Applying Logic in Chess

Erik Kislik

A top trainer demystifies modern chess thought
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Gambit
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Symbols

+                  check
++                 double check
#                  checkmate
!!                 brilliant move
!                  good move
!?                 interesting move
?!                 dubious move
?                  bad move
??                 blunder
+=                 White is winning
+/-                White is much better
+=                 White is slightly better
=                  equal position
=+                 Black is slightly better
-/+                Black is much better
+-                 Black is winning
Ch                 championship
1-0                the game ends in a win for White
½-½               the game ends in a draw
0-1                the game ends in a win for Black
(n)                nth match game
(D)                see next diagram
Foreword by GM Hjörvar Steinn Gretarsson

Chess is a hard game. Although that may sound like the most obvious statement ever, it is important not to downplay how complicated chess really is. Once you internally accept the difficulty of chess, it is much easier to aim for improvement in chess rather than perfection. One of the major reasons chess is so attractive is that it is very challenging. As a professional player, the hardest things for me are how to manage my time, how to deal with chess stress, how to maintain composure and confidence, how to work on openings and how to move forward in chess. Due to all this stress, it is not a great mystery that a big ego helps many players in the upper echelon of chess proceed with confidence and sometimes high-handedness. I do not mind it so much, since it is better to err on the side of slight over-confidence, if anything.

Nevertheless, when I was looking for a coach or someone to work with seriously on chess, I wanted to get a real ‘sciency’ type of person, who would be honest with me but not belittle me. Unfortunately, I had at times worked with strong players who made me feel like less of a player than them. At times they exaggerated the ease with which incredibly difficult decisions were made. It is tough to move forward as a player when you have doubts about your own confidence in the back of your mind.

I decided to consider Erik (the author of this book) as a trainer as I had heard about his success in coaching a player who had not played a single rated game in eight years to become Champion of Denmark. Although a coach really has no right in most cases to take responsibility for the results of his students, I could see that the effects of Erik’s dedication to the game and training methods were purely positive with people. It was a pleasure for me to exchange ideas with him, helping me focus my time and energy on what was really important. When I started working together with Erik during the Icelandic Championship in 2013, I noticed that he never had a single negative
thing to say about my chess or about my results, even after I had blown a crucial win in an important round. This extremely pragmatic and optimistic attitude really started to wear off on me and now I always look ahead to future games and matches with the intention of playing the best game of my career, even after an atrocious loss.

Despite the fact that Erik is by far the most organized player I have ever met and has surprisingly good opening analysis in every conceivable opening line, the attitude that struck me the most about him was his lack of bias and lack of what most people would call an ego. Whereas most people would judge you harshly for certain statements or beliefs of yours, I felt like Erik simply wanted to use any information about me and my chess to help me become a better person and a better player. This was exactly the attitude I was hoping to come across in my quest for a working partner and coach. I like people who are interested in a discussion of ideas, not in proving who is right all the time.

While reading through the first chapters of this book, I already had quite a few ‘Aha!’ moments as a coach myself. I realized that certain things that I struggled to explain were explained in a clear and simple way. In a broad sense, I look at this book as a collection of things I wish I had been taught when I started playing chess. For some reason, this topic has been neglected by most chess authors, but when you are starting out, there is no clear direction where to go. Even professional players might realize some simple things about chess that they had not thought about before by sifting through these pages. Although I did not contribute anything to this book (my best games are ahead of me!), I admire the ambitious effort to take a rational approach to breaking down various extremely complicated aspects of chess and giving advice to struggling players.

I have never picked up a chess book before and seen it loaded with commentary on first principles, the burden of proof, theory of mind, the law of diminishing returns and metagame concepts. In previous literature, somehow the world of logic did not collide with the world of chess. I was excited by this book because of the way all the ideas are intertwined; you get very concrete advice, as well as concrete definitions of what the author is talking about and how to apply his ideas. Everything is applicable and it is
easy to see how it applies to the real world. You could consider this an encyclopaedia of logical thought about the game of chess.

In large part, this book fills a lot of suspicious gaps in chess literature. Before I read this book, I found nothing written on how to make an opening file in ChessBase. I found no chess literature covering exactly what to ask yourself at the board and when. I also found nothing written on what questions to ask after a chess game to clearly understand and learn the maximum from the game you just played. I also could not recall a clear training plan (both temporary and long-term) laid out in a chess book, or distinctly classified different areas of chess or explanations of the differences between players of different rating ranges. This is all extremely useful and makes the book very unique. It is strange that no one did this before, but I am glad that I can share this book with my own students.

I was always looking for a solid reference work to recommend to my students but could not find anything that seemed to address everything, which was one of the reasons I wanted Erik to take on this project. If you are skimming or reviewing the book, you may want to look over the sections on piece values, candidate moves, what to think about at the board, elements of chess strength, what training plans to consider, how to use chess engines, how to analyse your games, and how to evaluate positions.

I must confess that when I started reading the chapter ‘Is Chess a Logical Game?’, I was not sure about its necessity in the book. As I continued reading, I started to realize it fits perfectly in the book. Players need to understand that they can learn from and make sense of everything in chess. This will give them great confidence moving forward.

This book elucidates what many international masters and grandmasters know to be true about chess in 2018 (or 2019... and beyond) but have not written about because the ‘old’ views of the game still have influence in chess literature. I hope that this book is able to help a lot of players improve their game and correct a lot of misconceptions about the game.

People appear to believe that something is less beautiful if it’s broken down and understood. I have the opposite opinion, in that I appreciate the beauty of anything even more if I understand what went into it. Art, music and love are
no less beautiful and no less enjoyable if we understand the mathematics and psychology that make them happen. This book demystifies many things about chess and is aimed at helping you understand and break down various chess intricacies.

Grandmaster Hjörvar Steinn Gretarsson

Reykjavik, Iceland, September 2017
Starting from first principles means beginning with simple, basic truths that can be expounded upon to form broader, more layered rules and understanding. Having got into serious chess at a relatively late age without any structured guidance, this was the only approach that allowed me to understand the game. Starting from simple concepts and branching out to more complicated ones serves as the basis for this book, as well as my approach to studying chess.

I was initially motivated to get into chess because of the depth and the logic of the game. Chess literature was also a huge motivational factor for me, because I liked that there were many different things that I could study covering all facets of the game. I was able to plunge into them in a systematic and formal way and build a formal education on the game. I started working on chess and playing chess seriously as an 18-year-old with no international rating (I had played fewer than twenty long games in my life) and not particularly grand ambitions. I simply loved the game and wanted to study it and learn as much about it as I could.

Before embarking seriously on chess as an adult, I pursued the game of Scrabble for intellectual curiosity, and I approached improving at it with ideas I gathered from studying chess. I sought out experts and expert opinion, I trained with a player who was ranked fortieth in the United States, and I got the best software and learned all the basic principles very quickly. After two months, some professionals told me I was the fastest learner they had ever seen in the game by a long shot. Yet I did not view anything I did as special, but rather just doing simple, logical things. I analysed all my games and decisions carefully and drew conclusions based on my mistakes and tried to learn from them. I kept training logs and notebooks as well. My approach was perhaps not all that intuitive, because I did not merely learn from experience, but it was methodical and led to consistent progress.

Chess is easier to study independently due to the wealth of resources
available to a player. As opposed to most other board games, the literature of chess covers every aspect of the game and is an additional reason why chess attracts many studious and intelligent people. For an academically-minded person like myself, this suited me perfectly. Unfortunately, there is no ‘chess school’ (such as the Russian school, Serbian positional school or Hungarian positional school) in America and in most Western countries in general, and I was essentially forced to decide how to approach the game all on my own. Without the chess culture or education many other countries have, I endeavoured to look at chess in a systematic manner and study it the most logical way I could, based on my limited resources.

In some countries, it would simply be a matter of going to a local chess club as a youngster, finding a strong coach there (or finding out from people there who is the best local coach), and having him coach you for ten or fifteen years. This process helped many current grandmasters save a great deal of time in their chess development. It also helped them avoid periods of stagnation of the type that almost every typical player runs into due to lack of direction and inability to solve problems in one’s own chess. The two most successful coaches in chess history in terms of grandmasters produced live within a few miles of me in Budapest and produced an incredible number of grandmaster players, using a serious and professional approach. While writing this book, I was in touch with some of their students and got feedback on how much this helped their development. If you are in a less fortunate situation (as I would assume is almost every person reading this book), you can only try to do everything feasible, and you should not underestimate the realities of high-level chess. There are few players in the top 50 in the world who did not have the equivalent of hundreds of thousands of dollars of support in their early chess career.

I should also mention that every player in the top 50 in the world was either a grandmaster or very close to grandmaster level by age 18. It is simply a fact of the game that time and resources are vital in determining how far a player will go. That certainly does not mean that an adult player cannot become a grandmaster. It simply means that you do not need to feel bad about not achieving something that you imagined was easier than it actually is. For the vast majority of late-bloomers, becoming a FIDE master (2300 strength) is a great achievement in itself.
I improved a lot more than American peers my age because I taught myself a lot, was curious about everything, was very focused on the truth, and had a healthy competitive attitude. In the interest of full disclosure, I was not competing with two younger world-class local players who became grandmasters (Shankland and Naroditsky). Due to my curiosity and desire for knowledge, when I was a relative beginner, I set out to read every chess book written by a 2600+ grandmaster player on his own games. I wanted to hear what every strong player had to say, in order to see every single intelligent approach among professional players. This comparison of all of these experts’ opinions was vital in my developing a good base of chess knowledge, even if I would do things somewhat differently now. I did not actually purchase any opening books during my chess development, as they did not address what was a weakness for me and in my play. This will be true for the vast majority of developing players.

Due to the fact that I was always a risk-taker and never afraid to travel long distances and take financial risks, I was able to play chess tournaments many players would shy away from. At times my friends paid for all my meals and even housed me. Extensive travel was vital for me, because as I stress later in the book, playing is the number one source of a player’s improvement. Many players in my generation in US chess could have become international masters or grandmasters, but they were afraid to take the leap and move far away from home. This is often essential to make progress in the upper echelons in chess. To get to master levels as an adult, sacrifice is needed along with a strong will.

My firm belief is that I never had any serious psychological problems in chess because my goals were mastery-focused (task-based) rather than result-focused (ego-based). Result-focused players tend to want to defeat specific opponents and be seen by their peers as winners. Trying to build an image of a winner influences the direction of many players’ goals in chess. Approximately 90% of players I come across in chess are extremely result-focused. This may work for some to get motivation, but a better balance is ideal. Luckily, ego struggles did not play much role in my chess, and my entire focus on mastery helped keep me clear-sighted and level-headed.

It is difficult to propose a way for players to shift from result-focused to
mastery-focused, but pointing out the differences between the two fundamentally different approaches may make it easier. The main issue I have with being result-focused is that it is almost purely emotional in nature. Another negative side to being result-focused is that it causes some players to quit chess entirely if their results are not good. It is easy to see why a more logical and professional approach is preferable. One can go into tough tournament games with task-oriented goals, such as (1) try to play good chess moves on every turn, (2) play until the last piece comes off the board, and (3) try to play the best game of your life so far. All of these would give you the energy and focus to play great chess. A task-oriented approach helps you enjoy the game more. I would much rather look at chess from a task-oriented perspective, in which love of the game propels you more than anything else.

Although many players worship world champions like Kasparov or Carlsen who apparently have a result-focused attitude, it is important to realize that they had full teams of players working for them for much of their career. When they lost games, they had players and coaches to comfort them and continuously motivate them. Normal players do not have anything like this and should not try to emulate top players in every way possible.

Later in my chess career, my motivation was based on completing discrete goals and I concentrated on mastering the game more than anything else. In doing so, I created lists of tasks for myself to complete. Upon completing the tasks, I felt very pleased with my progress. The tasks I started out with were usually books that I wanted to study from cover-to-cover. I had read roughly 40 books before my first US Chess Federation rated game. From my generation, I have not heard of anyone else who used this kind of task-based routine in his very early development. Nevertheless, from everything I have seen in chess, such a routine gives you the best attitude and the most consistent routine for stable results, even though results are not the motivational focus.

Although my focus was on books when I was in my early stages of chess development, what I did was somewhat inefficient. In this book, I will propose many improvements over mistakes I made at that time, which I only realized later in hindsight, after obtaining more experience and insight. Almost all the things I learned in chess were either from expert sources or
from trial-and-error, after trying essentially every approach and landing on what appeared to be empirically the best one. Even though I became an international master in five years from being 1600, I could have saved a lot of time and worked more economically had I understood various points laid out in this book.

This book is conceptually about sharing the fruits of my empirically-based work and research on the quest to improve in chess and discover truths about many of its mysteries. In a way, this book fills an important gap in chess literature: having someone with a connection to chess statisticians, computer chess specialists, psychologists and strong players write a book combining their ideas in a rigorous and coherent way.

It is very important to apply logic and use your intelligence both on the board and off. Figuring out why you are playing chess poorly and learning how to address that are two of the most compelling (chess) problems demanding an intelligent personal solution. I say that, having once been a very confused and temporarily-stagnant player, but eventually acknowledging that maybe I was doing and thinking some erroneous things that were contributing heavily to that. Introspection is a healthy and important part of every chess-player’s development.

In my chess development, I got stuck at 1600, 2000, 2200, 2300 and 2400, which are, as I see it, the main ‘chess levels’ below GM and above beginner where players tend to hit a plateau, or a temporary halt in development. I have not seen any commentary on this before so I draw particular attention to it. This book should be quite useful for adults who are not improving. What does it mean to be an adult who is not improving? It means you have played a good amount of games (50 long time-limit tournament games for instance) in a row without any noticeable improvement. If you have not been able to play so much, you should reserve your judgements about your own stagnation.

The title of the book, ‘Applying Logic in Chess’, raises a lot of questions about chess in general. One of the dictionary definitions of the word ‘logic’ is, “use and study of valid reasoning”. This book will be about applying a sound, scientific approach to various aspects of chess.

Part of the beauty of chess is that it is a completely logical game, in which
sound reasoning helps make sense of everything. One of the most appealing aspects of chess to me is that every mistake I have ever made was based on a very clear reason and misunderstanding or miscalculation. All of the opening variations I have analysed, I can explain move-by-move in a rational manner. The fact that the game always makes sense when analysed in this manner makes it unlike anything else one will encounter in life. This will be discussed further in Chapter 4. Chess is essentially inexhaustible from the perspective of an analytical adult looking to improve. In chess you can control your destiny, improve rapidly with motivated work, and make complete sense of everything you do and have done in the game.

I had been thinking about writing a book for a long time, but nothing really compelled me to do it until recently. For a number of years I had been saving and collecting a lot of simple points and ideas about chess which had not been covered in chess literature, but I needed a final push. The final tipping point for writing this book occurred when I attended a lecture given by an international master and was surprised by the casual and dismissive nature of some of his statements. In certain positions, the lecturer would claim an advantage for White when Black had a solid position, no obvious weaknesses, and no particular reason to be considered worse. Firstly, Black had not made any mistakes and had played a main-line theoretical opening that is common in elite chess. A simple truth about chess is that if Black has made no mistakes in a sound opening, he cannot be significantly worse. Both the lecturer and the observers should have known this. Secondly, when one side is completely solid and has no tangible disadvantage (not even a space disadvantage) with all else equal, one cannot objectively claim the defending side is worse or facing any attack. Since the lecturer assumed White had a strong attack, I could tell that he misunderstood fundamental aspects of solid positions in general. The players attending the lecture were club players ranging from 1900 to 2200 strength. Unfortunately, none of the players took issue with the casual claims of the lecturer, even though they were central to the conclusions presented by the speaker. Sadly, the viewers fell for his appeals to authority and did not question his bold claims. In instances like these, a cautious reader or viewer needs solid reasons and a basis for believing things about chess positions, so that misconceptions are not formed in the first place, and unlearning does not need to follow later.
This experience raised broader chess questions to which the vast majority of amateurs do not have a good answer, such as: What constitutes an advantage in chess? When can we stop and make large claims about chess positions? How should we talk and think about chess positions and our own games? You may already be confused, but that is exactly why phrasing and clarity are extremely important. We do not always have to be able to make definitive claims in chess, but we should pay attention to the looseness or strength we apply to those claims. For example, “Black is losing by force” is a pretty strong claim. Any person claiming this should be able to put together a small PGN file supporting this claim with brief variations. Yet most people deep in the chess world are quite familiar with such unsubstantiated claims on a daily basis. If the statement is phrased as, “White has a strong initiative and it’s not clear if Black can survive”, the claim is much softer and phrased in a much less dogmatic way. Strong players tend to think very non-dogmatically about positions and their evaluations unless they have very strong evidence they can demonstrate.

I do not wish to reiterate common chess ideas, but rather want to break down the many misconceptions found in amateur chess around the world. I am assuming you already have a fundamental grasp of the basics of chess, or if they’re not familiar, they will soon be through experience. The application of logic I am referring to is not just within the 64 squares and pieces themselves, but also a logical way to approach chess study, fear, psychological elements, and general thinking. My emphasis is on what computers have taught us, what strong modern players know, how to look at the game without any ego, and how to approach the game with a strong metagame strategy. When I started playing chess, I had no clue how to approach these issues, and no book existed that addressed them.

People talk a lot about overthinking things in chess. It is good to think consciously and rationally about everything in detail in chess, but when people refer to ‘overthinking’, specifically with respect to their own mistakes, they are usually referring to neurotically obsessing over bad ideas. At least with respect to chess, we should gradually shift away from the use of the word ‘overthinking’, since chess is one of the few areas in life where it is OK to slowly and methodically break down everything without seeming overly analytical. The important thing is to think efficiently and intelligently and
gradually learn how to make best use of your time. In this book, I give many
lists where I focus on the most important questions to ask yourself during and 
after a game, how to become more familiar with critical positions, what types 
of readily-aware human moves to focus on when using chess engines for 
analysis, how to make your own opening files, and many other things. 
Gradually, these matters should become internalized and a part of your 
natural chess thinking, so that your focus during and after the game is much 
clearer, more in-depth and able to save you a lot of time.

This book addresses neglected topics like the correct piece values, what 
computers have confirmed and taught us, what to focus on when trying to 
improve, efficiently using your time, how chess has changed, what a chess 
education is, and obvious-seeming questions like, “What should you be 
trying to do when you play chess?” I emphasize the fact that all advantages 
that have any meaning are fundamentally deep static advantages. It sounds 
like a very simple and obvious thing to say, but I had never heard anything 
like that before realizing it myself. It would have helped my thinking (and 
ability to understand positions and the game) a lot as a beginner to think this 
way. More about evaluating positions will be covered in Chapter 3.

Most of the professional chess-players I talk to nowadays are under the 
impression that it is very difficult (as White) to prove a long-term advantage 
in many popular chess openings, and it is more important to set problems and 
create psychologically difficult situations for the opponent. This will be 
addressed in a chapter on metagame views on openings.

While writing this book, I worked as the trainer for five grandmasters and 
spent copious amounts of time exchanging ideas with professional chess-
players and the programmers of leading chess engines. I outlined some of the 
ideas in this book to a number of professionals and I was surprised at how 
little disagreement I received. In general, they either thought that it was stuff 
which they already knew but had not articulated, or that what I wrote was a 
new insight to them. This was also a good time to write this book because we 
now have excellent research methods for testing chess principles with 
engines, and verifying precise piece values.

As a very curious person who wants to get to the truth of the matter on every 
issue, I risk and do not fear being wrong in any way. This book certainly puts
me at risk of asking questions that I cannot answer perfectly, but I endeavoured to write a book that is a challenge for both the author and the reader.

The main engines used while working on this book were Komodo and development versions of Stockfish (whatever the latest one was at a given time). I did not use Houdini because no new version of it had been released for a long time when this work was started, but it is now very similar in strength to Komodo and Stockfish. Many examples in this book are very complicated and I checked every position in the book for errors at depth 30 in an automated test with both Komodo and Stockfish. To be clear, depth 30 means that the engine calculates 30 ply ahead. A ply is a ‘half move’ in chess, meaning that the initial moves 1 e4 e5 constitute two ply. Those familiar with Stockfish may be confused to hear me say only depth 30, but recently there was a major shift to ‘Lazy Symmetric Multiprocessing (SMP)’. Lazy SMP uses part of the power of the extra cores to improve search quality and part to increase depth, whereas normal SMP uses all of the cores just to search deeper. So a ‘Lazy’ engine will never get as deep in the same amount of time as a normal one (assuming many cores), but will not necessarily play more weakly. For this reason, current Stockfish depth 30 analysis is no weaker than depth 34 analysis from older versions.

One annoyance that occurs when studying some chess books is being insulted by the author. One international master even went so far as to assert that certain books only exist to crush the egos of all players below grandmaster standard. One can observe two common themes in these sorts of books: (1) an author claiming all of the moves in the book are easy-to-see and he would find them without engine help; and (2) that the student is somehow out of form or in terrible chess shape if he cannot find the right solution. The first obvious point is that every strong player uses engines to check his games and his analysis. Discovering great solutions this way is neither strange nor anything to brag about. It would make absolutely no sense to write and publish a book full of errors when a two-second blundercheck would reveal those mistakes and immediately make your product a higher quality work. It is all too easy to emphasize how easy chess positions are when you see the solutions given by the computer. I have endeavoured to admit how difficult the game is and point out when a solution is particularly computer-like.
World Champion Magnus Carlsen has himself acknowledged that quite a few moves are too computer-like for even him to find. Let us be honest in our chess and not try to pretend we can or should play at the level of computers that are objectively above 3200 strength. When I worked with strong grandmasters, it was very revealing to hear them acknowledge that a lot of moves (even some that look simple when pointed out by an engine) are ones they would not find even in their best form. For any practical player, such revelations are extremely useful. They may help you avoid being too hard on yourself and beating yourself up for missing or miscalculating certain moves that professionals might not even play during their peak performances.

I would like to thank my father for taking out time to proof-read the text in this book. I would like to thank International Master Alex Battey for proposing interesting examples for the book and being one of the originators of metagame strategy in the modern sense I consider it. I would like to thank Grandmaster Zlatko Ilinčić for punishing me constantly in my chess youth with his Serbian School positional chess and forcing me to reconsider many of my ideas about the game. I would also like to thank International Master Nicolai Getz as well as Grandmasters Gretarsson, Jayaram and Kaufman for confirming that I am not alone in the vast majority of my views expressed in the book. Thanks to all of my students and other contributors who looked over the book, such as famous people like BitTorrent inventor Bram Cohen and National Master Christopher Chabris. It is always nice to see interest in chess from outer circles. I would also like to thank Grandmaster John Nunn for giving me a platform to write this book and showing interest in the final result.

I hope there is useful material in this book for all players seriously interested in learning. Good luck in your chess adventures.

IM Erik Kislik

Budapest, Hungary, March 2018
The optimum starting point is from first principles. A first principle is a basic assumption that cannot be deduced from any other proposition or assumption. It is something from which deeper truths can be derived. Since chess is such a logical game, we do not have to accept any propositions that we cannot prove, so the term ‘first principles’ will be applied to basics that are helpful for learning and playing the game. These get down to the basic meat and marrow of chess, which is essential for clear thinking about the game. Players who get all sorts of fundamentals wrong usually pay the price during their development.
Piece Values

You would think that something as fundamental as the value of the pieces would be well-understood by beginning players. When I started playing chess, I opened up my Simpson’s chess set and found an instruction guide listing the piece values as 1 for a pawn, 3 for both knights and bishops, 5 for rooks and 10 for the queen. As I played more, I often wondered why I was able to give up my rook for a minor piece so effectively, and why three minor pieces very often outplayed the queen, if these piece values were accurate. I relied on them in my early play, due to having them stated as a certainty, as did nearly everyone else I met who was learning the game at the time. But these piece values are demonstrably wrong. If you get the piece values wrong, it will impact a lot of your decisions, especially ones that involve trading pieces, exchanges, and unbalanced material. Most players are very material-oriented when they begin playing chess and gradually become more open-minded with their interpretation of the pieces, so it is even more important that you get these right at an early stage.

In the past, people used to say, “Scientists have calculated the values of the pieces to be...” I have no idea what they could possibly have used for those calculations before modern chess programs, so the statement sounds very vague and random, but with the intention of sounding deep and scientific. Modern chess programs are of course extremely diligent in their methodology and nowadays we actually have a reliable testing system. Years of research involving the strongest chess software and hardware in the world by Grandmaster Larry Kaufman and others suggests that the most correct (rounded) piece values are: 1 (pawn), 3.45 (knight), 3.55 (bishop), 5.25 (rook) and 10 for the queen.

These values are important to understand for a lot of reasons, one of which is that certain types of piece exchanges occur extremely often. One of these exchanges involves trading two rooks for a queen. From these piece values, one can easily see that two rooks are worth approximately half a pawn more than the queen, which is a significant material advantage. Three minor pieces are also stronger than a queen, again, typically by about half a pawn. Believe
it or not, I have had arguments with strong grandmasters in the top 100 in the world who did not know that three minor pieces are generally stronger than a queen. Part of the reason why they got this wrong was because they trusted and used older versions of the chess engine Houdini, which had very inaccurate queen valuations that overstated the strength of the queen. We know this thanks to thousands of tests run by Komodo and Stockfish. Intuitively, nearly all strong players already knew this though.

Another very important imbalance is when two minor pieces are traded for a rook and pawn. Using the incorrect piece values I learned when I started playing, I would have interpreted this as an even trade (trading 6 for 6). With this very common example, it is easy to understand how confusing it was learning the wrong ideas right off the bat. By the proper piece values, this grants the side with the minor pieces a .75 pawn advantage (7 trading for 6.25), assuming they do not have the bishop-pair. Although these are not absolute values and are situation-dependent, this is actually very useful to bear in mind when making such an exchange. Nearly every modern strong player understands that it is almost always a bad idea to give up a knight and bishop on f7 for a rook and pawn, unless you get something very clear, like a way to win another pawn or a long-term attack, because this involves a real loss of material. Even relatively strong players who use the wrong piece values still place greater value on the strength of pieces versus pawns than one might expect. It is worth pointing out that rooks are more valuable when you only have one due to the fact that rooks in general gain in strength as more pieces come off and files are opened up for the rooks, but also because there is no second rook to get in its way.

Pawns that become passed and very dangerous are the only real material value that changes dramatically based on the position. In certain positions, a passed pawn on its seventh rank is worth at least a material value of three pawns. It is extremely hard to quantify when a passed pawn has a value of two and when it is worth three. A discussion of this sort would be very vague with a high margin of error, and I doubt it would have much applicability. The important thing is just to be aware of the value a strong passed pawn may confer to one side. If a well-supported enemy passed pawn breaks into your third or second rank and you are a pawn up, it is worthwhile to consider the fact that you may not have an advantage. Thinking too statically about the
normal numerical values might lead you to believe you are plainly a pawn up, but the positional value of a far-advanced passed pawn is extremely important. When computers started to handle passed pawns extremely strongly (thanks to Vasik Rajlich’s very deep research with Rybka), their middlegame strength went up dramatically overnight.

People often ask me about the value of the king. There is no testable value for a king, since a king can never be captured and engines have no need to assign a value to it. Computers evaluate kings for safety, and have values in an opening and endgame table to encourage engines to keep the kings in the corners in the opening and in the centre towards the endgame. Kings are also used for calculating the value of a passed pawn. It is obviously good to have your king close and the opponent’s king far away from a passed pawn if it has the potential to be pushed. Yet none of these things assign a value to the king.

Nevertheless, there should be some frame of reference for the king’s value when thinking about how much influence you have over a given area of the board or its activity in the endgame. Assuming the king is completely safe in an endgame, 4 is a decent enough approximate figure to give to the value of the king. This may be useful to think about when deciding which pieces you should prioritize for activation.

I understand that ascribing some absolute value for the king is against the logic of the game, but it also seems like lazy thinking to have all of these statistics, tablebases and sophisticated computer evaluations, and avoid giving a concrete comment regarding the king. It can be useful as well when you are trying to judge an unclear attack and trying to think more concretely about the king’s intrinsic ability to help defend itself instead of thinking of it as just some useless thing that runs. For beginning players that may be a psychological problem: overestimating attacks, being afraid, and not remembering the king can do a pretty good job with just a few pawns and one minor piece or a rook, especially if all of the specific focal points around their king are safe. I must have seen hundreds of examples in which a knight on f8 effectively defended the h7-square and kept a black king safe with no other pieces around.

If you consider a king to have roughly a value of 4 in an ending, you may
choose to activate it rather than a bishop. A bishop is a long-range piece anyway and often does not need to be activated *per se* to have scope and purpose. A common mistake amongst even strong players is misjudging when to trade major pieces, especially the queen, in situations which allow a quick king centralization. In general, one of the easiest kinds of position to win is an endgame with a clearly centralized king versus an inactive one. I remember seeing a couple of Kiril Georgiev games where he won exactly like this against international masters: his king just had a slightly easier path into the game and became more active, allowing him to milk a large advantage. It is not so obvious when there is a transition in the middle of an attack or complications that suddenly changes pace and liquidates into an endgame with equal material and an active king for one side. The defending side, presumably previously worried about losing material, often feels a false sense of comfort when arriving at a simplified endgame in which material is equal but the opponent’s king is much more active. The following example is simple, but effectively illustrates the point:

White to play

**Gwaze – Ki. Georgiev**

_Coventry 2005_

31 b3?!
Giving luft (a German word meaning ‘air’) to the white king seems reasonable to avoid back-rank problems, but it does not deal with Black’s main threat. It was essential to cover the e5-square to prevent ...Qe5 by playing 31 Bg3!. This move also prevents ...Bf6 from being effective. After 31...Rf1+ 32 Rxf1 Qxf1+ 33 Be1! Black has no way to exploit the pin on the first rank because 33...Bh4? is met by 34 e7 and 33...Kf8 (intending ...Bh4) is answered with 34 Qc3! Kg8 =. After 33...b5 34 a3 Kf8 35 Ka2 White is safe and has no problems; 35...Qf5 is equal.

31...Qe5!

31...Qc5 32 Qxc5 dxc5 33 Bg3 h5 would also have given Black very good chances. The e6-pawn is awkward to defend and ...g5 is always a threat.

32 Qxe5 dxe5 33 Bg3 Rf6 (D)

![Chess Diagram](image)

White to play

34 Re1?

Allowing Black to exchange rooks is a fundamental error. After the exchange, the black king will run via f7 and e6 to a very active square in White’s camp, quickly deciding the game. White should have played 34 Bxe5! Rxe6 35 Bf4 Re4 36 Bg3 Re2, although Black is better and will be
able to press for a long time in the endgame due to his better pieces, superior king (in a few moves) and ability to advance his kingside pawns.

34...\textbf{Rxe6} 35 \textbf{Rxe5} Rxe5 36 Bxe5 Kf7 37 c4

37 Kc1 Ke6 38 Bc7 Kf5 39 Kd2 Kg4 is also winning for Black in view of his much better king position.

37...\textbf{Ke6} 38 Bg3 g5 39 Kc2 h5 40 Kd3 h4 41 Bc7 Kf5 42 h3 g4 43 hxg4+

43 Ke2 gxh3 44 Kf3 Bf6 –+.

43...\textbf{Kxg4} 44 Kf2 Bc5 45 Be5

After 45 a4 h3 46 Bh2 a5 Black fixes the queenside and wins easily.

45...\textbf{Kf5}

The simplest way to win this endgame is just to walk the king over to the queenside now that White is stuck having to cover the h2-square.

46 \textbf{Bc7} \textbf{Ke4} (D)
This is a good visual, clearly illustrating the dominant black king.

47 Bh2

47 Ke1 h3 48 Kf1 Kf3 –+

47...h3 48 Bg3 Bg1 49 Kf1 Bd4

49...Kf3 50 Kxg1 Kxg3 was also winning (51 b4 Kf3 52 Kh2 Ke4 53 c5 Kd5 –+), but perhaps Georgiev did not see the point of calculating this out since he won in the game without needing to calculate anything.

50 Ke2

After 50 Bd6 Be5 51 Be7 Kd3 52 Kg1 Kc3 53 Bd8 Bd6 54 Bf6+ Kc2 Black starts collecting pawns on the queenside, ending the game right away.

50...Be5 51 Bxe5 Kxe5 52 Kf3 Kd4 53 Kg3 Kc3 54 Kxe3 Kb2 55 b4 Kxa2 56 b5 axb5 57 cxb5 b6 58 Kg3 Kb3 59 Kf3 Kb4 0-1

Black wins this basic king and pawn ending by getting the opposition when White runs back to b1.

It is crucial to note that the values of the minor pieces and the queen are slightly higher than par in the opening and slightly lower than par in the endgame. What this means is that the values of the pieces change dynamically a little throughout the game. Rooks in general gain in value the longer the game goes on due to files opening up and more pieces coming off the board that get in the way of a rook’s range of motion. Hence, a rook is worth slightly less than par (5.25) at the beginning of the game. One explanation for this is that the rook-pair is in general a disadvantage because two rooks do not perform well on a full board due to their lack of coordination, manoeuvrability, redundancy in fighting for squares, and lessened effectiveness. The value of a single rook is a bit above par, while the value of two makes each of them a bit below average. I doubt that most grandmasters consciously realize this, but quite a few decisions can be best made sense of by understanding this. I wish the proper piece values and these
facts about chess had been known when I was starting out, because it could have saved me a lot of time and confusion. I can say it was quite enlightening to learn proper piece values later in my chess career though.

It is important to understand that the bishop-pair (when you have two bishops and your opponent does not) is an advantage worth approximately half a pawn. It is true that in closed positions knights are better than bishops, but the bishop-pair still has its half-pawn value after allowing for that. Every top engine almost always evaluates the bishop-pair as worth half a pawn, while the relative value of knight and bishop are position-dependent. It is important to note that when human grandmasters overvalue the bishop-pair, it just means that they have undervalued other aspects of the position.

The main reason why the bishop-pair is so valuable is because one of the bishops has no opponent and very often can single-handedly dominate an entire game. When you have the bishop-pair, putting pressure on the colour complex of your unopposed bishop means it will be harder for the opponent to defend those squares since he does not have a bishop of that colour.

Various texts refer to intricate attacking situations occurring with opposite-coloured bishops in the middlegame. The principle is that a certain complex of squares cannot be adequately covered, so one should try to attack on the same colour squares as the bishop that one has. Oddly enough, almost no one emphasizes that this detail is directly built into the bishop-pair inherently.

When you have the bishop-pair, the most important minor piece on the board is the unopposed bishop. This basic concept was emphasized in the book *The Method in Chess* by Grandmaster Iossif Dorfman and I find this to be one of the very few rules in chess that is not so vague as to be worthless. It is very much worth thinking about almost any time you have the bishop-pair. The next two examples make this point well.

A student of mine played the following position in a blitz game and had to choose which bishop of his to give up. It is worth asking which bishop he should surrender and why.
12...Qc7!

The reason why this is the best move is that in the resulting position, the unopposed white bishop on g5 cannot do anything or pose any problems for Black. After 12...Bxc4 13 Bxc4 White’s unopposed bishop on c4 is quite good: 13...Qc7 14 Rfe1 Rae8 15 Qf5 +=.

13 Nxd6 Qxd6

Black has ideas like 14...Bg4 and 14...h6 15 Bh4 Nh5.

14 Qd2 Nd5 15 Rae1 Rfe8 16 Bh4 N7f6

Black has equalized confidently, despite White’s bishop-pair. Black has good control of the square in front of the isolated d-pawn and can meet 17 Bg3 with 17...Qb4, when White will not want to trade queens. This is a very clear example of which bishop you give up making a major difference.

The next example is more difficult, but again, one of the bishops must go and there is a clear choice.
Black must choose which bishop to give up: the one on d7 or the one on e5. Of immense importance is how strong the opponent’s unopposed bishop is in the resulting position. Black made the wrong choice and White’s light-squared bishop became an incredibly strong piece.

22...Bxg4?

Instead:

a) 22...f6? might make sense if White had to take on e5 and strengthen Black’s centre, but he has better options:

a1) 23 Bg2 Be6 24 Nxe5 fxe5 gives Black the position he wanted.

a2) 23 Qg2 has some logic, seeking to play f4 and trap the piece. After 23...d4 24 f4 (24 Nxe5 fxe5 25 Bg5 Rc8 =+) 24...dxc3 the variation 25 fxe5? cxd2 26 exd6 dxe1Q 27 Rxe1 Rxe1 –/+ shows the importance of a good understanding of piece values: rooks gain in strength as more pieces come off
the board and two rooks are stronger than a queen, especially here. 25 bxc3 is a better defence because even though 25...Bxc3! temporarily wins a pawn, White can win it back by 26 Bxc3 Qc5+ 27 Kh2 Qxc3 28 Rxe8+ Bxe8 29 Rxd8 Nxd8 30 Qd5+ Nf7 31 Qxb7, though he is still marginally worse because his king is less secure.

a3) 23 b4! a6 24 a4 Rc8 25 Be3 Be6 26 Bc5 gives White a large advantage.

b) 22...h6! 23 Bg2 d4! (Black makes this pawn-break while he can, to avoid being crippled with an isolated d-pawn for the rest of the game and facing a dominant dark-squared central bind) 24 Nxe5 Rxe5 25 cxd4 Rxe1+ 26 Rxe1 Be6 (Black threatens the a3-pawn and d4 is not going anywhere) 27 a3 Rd7 28 Bc3 Nxd4 29 Qh5 b6 30 Kh2 is a more typical example of a small advantage due to the bishop-pair advantage. Although this is not fully equal, Black is still able to hold the position with precise defence. 22...h6! is a much better move than 22...Bxg4?.

23 hxg4 (D)

If nothing else, Kg2 and Bd3 is a very simple and strong plan for White, showing the power of the unopposed bishop.
23...Re6!

23...Qc5?! was played in the game, when White could have secured a large advantage with 24 Bg5 or 24 b4, exploiting Black’s awkward pieces.

23...d4 24 Bg5 f6 (or 24...Rc8 25 Bc4 +/–) 25 Be3 +/– is also very good for White.

The text-move is an improvement, but still leads to a worse position that requires accurate defence.

24 Bg5 Rd7 25 Be3 d4 26 Bc4 Ree7 27 Bg5 Bf6 28 Rxe7 Qxe7 29 Bxf6 Qxf6

Black is able to get rid of White’s bishop-pair only at the cost of a damaged kingside pawn-structure.

30 Qxf6 gxf6 31 Bb3 +=

White intends to play f4 and then bring his king in, with a comfortable advantage deep into the endgame.

In these examples, the importance of the unopposed bishop in the evaluation of the position was clear.

Stronger players interpret material differently and in a more open-minded manner. The brilliant positional pawn sacrifices played by Garry Kasparov throughout his career were very important in the development of the theory of many openings and of many strong players’ views of material. People often said that he sacrificed material in a way that no one else was doing at the time. It is true that stronger players in general sacrifice material more easily and for compensation that is harder to understand for their weaker counterparts.

We get straightforward examples of effective material sacrifices when the consequences of hanging on to the material appear bad, while the compensation for giving it up looks fantastic. This is demonstrated by the
following brilliant yet fairly simple example that ties in a number of the concepts addressed earlier.

![Chess diagram]

White to play

This position is unusual because the knight on a2 is quite far away from the play. Black would like to play ...c4 and either ...b4 or ...Na5-b3. His bishop-pair could matter in the long run.

1 Qd3

With 1 Be3!? c4 2 Nb4! White at least succeeds in improving his pieces and bringing the a2-knight into the game. Then 2...a5! 3 Nc2 Be7 4 0-0 Rb8 (Black aims for ...Bc8-e6 and ...b4 to improve his pieces) 5 Bf2 Bc8 6 Ne3 Be6 7 Qe1 (White seeks to play Bh4 to get rid of Black’s bishop-pair and trade off his bad bishop) 7...h6 8 Bh4 g5! (the only way to stop the exchange of dark-squared bishops) 9 Bg3 b4 10 axb4 axb4 would lead to a very interesting strategic fight.

1...g6 2 dxc5 Bxc5 3 Be3

White appears to be clamping down on d4, while trading away Black’s bishop-pair. It seems that Black is on his way to a worse position.
3...d4!!

This is a fantastic pawn sacrifice, highlighting the fact that when you have the bishop-pair, the most important minor piece on the board is the unopposed bishop. Following the main line below, it is amusing to see how the b7-bishop watches the a8-h1 diagonal like a hawk and does not allow White to make any use of his extra pawn.

3...Bxe3 4 Qxe3 += would have led to a lovely bind, in which White may realistically obtain a strong knight on d4 against Black’s bad bishop on b7. 3...Be7 4 0-0 0-0 5 Nb4 += also favours White.

4 cxd4 Ne7! (D)

White to play

The knight heads to d5, where its potential dominance will oblige White to exchange it off.

5 Nc3 0-0 6 0-0 Bb6

Black intends the obvious ...Nd5, but may also consider ...Rc4.

7 Rac1 Nd5 8 Nxd5 Qxd5
Black has full compensation for the pawn in view of his strong bishop on b7 and White’s terrible e3-bishop.

9 h3 Rfd8 10 Kh2 Qa2 11 Qd2 Qb3 12 Rxc8 Rxc8

Due to the threat of ...Rc2, the rooks come off, and Black will not face any problems at all given the strength of his unopposed bishop and the fact that White will not be able to play d5 to good effect at any point.

13 Rc1 Rxc1 14 Qxc1 a5 =

It is useful to be aware that rook’s pawns (i.e. any pawn on the a- or h-file) have slightly less value than par, so if you are thinking about sacrificing a pawn, it is helpful to know this general fact, especially because giving up a rook’s pawn often opens a file for a rook. A rook’s pawn controls the fewest squares, has the least mobility, the least board influence, and can thus be sacrificed most easily and confidently. Computer testing confirms this simple logic point as well, and it may not come as a massive surprise that one can sacrifice a rook’s pawn most easily with relative impunity. It may only be a very modest surprise for some people to learn that an a-pawn is generally worth slightly more as a doubled pawn on b3 than as a pawn on a2.

I have become very aware of rook’s pawn moves because they are the least valuable pawns and create the fewest weaknesses when advanced. People are often surprised when you move them. Nowadays I see these moves right away and sense them in analysis, wondering about a4 and ...a5 in a wide range of positions as useful space-gaining moves. Stronger players have a more flexible interpretation of material, and utilize compensation for material that weaker players may not even consider. Grandmaster Rowson considers one of the fundamental differences between a player at 2700 standard and one at 2600 to be their willingness to sacrifice material and recognize compensation: stronger players in general are much more open-minded.

It is also very important to note that a tempo is worth a quarter of a pawn. For clarity, a tempo is a move in chess. It means that if you have the first move, you have an extra tempo. Thus it is no surprise that on the very first move
with White to play (i.e. with an extra tempo), a chess engine will usually give a score close to +.25. This essentially explains why moving the same piece several times in the opening (or generally wasting moves and not developing) without doing much in the process can lead to a serious disadvantage. There are various ways to explain why players need to acquire a feeling for developing their pieces at an early stage of the game, but recognizing how a few wasted tempi can build up to being a full pawn down helps clarify everything with solid numbers. In Chapter 3 I will go into more depth on evaluating positions.

It is especially important for amateurs to keep tempi in mind. It is likely that the things you cannot see will elude you more. Very often players will make two consecutive non-developing moves in a semi-open position. According to my description, that is just a free half-pawn (.50) advantage. This is extremely important because a half-pawn advantage is enough for one side to be objectively winning in a wide range of positions. Undeveloping or decentralizing well-placed pieces must be done with care and a general awareness of what you are doing.

Imagine hypothetically that someone sacrifices a piece for two pawns and an attack. Many amateurs might conclude that this is not enough compensation. It very well can be if you factor in a weak king, which is hard to quantify, and the value of a couple of tempi that the attacker has while the defender’s pieces are offside. Two or three pieces out of play can easily be a half-pawn or a full pawn of value to the attacker. It is very helpful to incorporate this kind of flexible interpretation of material and time into your chess understanding. Shocking or slow-moving victorious sacrifices will make a lot more sense to you when viewed from this perspective. Few players think about this at club level, so it is worth internalizing these concepts and thinking deeply about them and how they apply in your games.

The following game snippet is an example of how I played the opening with Black when I was rated about 2000. I handled my pieces carelessly and did not think very rationally about what I was doing with them in terms of tempi and activity. I did not even consider for a moment that my not particularly active knight on d7 was not ideally placed there. Deactivating pieces should
only be done with at least some conscious reasoning behind what you are doing.

1 d4 Nf6 2 Bf4 (D)

This is what many strong players might once have considered a ‘nothing’ move – one that has no major idea behind it to fight for a conventional type of advantage. Most chess openings are based on posing direct tactical and strategic problems. For example, White may play to establish an ideal pawn-centre or to obtain the bishop-pair right from the opening. However, it is worth pointing out that this move has gained considerable popularity in recent years, partially due to the fact that many main lines have been neutralized in elite chess and partially because some subtle ideas have been found in the main lines after 2 Bf4.

2...g6

After 2...e6, based on observing the pawn-breaks, Black is already essentially committed to playing ...c5, since ...e5 is very unlikely to be a possibility at any point in the near future because ...e6 has already been played. When people want to play for ...e5 they usually set up with ...g6 and ...Bg7, and aim to play ...e5 in one move. It is useful to think about the opening and the
pawn-structure in this manner.

3 Nf3 Bg7 4 e3 0-0 5 h3 d6

5...d5 is theoretically sound for Black, but I would rather not play it. On the topic of metagame strategy in chess, one international master mentioned that when he plays the Torre Attack and London System, he wants to use the e5-square, so Black makes life easier for him if he ever gives up that square voluntarily. In the ...d6 lines, White misses out on a key strategic advantage, even if it may not give him a real objective advantage. Still, it makes White’s position more difficult to handle when he has nothing specific to play with, so I prefer plans involving ...d6.

6 c4 (D)

This is a theoretically unchallenging line, in which Black has many ways to equalize. Few players devote much energy to this specific system because it is not considered critical in any sense.

6...Nfd7?!

When I was playing the King’s Indian Defence as my main defence to 1 d4,
this plan always struck me as the most logical one in such positions. I wanted to get in ...e5 in nearly all cases. Despite the fact that very strong grandmasters like Svidler and Akopian have played this move with Black, it is dubious. It is amusing how in the following line White can choose Bg3 instead of Bh2, to harass the black queen with the nifty Bh4 in a number of variations.

There is a much simpler and more active move that does not decentralize the f6-knight: 6...Ne4!. Although d7 and e4 are both in a sense central squares, on e4 the knight plays a much more active role and must be chased away immediately. This frees Black’s slight cramp and allows him to push through ...e5 quickly. Black intends ...e5 in any case and can often exploit the fact that the b2-pawn may prove vulnerable on the long diagonal. 7 Nbd2 (7 Bd3?! e5! is a key tactical point: 8 dxe5 Nc5 9 Be2 Nc6 =+) 7...Nxd2 8 Qxd2 Nd7 9 Rd1 (9 Be2 e5 gives Black the initiative) 9...b6 10 Be2 Bb7 =.

7 Nc3 e5 8 Bg3 (D)

8...Nc6

Or:
a) 8...f5 9 Bh4! (9 Be2 Nc6 10 0-0 g5 affords Black a lot of counterplay that is difficult to deal with) 9...Bf6 10 Bxf6 Qxf6 11 h4 c6 12 Qb3 +=.

b) 8...c5 is an interesting move that has become popular in similar structures. Then:

b1) 9 Bh4 Qa5 (after 9...f6 10 dxe5 dxe5 11 g4!? += White plans Nd2-e4 with a comfortable structural advantage) 10 dxe5 Nxe5 11 Nxe5 Bxe5 12 Rc1 += gives White a better structure; he will calmly complete his development and claim a small plus.

b2) White can play very aggressively with 9 dxe5 Nxe5 10 Nxe5 Bxe5 11 Bxe5 dxe5 12 Qxd8 Rxd8 13 g4! +=.

9 Be2 Ne7 10 0-0

10 Bh4 f6 (this move may look strange, but it halts White’s threat of c5, which can now be met by ...exd4 because there is no longer a pin on the h4-d8 diagonal) 11 Bg3!? (another odd-looking move, but it performs the useful function of blocking out the bishop on g7, which will now struggle to get any form of reasonable activity) 11...Nf5 12 Bh2 +=.

10...Nf5 11 Bh2 (D)
11...Re8

After 11...exd4 12 exd4, 12...Re8 13 Re1 merely transposes to the main line, but 12...Nb8 followed by ...Nc6 puts more pressure on White’s centre and offers somewhat better prospects of counterplay.

12 Re1

12 dxe5 dxe5 13 Rc1 is also better for White and threatens the unpleasant c5!?

12...exd4 13 exd4 Nf8 14 d5 +=

White has a superior pawn-structure and intends the simple Qd2 followed by Bd3. Then White can slowly improve his pieces and push Black back. This is taken from an old rapid game of mine played over the board in San Francisco. At the time, I had no idea what I had done wrong and how I ended up in a worse position. Now it seems clear and obvious.

A feeling for development is closely connected to an appreciation of the value of tempi. As a basic example of time being wasted in the opening that beginners can relate to, here is a simple case:

1 d4 Nf6 2 c4 d5?!

This is perhaps the simplest illustrative example of wasting multiple tempi in the centre to allow White to obtain an ideal pawn-centre (solidly-placed pawns on d4 and e4).

3 cxd5 Nxd5 4 e4 (D)
4...Nb6

4...Nf6 is a principled try, aiming to meet 5 Nc3 by 5...e5. White can force a better endgame with 5 Bd3 e5 6 dxe5 Ng4 7 Bb5+ c6 8 Qxd8+ Kxd8 9 Be2 +-. 

5 Bf4

This is an interesting move because it prevents 5...e5 (which works after 5 Nc3) and doesn’t allow 5...Bg4 (which may be the best move after 5 Nf3), while intending to play Qc2 in some cases.

5...e6

5...e5 6 Bxe5 Nc6 7 Nf3 Nxe5 8 Nxe5 doesn’t give Black nearly enough for the pawn, while 5...g6 6 Nf3 Bg4 (6...Bg7 7 Qc2 is also very unpleasant for Black) 7 Nbd2 Bg7 8 Bb5+ c6 9 Be2 +/– allows White to follow up by castling and playing a4 and h3. Black has no meaningful counterplay or pressure on the centre and faces a difficult defence.

6 Nc3
If White has time to develop naturally with Nf3 and Bd3, Black will simply have less space and no counterplay.

6...Bd6 7 Be3 0-0 8 Nf3

One natural plan for White is e5 followed by Bd3.

8...f5

This is an ugly move, but there is no other active idea worth considering.

9 Be2 fxe4

Black secures a square for his knight on d5, but creates a weak isolated e-pawn in the process.

10 Nxe4 Nd5 11 0-0

White intends Rc1 followed by Bd3-b1, with a large advantage and a straightforward attack.

Here is another variation where Black is slow to develop:

1 e4 e5 2 Nf3 Nc6 3 Bb5 a6 4 Ba4 b5 5 Bb3 Na5 (D)
White to play

This is called the Norwegian Variation. You may think Black obtains the bishop-pair for free here, but he does not. That is because a tempo is worth quite a lot in chess, and Black has spent many tempi neglecting his development to try to grab the bishop-pair. I played this variation with Black for about half a year while I was a FIDE master. I eventually abandoned it because I fell too far behind in development in lines like the ones below.

6 0-0

6 Nc3 is also a natural attempt, when White can play directly in the centre while Black has nothing developed. After 6...d6 7 d4 exd4 8 Qxd4 Bb7 (following 8...Ne7 9 Qd3 += White intends to castle and play Re1) 9 Bg5 f6 10 Bxg8 Rxg8 11 Bc1 Be7 12 0-0 Kf7 13 a4 c6 14 b3 += Black has a passive position and a ridiculous knight on a5. White intends Rd1 followed by Bf4 or Nh4 with increasing pressure.

6...d6 7 d4!

It is worth noting that in the Ruy Lopez, Black generally wants to keep the pawn on e5, since otherwise he grants White a space advantage for free.

7...exd4 8 Nxd4 Bb7 9 Qf3!? (D)
Due to White’s direct threats, Black has trouble developing normally.

9...Qf6

9...Nf6 10 a4 allows White to follow up with Re1 and Nf5, making it difficult for Black to get any counterplay.

10 Qc3 Nxb3 11 axb3

White threatens the c7-pawn, so Black has to make a strategically undesirable move.

11...c5 12 Ne2 Qe5!

This is an example of what I call a *sliding move*: the queen slides forward to e5, hoping White will exchange there and freeing the f6-square for the knight. A ‘sliding move’ is one that moves a piece along the same line of control as the opponent’s equivalent piece, without exchanging, usually so that you can benefit if there is an exchange. Such moves are counterintuitive because we tend to expect the tension to be resolved rather than heightened.

13 f3 Nf6 14 Bf4 Qe6 15 Be3
White intends Nf4 followed by Rd1, when he will maintain a firm grip on d5.

15...Nh5 16 g4! Nf6 17 Nf4 Qe5 18 Qxe5+ dxe5 19 Nd3 Nd7 20 Nc3 +=

Black is surprisingly passive in this endgame and White can plan Nd5 followed by c4 to keep a long-term pull.

In completely winning positions, practical players usually seek a path to victory that offers the opponent the least chance of saving the game, and where there is the smallest chance of overlooking something important. As an example, when a rook for a knight up, sometimes it is best to trade the rook for a knight and pawn just to arrive at an easily won position. An extra exchange is actually not that easy to convert unless you can win more material. That is one of the points of having extra material: to use the extra force to win more things, not necessarily to simplify, like many people believe. Many rook + 3 pawns vs bishop + 3 pawns positions are in fact drawn, especially with all the pawns on one side of the board.

There is a particularly funny non-transitivity where two bishops are notably effective against two rooks. 10.50 (or a little under) versus 7.60 is how you would normally interpret two rooks versus two bishops. It turns out that two rooks against two bishops and a pawn is much less than a two-pawn advantage. It is actually more like a one-pawn advantage. This has no easy explanation other than the rooks being less effective in this particular case than you would imagine. Most grandmasters do not know this, but I suspect they could conceptually realize it quickly from some examples. It is partially because the rooks have such a hard time keeping the bishops from attacking them. A rook can push a knight around the board, but its coverage of what a bishop does is a particularly orthogonal mismatch. In a situation where you have two bishops and two pawns against two rooks, I would estimate the chances are 90% that your opponent overestimates the value of the rooks and plays decidedly worse moves as a result of how much he overestimates his position. This is a rather rare material imbalance, but worth noting.

The correct piece values are most helpful to bear in mind when strange imbalances are on the board or could potentially arise. With identically equal
material of course, piece values are not an issue. In any case, piece values should be internalized quickly, but can still be a quite useful guide when unbalanced material needs to be assessed. Positional factors also matter in all cases, but having a good understanding of the value of the pieces will definitely help you evaluate positions better than getting their values wrong.

To reinforce these ideas about piece values, I have a rather complicated example which makes much more sense when you consider that Black is barely sacrificing anything. Players are just led astray because of their own misconceptions about the value of the pieces.

![Chess Diagram]

*Black to play*

This position really appeals to me because the most obvious and aggressive first try that came to mind ended up being a very good move.

**10...Nc5!**

Black appears to be somewhat passive because he has trouble getting his c8-bishop and d7-knight out. By sacrificing the exchange for a pawn, he gains a crucial central pawn, throws the game into a state of turmoil, and actually obtains very good positional compensation for the exchange. Otherwise, Black must clearly avoid 10...Nxe4?? 11 Nxe4 f5 12 Qd5+ Kh8 13 Neg5 +– and 10...Qe7? 11 Ba3 +/–, while 10...Ra6 11 Qe2 +/– is very clumsy for
Black. 10...Re8 11 Ba3 Bf8?! looks natural but is a little passive: 12 Bxf8 Kxf8 13 Qd3 Qe7! (13...c6 14 Nd2 + =) 14 Qe3 Kg7 15 Nd2 still is not quite fully equal for Black.

The quiet 10...c6 is a solid alternative, though after 11 Ba3 Re8 12 Qd3 b6 13 Rfd1 Ba6 14 Qe3, threatening Bh3 followed by Rd2 and Rad1, Black still has some work to do to equalize.

11 Ba3

White may think he is just winning material with this natural pin, but that is far too simplistic of a perspective.

11 Qe2 Qe7 12 Ba3 c6 13 Qe3 b6 leaves Black rock solid. White does not have anything here: 14 Rfd1 Re8 (Black has ideas like ...Ng4 followed by ...Ba6) 15 Bxc5 (15 Nd2 Ng4 =) 15...bxc5 16 Bf1 Bg4 =.

11...Nfxe4! 12 Nxe4 Nxe4 13 Bxf8 Qxf8 14 Qe1 f5 (D)

For the exchange he has sacrificed, Black has the bishop-pair, a central pawn on e5, and a bishop against the opponent’s rook-pair, which is slightly below par. Interestingly, many players would assume Black lost the equivalent of a
pawn in this sequence. In actuality, he traded 3.55 + 1 + .5 for a rook that was slightly below 5.25 since both rooks were on the board. In essence, this is a very even exchange numerically. As long as White doesn’t have any kind of real initiative, Black should be happy to neutralize White’s play like this and obtain a psychological advantage and the initiative by changing the nature of the position.

15 Nd2 Nc5!?  
Black would like to play ...e4 followed by ...b6 and ...Ba6 to activate his c8-bishop.

Another good option is 15...Nd6; e.g., 16 Bd5+! (16 Nc4 e4 =) 16...Kh8 17 Nc4 Nxc4 18 Bxc4 f4 19 Qe4 c6 20 Rad1 Bf5 21 Qe2 e4! 22 gxf4 (22 g4 f3) 22...h5, when Black has a solid position and counterplay.

16 Rd1 Be6  
16...e4? is too slow here due to 17 f3!, but Black can develop his bishop to the natural e6-square as well.

17 Nf3 e4 18 Ng5 Bd7 19 f3  
White threatens to take on e4, so Black needs to generate counterplay quickly and challenge the g5-knight immediately.

19...Bf6 20 h4 h6 21 Nh3 Bc6 22 Nf4  
22 Qe2 Be5 23 h5 gxh5 24 fxe4 Nxe4 =.

22...Qf7 23 Qe3 exf3 24 Bxf3 Ne4  
Black has equalized. He intends to play ...Re8 on the next move.
Interpreting Chess Rules and Ideas Taught to Beginners

You don’t have to learn everything the hard way. Plenty of people have already been there, done that, and learned the hard way themselves. In my own recent work, by far the most important heuristic was one I discovered by experimentation and for which I only later figured out an explanation. By ‘experimentation’ I mean ‘trying every possible idea even if it is clearly ridiculous and seeing how it works’. This has given me a broad frame of reference for evaluating chess ideas and ways of thinking about the game.

When I started playing chess, I heard many different pieces of advice that were often conflicting and made little sense to me collectively. Only later did I patch up all the ideas in a way that struck a logical chord with me. I will address some of those pieces of advice that never seem to be explained in a reasonable way, so a beginner never has a meaningful way of making sense of the principle or idea, or understanding where it came from. In a sense, a lot of advice given to players seems a little random without understanding its genesis. Some originally well-intentioned advice tends to get overgeneralized and become misleading when players pass it on in an attempt to assist other players.

Rules in chess assume ‘all else equal’, but all else rarely is equal, so we need to judge ideas based on specific circumstances. Most of the time, advice given to amateurs is in the form of rules. Chess is a concrete game though, and more often than not, this advice is too stereotypical to be of much applicable value. In terms of engines, as long as something is right more than half the time, an idea has validity and may test out positively. Of course, to rely on rules in practice with much consistency, one needs much more confidence than 50%, so I tend to focus on useful questions to ask rather than rules to rely on. The idea is to focus on important aspects of a position in an open-minded manner, rather than close-mindedly try to adhere to some rule as if it must be right. ‘It’s the exception that proves the rule’ is a popular statement spoken outside the realm of chess. In chess, exceptions to
legitimately good ideas or rules just highlight that other things are more important in the specific position than a general rule that applies with all else equal. This is true because there are many different factors in a position. Nevertheless, it is a good idea to internalize and think about many basic ideas about chess to deepen your grasp of the game.

I saw a list recently written by a grandmaster giving advice to beginners, so I shall break down the advice given after I quote it (in italic). Most of the examples quoted in the following pages represent a decent idea but focus on fundamentally the wrong concept. It is worthwhile to address these rules because everyone has heard them before and most people have not thought about them very deeply. If you are a player under 1600, chances are that the advice did not strike you as so bad the first time you heard it.

1. “Develop knights before bishops.”

This is not a very useful rule and it depends on the opening in question. You may interpret this to think that developing bishops early on is suboptimal for some reason, but that is definitely not true. There is nothing fundamentally wrong with developing a bishop early in the game. What matters is the reason behind it. In many openings like 1 f4 d5, it is logical to play a quick ...Bg4 to get the bishop outside the pawn-chain before playing ...e6. In general, the main drawback to playing an early ...Bf5 or ...Bg4 in most 1 d4 d5 openings is that the b7-pawn often becomes weak due to Qb3 (yet it is easy to see how that is not a concern after 1 f4). The most basic example is 1 d4 d5 2 c4 Bf5, when even 3 Qb3 is a good move. If Black had time to play ...e6 and ...c6, there would be nothing wrong with developing the bishop to f5 in this case. In this instance, it is mainly a concrete consideration. Developing any inactive piece is usually not a bad idea if it does not lose material or destroy your piece coordination. Perhaps this last sentence should be the idea taught, but it is hardly a rule and more of a general consideration.

Of course, a knight on its initial square usually has very little scope and influence on the game so one can see why you might not want to leave it on its initial square for long. Still, there are many openings in which it is perfectly reasonable to leave the b1-knight at home for quite a while until
White has already castled. The Ruy Lopez is a good example of this. The expression ‘a knight on the rim is dim’ is something most beginners have heard. It is important to understand that in many instances a knight on the side of the board is quite acceptable. This is true especially in closed positions where one needs to play for a pawn-break; in such instances, a knight on the side of the board may be doing a great job of preparing the break. A knight on the rim that prevents the opponent’s pieces from developing or can quickly occupy a great outpost is often very effective. Squares like b6, c5 and c6 are very common outpost squares for a white knight that was formerly on the edge of the board. A knight in close proximity to the opponent’s king also tends to perform at maximum capacity. Strong players rarely concern themselves with conceptual ideas at the board about bad bishops or bad knights because everyone knows that ideally you would want a piece on a monster square in the centre, or otherwise on the best square possible. One of the key questions to concern yourself with at the board is about the worst-placed piece. If that is a useless knight on the edge not influencing the play, you should be drawn to consider moving it.

One additional reason why knights are often developed before bishops in some openings is due to flexibility. When you put a knight on f3 early in the game, most of the time it is the best square from g1, whereas the bishop often can go to e2, d3, c4, b5 or g2 and it may make sense to be flexible in this decision. The knight has fewer squares, so you can get the best move right more often just by guessing. I would rather just try to play moves with good reasons behind them. Perhaps the rule could also be worded as, “Play good, obvious moves, and take your time on uncertain moves.” I would imagine everyone already knows that though.

2. “Castle early.”

Castling in general is a good thing to do at an early stage of the game, but it is important not to do it too robotically or without paying attention to other considerations. Most players have never even thought about the reason why they should want to castle, and just do it without much thought. Castling at an early stage makes sense to get an inactive piece (your rook) into play, to free the e1- (or e8-) square for another piece, for overall coordination, and to
protect your king. What happens if the position is completely closed, or your rook is already active and your king is surely safe in the middle of the board for the foreseeable future? In many cases like this, castling is not going to improve your position much. The main arguments in favour of castling then are actually piece-activity, your worst-placed pieces, coordination, and king safety. Thus, it is important not to get too focused on the castling rule, when these considerations are more vital in making the decision. I see a lot of players castle in situations where the king would actually be safer in the middle of the board. In the next example, White had put all his eggs in one basket, relying on the pin on the e-file, but Black got great play without needing to castle.

We have a fairly typical occurrence here in the Sicilian: Black has a sound pawn-structure, but some difficulty completing development. If Black can open the h-file, he won’t even need to worry about castling, while White will have a weak king. In the game, this is exactly what happened and White went down without much of a fight.
14 Nc3?

This is a major misjudgement, allowing Black simply to take on g4 and play ...Kf8, when all his pieces will be ideally placed after ...Bd6.

14 g5! is clearly the correct move, keeping the position closed and making it more awkward for Black’s king on e8 and rook on h8. 14...Ne4 and now:

a) 15 Nc3 Nc5! 16 Nxd5 cxd5 17 Bxd5 Rc8 18 Bf4 0-0 19 Rad1 Bxg5 20 Bxf7+ Rxf7 21 Rxd8+ Bxd8 22 Qc4 Bb6 23 Re7 Rd8 seems like it can only be better for Black: 24 Be3 Rd1+ 25 Kg2 Nd7 26 Bxb6 Nxb6 27 Qb3 Rd7 28 Rxf7 Rxf7 with the initiative.

b) 15 Nd2! Nxd5 (15...0-0 16 Nxe4 dxe4 17 Bxe4 Bxe4 18 Qxe4 Bxg5 19 Qe5 Bf6 20 Qxh5 Re8 21 Rxe8+ Qxe8 22 Be3 Rb8 gives Black counterplay) 16 Nc4! (this move is important; now Ne5 is unstoppable) 16...Ne4 17 Ne5 Bc5! 18 Nxd5 fxd5 19 Bxe4 0-0! appears to lead to an obscure perpetual check: 20 Bxg6! (not 20 Bg2? Bxf2+, when 21 Qxf2? loses to 21...Rxf2 22 Kxf2 Qh4+ =+ and 21 Kh1 Bxe1 22 Qxe1 Qf6 =+ favours Black) 20...Rxf2 21 Qe6+ Kh8 22 Be3 Qh4 and White’s king will not be able to avoid a perpetual.

14...hxg4 15 hxg4 Kf8! (D)
Now ...Bd6 will flow naturally and point out the weak dark squares on the kingside.

16 Bf4 Bd6 17 Qf3 Bxf4 18 Qxf4 Rh4!

Clearly Black will triumph as a direct result of White’s poor handling of his kingside pawn-structure.

19 Qg3?

This looks like a plain blunder, though there were no good options. After 19 f3 Qb6+ 20 Kf1 d4 21 Ne2 d3 22 cxd3 Nd5 23 Qd4 Nb4 –/+ Black’s threat of ...Nc2 causes problems for White.

19...Rxg4 20 Qh2

20 Qh3 Kg8 –+.

20...Nh5 21 Rad1 Qg5 0-1

With less material, an awful position, and various threats from Black, White gave up. This example is especially appealing because Black won the game in direct attacking fashion only because he did not castle.

Although this is just one example, it is not unusual for your rooks to become active on the h-file at an early stage or for the king to feel safe on f1 or f8 in many openings. Learning from such examples can help you develop a more nuanced feeling for when castling is called for and improves your position. As one gets stronger in chess, there is a tendency to drift away from shallowly interpreting common pieces of advice.

3. “Keep the queen at home early in the game.”

This is something almost every beginner learns. Is it really such a bad idea to run around the board collecting a bunch of material? Of course not. The real
issue here is the time spent winning that material and the value of a tempo (a quarter of a pawn being the most accurate rounded value), which was explained in the section on piece values. Players should try to develop an understanding of tempi in all phases of the game and avoid wasting tempi in all situations, regardless of whether it is the opening, middlegame or endgame, and which piece is wasting time. That is why rules like this often fail to make a compelling point and may even falsely convey ideas. Some players think that just because it is the middlegame and all of their pieces are developed, it is probably not a mistake to move the same piece three or four times in a row. This is one of the consequences of interpreting a rule like this literally: you may conclude that time is of less value in later phases. If your opponent really cannot do anything direct against your position or weaknesses, then you may indeed have time for ultra-slow moves. If you grasp tempi well, you will not want to move the same piece many times in a row unless there are very specific concrete reasons for it. Hence, the issue is not the queen inherently, but the value of a tempo.

There are a lot of instances in which developing the queen early makes perfect sense. One of them is in lines like 1 d4 d5 2 c4 Bf5 3 Qb3, where Black has not developed any of his kingside pieces yet. Sometimes even grandmasters quickly play stereotyped moves and forget about the possibility of winning material with a queen move right in the opening. In the game Safarli-Šebenik, European Team Ch, Reykjavik 2015, after 1 e4 c5 2 Nf3 d6 3 Bc4 Nf6 4 d3 Nc6 5 c3 Bg4??, White missed the move 6 Qb3, which would have won a pawn immediately. He said afterwards that he played 6 h3? without seriously thinking about it. Additionally, when your position has no weaknesses, you are often free to roam with the queen if it is doing something purposeful like provoking weaknesses or picking up material. Here an additional emphasis is put on grasping weaknesses and the fundamentals of your position rather than stereotyping a piece as something you do not want to move early in the game.

4. “Keep your king safe. Do not advance pawns in front of your king.”

What does it even mean to keep your king safe? Many players think castling keeps their king safe, and then castle right into vicious attacks. If your king
has almost no potential to be attacked, it can be well-placed right in the middle of the board. Additionally, your king can also be completely safe with all of your pawns advanced directly in front of it. Players should focus on perceiving real threats and recognizing focal points rather than being vague about a move being ‘weakening’. In closed positions, advancing flank pawns in front of your king is extremely common because the opponent has no open lines to exploit the potentially weak squares you may have softened up. Hence, this rule boils down to exploitable weaknesses. If you can advance pawns in front of your king for a meaningful purpose and your opponent is not able to exploit the thrusts in any way, in a lot of cases, it will be a good idea to do so. My favourite instance of this rule being broken is when advancing a pawn in front of your king is actually the best way to keep your king safe. Sometimes this provides useful space for the defensive forces, but often the key question is to do with ‘hooks’. A hook allows your opponent to open the position by force with a pawn-push to a certain square. Sometimes advancing a pawn in front of your king prevents the opponent from utilizing an easily accessible hook and makes it much harder for him to get active play.

5. “Avoid pawn-weaknesses.”

This is another vague statement that does not seem particularly helpful, and would almost never help you make a decision at the board. This statement might have some credence or validity for beginning players who like to play one-move attacks that threaten an opponent’s piece with one of their pawns, but weaken a whole host of squares in doing so. In this instance, the main point should be that a harassing piece with no actual (strategic) goal other than to attack a piece is often not good and may simply create weaknesses or hurt your position in some way. In terms of pawn-weaknesses in general, what matters most, firstly, is exploitable weaknesses. Secondly, trying to avoid pawn-weaknesses at all costs can cause a player to interpret any pawn that looks unusual as a weakness. Doubled pawns are not always weaknesses, and often control key squares in the centre or allow files for rooks to be used. It is important not to interpret potential weaknesses as real weaknesses. A lot of players try to avoid isolated pawns due to interpreting them as weaknesses. This kind of thinking limits a player. In Chapter 6, on evaluating positions,
there are examples of both good isolated pawns and suboptimal isolanis. That being said, having four isolated pawns is usually awkward, but people rarely focus on these cases and such instances are usually the result of many decisions, not just one.

Additionally, few players willingly create weaknesses that they realize are weaknesses. Most of the time for beginners, if they make a weakening pawn move, it is because they think something is forced, or they are responding to something that has been captured that they overlooked. For them it would be more useful to improve their candidate-move considerations when things are threatened, or to be aware of piece exchanges that are unfavourable for them. Additionally, poor piece exchanges are often the result of thinking the pawn weakness you are creating is more important than the quality of the exchange that took place. These are specific areas that nearly every player can and should work on.

6. “Capture towards the centre.”

Capturing towards the centre is usually done to control more squares with your pawns. Yet capturing away from the centre very often brings pieces into play that were inactive. You need to judge how the capture affects the rest of your pieces when you decide which way to go with it. It is not unusual in a wide range of openings for Black to play ...dxc6 when a piece is captured on c6 (and ...bxc6 is still available). Most of the time, the move ...dxc6 in that case opens lines for both the queen and the bishop and assists in Black’s development. In terms of captures on b3, g3, b6 and g6, these tend to be the most favourable instances to capture towards the centre, partially because the a-pawn is the least valuable pawn and it often opens the way for an inactive rook on the rook’s file. This is an empirical data point confirmed by Grandmaster Larry Kaufman’s studies of piece values that it is worth being aware of. This is certainly an ‘all else equal’ kind of rule, and you will always have to make the judgement concretely based on what you determine is most important in the position. In a lot of cases, piece-activity will determine which way to capture.
7. “Always have a plan.”

You do not always need a plan. If you have no apparent plan at all but have awareness of the important things in a position (the opponent’s ideas, badly-placed pieces on the board generally, and weaknesses), very often you can make purposeful moves. You can make a purposeful move that prevents the opponent from playing a good idea or improving one of his badly-placed pieces. You can make a purposeful move that cements a weakness in the opponent’s position or liquidates one of your own. You can improve one of your pieces without necessarily having it connected to any plan. Very often we can play purposeful chess without a clear idea of how the play will develop, or even what our next move will be.

The idea that you should always have a plan is particularly confusing for beginners and places no emphasis on the fact that the opponent also has ideas of his own that you have to take into consideration. The quote feeds into the myth that every brilliantly played game was based on a deep master plan seen well in advance. Old books often gave the impression that you could plan out exactly how you were going to win the game in superior positions and the opponent would be helpless to stop you. In most cases, games were won with generally good multi-purpose moves that had many ideas behind them, not just one. I do not think this idea of grand or deep plans is even something useful to bear in mind. It may actually lead to shallowness of thought, rather than depth, due to missing the opponent’s ideas. The focus should be on playing the best move in each individual position, regardless of whether you can predict exactly how the play will proceed. Sometimes there are just too many possibilities in a position to really have a clear plan in mind and it is best to just play good moves that you think improve your position generally or deal with the possible coming complexities in the best way possible. Flexibility and being aware of the opponent’s ideas are very important. A lot of the time you can come up with the best move in a position without needing to see necessarily where the rest of your pieces are going next. Instead of always having a plan, try to always have good reasons for your moves instead. That sounds obvious, but certainly helps in understanding and learning from your own decisions after a game.

People often imagine that strong players do everything by design, when they
really generally do not. Grandmaster Simon Williams likes to talk about how he does things which he feels are questionable in-game, but then are touted as brilliances afterward. He remarked that this is one amusing thing about being a grandmaster. It is common to work with a lot of uncertainty at the board, and I have had countless post-game analysis sessions with players of grandmaster strength who repeatedly said, “I do not know” throughout.

8. “Play where you have more space.”

This is one of the rules that is close to being good advice, since having more space in a certain part of the board gives you more room to manoeuvre in general. Nevertheless, we obviously have to look at every position on a case-by-case basis. Some positions have a lot of open space somewhere with no play at all to make use of. A lot of closed positions involve effective liberating moves on the side where you have less space. This is closely related to the ‘pointing pawns’ rule taught to amateur players: “Play on the side of the board where your pawns point.” Nevertheless, this is poorly-worded and too dogmatic, so it confuses many beginners. A much better wording in a less dogmatic form would be simply to state that in closed positions, the direction your central pawns point almost always denotes where you have more space and points to which pawn-break you would ideally like to play. The emphasis is on the word ‘ideally’, so that you do not become too one-dimensional in carrying out the idea. Typically your pieces will operate most effectively where they have the most room to manoeuvre, but you should not dogmatically interpret this rule. In certain positions, you will have even have more space on all parts of the board. In that case, following this rule would dictate that you should play everywhere, despite the fact that you can only make one move at a time. It is important to distinguish between the moves you ideally want to play and the actual best moves (according to your evaluations and judgements) at the board. The main take-away from this rule should be that piece exchanges, evaluating pawn-breaks, and badly-placed cramped pieces typically have greater importance when there is a struggle for space.
A common elementary rule is to exchange pawns when behind in material and exchange pieces when ahead in material. This simple rule is rarely expounded upon, so it is worth exploring a little. While there are not so many situations in which exchanging pawns is profitable for the side that is material up, in some cases, trading pawns does make converting a win easier for a practical player at the board. This can happen when certain pawns are hard or awkward to defend, and trading them off simply gives you less to worry about. A lot of people get confused by the idea of exchanging pieces while material up and overfocus on it, instead of focusing on playing good moves. When I was around 2000 strength, I really enjoyed an article I read about playing actively when material up, even specifically playing actively with your queen while it was placed in the opponent’s camp. Most players have a natural urge to play extremely passively when ahead in material and often miss out on opportunities to make the most of their greater force and numerically more powerful army. The most psychologically healthy attitude in chess is to play actively and dominate the position when material up. If you have better economy of force or a bigger army, the contest of force should, barring major exceptions, end in favour of the stronger side. This is especially true with respect to focal points: sometimes certain squares are just not able to be defended when the side that is ahead in material coordinates his efforts on a specific target. This concept, in my experience, is not thought about much by players under 1800, but conceptually is a very easy one to grasp.

With a material advantage, many amateurs get the idea of exchanging pieces wrong (assuming the game will win itself) and go into ‘extreme passivity’ mode or exchange off their active pieces for the opponent’s passive ones due to the fact that it decreases psychological tension for them. Whether material up or not, you should still consider the most important aspects of the position and judge whether a trade is really good for you. Exchanges of any kind may help the defending side for a variety of reasons. The main reason is that fewer and fewer pieces on the board give the defending side greatest potential to head for theoretically known drawing positions. Both the attacking and defending sides need to be very cautious about simplifying when the situation may be close to the border between a win and a draw.
Regarding extra material in typical situations and decidedly passive play, I had a lot of fun with exchange sacrifices early in my chess career because they jumped out at me after reading the book *Secrets of Modern Chess Strategy*. When I was 2200, I had a tendency to play exchange sacrifices for interesting or unclear compensation and I was surprised by the psychological effect it had on my sub-2200 opponents. They tended to play weakly after exchange sacrifices, while after normal piece exchanges or the trade of queens, I did not notice particularly weak play. I had a game in Spain in particular in which I sacrificed the exchange by the method of elimination because I really could not see any better option in a bad position. The choice was to play a significantly worse position with a bad king and maybe hold equal material for 5 or 6 more moves or give up the exchange to obtain the bishop-pair and hope to get play on the dark squares. I made the latter choice and my opponent thought I saw something really deep even though I did not. It was clear that he did not understand my reasoning at all. He actually needed to play aggressively in the new situation to punish me, but he decided to play defensively. This allowed me to obtain a ton of compensation. He wasted about four tempi in a row (about a pawn’s worth of tempi!) doing nothing in particular and my position became excellent.

In many cases with material imbalances or ambiguous post-sacrifice positions, the player with more nominal material pays too much attention to the material component of the evaluation, and therefore plays to ‘justify’ his ‘advantage’. It is simply harder to see and think about less concrete aspects of the evaluation. This especially applies to dynamic aspects. This influences players at all levels, but more at lower levels due to a lack of nuance and experience handling positions with imbalances. They tend to focus on keeping their material edge and may neglect other considerations, making suboptimal consolidating moves or non-dynamic moves rather than the objectively best moves. It is simply useful to be aware of the fact that you might be doing this in some of your own games so that you can consciously work to correct or overcome it.

A simple awareness of the badly-placed pieces on the board or drawish endgame scenarios can help one avoid making bad exchanges when material up. There follows a surprising example where simplifying when two pawns up did not actually give White enough to win.
Before the diagram position arose, White played Nb3-d4 and Black responded with ...Bc6-d7. White had been two pawns up with pressure for a long time, played a little carelessly, and assumed the win would come naturally due to his large material advantage. What he underestimated is how difficult it is to win certain types of endgames with various isolated pawns when the only way to make use of your extra pawns is to try to queen them. The coordination between the stronger side’s pieces and pawns is often terrible. Here is a very interesting example of this occurring while two pawns up, but with four isolated pawns.

1 Ra1!?  

White tries to improve over 1 Q xd6+ by activating his rook and not improving Black’s king. In the diagram position, White had nothing better than to exchange pieces. Yet before it arose, he chose to enter this position when he had various other options because he assumed this one was winning. As it turned out, that assessment was incorrect, and he shied away from the actual winning continuations to trade queens into a drawn endgame. This
example highlights the importance of being aware of ways to make progress when you have extra material and an endgame is looming.

Trading queens on d6 does not seem to achieve much, as Black activates his king and then follows up with ...Nh3, obtaining pressure against White’s weak pawns: 1 Qxd6+ Kxd6 2 Ra1 Nh3 3 Ra6+ Kc7 4 Rf3 Ng1 5 Re3 Rg2 =.

1...Nh3 2 Rf3 Ng1 3 Re3 Qxa3 4 Rxa3 Rg2

Black threatens the h2-pawn as well as the modest strengthening of his position by ...Rb6 and ...Kd6.

5 Ra5

5 h4 Rh2 6 Ra1 Nxe2 7 Rxe2 Rxe2+ 8 Nxe2 Bxf5 9 Ra7+ Kd6 10 Nd4 Bg4 gives White a pawn-up position where he still won’t be able to win against Black’s active pieces and bishop-pair.

5...Rxh2 6 Rxd5 Ba4+ 7 Kb1 Rh1! 8 Bf1! (D)

![Chess diagram]

Black to play

White intends the simple 9 Ka2 or 9 Re1, when he will have consolidated his extra material.
8...Kf7!

Black keeps White on his toes because 9 Re1? will be met with 9...Bxd4 followed by ...Nf3.

9 Ka2

White now legitimately threatens 10 Bg2 or 10 Ra5, so Black has to move it or lose it:

9...Ne2!!

This shot aims to exploit White’s clumsy king position if White takes with the bishop.

10 Rxe2

10 Bxe2? Bxd4 –/+.

10...Rxf1 11 b4 Rc8! 12 Bb2 Ra8 13 Ra5 Rxa5 14 bxa5 (D)

![Chess Diagram]

Black to play

14...Bxd4 15 Bxd4 Bb5
Black easily draws the opposite-coloured bishop ending.

This is a nice counterexample to the standard rule, “Exchange pieces when material ahead.” As we saw here, after the exchange of queens, White had problems defending his pawns and coordinating his pieces. Even before the first diagram position arose, White should have aimed for a position where his two-pawn advantage mattered more than it did in the game. He allowed Black to draw in one of the only ways possible: by believing in his material superiority too much and not accurately assessing Black’s defensive resources. As you can see from the main line given, being two pawns ahead in this opposite-coloured bishop endgame leads to a quick handshake. Spotting significant drawing chances like Black had in this example is a sign of a strong defensive player, especially if you notice them in advance. It goes both ways: both players needed not to be too tied to the material factor in assessing the endgames that arose.

10. “Play opponents your own rating level to improve the most. Against stronger players, attack them and aim for complexity, because in normal or typical positions they are likely to outplay you.”

The best way to make sense of these statements and why they are wrong is to understand where these thoughts came from. Many respected book authors of the past proposed that you should play opponents within 100 rating points of yourself, both to avoid psychological discomfort from losses and for development as a player. Their students did not perform well against stronger opponents, were not particularly mentally strong, and got depressed by losing more often than winning or drawing. It is true that players who are extremely scared of their higher-rated opponents will underperform on the whole, but that is something they should deal with based on effective mental strategies and experience. Due to getting outplayed a lot, and mostly winning by cheap tactical tricks against much stronger players, their coaches proposed the idea that they should play for cheapoes against much superior opposition because positionally they believe their students have no chance in a normal game.

That sounds like terrible advice to me. Their idea is that you should not just play your usual game (or try to play your best chess), but adhere to a
specifically aggressive and wild standard because they have no confidence that you can play reasonably well in typical chess positions. If you are struggling in normal games against stronger opposition, why not analyse those games so as to improve your level of play in typical positions and consistently improve your defensive play? It is safe to assume that you are doing a lot of defending against stronger opponents that beat you repeatedly. I do not know about you, but I learn a lot from getting positionally outplayed by stronger players, and find those to be some of the most useful lessons I ever learn in chess. It should be somewhat obvious that the weaker player playing the strongest moves and losing the fewest games possible is what annoys the stronger opponent the most in such a scenario.

There are a couple of facts in favour of the lower-rated player (with more than a 100-point Elo gap). Firstly, it is significantly easier to draw a game than to win a game. You can only win chess games thanks to mistakes by one of the players, and at a relatively high level against solid opposition, it is very difficult to provoke them to make mistakes if they do not want to weaken their position or outwardly take risks. Secondly, taking the Elo system as a whole, higher-rated players significantly underperform when they are 200 to 300 Elo stronger than their opponents. When a player is 200 Elo stronger than his opponent, he is expected to score 76%, yet scores closer to 73% in actuality. With a 240 Elo gap, a player is expected to score 80%, but scores only 76%. Thus a “240 Elo gap” is slightly off, closer to what should really be a 200 Elo gap for accurate point distributions (Sonas, 2013). Previous reports confirmed the same thing as early as 1995 in major chess publications. These older reports were pointed out to me by National Master Chabris.

The statistics show a rather interesting point: At a 235 Elo disadvantage, you need to score just a measly 20.5% to break even. This is arguably the perfect Elo gap for gaining points as a weaker player. Diminishing returns are felt after this gap as well, because the possible increased winning percentage after this is so minimal. For example, at a 335 Elo disadvantage, you need to score 12.7% to break even and at a disadvantage of 435 Elo, you need to score 7.55%. The amount that you need to score gets harder and harder to achieve relative to the skill gap as you cross the 235 barrier. Most 2450 players would lose every game against Magnus Carlsen despite being expected on paper to
score approximately two draws and eight losses out of ten. This gap is too big at the higher end of the spectrum. Of course, in a general sense the World Champion is an exception because he always plays lower-rated players and scores extremely well against them. But in general, a 400 Elo gap usually means the skill gap is too big to regularly get a draw one in five games. In most cases, draws with an Elo gap like that come about through relatively lucky circumstances, whereas when someone is around 200 or 300 Elo higher-rated than you, their strength gap is unlikely to be so big that you cannot catch games here or there and draw an awful lot of them. It makes perfect sense looking at the rating system that being about 235 Elo lower rated than your opponents is excellent for gaining points, gaining strength, and gaining experience. When I faced players with that much of a rating advantage over me, I tended to score quite well and gained very useful experience and rating points.

It is interesting to analyse the results of many closed round robin GM-norm tournaments and see how often the highest-rated players performed up to their expectation. In over 80% of cases, you will find that the top-rated players in the section lost Elo to their solid, lower-rated opponents. This makes perfect sense from a psychological perspective: best training results are consistently shown when effort applied is the number one factor, not necessarily consistency (as published in a study by Scott Barry Kaufman in 2015). The same goes for playing: where effort is at a maximum, the results are also expected to be the highest. Being a few hundred Elo points above another player tends to not motivate someone to work the hardest at the board to play their best chess. But having your back against the wall tends to bring out the best.

I would like to point out that increasing draw rates at lower master levels are a recent trend for a variety of reasons. Firstly, it is much easier to prepare forcing lines (that tend to end in long draws or positions that are difficult to lose and take the play out of the game) thanks to recent advances in computer hardware and software. Secondly, defensive technique has improved dramatically due to players analysing their games deeply with computers and getting better at finding defensive resources in their own games. Lastly, a larger percentage of rapidly improving young players now play in tournaments compared to the past. If you compare the situation in 2015 to the
1990s, the difference will look enormous statistically.

Most people do not realize it is well-established that facing players approximately 200-300 Elo above you is optimal for improvement from multiple angles, giving you both a slight mathematical and psychological advantage, as well as a learning advantage. This applies even more if you have a good mental state and can play solidly and not lose too many games due to unforced errors especially. At first I was intimidated by stronger players, but due to simply experience and immersion, I became used to it. Losing to stronger players makes it crystal clear what you need to work on. Additionally, realizing I was consistently gaining rating points against stronger players made it mentally easier to play against them. 2550 grandmasters who are unable to play opponents rated over 2600 practically never get the chance to break through to higher levels. It is essential to play higher-rated players if you want to move forward.

It is also known in numerous sports and sports psychology generally that the optimal improvement strategy is to play opponents one rank or level above you (in chess, 200-300 Elo is a good estimate of that), who will expose your mistakes and deficiencies, but generally not viciously enough that you are discouraged from trying. Although I did not know this when I started playing chess, I nearly always played in higher-up sections in tournaments, even when I was 1800. As one valid analogy, in martial arts, one of the reasons the belt system is retained so widely (other than sales and motivation) is that it helps match people for training purposes such that sparring or rolling with a sempai or senior roughly one rank better is especially productive. You make mistakes and they are punished, but not so mercilessly that you are unable to make the attempt. You can do that with much more skilled partners, but they have to be in a teaching mode where they are deliberately giving you openings you can learn from and selectively punishing mistakes, and relatively few people do that well.

Logically, this all makes perfect sense, and additionally it is worth pointing out that you can improve a lot more as a 2000 player than as a 2500 player. As a 2000 player, you can realistically gain 200 to 300 points with one year of very serious professional work, whereas a 2500 has almost zero potential to gain that many points in such a short time. Thus, an improving 2000 player
has a strong tendency to take points from above just due to his natural improvement and improvement potential and possibilities. The 2000 player has to get his points from somewhere, and gains the most from stronger opposition, whereas a 2500 player struggles to find significantly higher opposition because barely anyone is even 200 or 300 Elo above him. When 2500 players get stuck playing significantly lower-rated opponents, they have a seriously difficult time gaining any points at all. These players shooting through the ranks and taking a lot of points along the way have a tendency to put a small dent in the overall fairly accurate rating system. I was one of those players as well, and hopefully as a reader you can be too.

Playing better players, you develop the most, grasp concepts like solidity much more, and gain psychological strength. A normal advantage better players have is slightly psychological. Once that is gone or overcome, you are a clear statistical favourite as the underdog.

Many players believe that against stronger players, you should attack. This is often repeated as a maxim. Unfortunately, this often leads to the creation of unnecessary weaknesses and crushing defeats. Playing dubious openings also hurts the most against the strongest opposition, as there is the greatest likelihood of being shown why they are regarded as dubious. When I just played normal chess in grandmaster tournaments where I was the lowest-rated player, I gained Elo in the vast majority of events. For absolute clarity, it is worth restating that it is just a myth that you should ‘attack’ if you are the weaker player. Playing good moves is what annoys stronger players the most. When strong players see their opponents are giving them few winning chances, they are more likely to lash out and play bad moves. Many chess teachers claim that your best chance against a much stronger and more experienced player is in a complicated position because they might miss something. But we lose games due to mistakes that we make ourselves, and giving yourself maximum stress on every move will simply lead to you losing nearly every game if the skill gap between you and your opponent is too great. If you play normal chess, you provoke the stronger player to make objectively bad decisions.

Nowadays we also know how drawish chess objectively is. The draw rates are high in the computer world championship, the correspondence world
championship, and many popular main lines in elite chess have been worked out to an equal position or a draw. It does not bother me in any way that chess is a fundamentally drawish game because complicated and exciting positions featuring mistakes by both sides occur in practically all of my games. Being the lower-rated player is a statistical and psychological joy with no pressure on you. If you defend decently, play relatively good openings, and have a solid mental state, you should consistently gain rating points against stronger opponents. The experience is very valuable, and even against stronger opposition, I practically never play for a draw with White, despite what you might think from what I have written. In every White game, I aim to play principled chess for the maximum advantage possible. Granted, with Black I tend to play solidly and focus on equalizing so as to avoid suffering against grandmasters in lifeless positions. Nowadays stronger players try to create complexity and unbalance the positions against weaker opponents, especially with Black, when they are afraid their lower-rated opponents may just play reasonable moves, simplify, and draw.

Stronger players set more difficult problems for you, force you to be more alert, and overall play more good moves. Playing them forces you to improve your candidate-move selection, your calculation, your tactical awareness, and your opening play. Playing them causes you to think harder, which has a training effect itself. They play trickier ideas, exploit nuance more and demonstrate subtlety in all areas to a much greater degree. In chess, it is just a harder test, which you will also prepare harder for and put more effort into. But besides all that, the quality of the chess is simply higher, and you learn more from analysing the games, their decisions and analysing with them. They normally calculate better than you do, so when you make a tactical mistake that they exploit, if you figure out what you did wrong, you see how looking deeper or more accurately in your calculations could directly improve your own play. If you look at such calculations in annotated games of grandmasters, it is more abstract and less motivating. It is definitely most personal when you play it yourself. Additionally, if you play the same stronger players regularly and do your homework, you will close the gap as time goes on. When I was 1800, I sometimes played 2100 and 2200 players in the finals of my local club events. Eventually I faced a 2200 player’s Black repertoire five times and worked out a nice way to challenge him each time. We drew four of the games, but I got an extremely good feeling for the
variation in question, which he handled slightly differently each time, helping me appreciate the subtleties of the position-type.

Assuming you are analysing the games and learning a lot from them, you will typically have more to learn from the games and the decisions in them than your stronger opponent. For players in the 1500 to 2200 range, round robin tournaments are a great opportunity to become better than your regular opponents if you put in the effort and learn a lot from each of your games. After a while, if you seriously analyse the games and prepare for them, you should play the opening phase of the game much better than your opponent after figuring out the flaws or exploitable holes in his repertoire. You should also become familiar with the playing style that your opponent has and the types of mistakes he regularly commits. In general, being the lower-rated player and facing a much stronger player many times allows you to shrink the gap each time you meet, play, and seriously analyse the games. In almost all cases, if you are doing serious analytical work on the games, your opponent will not be taking it nearly so seriously. After all, most players as a whole do not work extremely seriously on chess.

Thus, the rating system has changed the way the game is played at master level (at lower levels less so since they are not as good at drawing or playing without unforced errors, but you should still seek out stronger opposition and learn to play them without fear because it is still the best for learning). The fact that chess is inherently a drawn game with perfect play and that many players have improved their skill in defence, general solidly and soundness, means that the game is different compared to previous times. In a broad sense, dubious play on the whole is now discouraged.

Lastly, the grandmaster in question ended his list with the statement, “Play the best move.” You might think the last one is a joke, but I have seen it on multiple lists of advice for beginners. If only that statement had any specific applicability and it were that simple... Perhaps the author would also agree with and even prefer the statement, “In critical positions, make sure to play the best move and use as much time as necessary.” Even with this quote, I would not fully agree, because sometimes you simply will need to make a judgement call, knowing that you will not be able to figure out the best move
at the board due to the time situation or the complexity of the position.

Many players are too obsessed with the idea of trying to play the absolute best move, rather than trying to maintain a certain evaluation or the nature of the position. After all, many books preach the idea that if you cannot find the text-move which has two exclamation marks on it, you need to go back and study more. The emphasis is in the wrong place there, when it should be on consistency and stability in playing good moves through an entire game.

A big part of getting stronger is understanding when rules do not apply. Essentially we want to understand and grasp useful generalities, but transcend the rules. While understanding that space and capturing towards the centre are generally good things, by thinking of counterexamples and becoming acquainted with examples of exceptions, we become better and better at creatively interpreting rules and transcending them.

I recently saw a strong international master analysing one of his games. He mentioned how in one superior position, he was unsure of the consequences of a tricky move that may have been good, but that he could not work out well (he could not evaluate the resulting position properly either). He refrained from this tricky variation and played something safe that did not give his opponent anything or give away any of his static advantages. Such a way of making this kind of decision seems quite foreign at lower levels: a general sense of playing many good moves consistently throughout the game and not playing an insane line that you cannot assess, which may lead you into a hard-to-handle position in which you will almost certainly make mistakes or oversights. This is not to say that you should avoid complex positions, but that in certain cases entering them will simply lower your expectations of success or expected value from the position. In the case of being statically much worse, it usually does make sense to randomize the play a little, but you should still be aware of the level of risk at stake.

Additionally, in the current FIDE time-limit (90 minutes for the game plus a 30-second increment on every move and an additional 30 minutes at move 40), how you handle time-pressure is extremely important. In games with a lot of critical moments, we simply have no time to think for ten or fifteen minutes each time. In some cases, we need to settle for moves that we simply know are not bad or that do not change the evaluation of the position.
negatively. In chess literature, it was assumed in the past that you only got into time-trouble due to flaws in your own personality and that there were easy methods to correct this tendency. Nowadays, since the standard time-limit is so much faster, time-trouble is a problem nearly everyone faces, and no one has provided any clear guidelines on how to deal with it effectively in all cases.

The main advice that I give is to write down your move times during your games, and analyse your games afterwards from the perspective of major time expenditures to see if you wasted time unnecessarily. You may notice an easy pattern to correct in your time management by repeating this exercise. By using your time more efficiently at critical moments early on, you can save time for moves 30 to 40 in the game. Research by Dr Kenneth Regan has revealed the important finding that players of all levels empirically play approximately 200 Elo weaker than their average strength during moves 30 to 40, which is typically where time-trouble occurs. This is very important knowledge for a player considering whether to risk getting into serious time-pressure when deciding between a few tempting options. Most strong players sense that they play a bit more weakly in time-pressure, but few realize it is this significant.

Going through lists of advice like the quotes given above helps you cement your understanding of the game if you think about each statement critically and objectively. Such lists usually receive only very minimal criticism or none at all, but feature ideas that give players a strong tendency to overgeneralize and a need to unlearn things later. Even as a beginner, I did not want to get into a rut of dogmatic thinking. I wanted to appreciate the depth of the game and think about things properly. Developing players should, among other things, think about good questions to ask themselves at the board and what aspects in a position to focus on. This will be covered later in the chapter. It is worth discussing some simple ideas about chess that are much more seriously worth thinking about than the usually quoted advice about the game.

I really liked a couple of quotes in particular that summed up good ways of thinking about the game in a very basic and general sense. After his world championship match with Viswanathan Anand, Magnus Carlsen was asked,
“Did you plan to target Anand in any specific area of his game?” The current World Champion replied, “[my plan was] Nothing special apart from playing 40 to 50 moves in every game. That was my main goal.” In another interview, he stated that he wanted to play 400 good moves in the match against Anand. This is a nice contrast from quotes in the past like, “I will crush all of my opponents.” While it was understood in the past – at least as far back as Steinitz and Lasker in the late 19th century – that you can’t win a game without the opponent making a mistake, it only appears to be the latest generation that has truly taken it to heart. The books of Botvinnik, Capablanca, Fischer and even Karpov gave numerous examples of games in which players lost without the annotator pointing out any noticeable mistake. In more recent times, the former correspondence world champion Hans Berliner unironically claimed that from the starting position, 1 d4 is a winning move. In the above quote, Carlsen simply stressed the importance of playing a lot of good moves because he cannot mysteriously make the opponent lose with ‘super moves’. When I started playing chess, I felt as though books repeatedly drilled the importance of playing and finding brilliant moves into my head. They stressed critical moments, finding the absolute best solution, and ‘IM’ or ‘GM’ level moves, which they classified as unique and special moves. Now I see it all differently, and the World Champion’s quote was quite sobering. He places a special emphasis on consistency and playing well for the whole game. It is an excellent idea to try to play 40 or 50 good moves going into every one of your games and not stress out over perfectionism. This can also help you avoid getting impatient and thinking you are going to crush all of your opponents quickly without their own help, which we know cannot happen.

The World Champion’s quote implies the importance of consistency because of the fact that you do not lose a chess game without making a mistake. This is an absolutely basic point about the game that every chess-player should know and understand. There are many implications of this. As mentioned above, old books often portrayed one side winning chess games without the opponent making any perceptible error according to the commentaries and analysis, as if the star just won because his pieces moved differently. I am startled when some players do not seem to realize that obviously there had to be a mistake somewhere along the way for one of the sides to win. For one side to be clearly worse, a mistake has to have been made. Sometimes I see
even strong players analysing a position and I ask, “What mistake was made to get to this awful position?” Sometimes they forget or do not consciously think about the fact that this is a logical necessity, and are surprised by my question.

This also works another way: when both sides have made no mistakes in a chess game, the position has to be objectively equal or close to equal. Being aware of this is very helpful when analysing and playing over games so that you can understand conceptually what occurred and what leads to wins, losses, and advantages. Awareness of mistakes and errors also assists in evaluating positions. If you are confident that no mistakes were made, you can also have confidence in the evaluation of the position just by elimination because no other evaluation is logically possible.

If you just keep playing good moves, you can win a lot of games without necessarily doing anything fancy. Bent Larsen used to say that when he was 2100, he played like a grandmaster once or twice a year, but to become a grandmaster he needed to do it every day of the year. Patching up weaknesses is a huge aspect of becoming more consistent, and analysing your own games is a huge part of that.

Besides the World Champion’s simple quote, one of my favourite quotes about chess is from Grandmaster Jon Speelman. He said, “I see improvement mainly as a knitting together of the areas of competence so that gradually one learns more and more to sustain good play until there will be whole games without serious error; and even coherent games in which one can discern a single underlying intelligence.” Speelman’s quote puts a special emphasis on learning, consistency, competence and avoiding error in an extremely eloquent way. It is undeniable that consistently playing good, reasonable moves is an extremely important part of playing strong chess. One could argue it is even the single most important part. Competence is vital in all of the important areas of chess because, among other reasons, high levels of competence increase consistency as well as reduce and help prevent large errors. At the board and while analysing though, the moment-to-moment chess experience should be focused on awareness: perceiving the most possible relevant and important aspects of a position so that you can understand it as well as you can.
Have you ever been at a chess club and seen a bunch of players analysing a position with no agreement in sight, when a grandmaster walks in and immediately senses and plays the best move that no one else noticed? Obviously this does not happen all the time, but it certainly happens often enough that a strong player immediately sees a solution while everyone else around the board looks at less important moves. There are a lot of reasons for why this occurs. Firstly, amateur players may just get obsessed by random moves in the position and calculate them endlessly, rather than looking for more ideas and basic candidate moves in the initial position. One explanation for why many players rated under 2000 have trouble finding certain moves is because of the cognitive bias of anchoring, where they rely too heavily on the first thing they notice in a position. Considering multiple lines of play and not getting obsessed with irrelevance is a very important part of playing good chess. Secondly, stronger players tend to be much better at homing in on the best basic moves to consider in a position due to superior awareness, focus, and evaluation of the position. This is one reason why I like to get instant evaluations from strong grandmasters in complicated positions. Even if they are wrong, I can at least see what they focused on in the position and why they gave the evaluation that they did. From hearing their thoughts for five seconds, learning about their focus in a position can often help me consider why my focus was suboptimal. As you develop a better appreciation for errors, consistency, and evaluating positions properly, your overall chess competence in many areas goes up.
The Allure of Genius and Glamorizing the Past (Tal Syndrome)

It is often stated that people over-report the amount of hours they put into tasks they are trying to become good at. Chess is a very different case and the reasons are easy to understand. Many chess-players see their chess ability as closely related to their intelligence (perhaps fallaciously, but they think it nonetheless), and there is a lot of effort to put across an image as a player who does not work very much on chess. The idea is to look like a natural talent who plays more on his own wits than on specific knowledge or the fruits of his hard work. Looking like a genius is very alluring to most players and gives them bragging rights to seemingly appear more talented and intelligent than other players who did not get as far as they did. I asked a local grandmaster how much total time he had put into chess before achieving his title. He replied, “Way less than 10,000 hours.” I was able to check how much time he had spent on the Internet Chess Club, and on just one of his accounts he had already spent 11,000 hours before becoming a grandmaster. His genius narrative did not mesh well with the facts.

On the other side of the fence, club players occasionally lie about how much time they spend studying chess to receive pity from others. Nevertheless, you can test them on what books they claim they have read, and you will realize that most of the time they can barely tell you simple things about the books in question. A lot of players also exaggerate how much opening theory they know, but cannot explain the basic points of moves in their main lines or how to handle any sideline. This is all closely connected to narratives, ego and image in chess.

A lot of the previous studies and reports on chess improvement rely on poor, self-reported data in which players had a serious personal interest in under-reporting their time spent on chess. In their minds, they thought it sounded pathetic to say they worked on chess five hours a day for years and saw no progress. Some of them assumed that it implies that they have no life outside of chess. The allure of genius for them is implying that a genius does not
need to put any work or effort into anything, even though any person educated about learning knows this is obviously false. I am just honest about the fact that I worked on chess many hours a day for multiple years to pursue my goals, and now as a trainer I work about eight hours a day on conscientiously assisting players and producing quality material. In certain disciplines, you can legitimately get very good within 1,000 or 2,000 hours. Chess is genuinely not like that, and the best trainers in the world will all say the same thing, and place an emphasis on longevity.

People tend to seriously underestimate how much time chess takes and how long it takes to become very strong in the game. One nine-round tournament typically takes at least seven hours per game, when factoring in preparation, playing, travel and post-game analysis. That is over 60 hours for just one tournament. Now imagine a player who has played 100 serious tournaments trying to claim they barely put any time into chess. Playing is usually only a fraction of the total amount of time people put into chess. When I pursued chess seriously as an adult, I treated it like a day job, putting in close to eight hours every day and playing on weekends whenever possible. For students on summer break, or people taking a year off from work, this is a very realistic amount of time to put into chess. With three years of such a routine, a player can put 10,000 hours into the game. Despite this, I have not seen one instance of a player transforming from 1200 beginner to international master in three years.

It is usually easy to track how long someone has been playing chess due to their Internet accounts and official ratings, so it is tough to fake it. In the early 2000s, a FIDE master and trainer claimed that he could turn a beginner into an international master in 1½ years. Alas, the results never came, and the bold claim remains exactly that: a bold claim not substantiated by anything. Having spoken to the top trainers in the world at great length, there is no one who has confidence he can turn a beginner into a professional in just three years. With that in mind, one needs to think about longevity and being realistic. How do you think people get good at other skills like programming and musical instruments? They put in years of dedicated effort and practice and presumably do not look for short-cuts. When I wrote the article ‘10,000 Hours and Chess’ for the magazine Chess Monthly, I interviewed professional musicians and programmers who all told me they would not
consider anyone a master after even significantly more than 10,000 hours invested. Complicated fields need to be respected for their complexity and treated accordingly from the learner’s perspective. With that being said, 2000 and 2200 are quite different ratings to achieve than stable international master standard, and can certainly be achieved in a shorter amount of time. I have had a very focused and motivated student go from 1500 strength to 2000 in less than a year. It should be encouraging for developing players that hard work pays off so well in chess, and that natural ability and genius is so overstated.

One of the most common questions I am asked is, “How good can I become?” It seems that the person asking the question is dreaming I will reply, “World champion!” A coach answering the question can almost never have the necessary information to make such a bold prediction. Your realistic development in chess depends on many factors, which include but are not limited to:

1. Visual spatial intelligence (it makes no sense to tell an 80 IQ person he can become a grandmaster if he just tries a little harder – this is not only misleading, false, and with zero evidence behind it, but quite cruel; I have nevertheless coached a grandmaster who had an IQ verifiably below 100, but an extremely good skill set and mental abilities for chess).

2. The amount of time that you will realistically devote to chess every day (at least one hour if you have goals of gaining a few hundred points in a relatively short amount of time).

3. How frequently you plan to play chess tournaments (a lot of people have the idea that they are ‘just not ready’ to play chess tournaments, so their rating stagnates for many months rather than going up).

4. How well you deal with pressure and adversity.

5. How you have decided to manage your funds.

6. Your general level of dedication and motivation.

I would not put a limitation on your chess. When I was 1600 strength and 18
years old, some people told me it was ‘too late’ or that “FIDE master is the upper limit you can reach.” Such comments are always lacking in any kind of compelling evidence and are always just pure speculation. I never believed them and I became an international master. Perhaps the only caveat I would place on all of this is that it would be very difficult even with fantastic support for a relatively weak adult player to enter the top 50 in the world. This is a different level of strength than almost every player realistically aspires to become though. For adult players, the main issue is time and resources, while lack of energy may be a much smaller factor. I know adult players who became masters after age 18 but simply do not have the time and resources to devote themselves to chess fully, due to having a family and a full-time job. One of them is 2450 FIDE and I see no reason why he could not become 2650 with a few years of serious work with elite players. The only issue in his case is the practical side. Emory Tate achieved his international master title at age 48. The main thing is that adults very rarely devote themselves to chess at such a late age, so we rarely get to see how strong they could have become. For an 1800 or 1900 player in their early 40s seeking to achieve 2200 strength, it would never be an unrealistic goal if they have the time, interest, and energy for it.

I have never met a player that I worked with who I did not think could reach 2200 strength (national master). What matters more are the practical factors: playing, analysing those games, and doing effective training. Playing is definitely the most important though. Long games are where you develop your abilities like calculation the most and put the most effort and energy into the game. When I went from unrated (with a national rating below 2000 USCF) up to 2400 FIDE in a little over three years, it was because I played 100 long games per year during that time period. Without playing a lot, it would not have been realistic to make such a jump. A student of mine rated 1600 recently came to Budapest to play a 9-round tournament not far from where I live. We trained every day while he was here. After one tournament, he was essentially playing at an 1800 level. His only issue was lack of experience.

For most players under 2000, they can get to 2000 quickly if they are able to play serious events, get the fundamentals down, and work hard at the game. Usually the main issues are practical factors, not ‘mental’ factors, like
intelligence or personal ability. When trying to get better, I never dwelled on my own ability (or lack thereof) and questions like how good I could become. I focused on putting effort into the game and enjoying it. It is not simply that you should believe in yourself with a healthy level of confidence, but that you should definitely be realistic and have an educated perspective about what kind of work and effort is needed to become really good at difficult things in general. Being realistic is a very easy way to avoid disappointment and to allow yourself to plan your chess work and the directions of your effort. I always think you should believe in yourself and try for the maximum; that is a basic thing for me. At the same time, try to be honest and realistic to avoid discouragement, and try to enjoy the process as much as possible using whatever personal strategies work best for you.

Referring to what was written before about ego and perceived genius, the allure of genius is one of the reasons why many old books presented games as if there were no errors in them. There was a desire to demonstrate brilliance rather than the importance of simple consistency and good logic that is emphasized by the best players today. Sadly, many of these legendary games featured bad moves and sacrifices that were incorrectly praised for decades. It is important not to be confused or incorrectly persuaded to believe something fundamental about the game because of past narratives and sloppy analysis.

There is a lot of fantasy and romance in chess culture. I am not inclined towards player worship, whereas in local clubs around the United States, there is a heavy obsession with the strongest players of the past like Alekhine, Capablanca, Pillsbury, Morphy, Fischer and many other players. Unless this player worship leads you to put a ton of energy into improving your chess, it tends to have a negative psychological effect. The entire affair of playing chess usually becomes somewhat mysterious to those who worship players.

I do have to concede the artistic value of former World Champion Mikhail Tal’s best games, but it is very important not to become inflicted with ‘Tal Syndrome’. Tal Syndrome specifically refers to the desire to try to play like Tal in every game. It is an amateurs’ love of beauty for the sake of beauty, combined with false assumptions about Tal and how he played. Statistically,
he actually did not sacrifice nearly as much as club players think. I have gone through all of his tournament games and concluded that he only sacrificed something once every 6 or 7 games, which is not all that unusual. If you have 3,000 games in your career, it will definitely feature a lot of combinations and sacrifices. It is detrimental when players interpret his chess thinking that he played wildly and without good reasons for his moves in every game, even if he did not sacrifice all that frequently. Tal largely played by the book and had very good endgame technique. He had to be well-rounded and he could not have had any major weaknesses or people would have succeeded at easily exploiting them.

Incorrectly interpreting the chess of a player you worship can lead you to mimic his play in a bizarre way that does not resemble how he played chess at all. Tal Syndrome can get you stuck on attacking and make you lose sight of the more fundamental aspects of the positions you are playing. Tal Syndrome is most detrimental when it leads you to try to ‘play like Tal’ in situations where your position is not strong enough to justify it.

An important aspect of getting better at chess is internalizing the fact that you do not need to play like a crazy person to win games. Something I learned from playing a lot was that players who beat me did not do anything special most of the time. There were few extravagant or exceptionally brilliant moves that put me away in all of the games I have played. When you realize that your opponent is not going to lose the position without making a mistake, you may conceptually want to focus on playing sensible moves rather than trying to blow your opponent out of the water. It is still perfectly possible to win brilliancy prizes without aiming for brilliance per se. It often happens that after solid play without aiming for brilliance, you can still crown games with brilliant combinations and winning moves. After all, these game-ending tactical brilliancies are more likely to occur in your games if you win more games in general.

On the topic of metagame strategy, in the past people used to think brilliance was the secret to the game: playing stunning or amazing moves to win games. Nowadays the best players understand that the key is stability and consistency. As mentioned earlier, the World Champion soberly stated that his goal in the world championship was to play 40 or 50 good moves every
game. Strong chess is much more about making simple high-percentage
decisions that are solid and good than it is about being brilliant, macho or
blowing anyone away. The main emphasis is that huge errors are avoided.
Most of the time I see my games as my opponent giving me an opening, and
as long as I’m pretty stable and consistent, I will make it to the goal line more
often than not. This is a useful way for most players to think about chess to
avoid playing to impress too much.

From playing, I personally realized that I do not need to force anything to get
tense positions in nearly all my games. With White I play for the maximum
and with Black I try to achieve a comfortable or solid position, often
intending to equalize by force. Those inflicted with Tal Syndrome often think
they need to force complexity into a position or aim for the most shocking
possible line. In my last 30 games, I did not aim for complexity at all. In fact,
I tried to play simple and sound moves as far as possible. In at least 25 of
those games, a very tense position arose on the board. This is comforting for
those worried about excessive draws or boring tendencies in their games. If
you play principled chess with White and put the burden of proof on the
opponent with both colours to show that he has done his homework, you can
count on tense positions occurring very often.

To avoid glamorizing the past too much, it is worthwhile to point out that
various objective reports (John Nunn’s Chess Puzzle Book gave data on one
famous ancient tournament on the topic) indicate that almost every player
outside the top ten in the world before World War I was below modern 2200
strength. Another important data-point is that the time-limit is faster now, yet
players still play at objectively the same move strength or stronger. The fact
that all players play more strongly with more time has been confirmed in
every report by intrinsic performance rating specialist Dr Kenneth Regan. It
logically follows that players nowadays are simply stronger than in the past
below grandmaster level, despite equivalent numerical ratings. In some cases,
players may even be a solid 100 Elo stronger than players with the same
rating thirty years ago.
What Should You Be Trying to Do When You Play Chess?

This is actually a much more complicated question than you might think because it has multiple parts to it. Due to the complexity and relevance of the question, it is worth thinking seriously about. A stereotypical answer is, “Play good moves.” Yet this simplistic answer is not helpful in any way and misses the broader picture, since we are humans that constantly perceive, judge and predict. A player should have basic fundamental goals when playing once he has played chess for a little while and got used to the conscious experience of playing and thinking about the game.

A couple of years ago, Grandmaster Larry Kaufman mentioned that one of Komodo’s strengths that made it the top chess engine in the world was that it spent more time on evaluating positions than other engines. This is not good for blitz chess where tactics tend to dominate, but at longer time-limits, such an emphasis is not bad even for humans. This is also why long-term students of mine have comparatively higher ratings at longer time-limits than in blitz and rapid; they spend a lot more time evaluating positions and thinking through positions than their opponents do. Players under 2000 should consciously try to use more of their time evaluating positions that occur in their calculations, both during the game and while analysing it. I have had students rated under 1700 that regularly spent no time by move 15 (after leaving known opening theory within the first 7 or 8 moves) in long time-limit games with a 10-second increment. In all cases, when they simply decided to spend more time in the early stages, they played stronger moves and better chess. Players tend to have the opposite problem (time-trouble), but if you play quickly in all kinds of critical positions, you are surely missing a lot of chances to play better moves you could find or choose if you used more time.

The initial goal is to look around the board and be aware of as many important things as possible, and to use these awarenesses to help you choose between the best possible candidate moves. To be more specific about what
you want to do during a game, you should consciously select candidate moves on every move and calculate them satisfactorily. You should try to evaluate the positions that occur in your calculations reasonably well. Additionally, you should always have some kind of conscious and reproducible logic behind your moves. With a reasonable amount of experience playing chess, and some focused effort on improving in these areas, everyone should be able to calculate and evaluate positions decently, and remember a lot of what they thought about during the game. Coaches are often heard lamenting the fact that their students do not apply logic in chess in a lot of their games and ask me how to help.

One certainly has to make structured thinking a routine. For me it came naturally since I always tried to break things down into their fundamental elements. I always analysed every game of mine to learn as much as possible from everything I played. For many others, chess is more of an intuitive game, in which many of the decisions and choices occur subconsciously. Ideally the goal would be for more of those decisions to be made consciously, so that they can work on their over-the-board logic and decision-making in a way that is easier to correct and improve upon. The goal of having good reasons for your moves is a great one. After the game, you should be able to explore and investigate those reasons and decide if they were logical.

From a psychological point of view, one should never forget that we should enjoy playing as much as possible. If you do not enjoy what you are doing, you are probably not going to exert as much effort.

We can conclude that during a game you should try to enjoy playing, exert as much effort as possible, select candidate moves well, evaluate positions effectively, calculate competently, use your time well, and have conscious reasons for your moves so that you can learn the most. Strong players generally do these things without thinking about them consciously, but at lower levels it can definitely help to be consciously aware of fundamentally what you are trying to do.

A lot of the time you cannot figure out the opponent’s best move, nor is it even necessary in most positions before committing to a move, so do not worry about that. The best that you can consistently do is confirm that your move is not a blunder before making it. We all blunder sometimes, especially
in time-trouble. Accept it and analyse your games to try to minimize how often it happens.
What Should You Ask Yourself During a Game?

When I started playing chess, my thought-process during a game was completely chaotic. I had read a lot of books, but did not really have a good idea about what I should be thinking about at the board specifically. I often focused on prophylaxis and what precisely was weak in my position, but nothing beyond that consciously. Applying logic in chess at a basic level often just means asking yourself simple questions that have obvious answers when you think about them. Sometimes, for instance, when we consider whether an attack can work with, say, various badly-placed pieces or no clear focal points, the answer seems obvious to us because we have just thought about things from a different perspective for clarity thanks to simple logical questions.

At a late point in my chess development, I read the three positional questions proposed by Grandmaster Aagaard in the book *GM Preparation: Positional Play*. I agree with his questions and utilize basically identical ones, which are:

1. What are the weaknesses?
2. What is the worst-placed piece for each side?
3. What is the opponent’s idea?

It is worth being a little more specific about each of these questions. A bad king position definitely counts as a weakness. Players under 1700 having trouble with blunders may want to consider asking themselves, “Which pieces or pawns are undefended?” for both you and your opponent, essentially in every position so that you can improve your board awareness with respect to tactical vulnerability. Scanning the board like this only takes a few seconds each time and you will get better at it the more you make it a routine. Blunders can be caused by any number of reasons such as hastiness,
lack of time, forgetting to scan for weaknesses or undefended pieces and tactical motifs that just seem intuitively unlikely in a given type of position. Awareness of what causes these blunders can help you counteract the causes.

For clarity, it is important to understand that a pawn not defended by anything may be perfectly healthy and not a real weakness, but just something that may come under fire at some stage. Additionally, it is worthwhile to think about the worst-placed piece, but with badly-placed pieces in general, one should also try to be aware of all of them. Asking questions like, "What is the worst-placed piece?" highlights the vital importance of specifically poorly-placed or well-placed pieces. There is a natural tendency to simply neglect a passive piece, but to notice the strength of a dominant one. A more complicated case is when a piece is perhaps not dominating the game in any sense, but hard to chase away, annoying, and impacting key squares. The relative value of pieces and where they are on the board is quite subtle and nuanced and takes a lot of experience to develop a good feeling and appreciation for. Not only do good and bad pieces strongly influence the evaluation of positions, but thinking about them more will also deepen your positional understanding and improve your chess by honing your skills at handling the pieces. Lastly, it is important to realize that the opponent may have more than one idea in the position, and thus you should try to be conscious of as many of the opponent’s concrete threats as possible.

You would be surprised how many positions should be played by simply swinging an inactive rook towards the centre because it was one side’s worst piece. It is amazing how many tactical exercises suddenly seem a lot easier when you simply scan the board for major weaknesses in the defending side’s position before you start thinking about concrete candidate moves. Since I started out in chess studying the books of Mark Dvoretsky, prophylaxis (and considering the opponent’s ideas) was always a natural part of my chess thinking. For those who do not have so much classical chess knowledge, it may be quite counter-intuitive to think consciously about the opponent’s threats. Some players try to force themselves to get used to this type of thinking by starting a chess game thinking about stopping all of their opponent’s ideas, rather than having their own. This is interesting, but fundamentally the wrong approach. A better idea is just to consider what your opponent is doing, and simply see if there are effective ways of preventing
him from carrying out his intentions, especially if he has a clear and obvious plan. Theory of mind (understanding that another person’s perspectives and motives matter) is important in considering what the opponent might do. Prophylactic thinking may not be natural for you, but with practice you can definitely internalize the habit of always considering the opponent’s ideas.

Incorporating such questions into your thinking in long games has good potential to help right away. I also like to ask one of the common questions proposed in Dorfman’s book The Method in Chess: “Who benefits from the exchange of queens?” This is generally most useful to ask yourself in the middle or late middlegame or when transitions to specific simplified endgames are likely. I do not think about it in every position due to its specific nature, but in many middlegames it is useful to ask yourself this question, which helps you get a better feeling for handling your most powerful piece. Developing queen-position and king-position sensitivity is important in chess growth. Who benefits from the exchange of queens is generally not something I spend large amounts of time worrying about because you can figure it out quickly most of the time. In a wide range of positions, you can plug the same position into the engine without the queens on and see how differently it evaluates it. It is amusing how many positions start to make a lot more sense after doing this.

Lastly, the question, “What are the pawn-breaks?” is an important one to ask as well. This is typically just useful to ask in closed and semi-closed positions, which is why I do not always think about it. As a general rule of thumb, a closed position has zero open or half-open files. A semi-closed position has at most one half-open central file for either side, and an open position has multiple open or half-open files. There are differing definitions, but isolated queen’s pawn positions can be considered to be open positions due to the two half-open central files. Pawn-breaks create tension in a position that previously had close to none. In semi-closed positions, it is common to solidify your position a little before playing a liberating pawn-break that allows one’s pieces to develop more activity. This is the fundamental idea behind many openings, such as the Tartakower QGD: Black develops and solidifies his centre first with ...b6, ...Bb7 and usually ...Nbd7 before executing the pawn-break ...c5. Many positions boil down to simply being able to find the only way to generate activity or get play. Pawn-
breaks are usually how you get your play in closed positions, semi-closed positions, or positions with no direct confrontation between the pieces.

Thinking “What is the most active move?” is important and often neglected and completely forgotten about in practical play, but ties in with the previous question. If we continuously play the most active move (after judging it is not a mistake), our play will be very dynamic and powerful. In a complex middlegame, whenever you can play the most active move, you should usually do so unless something else definitely looks better to you. It is useful always to be aware of your most active move, because if nothing looks better, you can always just play it by elimination. In closed and semi-closed positions, a pawn-break is usually the most active move. In open positions, aggressive piece-play is usually the most active thing you can do.

Curiously, in the following historical example from Nimzowitsch, he does not mention the importance of Black playing for his most natural and ideal pawn-break, and opts for an outrageously passive plan on the side of the board where he has less space. It essentially allows White a free hand. Nimzowitsch was also a fan of attacking the base of the pawn-chain, so it is strange that Black does not try to target the base. It was given by Nimzowitsch in a section covering prophylaxis in the famous but very old book *My System*.

![Chess Board]

*Black to play*
He suggests 1...Ra7? with the idea of ...Rfa8, missing that White does not need to play the a3 and b4 plan, so Black’s whole plan is ineffective, and puts his pieces on passive squares inflexibly. In this case, White should not play on the queenside at all if Black is going to stake everything on that. Many strong modern players would think about the pawn-breaks available to each side. In view of the direction Black’s central pawns are pointing, the most natural idea is to play on the kingside, where he has more space. Thus, 1...Nh5 and 1...g6 come to mind. The idea of 1...g6 is to play ...Nh5 and possibly meet g4 with ...Ng7 and ...f5 or ...h5. The pawn on g6 intends to recapture on f5 if White ever takes, giving Black stable control over e4.

1...Nh5!? 

There has not been much written about the chess textbook tendency to include examples where the solution only makes sense if your opponent accommodates. In this case, the move 1...Ra7? is very slow, but might not be bad if White plays a3 and b4 and gives Black use of the open file. White can play flexible multi-purpose moves instead of going for a3 and b4 directly. After 2 Qd2 Rfa8 Black has simply misplaced his pieces on the queenside for no particular reason. Black had a plan on the kingside and it was positionally sound, so he surely should have gone for it. 3 Rae1 += intends f4 and e5. Although White’s central pawns are pointing towards the queenside, here f4 does not create any serious weaknesses because he is able to execute e5 immediately afterwards. Black’s knight is also not ready to blockade on the e5-square.

1...g6 is a natural option. 2 Qd2 Nh5 and now:

a) 3 g4 Ng7 (Black intends ...f5 or ...h5, but can even consider ideas like ...Qh4 first) 4 Rae1 h5 5 g5! (5 h3 Qh4 6 Kg2 f5 =) 5...f6 6 h4 Rae8 7 Kg2 Bc8 =.

b) 3 Rad1 f5 4 exf5 gxf5! gives Black the very interesting plan of playing ...f4, followed by ...Ng7-f5, when his knight could hop right into action. 5 f4 e4 6 Ne1 Nf6 7 Nc2 Ng4! (this provocative move hopes to provoke h3 so that after ...Nf6 and ...Nh5, the knight would have more targets) 8 Nd4 Rf7 =.

We now return to 1...Nh5!? (D):
White to play

2 g4

This looks natural because it is one of the only ideas to stop ...f5, if only temporarily.

2 a3 f5 3 b4?! (3 Qd2 Qf7 =), the plan Nimzowitsch wanted to misplace his rooks to prevent, is not even particularly dangerous if Black goes for the most direct and obvious kingside play: after 3...Qg5 4 Qe2 fxe4 5 Nxe4 Qg6 Black intends 6...Nf4 7 Nxf4 Rxf4 followed by doubling rooks on the f-file, with a slightly better position.

2...Nf4 3 Nxf4 exf4 4 Qd2

4 Kh1 Qe5 5 Rf2 h5 gives Black good counterplay.

4...Qe5 5 Rae1 a4! 6 b4 a3!

This is not only a useful move, but makes it difficult for White to come up with a clear plan. The immediate 6...g5 could have been met by 7 h4.

7 Rf2 g5 8 Rg2

After 8 h4 h5! 9 gxh5 gxh4 Black secures counterplay and equality in a sharp
position.

8...h5! 9 gxh5 Kh7

Black intends ...Rg8 with excellent counterplay.

The questions in this section are all posed to increase your awareness and understanding of what is happening on the board. Badly-placed pieces, weaknesses, possible pawn-breaks in closed positions, and the opponent’s effective ideas are worth being aware of all the time. The ultimate goal is to increase your awareness of all of these things as much as possible, and to understand entire games of yours in the context of how badly-placed pieces, weaknesses, pawn-breaks, and the opponent’s threats influenced the play and the outcome. It is not unusual to make qualitative strides in all of these areas after you start consciously paying more attention to them. The ideal long-term goal here is unconscious competence. If you can get to a point where you tend to be aware of poorly-placed pieces, weaknesses, the opponent’s ideas, important pawn-breaks, and who benefits from major-piece exchanges, you will be playing chess at a high level.

I think about these three positional questions in long games whenever I have time. They help you focus on what is most important in a position, which helps you notice and be able to choose between good candidate moves that address what is most essential in the position. A nine-step thinking process is just far too confusing, and still does not really help you find the best moves. Having a few internalized simple questions is a lot easier to work with and apply; three is a good number. It is a joy that chess is such a logical game, so figuring out answers to these questions often reveals a lot about the evaluation of the position and the best moves to consider, as well as perhaps what pieces you might want to exchange.

These questions help you prioritize the most important factors in the position. In most cases, the opponent’s serious threat or threats must be dealt with immediately. In some cases, a weakness can be created or must be addressed immediately, and just by asking the question, one will realize this. In other cases, your attention may become focused on a particularly bad piece you had
neglected without specifically giving it thought.

Of the three positional questions, the one to ask first is “What is the opponent’s idea?” In many positions, the opponent has a direct threat that must be dealt with and everything else is of lesser importance. The opponent’s threats are more important than improving your worst-placed piece. If the opponent has a strong threat and you do not notice it, you may lose immediately by playing a modest move that improves a piece but does not deal with that threat. One of many reasons why “What is the opponent’s idea?” is such a useful question is because in many positions, the opponent has no good ideas at all. In situations like this with a clear advantage, you are able to play calmly and optimize everything in your position before aiming for any concrete play or direct attempts to win or break through.

It is logical to ask “What are the weaknesses?” next. This is because if there is a direct weakness to exploit or prevent from being exploited for a substantial gain by one side, this should very often be dealt with if there is nothing else extremely important to address on the board. If there is something weak in the position that can be exploited by either side, it must be a high priority. Strictly speaking, tactics can only flow from a weakness. This is one of the reasons why “What are the weaknesses?” is a very important question, even when solving tactical exercises. A weakness is either a weak pawn, a loose or bad piece, a soft square or a poor king position. Very few exceptions exist outside of this categorization that can be called weaknesses. Having various isolated pawns that individually are not necessarily weak can be called a weakness when taken together, though weak squares and weak pawns are likely to inevitably exist even in the case of this exception. As an adult improver, it was necessary to lay things out like this because I was not learning chess merely through osmosis, like many prodigies do.

Finally we can ask ourselves “What is the worst-placed piece?” When there are no direct threats to deal with, no weaknesses to create, exploit, or prevent from being created, improving a poorly-placed piece is often the best move. When you do not have any bad pieces, for instance, after becoming fully developed, you should narrow your focus to weaknesses in the position and the opponent’s ideas. After all, piece-activity is very important and something we should always pay attention to. While we should not miss
chances to develop fiercely active pieces, we should not forget about our badly-placed ones too.

Another important reason why thinking about bad or exploitable pieces is important is that distractionary moves that can completely change a game are always aimed at distracting a specific piece, so focusing on individually exploitable pieces is sometimes the key to winning or saving games in unexpected ways. We have a tendential bias to underrate the importance of a specific piece in complicated positions. This is one reason why consciously thinking about this question is so helpful: we naturally tend not to think about such things unless we are primed to focus on them.

Moving on to other questions, with numerous pieces on the board, the side that benefits from an exchange of queens nearly always has either an inferior queen or a weaker king position. If one’s queen has less scope or mobility, it is easy to understand why trading it for the opponent’s more mobile queen may be a good idea. Additionally, if your king is more exposed and can be attacked by the opponent’s queen, trading queens is an obvious option. On the flip side, a common strategic error is trading queens when the opponent has a very weak king position, as this gives up most of your attacking chances.

Considering all of the pawn-breaks in closed positions gives you a very good idea of how the play will develop and helps avoid getting distracted by irrelevant details. For instance, some players may play purposeless ideas rather than constructively work towards playing a good pawn-break that would work out well.

I like to distinguish positions as open, closed or semi-closed. Semi-closed are among the hardest to play because of the uncertainty about whether to play with pawns or pieces in any given situation. With only one open file or only one half-open file, pawn-breaks are very important to think about for both sides because that is how the game opens up further. Players overall have a major tendency to underestimate the value of pawn-breaks in semi-closed positions and overlook them completely in their calculations and candidate-move selection. Just being aware of this observation can be beneficial in your own games.
When assessing king safety for both sides, the main factors are the pawn-structures in front of the kings, the mobility of the pieces and situation in the centre, open lines in front of the kings, the local superiority of force around each king, and weaknesses near each king that can be attacked as focal points.

In tournament games when there is time, I always do a brief blundercheck before I make a move. Scanning the board quickly before making a move is something that nearly every strong player has learned from painful experiences that he has to do. On my opponent’s move, I like to look around the board for undefended pieces or pawns to be aware of and always maintain a certain level of awareness about those weaknesses. I always ask myself “What are the weaknesses?” in any case, so that should also point to a lack of harmony or undefended material in your own position if something looks awry. In a weird way, it is like asking “What looks wrong with this picture?” when looking at the positions both sides have.

If you feel like you are having trouble with excessive blunders, you may want to practice scanning the board for all of the undefended pieces and pawns for both sides. This only takes a few seconds and can improve your board awareness, both in the position you are playing and in general. It may happen that you forget about pinned or overloaded pieces because for practical reasons they technically make something undefended. This awareness should improve over time, but once you realize you have a tendency to make this mistake, it should help you to overcome it at the board much more often.

I think about what is undefended for both sides on my opponent’s time by simply scanning the board. With a board full of pieces in the middlegame, I can see everything that is undefended in the position in about five seconds. This is something you should practice, so that you can get better and better at spotting undefended pieces quickly. Any player can get to a point where they can see what is undefended on the board in a relatively short amount of time. It is almost as basic as an arithmetic problem, involving nothing more than just spotting the basic squares pieces control. Sometimes I scan the board and think to myself, “ah, b2 is undefended, so there might be a tactic exploiting that in this position or later on.” Most of the time, I can make that scan quickly and it costs me just a few seconds if there is no tactic, so very little
time is really lost by doing this.
A big part of getting stronger is understanding where you are weak. If you ask a chess-player what weakness they need to work on and they hesitate to come up with at least one clear answer, they will probably have a tough time improving. Your weaknesses are by definition what hold back your Elo gains. So reflect on what you struggle with, what you have been avoiding or not putting enough into, and especially where your game breaks down. Know yourself well. One thing that is difficult for many players to accept or admit to themselves is that they can make progress in essentially all major areas. Looking into your weaknesses reveals just how much there is out there in chess to learn. Let us start by trying to break down chess improvement into phases before discussing specific improvement plans.
What are the Main Stages of Chess Improvement?

Understanding chess improvement and strength by rating level is important for both students and trainers. One reason for this is because moving up to the next level may require specific action based on your current strength. Another reason is that different typical errors occur at different levels. Identifying and being aware of those errors is very helpful. Different types of exercises are also most beneficial when clearly catered to playing strength. Generalizations are not harmful to make here because if they do not apply to you specifically, it can still help to be aware of what applies to many other players near your rating.

Before getting into too detailed of a discussion, I want to mention in passing that I coached the number one player in the world under age 8 earlier in my coaching career. One issue that made things difficult was that he never fully got the deeper aspects of positional play that I tried to explain to him. These were usually abstract ideas. He typically walked away from his positional mistakes without a full grasp of the weaknesses he had created and why, but only with a kind of pattern for exploiting the mistake he had made tactically. He developed a sense of activity from this, but not the underlying logic behind the positional idea.

There were military tests done on the subject of abstract thinking, and children who were under age 8 scored poorly in abstract understanding, with very limited ability to grasp perceptual differences. For example, when the same amount of water was shown in two different-sized cups, children under 8 almost always concluded they were different amounts. At age 10, children nearly always realized that it was the same amount. In view of this, it makes no sense for a coach to be upset (or even disappointed) with a young child for not grasping deep concepts. This is why coaches need to understand psychology and child development if they are coaching children. It also aptly explains why the youngest grandmaster ever to achieve the title did so a few months before his 13th birthday. Before age 8, the more abstract concepts in
chess are nearly always elusive, but a couple of years later, they are able to grasp positional chess much better.

What I have noticed as both a player and a coach is that between beginner level and grandmaster, the main strengths are approximately 1600, 2000, 2200, 2300 and 2400. Typically each of these levels takes six to twelve months to break through for a dedicated and able player, with some exceptions. This is perhaps why even for the extremely talented, there is no evidence of any player in chess history going from complete beginner to international master (2400) in 18 months. Based on these stumbling-block levels, it is logical to assume that three years is at the very low end of the conceptual spectrum for time invested for a player to become a grandmaster. Everyone currently in the top ten in the world required longer than this to achieve the title.

Not surprisingly, these were also the levels that I got temporarily stuck at myself, and where statistical analysis shows the greatest bunching of ratings. This is something numerous tournament players have told me as well. In my own experience, when I was rated 2335, there was hardly anyone within 20 Elo of me at any tournament I played in, yet quite a few players closer to the ‘poles’ of 2300 and 2400. That certainly may seem odd if you have not seen or experienced it yourself, but makes sense from the perspective of playing strength gradations.

Inexperienced players have a tendency to play for explosive, Romantic chess and later shift towards an attitude of seeking a small advantage and outplaying their opponents with consistency and pressure. Initially chess is largely about localizing simple processes. This means rapidly developing your ability in the process of seeing simple threats, and making simple tactics become subconscious and automatic. I have yet to work with a player who did not comprehend simple tactics, so it was purely a matter of lack of familiarity and not enough games played if they struggled with them.

As a coach, with players below 1600 level, it is important to try to get them to 1600 standard as quickly as possible. In order to do this, they need to recognize the main erroneous tendencies of players in this rating range. It is sensible to consider 1800 an interim rating, in which you are trying to push for 2000, and are either close to breaking through, or quite distant and closer
to 1600. A lot of players get stuck at 1800 or 1900 for years. In most cases they could be 2200 with purposeful training. Even to get to 1800 in chess with very little work requires some ability and shows clear potential. When I started playing chess seriously at age 18, my USCF rating was 1800, but I only had chess knowledge, experience and strength closer to 1600 level. With less than a year of work, I propelled myself to 2000 strength, where I got stuck again for a little while. Due to a lack of guidance, I then had to realize deficiencies in my own play and figure out how to fix them to make strides forward.

I would not consider a player stuck at a specific rating unless he had played a significant amount of games without any signs of improvement. This can be anywhere from 50 to 150 long time-limit tournament games. Due to a lack of meaningful diminishing returns below master level, if you are working on chess properly and consistently, you should continuously see progress if you are able to play tournament games and analyse them well. It is important to avoid despair if you simply have not had the ability to put in the necessary tournament games. Obsessing over lack of progress in rapid, blitz or online rating misses the point, especially because many players go from 1600 to 2000 in real strength without improving their blitz ratings. I have coached players stuck between beginner and 1600, between 1600 and 2000, between 2000 and 2200, between 2200 and 2300, and between 2300 and 2400. I would have liked to have read a strong player’s views on the topic of different rating ranges when I was starting out in chess and at least get some kind of idea of what to expect moving up or what mistakes are common at each level.

**Beginner**

In the opening phase, getting developed quickly should be the primary goal for beginners. At this stage in one’s development, there is no need to emulate grandmaster opening play if you can play simply and get out of the opening with an acceptable position through simpler means. Playing the richest and most complicated positions will come at a later stage in your development.
At beginner level, if often happens that a player loses material and fails to put up much resistance. There is much greater tenacity at higher levels and general awareness of defensive possibilities and resources. One common scenario I observe is that a player might lose his queen for slightly insufficient compensation. Rather than simply trying to put up a solid defence and making the opponent prove he can actually win by breaking through, the defender lashes out and loses right away. The queen likes direct attacks and in that sense is not such a subtle piece when playing against, say, a rook and knight. When the defender can make it as tough as possible for the queen to get simple targets to latch onto, he can often put up tremendous resistance against the queen, even when a fair amount of material down.

What is very interesting is that even players who have hardly played before can find a mate in 1, a very short combination, identify what is undefended in a position, identify what a bad piece is, and even think about whether exchanges are good or bad for them. In short, by asking the right questions and thinking about things the right way, even a player who is new to chess can get his feet off the ground the right way and start focusing on the right things.

For beginning players who started playing chess online or generally doing most chess work on a computer, making the transition from an electronic board to the real board is difficult. I had this issue myself when I played online almost exclusively. I partially counteracted this problem by studying a lot on a real board with nice pieces and this motivated me to want to take it out and study on it whenever possible. At a certain point in time, I started seeing exactly the same lines on both the 2D board and the 3D board, but I think it definitely helped that I consciously worked on visualizing the board as well as I could in my head. For instance, if I played out an unbelievable variation in a book, I tried to close my eyes and imagine the entire variation being played out on the board in my head to grasp the full tactic and the piece paths involved to make it work. This is a simple exercise that helps conceptually and spatially understand chess sequences. Sometimes during a game I close my eyes and visualize the pieces in my head. In certain cases, this helps me appreciate certain aspects of the position I may not have focused on as much when I looked at it directly. With practice, you should quickly improve your ability in this area. That being said, there is nothing
equivalent for overall chess improvement to playing over-the-board
tournament games in which you will exert significantly more effort and spend
much more time calculating than in even the best training.

When players start playing chess, compensation is not very well understood
because the material situation is usually evaluated too statically. With respect
to evaluating the material situation, development counts, tempi count, a
shattered king position counts, the bishop-pair counts, and pieces completely
out of play count.

As you get better, you tend to solidify your play, whether you interpret it that
way or not. Playing calmly is not very well understood at lower levels. When
the opponent has no counterplay and no way to improve his position
meaningfully, you can almost always play calmly to work to improve your
position in the most consistent and risk-free way possible.

I would not stress the ratings of very young kids too seriously. Many kids are
much stronger than their ratings because of the pools of players they play in
and because they do not play that many rated games. For many of them, it is
mostly a matter of playing a lot of serious games, using their time well in the
games, and playing as many safe and good moves as they can that don’t lose
material. A lot of games below 1400 level are decided by outright blunders
that players realize right after they make a move, so scanning the board for
undefended pieces and doing a quick ‘blunder check’ before they make a
move may help them a lot in practical games.

Children under the age of 11 should focus on absorbing opening ideas,
picking up tactical patterns, seeing direct attacks on the king, and seeing
examples of weak squares and how they can be exploited. Abstract positional
concepts will be far easier for them to understand later in their chess
development.

Focus on improving your worst-placed pieces in the opening and being aware
of everything undefended in your position as often as possible. It is also
useful to remember that a tempo in chess is worth a quarter of a pawn, so be
careful about wasting time with moves that are not necessary when you
should be developing. It is helpful to remember that the bishop-pair is worth
half a pawn, so avoid giving it away unless you have a really good reason.
My most applicable takeaway advice for players in this category is that you should basically always keep fighting on, even when a piece down. Sometimes if you play a bit quickly when you’re a piece down, you might provoke your opponent to play quickly and blunder the piece back. When I have an awful position, I tend to play quickly, most of the time because I only have one or two decent moves anyway. When you only have one good move to play, there is little point in thinking about it anyway. I do not want you to play bad moves when material down, but if you are pretty sure the moves you are playing aren’t too bad (and especially if they carry threats), you will want to play a bit more quickly to psyche the opponent out a little since it gives him a higher chance of blundering. He will probably think you are just depressed and desperate because of your position and play more quickly too, giving you your best chance of saving the game.

**Under 1600**

A common tendency is that when players focus too much on new concepts they have learned, their tactical awareness at the board goes down. Carelessness and stereotyped play features most frequently for many players under 1600 in a tendency to recapture ‘automatically’, rather than look for in-between moves. Another tendency is to trade too many pieces without considering whether the exchange is really a beneficial one to make.

Players under 1600 tend to unintentionally help their opponents develop or improve their structure. In cramped positions, trading pieces because you have less space and no active things to do with your pieces is usually a good thing to do, even if you are trading off an enemy piece that is equal in function and value to yours. Try to avoid playing exclusively passive moves in passive positions.

Players at this level tend to have serious problems with large tactical errors, candidate moves and improving their worst-placed piece. The lack of tactical competence is why I strongly advocate that all players below 1600 strength do the intensive tactics course ‘Chess Tactics Art 5.0’. Going through the entire programme multiple times should cement basic tactical patterns clearly
in your head. Once you have solved all of the exercises once, going through them again is much faster and serves to aid long-term memory. One student of mine went through the entire Chess Tactics Art programme four times in ten days. Despite the fact that his rating was under 1600, his tactical competence became much higher after less than two weeks, and he was taking clear strides towards 2000. Since your chess career will presumably last many years, spending an hour a day for a few weeks to consolidate basic tactical patterns is not any kind of real sacrifice. It is essential temporary work and a very important step forward. 1600 is typically the level that players get to quickly once they have studied tactics fairly deeply but no other phase of the game. This is not actually a mistake, although I did it myself by accident. I had read the massive tome *Chess: 5334 Problems, Combinations and Games* by Laszlo Polgar and a couple of tactics books right off the bat and that structured study helped get me to 1600 level very early on. From that day forward, I had to learn deeper aspects of chess, and books like *Understanding Chess Move by Move* by John Nunn really helped me look at the game aiming for simple and clear thinking on each move. It gave me a broad idea for what kind of logic to look for and use over the board.

The most common positional mistake I see among players below 1600 is a lack of feeling for developing the pieces, especially the rooks. I try to stress the question, “What is the worst-placed piece?” But in many games, a player simply does not have time to think methodically through the main questions I propose asking, especially if it is a 15- or 30-minute rapid game. One probable explanation for beginning players making this mistake is that almost everyone learns early on in their chess development not to move their rooks out early in the game. For some players, they do not adjust so well to the need to be really active with their rooks in later stages of the game. This is especially true towards the endgame, when rooks become relatively stronger. For some, just thinking about improving their rooks as often as possible can be a useful nudge to help them appreciate the need to activate all of one’s pieces and have them work together effectively. At 1600, material was the first focus in my head. Then more and more positional elements came to mind.

Players in the 1500-1600 range are usually very inconsistent. Sometimes they
play a long series of good moves, but just too infrequently. A bunch of my 1500 students have beaten 1900s or at least outplayed them to obtain completely won games. It happens. I don’t think an 1800 or 1900 is so far above a 1600. There are a lot of reasons for the Elo difference, but tactical awareness is definitely one of them. Usually they do play a little better in almost every area though. 1500s usually play at a 1900 level a few times a year. It reminds me of a Bent Larsen quote I like to repeat: “When I was 2100, I played like a grandmaster once a year. Too bad you have to play like that all the time to actually be a grandmaster.”

Developing the opponent’s pieces accidentally through exchanges, captures, or superficial threats is something a lot of players 1600 level and below do not see as such a bad or important thing conceptually. This counts very radically with respect to time, because players often provoke the opponent to improve his pieces while wasting time or tempi with one’s own pieces.

Around this level, there is a tendency for the psychological bias of anchoring, which causes a player not to consider more than one move in a lot of positions. This can be consciously overcome with awareness. Around 1600 level, many players have trouble considering slow-looking moves, short-range moves that slightly improve one’s position, and moves perceived to be weakening that actually are not. There is a tendency to see ghosts and be afraid of non-threats. Clearly the best way to overcome this is through self-analysis and carefully checking the ideas that worried you after a game to see if they were really so worrisome. Blocking a c-pawn with a knight (...Nc6) when White has a d4-pawn in a typical 1 d4 d5 game is a common mistake lower-rated players make, not sensing the immobility and awkwardness of the knight on c6, and how it prevents them from playing ...c5. Many amateur players block their c-pawns with ...Nc6 due to an inadequate understanding of pawn-breaks, not realizing that ...c5 was their main source of active play and now they will probably have none.

A big issue around the 1600 level is giving away an ideal pawn-centre (i.e. a well-supported d4-e4 phalanx) by unnecessarily pushing one of the pawns. This often gives the opponent counterplay in a position where he previously had none. Players under 1600 need to be careful that they are not helping the opponent develop a piece that had poor prospects, although this type of mistake occurs even in grandmaster games under subtle conditions. This is a
common type of simple mistake we make when we trade pieces early in the game. It is usually the result of never considering how the opponent will complete development, how passive they are, or what their worst pieces are.

An area of confusion for many players under 1600 is that a lot are taught to ‘defend or move away’ when a piece is attacked. This does not factor in the idea of counterattack at all and naturally leads to poor candidate-move selection and inferior play. It often happens that it looks like you are going to lose one of your pieces, but, in actuality, you can challenge an enemy piece of equal or greater value and not lose material. It is important to avoid getting too narrowly focused on attacked pieces and as a consequence forget about counterattacking potential and the opponent’s weaknesses. Players under 1600 tend not to see a problem with having an undeveloped piece sitting in the corner not doing much. It is important to detect this as a typical problem in the middlegame and to develop a sense of what harmoniously developed forces look like.

I have noticed that a lot of players under 1600 forget about simple pins on the e-file in 1 e4 e5 openings when the pawns get cleared off the e-file. It seems that stronger players have almost all experienced a painful defeat due to losing a piece on the e-file and learned their lessons from it. One should in general be cautious about capturing pawns with a piece that can then be directly pinned against your own king.

Even though players around 1600 level almost always hate to sit back and play passively without doing anything for a very long time, when their position first becomes passive, they will often struggle to find anything to do for a while. Then in a later attempt to break out, they might try something radical that doesn’t work. With experience, one gets a better sense of when to play actively and when to sit tight.

When a lot of material ahead, players around 1600 should really focus on the opponent’s threats, with a special focus on both king safety and queen safety. As long as the king and queen are safe, even a major blunder may not endanger the victory.

A 1600 player can have both a reasonable base of knowledge and a decent feeling for how stronger players think. That is how I was at 1600 essentially,
while primarily just lacking playing experience. If you know what to look for when looking over these games (see the six questions I give for analysing your own games in Chapter 9), and briefly computer-check important positions you do not understand, you can make strong headway.

**1800 (Good Club Player)**

1800s are at the cusp of breaking through: once they get used to the kind of pressure they are going to have exerted on them by 2200s, they can get better at expecting it, reacting to it, and coping with master-level play while adapting to it. Exposure plays a huge role here. Once they are exposed to it enough, they will tend to start seeing a lot of those types of ideas with both colours and from both sides of the board and see a higher level of play.

Below 1800, a big problem for players is that they tend to focus just on playing move-by-move without much structure to their thought, rather than also thinking about more conceptual aspects of a position like pawn-breaks, weaknesses and bad pieces. Chess is obviously a concrete game, but broadly understanding a position or position-type matters a lot as well. When players start to become more conceptual for the first time, they tend to think about the game entirely differently from that day forward.

A key thing for players under 1800 is to learn to appreciate the danger in almost any position, and to ask “What is my opponent trying to do?” At this level, most players are normally making very direct threats (as opposed to more subtle Petrosian or Karpovian slow positional build-ups). “The threat is stronger than its execution”, while only being true sometimes, is not applied so much below a certain rating: say, 1900. A lot of the time there are three or four different ways to implement an idea, but most of the time players in the under-1800 range will be facing the absolute most direct form of whatever idea the opponent is trying to carry out.

My impression from working with a lot of students is that the concept of risk does not seem to be understood so well below 1800 level (and even at 2000 level). It is important to understand that if you want to execute a sacrifice that
you cannot calculate accurately, the evaluation of the position matters a lot in this decision. If you have a comfortable or large advantage, you may have a very high likelihood of winning the game without introducing a randomness variable or a third result (losing). With an equal, stale and balanced position, an unclear sacrifice may simply be the only way to play for a win. From the standpoint of basic metagame strategy, we would like to choose whichever decision gives us optimal chances of performing the best. The last thing you want to do is throw away a +1 position that should be easily winning by trying a piece sacrifice that you have no reason to think will work. This may sound obvious to you, but the important point is that you consider what exactly you are risking when you sacrifice material or go for a committal attack or decision. If you are risking all of the advantages you worked to build up, you should care about those advantages a lot and not want to give them away unless you really think you are increasing your expected result by playing an incalculable line. The important thing is that you mentally internalize a decent sense of risk in chess, which is often not that difficult to break down in individual cases if you think about it logically.

Although I emphasize the importance of thinking about who has an easier time developing their pieces in Chapter 10 (‘Metagame Opening Strategy’), players under 1800 specifically should try to get used to thinking about whether their opponent has a hard time developing their pieces. I see a lot of games from amateur players in which they willingly help their opponent’s inactive pieces develop in a position where the opponent actually would have been way behind in development or struggling to bring pieces effectively into play. In many cases, this is how players lose advantages in the opening without understanding why. I have seen many games where one player is practically paralysed and his opponent helps him with an incorrect exchange, a pointless check, or an otherwise ill-advised time-wasting move. Try not to make it easier for your opponent to get his pieces into play than is absolutely necessary. This applies especially to cases where you are clearly better or have a lead in development.

I recommend doing a 1600-1800 openings search in ChessBase to get a clearer idea of what players at your level are most likely to play. This can help you avoid getting bogged down in long theoretical lines when you will most likely not even get into them.
A major part of the improvement process from 1800 to 2200 involves understanding how to improve a position gradually with simple moves. Gradually as you move closer to master strength from 1800, you will get better and better at calmly improving your pieces and playing without unnecessary weaknesses, which may have both been somewhat foreign practical concepts to you not long ago.

**2000 (Strong Club Player)**

As Garry Kasparov wrote, “Talent exists and it matters the most in the most elite segments of performance.” At lower level, hard work is the most relevant talent you can have. Even the best chess-players who ever played the game were below 1500 strength the first time they played it. They got better by repeatedly playing and studying the game. Getting to 2000 is a matter of accumulating knowledge, awareness and thinking techniques, and improving your calculating ability. It helps to understand all this and not be deterred by roadblocks along the way in your development.

Below international master especially, players generally think more about their own moves than the opponent’s, which is a likely reason they attack better than they defend. In my case, my chess development started with a heavy emphasis on prophylaxis, so this was not a problem for me. Few players start out thinking like this though.

Many players around 2000 fail to prevent counterplay when they have a simple and straightforward advantage. Maintaining the status quo in many cases would just mean maintaining the pure version of the advantage that exists and not allowing any serious counterplay.

Nearly all 2000 players need to improve their opening play and their calculation, understand classic games well, and develop higher positional understanding and a grasp of weaknesses. 2400 players often beat 2100 players due to one crucial weakness that the weaker player underestimated or failed to see the importance of.
One of the problems I often see below 2000 is players casually making moves that open up the opponent’s attacking possibilities, most likely without realizing it, while having a bunch of passive pieces themselves. Although ultimately a blunder may cost them the game, positional awareness is very important here and it is vital not to overemphasize the single blunder as the reason for a loss. It is usually not just ‘one blunder’ that causes the loss, but the accumulation of weaknesses in your position. Being aware of those weaknesses, how they were created and how they could have been avoided is very important in making strides forward and increasing your positional understanding. Tactics are all based on weaknesses at the end of the day, and awareness of weaknesses is a positional observation too.

A big problem for many players under 2000 is that when they play blitz, they do not understand very well what happened in the games on a conceptual level because they are playing for pure piece-activity and tactics. As a result, they gain very little from the games besides awareness of one or two tactical ideas they may have missed. On the flip side, a more positionally-attuned player would improve his strategic and structural understanding, and really attempt to understand on a more fundamental level why he lost some games.

Players under 2000 tend to have the wrong idea about calculation and usually get the basic first few ply wrong in difficult exercises. From asking them which candidate moves they are considering and which moves they think are best, I can tell that wider, more conceptual analysis would benefit them a lot. In long games, there is time to spot almost all of the necessary moves to consider. It is important to consider a wide range of options almost all the time, unless one very clearly and obviously stands out as best.

One of the hardest aspects of practical chess is when you obtain a difficult position as Black around move 12-15 and need to find difficult manoeuvres to develop your pieces. We all get into weird positions in the opening, and the stronger the player, the more likely he is to find the correct way to get his pieces out. 2000 players tend to collapse in these situations, even very early on in the game.

Decentralizing well-placed central pieces was something I did very often when I was 2000. I would, for example, move a knight away from c6 or f6 to the back rank as Black and not grasp the consequences of what I had done.
By undeveloping and having significantly less central control, I often hurt my position quite a bit, wasted time, and became unnecessarily passive. There is a tendency to underrate the value of tempi among most players because it is far less tangible and visible than something like the direct loss of material.

There is more inconsistency among players under 2000. This is worth being aware of, especially for beginners who are afraid of playing higher-rated opposition. Sometimes 1900 players drop a piece. It is important to understand that ratings are approximations. Former world championship candidate Bent Larsen strongly emphasized consistency and acknowledged that in his earlier years it was the main thing he lacked.

When I reached 2000, I did not think about pawn-structures very much. I would generally just look for moves, but not consider the structure so carefully. I did not assess isolated pawns as any kind of meaningful thing, in endgames or in any other stage of the game. I would say that my overall awareness was rather low, but I handled the initiative well and my opening play was aggressive and acceptable. My students rated approximately 2000 tell me their higher-rated opposition can cleanly win a +1 position in most cases, while weaker opponents will let it dissolve. In essence, they maintain their advantage without giving up anything. This is a turning point in chess strength at a certain level around 2100.

Confidence about maintaining advantages when transitioning into endgames was my biggest breakthrough when I crossed over towards 2000. For example, being totally relaxed about dramatically changing direction and swapping queens in the middle of an attack if it clearly leads to some positional advantage instead of being too fixated. One can say that general flexibility in thinking is another key point. Also, maintaining tension is a key difference at higher levels quite a bit over 2000. Making simple exchanges, non-standard moves, and playing many quiet moves in a row are something most players have trouble with at 2000. In general, lower-rated players always want to do something, even if the opponent has a completely solid position and any direct action you take is merely detrimental to your own position or decentralizing your own pieces.
Stubbornness is one of the main hindrances that prevents players from moving forward, especially at roadblocks around 2100 or 2200. Stubborn players have a very hard time improving because they do not change their mode of thinking and keep making the same errors. Being open-minded and open to criticism is a very important part of getting better, especially as an adult. Sometimes changing the way you think about something (even after playing for many years the same way) can have a very positive effect on your perspective at the board. Some grandmasters told me that when they started to think about pawn-breaks more conscientiously in semi-closed positions, they focused their thought in such positions more effectively. When training grandmasters, I encountered plenty who evaluated positions with the bishop-pair too statically as better for the side with the bishops. I often provided them with exercises in which the other side had serious positional compensation for the bishops to help broaden their interpretation of such positions.

I once saw a game in which a 2200 player wasted three full tempi with Ne5-c4-e3 while he had an isolated d-pawn and needed to make something happen. He did not realize that he had just wasted three tempi at all, and apparently did not appreciate the value of tempi. Strange examples like this are surprisingly common and show a lack of understanding of basic principles. This is to belittle no one, except for dogmatic and shallow impressions about positions. I have made plenty of fundamental errors myself, but I seek to avoid being dogmatic and make sure that my thoughts are objective afterwards.

When I made the jump from 2300 to 2400 I had to play much more stable chess overall and avoid all the unforced losses and poorly-lost games in the opening with Black, where I simply ended up clearly worse and lost without a fight. Once I established some solidity to my game it made me play much more stable chess against grandmasters and allowed me to move forward in an effective manner. This can differ from player to player, but in most cases, improved opening play and decreased unforced losses are big reasons for a player to make the jump from FM to IM. One grandmaster told me he plays with a certain paranoia, simply because he hates to lose so much. Most
players under 2000 are not thinking too much about what their opponents might do structurally, tactically or conceptually. This should always be a major area to work on at all levels. Things you should focus on at the board do not change significantly as your skill level increases. Beginners need to focus on slightly more basic things, but that is the main distinction, since all players should be focusing on important characteristics of the position and answering questions about the position that are helpful to consider.
General Improvement

With respect to moving up the rating ladder, many players do not get better because they do not analyse their games (or at least not in a way that teaches them much). It is important to care about truth and about obtaining knowledge. Curiosity is a great thing and dramatically accelerates creative thought and development. A major reason why a lot of players do not get better is because, for them, deliberate practice is not especially fun. Usually that is because obtaining knowledge is not fun in itself for them. That is good news for you, because it means most chess-players are not going to focus on disciplined and deliberate practice. I would not necessarily say I focus on developing skills that are hard to obtain, but just on what needs to be developed. Some essential skills are easy to develop. Becoming a more logical player is certainly one of the hardest things for many players.

In their early stages in chess (and sometimes in later phases too), many players view the whole game as just a random tactical sequence changing from move to move, in which you try to find wins on each move. I have met many players who see chess this way conceptually, rather than focusing on playing good moves, restricting your opponent, playing the best high-percentage moves to maintain all of your pluses and giving the opponent nothing constructive to do. Patience is extremely important for such players, who tend to go for complications and tactics no matter what the position is. This is a big reason why evaluating positions well and managing the game effectively are very important. If it is clear that you have a big advantage statically, most likely you can maintain this advantage without risking anything or changing the position drastically. Getting better at playing with the patience to improve your pieces calmly while restricting the opponent’s main sources of counterplay will allow you to manage your advantages more competently and lose far fewer of those advantages needlessly. I have seen countless examples in which one side had a clearly winning position and made an extremely risky tactical move, depending on lengthy calculation. In that case, if your calculation is off, you have just thrown away your advantage for no reason since the position did not call for any risk-taking.
It is important to understand that practically every improving player hits a roadblock simply because development and rating gain is often somewhat random and not totally linear. If your rating does not increase for a year, it is vital to understand that it does not mean that you did not improve and are not playing at a higher level. Most players do not realize that even Magnus Carlsen, arguably the most talented player in history, got stuck for over a year without his rating going up as a developing player. In fact, at age 14 and 4 months he had an Elo of 2552, and at the age of 15 and 10 months he had a lower Elo of 2528. When you consider that even he lost rating in his youth over a span of a year and a half despite playing and studying all the time, you will realize you do not need to feel bad about temporary setbacks.

With a particularly confusing position in chess, on a fundamental level all you have to do is orientate yourself by looking at everything going on. Many people shut down in crazy-looking positions way too easily. Strong masters (2400 and up) tend to fear these crazy-looking positions much less, and play them with a much greater level of calmness. You have to break down what is going on – the weaknesses, the focal points and the things that matter in the position. Sometimes you should push all the pawns in front of your king but everything is totally safe. Perhaps once you simply look at the position clearly, it becomes obvious that your king is not in any danger.

Then you have attacks that clearly do not have enough pieces in them or any clear targets. Rather than ‘wanting’ to attack, in many cases you need to realize that other factors are more important in the position, and recognize the value of basic centralization. Oddly enough, most beginners seem to get this idea of centralizing their pieces early on, then at a later stage start to neglect or forget about it. That may be due to the seeming intangibility of it: they can’t quite sense what centralization feels like. That is a truism of a lot of common-sense chess. It is intangible and often long-term where you cannot directly see a concrete benefit in terms of calculating a line. Sometimes you have to trust your intuition and understanding of fundamental chess concepts and realize there is something operating deep in the background beyond conscious observation. It often happens that we see moves that we know are naturally good, but you have to make yourself believe that it does not matter if you cannot see a direct reason for the strength of the move right away. Sometimes just slightly improving your position can be a very good reason
for playing a move.

I have not encountered a player under 2000 who worked on chess in a professional or methodical way and saw no results. What that means is that if a strong player observed them working on the game, they would be likely to judge the work being done as useful and productive. Many players are not honest about the work they do, effort they put in, and the nature of their study. It is essential to be honest with yourself if you want to make serious strides as a struggling player.

I have not yet worked with any player whom I thought could not reach 2200. Raw talent is only vital in order to reach the absolute elite in chess, as far as my own experience and other trainers tell me. Hardly anyone ever actually reaches their chess potential and puts in as much time and effort as they could have. 2200-2300 is a much different level than 2500 (grandmaster). Becoming a grandmaster involves significantly more time (and generally money too) than pursuing 2300. A lot of people struggle to reach 2500 simply for practical reasons.

An appreciation of specifically good and bad pieces and how to deal with the opponent’s strong ones and improve your worst ones is much more refined at 2400 level and up. This is one of the reasons why in amateur games you often see the exact same strong move being missed on move after move. In such an instance, a key appreciation of the importance of a vital factor in the evaluation is missing.

Chess-players are stronger now than in the past for a variety of reasons. The time-limit is faster, but players still play at the same strength at 2400 level in standard FIDE time-limit games, which means that their actual strength is higher taking into account the reduced thinking time. Interestingly, 2400 players play at 2500 strength when they are not in time-trouble. 2200s are more well-rounded now and do not lose nearly as easily as in the past. Before, they would often be a free point for stronger players. 2200 players were worse at playing for a draw in the past – now they have access to more information and work on the game more effectively than players did twenty years ago. Engines have levelled the playing field a lot because the knowledge that was often elusive to players below master level can now be obtained quickly from game analysis.
When players reach a plateau or think they have reached one, a good idea is to try to do something fundamentally different. This could have an empirical basis, such as using openings that score the best, or playing in an active, positional style like Magnus Carlsen or Anatoly Karpov if you believe this convincingly brings the best results. For instance, most players under 2000 try to focus on attacking chess, with a heavy emphasis on direct attacks. One of the problems is that this leads to a lot of unforced errors. Tightening up the play, aiming for increased solidity and minimizing unforced errors often has an immediate and positive effect. Placing a special emphasis on weaknesses in your own position and understanding weaknesses better in general tends to lead to greater positional understanding. Additionally, playing new openings often motivates players to look into brand new ways of playing and doing a lot of research, when things may have felt stale before. Making things new and exciting is an important aspect of working on chess. For many players, playing more solidly with Black in particular often involves switching their main openings and more conscientiously looking around the board for debilitating weaknesses.

Although most chess authors are afraid to write about it, lying to yourself is an obvious reason why a lot of players will not improve. You can see this even with grandmasters who do not want to analyse their games or downplay the mistakes they made. It is an obvious fact that analysing with an engine well over 3200 will reveal lots of inaccuracies in a 2500’s games that are worth understanding. For many players, it is not lack of knowledge or calculating ability that causes them to lose games, but their mentality going in, how calm they are, and how much effort they put into learning and being objective. For a lot of stubborn players, their biggest step forward would be just to admit they have been doing things the wrong way for many years and try to break out of that cocoon of stagnation.

Some people believe that solidity in general is detrimental to chess progress or development. The problem with this belief is that the likely alternative is even worse. The worst-case scenario when you play a much stronger player is that you lose the game with a large error that is so obviously bad that you learn close to nothing from the game outside of that single blunder. Playing stronger players tests your limits to a degree on what you can get away with. In general, when I started playing at 2400 level, most of my opponents were
consistently playing with no weaknesses, while they tried to give me one or two weaknesses or possible worries in my position. From this angle, they were able to play without any real risk and essentially either win or draw almost every game they played against me. There is no drawback to such a strategy and it is one of the most common metagame strategies applied in high-level chess. It is frequently applied in the opening too, with White often ‘playing for two results’ in such a way that Black is the only one that can realistically be worse. Normally it means that if the structure or the general status quo remains the same, the superior side has almost no losing chances or almost no chances to be objectively worse.

The level of solidity starts to go up dramatically around 2200 level, and around 2400 level many players have a completely rock-solid style and are very hard to break down with both colours, not giving up advantages without a stubborn fight. This is in sharp contrast to swashbuckling attackers of the 1980s and 1990s, who freely gave their opponents the advantage, often with both colours. In the pre-computer days you could often get away with this because the standard of opening analysis was lower and defensive technique was not nearly as refined. Standard defensive methods and devices were also less commonly known.

Most players play more solidly over time for a variety of reasons. One of those reasons is that calculating irrationally complex positions with a loose king position requires an enormous amount of energy. Most players do not like putting so much stress on themselves regularly. Players also tend to remember a little less as they get older, and therefore prefer simpler variations. Their increased solidity is not necessarily due to less calculating ability. It may partially be due to having less of a desire to have to find crazy ‘only moves’ in the opening and a tendency not to see the point in huge risks that may have been appealing at an earlier stage in their chess life. The ‘Tal effect’ of wanting to play recklessly is greatly diminished over time and the desire to play for beauty is usually not as strong after you have a lot of tournament experience damaging positions with aesthetically-pleasing moves.

Although I have tried to refrain from analogies throughout this book to give the most concrete possible statements about chess, I will share one here. An
international master who is an esteemed chess coach likes the analogy to driving. He says, “You can compare localizing simple processes in chess with driving. When you learn to drive, initially you just need to practice enough to press the brake and accelerator, and steering. And in the case of manual transmission, changing gears. This process becomes subconscious only by driving.”

Many players imagine that they lost games purely due to blunders, when positional errors and completely overlooking some of the opponent’s not-so-difficult moves are practically always factors. This is another reason why a holistic approach is practically the only one in chess that makes any sense. Most players who have not analysed their games in serious depth do not realize all of the different types of errors that are occurring in their games. Missing a break, damaging their own structure, or some other similar reason can be quite revealing. It is not that an aggressive style has to be bad, but very aggressive players at lower levels nearly always neglect basic positional chess, and go for clearly bad and unnecessary pawn-pushes. Most strong players aim to make aggressive moves that are positionally justified and difficult to exploit. Often when I play a g4 thrust in a middlegame, I do not see it as an aggressive move. I just see it as a useful move that assists in a concrete goal of mine and does not create an exploitable weakness.

Short-distance moves like Ra1-b1 and b2-b3 played by strong grandmasters shocked me over the board a lot when I was pursuing the IM title. Very often their moves were slightly more useful than mine, and I got positionally outplayed countless times due to my opponents being able to improve their position slightly more than I was able to. I learned a lot from these experiences and had to adapt to play more concretely and choose my openings and pawn-structures more logically.

Adjusting to the modern way chess is played at master level is an issue for certain older players who grew up in an era when hack attacks were commonplace. Players were generally taught to aim for imbalance and to hope to get lucky tactically against stronger players. Nowadays players simply understand that when they play solidly against stronger players, their opponents will surprisingly often collapse or take unnecessary risks.

2100s nowadays play at least 50 Elo stronger due to their psychological
strength now and sounder opening play than in the past. Outright bad openings were a mainstay in the repertoires of nearly every single player in the 1990s. Nowadays many amateurs actually play good, sound opening lines. Even in 2005, many more weak lines were played at this level.

Improving 2100 and 2200 players in general seem significantly less fearful than similarly-rated players were 10 or 15 years ago. A panoply of professional players have told me that. It has been a new trend, perhaps aided by the confidence these players have thanks to analysing with 3200 computers, working with stronger players, and beating grandmasters online regularly. The trend of solidity among young players is partially being caused by their high-class coaches who advocate very high-level play and decision-making, which is quite different from how 2100 and 2200 players played in the 1990s. The huge gaps that almost all players had around 2100 level were very easy to shore up once technology improved and everyone started analysing their games with engines. For instance, practically all players above 2000 are now better at finding ‘only’ moves and odd defensive tries thanks to working with engines.

People have learned a lot about how to maximize their results in chess over time. There is a definite tendency for the lower-rated player to aim for symmetrical and solid positions whenever possible. There are many reasons for this. Late in the game, symmetrical structures are easier to hold, as there are more theoretically drawn positions (for instance, 4 vs 3) in symmetrical position-types. It is also much easier for a human to handle. There are also more opportunities to sacrifice a pawn and draw. The same thing held true in GM Kaufman’s computer testing: with an edge of +.5 in symmetrical positions, the stronger side won significantly less often than in other position-types. This is both an objective area (theoretically drawn more often) and a human issue (much easier to defend and calculate for a human). Symmetrical structures generally favour the lower-rated player in master play due to the greater ease of defence, ability to head for known draws, greater ease in calculation, and greater likelihood of objectively being drawn.

Part of the reason why there are more underrated players in the 2000-2200 rating range than in the 2300-2500 range is that rapid improvers can and do gain rating points much more rapidly in the lower of those ranges. There are
many reasons for this. One reason is because less actual skill is needed to go from 2000 to 2200 than from 2300 to 2500. For many players to make the jump from 2000 to 2200, developing a decent opening repertoire, getting 100 solid games of tournament experience at their level or above, and improving their positional understanding in small doses is often enough to make the jump. Moving up from 2300 to 2500 is a very different matter, as players above that level play very accurately and give away far fewer free points. An additional reason for lower-rated players being rapid improvers much more frequently is that players below 2200 tend to have no difficulty finding higher-rated opponents if they play international tournaments. Players above 2400 (in Iceland for instance) have told me that if they play local games, they need to make statistically ridiculous scores just to break even rating-wise. Meanwhile 2200s playing in the same events may get excellent opportunities to play higher-rated and more skilled players without needing to put much rating on the line.

I firmly believe in the ability of most players to reach master level. Step up to the board and face your problems. For those seeking international titles, there are some fundamental practical issues, such as making norms. To become a national master, those practical problems are much reduced, and players greatly underestimate their chances. Becoming 2200 USCF (National Master) is very different from becoming 2500 USCF (approximately the conversion for the strength of an international master), as getting to IM level usually requires a solid amount of travel and planning out which tournaments you are going to play. Getting to 2200 USCF simply requires being able to face 2000-level players at a semi-local chess club. IM requires being able to play three international masters in the same tournament at least somewhat regularly to pursue norms. A lot of people underestimate the time it takes to make three IM or GM norms. That being said, chess is a great game with regards to the possibilities that it offers adults in their thirties, forties and even fifties.

It is important to understand just how strong elite players are. Nowadays players have to play universally, and are able to learn and know how to play essentially any position-type strongly due to interaction with other strong players and of course strong chess engines that make it easy to analyse positions properly. Judging from comments you see online, there are those who believe that there are players in the top 25 in the world who are poor
There are positional players, weak endgame players, or have poor openings. There are of course varying degrees of expertise in different areas for all players, but there is no player in the top 25 who is so weak in any given area that he represents an exploitable free win for anyone. Every top player handles complex Nimzo-Indian structures well with Black, can play well with and against an isolated d-pawn, and has high-quality elite computer preparation. I wrote an article in a major chess magazine called ‘The Myth of Carlsen’s Lack of Opening Preparation’, which was praised by a lot of strong players, including Magnus himself. Interestingly, in the Qatar Masters in December 2015, the World Champion won with White against a 2750 grandmaster (Li Chao) in a heavy theoretical main line essentially without a fight. This happens more often than you might otherwise think. It is important to establish these basic facts not just to avoid unnecessarily disparaging the top players in the world but also because it is vital to understand that universality nowadays is not only possible, but necessary. Very few players want to be pigeonholed as a one-trick pony that can only do a few different things in the opening and a few different things in the middlegame. Players are versatile because they need to be to adapt with correct metagame strategy in modern chess. One thing players below GM have trouble with is flexibly switching gears; once the position has changed there should be no mental residue or ghost favouring a move that had previously been good.

One of the main reasons for playing up in section-based tournaments is because one of the keys to getting better in chess is constant exposure to higher-level chess. We naturally adapt in many ways, but there is much more to learn and more depth to the moves from higher-level play. Another reason for playing in a higher-level section is that at lower levels, the gaps between players are less defined. As an example, many youth players start off with ratings around 600 and are still stuck with ratings around 1300 even when they are actually much stronger than that, but simply have not played very much. In many cases, it takes a long time for someone’s rating to catch up with their actual strength. Additionally, it is also possible to gain the most points when you play in higher-rated sections. Winning just a few games against much higher-rated opposition leads to a massive Elo gain, especially by US Chess Federation standards. With a great performance as the top seed in a section, a young player may only gain 30 rating points or so. With a great performance playing up, gaining 100 points is not out of the question.
Many players are significantly less fearful at the board due to computers demystifying most positions. When players have analysed a certain position-type, even a little, with the computer, they often do not fear entering it any more. For instance, nowadays people happily dive into King’s Indian positions that grandmasters were scared to enter against Kasparov, assuming the positions were lost or very bad for White.

It is usually arrogance that prevents players from accepting the possibility that they can improve in every major area in chess. This involves admitting just how many mistakes we make when we play and just how much work there really is to do to patch up our play. The willingness to change and be open to new research methods is very important, especially for older players, who may be stuck in their ways. Many players over the age of 40 underperform due to stubbornness that is justified with defence mechanisms, when they have very clear and tractable weaknesses that could be corrected through regimented study. In almost every case there are simple and effective things a player can do to dramatically improve his chess logic, positional understanding and opening play. When players do not see an improvement in these areas over the course of many years, it shows that the amount of learning done from analysis of their own games is clearly insufficient. There are plenty of grandmasters who analyse the games and write tournament reports covering 70 or 80 games explaining all of these types of typical mistakes in depth. There seems to be a defeatist and unreasonably sceptical attitude among players in many cases though, as if people think these well-established coaches are trying to scam them and there is no point.

Additionally, buying a decent computer and using it to analyse your games in depth is within the financial means of practically everyone who plays chess with any regularity. A common attitude is that a player thinks he does not need it, when in reality he is merely being needlessly miserly to his own detriment.

In most cases, simple regimented study will lead to clear improvement in multiple areas of chess strength. This is one of the reasons why I like breaking down chess strength into six different categories, as in Chapter 4. You can clearly gauge over time whether you have improved in each of those six areas. If significant progress has been made in all areas, it is almost certain that your rating will go up. It is a great way to measure things. If you
are constantly changing your openings, barely thinking conceptually about the positional decisions you make, stuck in a rut, and telling yourself you do not need a coach or a solid computer for analysis, you should probably reconsider the general aspects of chess strength as a whole and whether you are doing anything to make forward strides.

If you develop bad habits, you may not be able to shake them for a long time. It is important to try to realize what bad habits you have during games and when thinking about positions. It is important to realize what misconceptions you may have and work to minimize them. The unlearning process is a difficult one and that is precisely why it is such a good idea to learn things with a very strong and sound basis from the start.
3: Prioritizing Your Chess Undertakings

For maximum learning and improvement, playing is clearly most important, analysis of those games is second, and whatever you do for training comes next. In sports psychology, an established textbook idea is that there is nothing equivalent to the experience of playing. Training should mimic it as closely as possible. Separate training techniques help, but are not quite as effective as the first two options, due to a lack of effort and a lack of wholeness in different areas that are improved all at once. Playing chess is also pure calculating intensity for four hours in a row. It is basically impossible to emulate this in any other setting. One of the reasons why drilling (beyond basic competency drills) works in some other games and sports but not in chess is that chess has so many different types of positions and ideas that repeating most simple drills or patterns is not very effective for master players. Chess is too complicated – every player I have ever worked with has flaws in every major area of his game. Players who ask for a ‘specific breakdown’ of their weaknesses (I get that very often) fundamentally misunderstand the complexity of chess and the amount of mistakes being made on a very basic level that professionals and coaches grasp easily. Coming up with a reasonable set of moves after being aware of what’s important in the position, then reasoning, perceiving and calculating... Complex positional ideas are not easy to drill.
The number one source of chess improvement will always be playing. There is nothing more personal, more revealing (about your own play), and more engaging (using close to 100% of your mental energy) than simply playing. Very often at the board you will realize why certain moves are good due to small tactical points you would have otherwise missed if you weren’t focusing so much. Suffering in bad positions over the board (in my case, which happened many times for many hours), forces us to search harder and deeper at earlier stages of the game so as to avoid this suffering. There are many positions that we simply realize are hard to play or unpleasant just by playing them. A lot of those positions won’t be understood in any other way besides physically playing them. Serious calculation for 30 minutes in a row essentially only happens in real games. Things that you play on your own or realize on your own, stick the most. This is exactly why playing is the most important aspect of your chess improvement. Playing develops and improves the main skills that are going to be most useful for you in your chess career. Many players obsess over knowledge despite the fact that skill, awareness and competence are actually more important.

When you play, your thinking becomes faster, you get used to stressful situations, decision-making becomes more natural and time management optimized. While playing, you realize a lot of interesting things at the board, like what threats your opponent has and what is genuinely unpleasant and difficult to face or play. Then the next time you play that pawn-structure or position-type, you remember those things.

Playing teaches you patience, concentration, and how to play under pressure, because the game really matters. There are a lot of subtle ideas that I found during games that I never would have found in training, due to thinking about the position at the board very deeply for about 20 minutes (counting my opponent’s thinking time) and under immense pressure to find a good idea. If you fail when you train, nothing bad happens. Pressure makes the best training. Under pressure, we do not stop until we find something at least acceptable. We push ourselves to our limits. During training, it is common
just to give up on something difficult after five minutes of thinking. Since it is very motivational to play a game with clear rewards or losses, it is easier to stay sharp and concentrated, thus the better practice it becomes.

When we interact with others, there are a multitude of complex operations going on in our brains compared to working independently and having the luxury to relax. Many evolutionary psychologists suggest that this dates back to when humans lived in the wild and had to operate with heightened senses around others for safety and survival. When we are in a demanding moment we have to produce. We only operate at about 70% focus at most in training. The majority of training is done passively, while playing is 100% focus. Playing also creates a much richer experience involving more senses, thus leading to a greater and stronger memory of what happened.

The conscious aspect of our play is why we learn the most from our games when we consciously remember what we thought about during the game. This way we remember our choices and the logic used to make them so as best to learn from them.

You learn a lot from emotional pain and the visceral experiences that pain gives you. This is true about failures as a whole. Playing a lot in general gets you used to the experience of failing, which is a major motivational factor because we attempt to work hard to minimize future pain. The point is obviously not to try to fail, just that it is a natural part of the process of gaining experience against better players. With a healthy mindset, naturally you bounce back from painful experiences most actively and think about them the most. This means that you also usually learn from them the most.

Without a natural punishment and reward mechanism in place, you learn significantly less and are not as motivated to learn from your mistakes. Many players have told me that if the entire experience is not hard, they feel like they are not getting a lot out of it. That is an exaggeration, yet I still clearly see the point that effort and hardships are vital here. The emphasis from all of the studies on this subject show that maximum applied effort in both playing and training is vital. As I have noted, in training, it is rarely possible to mimic the effort applied in a real game. Recent scientific literature has shown that consistency in doing a task (for instance, training every day) on the whole gives less results on average than high applied effort consistently. Total effort
applied is more important than both experience and training regularity. This does not mean that you should not try to train every day, just that the most important aspect in your training is what you put into it. That being said, someone who exerts a lot of effort can be expected to train very often and seek out the maximum possible opportunities for learning and developing in the game.

Occasionally I used to pull myself away from playing tournament games because I felt I did not know my openings well enough or I felt that my tactical or positional play was subpar and I should just do a bit more studying before playing. Had I been thinking the right way and focusing on playing and developing skill, I would have certainly saved time on my chess improvement path.

What is remarkable is how obvious this point is when you think about it clearly. What do you do by playing in a tournament? You force yourself to think about chess for a whole day, weekend or week. And the thought you force yourself to do is very beneficial, because it is (1) motivated by its clear relationship to your own winning and losing, and (2) focused on openings and structures that you will tend to see again, since the themes in your own games will recur. Then the games provide the best study material for improvement, and so on. It’s really a no-brainer if you do the math, especially when you consider that the odds of spending the same amount of time in pure study are almost zero for the average person who is not motivated like a professional athlete is.

A chess tournament is what behavioural economists might call a ‘commitment device’, i.e. a way of forcing yourself to commit to something. In this case you pay the money, register, travel to the site, etc., all to commit yourself to spending time on improving your game. (Plus you might win money, have fun, meet up with friends, or make useful connections with potential trainers or sparring partners.)

At tournaments you will almost always see a lot of other games as well that are eye-opening. I must have had at least 10 or 15 occasions in my chess career where an amazing game occurred on the board next to mine that was unforgettable, and extremely instructive in some way. During league games as well, one or two of the games are usually extremely interesting for one
reason or another and the whole team talks about the game at dinner later that day. This kind of immersive experience is something that does not exist at all if you are not at a tournament or right in the heart of the contest. That being said, focusing on the other games should be done after your own game is over. An obvious point about the importance of playing is that if you do not do it, you will not have games of yours to analyse.

The following quote is from an online post by Garry Kasparov: “You can learn just about anything from books, and chess is included. But to really improve, you must play regularly, like any other sport. The concentration and mental discipline needed to improve chess performance can’t come from study. Especially true below master level. Experienced tournament players have developed those ‘game muscles’ well. Amateurs need to build them. Study won’t help you if you can’t focus.” The quote is a very good one for placing emphasis, although the phrase “to really improve” certainly has exceptions. I got to 2200 FIDE having played a total of just 40 long games in my life. I did really improve a lot without playing, but it is fair to say that for most people, playing will be the absolutely most important part of their improvement. Probably I would have improved faster if I had been in a position to play more games (I was not), but at least the good news is that if you also are in a position in which long games are hard to come by, serious improvement can still occur at lower levels, especially below 2200, where players tend to have so many basic knowledge gaps. After 2200, playing and working on the specifics of my own play were definitely the most crucial elements in my improvement. It was extremely important to improve my ability to analyse positions and understand my own games conceptually, even as they are in progress.

After a while, chess is much more about practising thinking in chess terms than about innate ability. When you compare one player who plays frequently to another player with the same rating who does not, the difference between the players will actually be quite substantial. The one playing frequently will generally play better chess, despite having the same rating on paper. This is another important statistical area in which playing cannot be understated. Playing helps you develop a sense of danger and a sense of urgency. A good sense of danger gives you a good feeling for what types of positions to avoid. When analysing, unfortunately, positions never seem all that dangerous. You
only really get a feeling for their difficulty when you are forced to find moves for that side on your own, in real-time. Any training you do outside of a game will hardly ever be at the same intensity as you play a game. When you face very strong opponents in tournament games and prepare for them, you see how they prepare and how many good lines and ideas they have and then you can use them against your own opponents. You learn a lot of deep things about how they play the late opening stage and middlegames. A lot of learning takes place before the game while diagnosing the opponent’s weaknesses and mistakes.

Those who do not play serious games often are more likely to blunder at any given rating level. Playing regularly helps players get into a groove while they are learning a lot from their previous games as well. It does not have any real downside. If you can remember and later save as many lines you calculated during the game as possible, this is the best material to look at for improving your calculation.

Playing chess tournaments regularly helps keep you in check and make sure you are putting in the maximum amount of effort possible. A lot of chess-players do almost no work outside of tournaments, but work extremely hard right before tournaments, during them, and right after them. Being tested with your rating at stake is about as motivating as chess can get. When you have just learned a lot of new ideas, improving your rating is often as simple as just playing many games. I regularly hear from motivated players that after taking chess lessons, they play better. It is worth pointing out that during the time of his big sudden rise, World Champion Magnus Carlsen played extremely often, while training relatively rarely.

Seeing an unpleasant and unexpected strong idea show up on the board makes you realize something almost instantly that hours and hours of training may never reveal to you. You develop an awareness for how a position might collapse, how an advantage might be sought, or the type of move that might not be justified based on playing many games, even if some of those games are rapid or blitz games. It is very common to hear a grandmaster talk about how he played a line or idea in a rapid or blitz game against another grandmaster and learned a very important idea or plan from that game that he was able to use in many future games. Almost every strong player plays a lot
of blitz games in his openings to get familiar with the position-type, and how to fight for advantages (and equalize with Black or specifically play for a win) and the initiative in his main openings. It is a great way to pick up ideas very quickly if not done in excess and if you make a concerted effort to seriously analyse and learn from the relevant moments of those games.

For most players it is most effective to adopt a playing style where problems are easiest to fix. As an example, if you try to emulate Kasparov’s openings, which are based on 20-move lines we do not have access to, it may be extremely hard to fix opening problems. It is not easy to adjust your play when games are won and lost based on microscopic tactical nuances. That does not mean you should avoid playing sharp tactical chess, but if your main focus is raising your overall chess strength, playing as many sound and good moves as possible per game is likely to be your best bet, and the one which will involve errors and problems that are easy to diagnose and deal with accordingly.

Usually when I play multiple tournaments in a row and get into a comfortable groove, all aspects of my play improve just a little: preparation, awareness, calculation, confidence, time management, and the like. Even tiny improvements in each of those areas can make a big difference in one’s play.

The best coping mechanism for dealing with harsh losses is to play through blunders and bad losses from top players. Rowson’s book The Seven Deadly Chess Sins considers the psychological side of the very bad moves we sometimes make. I would try to avoid reading too much into what you perceive to be your own bad form though. Many times top players make one or two very bad moves in a particular game, and it does not really indicate much at all about their future games or future play.

Remember that playing games is the best way to improve. Play a bunch of games, analyse them and keep coming back stronger. Playing a 3-day 5 to 7 round event over a weekend is a great way to get in a lot of rated tournament games. You should flood your mind with good ideas, then play a ton of games, then fill up your mind with ideas, then play a bunch of games and keep repeating the process. Playing in consecutive sequences helps you get into a groove and avoid rust.
Playing does the same thing to your chess as speaking does to learning a language. You can learn a lot of grammar and vocabulary without engaging in conversation, but nothing compares to actually talking to native speakers when it comes to your memory, concentration and understanding. Get out there and play.
Analysis of Your Games

The number two source of chess improvement will always be analysis of the games you have played. Through these means, you get to verify whether all of your intuitions, feelings and conclusions at the board were actually correct. It’s useful to make note of as many thoughts, conclusions or feelings you had during the game as you can so as to look at them and think about them later. Of course, the main benefit from analysing one’s own games (or having a strong player do it) is simply to be aware of the mistakes, why you made them, and how to improve your thinking so as to avoid similar mistakes (or the exact same mistakes) in the future. This is again related to chess understanding, chess logic and chess decision-making skills. Good self-analysis and chess work will help you improve in all such areas. Attribution bias can be a real problem for people who do not analyse their games seriously. Such players often create a narrative for a loss, rather than looking at all of the different areas of their play they could work to improve from the excellent material their games provide.

“Negative examples are memorized better than positive examples. When one group of firefighters went through the list of real-life mistakes other firefighters have made, and another group just went through the list of positive things to do, the first group demonstrated better judgement when faced with real-life tests. Our brain seems to discount the best practices, but single out bad examples of someone else making a mistake.” – Shane Parrish.

I do not put a lot of weight into Rowson’s quote, “Be careful with the idea of learning from your defeats. If we become comfortable with the idea of learning, it can undermine our will to compete.” I have yet to come across a player who did not fight hard to avoid defeat; the point is to learn from all our games, whatever the result. In this respect I place no special emphasis on wins or losses and after games just try to grasp the best moves and understand the critical positions that occurred in my games, all while trying to improve my chess education.
Training

General Advice on Training

The number three source of improvement is training. For this, the key is to feel motivated doing something fun, manageable, and that you can continue doing day in and day out. It is vital to feel inspired (as much as I hate this often misused and cliché word, it makes sense to use it here) and do training that gives yourself a feeling of productivity. There are many different types of training you can do, so it is important to think about each of them in a sensible way.

To think logically about training, you have to prioritize your undertakings very seriously. Since playing is the number one factor in chess improvement, I encourage everyone to play as many tournament or serious training games as possible. I place emphasis on the ideal being to play someone who is one level of strength above yourself, as I discussed earlier in the book. Most of the general textbook advice on chess improvement emphasizes a ‘masterful study programme’ of some sort. I have taught players who did no training outside of our lessons and had not read any chess books in their lives before and were able to reach 2000 strength. Clearly one can make serious strides in chess without a serious study programme focused on chess literature. That being said, a fair amount of chess literature and classic games of the past should be engaged.

In your own chess training, you should emphasize evolving and experimenting with what works for you. For many professionals, this involves re-arranging their work space occasionally to be more motivated to work there. As for serious chess work, alternating between temporary and permanent work is a good way to avoid boredom and prevent creativity from being stifled. The moment you get stuck in what you think is the perfect strategy for chess improvement, it is likely that your progress will be suffocated by dogma.
Your training ideally should mimic a real rated game as closely as possible, although unfortunately most training is not all that close. That being said, going over well-analysed grandmaster games may not necessarily be that similar to playing a game, but it is still an intense exposure to high-level chess and the type of thinking you should try to apply at the board.

Creating a training log is useful for all aspiring players, in the same way that it has been proven that people eat more healthily when they keep a food log. A chess training log not only helps prevent you from sitting on Internet chess servers all day, but it helps structure your training. Simply write down the activity and time taken. Players study more when it’s being recorded – or perhaps they just procrastinate less, which has the same final result. They also lie less about how much they study when the exact study has been recorded. Having various notepads next to your computer or work area is very effective for writing down important questions, games, or moves that you want to make sure to focus on later.

It makes sense to break down your chess study in a daily, weekly, monthly and annual fashion, with ideas about what to study before a tournament and what to review after each tournament and after each game.

Temporary Study

Temporary study is aimed at improving your competence in different areas. Due to the fact that most players below master level have insufficient tactical skills and not much endgame knowledge, it makes a lot of sense to spend a month or two getting your skills in these areas to an acceptable level of competence. Additionally, playing through ancient grandmaster games is an aspect of chess study that enriches your chess culture and understanding. Playing through every world championship game since 1900 takes less than a month of dedicated work if you simply compile a database of the games and try to understand what strategic and tactical ideas were effective and strong at the highest level. One day when I was 2000, I went through all the games from the Kasparov versus Short match from 1993. In many positions, I had to turn on the engine and make natural moves to understand what was going on
in the game, but I was still able to see roughly what happened and why
decisive games were won. Once you conscientiously understand some high-
level chess matches like this, you are able to apply a lot of ideas by analogy,
and this is partially why you will hear so many grandmasters mention how
certain positions remind them of previous world championship positions. It is
a clear sign of an educated chess-player, even though it does not take very
much time to actually view and think about the games. Once you do it one
time, you essentially cement a big part of chess history into your mind and it
is not something you necessarily have to do again. If you are weak in these
temporary areas, you fill in these gaps as quickly as possible. In a span of
three months, you can get your basic endgame study, basic tactical pattern
study, and classic historical game study under your belt firmly and need not
worry about being deficient in these areas for your rating level any time in the
near future.

**Permanent Study**

Long-term study should apply to the most general areas in chess and be
useful at all rating levels. For instance, games collections such as Karpov’s
book of his best games is interesting for both 1600 players and seasoned
grandmasters. Instructive thematic middlegame and endgame material, and
various types of exercises can fit into this category.

**Before a Tournament**

You should solve tactics before a tournament starts and make sure you feel
comfortable in your main openings. A helpful idea is to make a few very
small PGN files with the lines you plan to play with both colours, focusing on
what would bother you the most. The point is to make this file as small as
possible so that you can remember everything you put in it. A file like this
can be very useful and used in future tournaments as well, so you should save
and update what you create. During the tournament, try to relax, get enough
sleep and be ready to exert yourself completely during the games.
Before a tournament, I would review your past games (by simply going over saved analysis you have of past games, so not too much time is spent), solve roughly 100 simple tactics a day (but take two days off before the tournament), and for openings, use a correspondence book or a digital opening book (like Hiarcs’s book) and simply use the arrow keys to play through all of the lines you play yourself. This way you fill your mind up with all of the relevant lines right before you go to the tournament. I do not like to memorize lines at all, but in this situation, it is very useful.

Daily Plan

It is best to limit to-do lists to only five things to keep them manageable. If you stick to five short tasks at a time, you can complete everything on the list that day. After all, we only live one day at a time.

If you have three hours a day to study, I would try at least to do four pages of book study and three difficult exercises per day. Beyond that, in a few hours, you may easily complete 15 pages from a book. If you have a recent tournament game you have not properly analysed or a glaring problem in your opening repertoire, I would focus on patching that up as your top priority. That would be a form of temporary study that you would take care of in a day before returning to your more long-term study. Often I would study from a book to get started and feel inspired, study 7 or 8 pages, attempt a few difficult exercises, and then analyse a tournament game of mine and an opening variation that was on my notepad that I needed to check. I saved my tournament games to a folder called ‘My Tournament Games’ and I saved my opening analysis to either a ‘1 e4’ or a ‘1 d4 and Others’ database. This made everything neat, orderly and easy to find. I usually found my opening analysis later by ECO code.

Overall Study Plan

Ten hours per week is a good basic goal. Players who study just 40 minutes a
day are not putting enough time into the game. In an ideal world, an excellent training plan would be to fill up your brain with ideas after 200 hours of study (50 days of 4 hours of study per day), play 50 games (150 hours of playing – the reason for playing so many in a row is so we are always in our best form when we play, with the least rust and with the most ideas in mind), analyse them deeply and study for 100 more hours, play 50 games and repeat the process. If you cannot play more than 20 tournament games per year, then let online games be your way of gauging your development. Play games regularly and analyse them.

When you are an international master or grandmaster, you do not have to work as intensively to get the right answer. Simply watching or playing through games is training, feeding the massive knowledge ‘database’ you have built. You can figure out the best moves much more easily and understand entire games far more effortlessly with more and more strength. The stronger you get, the less you have to think.

Playing isn’t the only way to get better (especially below 2000), but if you aren’t training like crazy, it’s one of the only ways to make big improvements. Sinking more into general chess culture and elite chess also gives you a better feeling for ‘normal’ and common moves, and makes it easier to find reasonable moves at the board.

A nice training idea used by some international masters I know is to look at a game from a TWIC or from a grandmaster game in ChessBase and simply add in ten sidelines with one obvious move that you were curious about while playing through the game. This is done with the engine turned off of course, so that you can generate some genuine ideas of your own. Then you simply check with the engine to compare the obvious unplayed move with the game continuation. This process fulfills two very important roles: firstly it prevents overfocus on engine moves or the top engine line, leading to very human analysis. Secondly, it helps your quick analysis skills (which must translate to improved blitz play) by giving you a lot of information on natural moves and how they play out objectively. Extremely strong blitz players are very good at playing and assessing these kinds of obvious moves and it is something everyone can work on.

Of course, if you could hire Magnus Carlsen to be your coach and train with
you multiple hours a day, this question would not be necessary to discuss. An improvement plan is purely based on what you are realistically able to do. Ideally you could train with a world elite grandmaster, play 20 tournament games per month, and play training matches as often as possible over the board with a player 200 or 300 Elo points stronger than you. Yet since this is a possibility for close to no one, more realistic aims must be set. When asking a coach what your improvement plan should be, you need to ask what you are capable of doing. If a player asks me for advice and I suggest improving tactical and positional skills, and basic competence in endings by studying certain sources and the student clearly is not up to studying them, it is best to make that clear from the start. If you have one hour per day to devote to chess, you need to be realistic and the question then is how to make use of your time efficiently. In many cases that will involve playing online games, briefly analysing them, and spending the rest of the time trying to improve your competence and awareness in other areas.

Some players just improve by playing, then analysing those games, then preparing during tournaments. It is important as a coach to differentiate between temporary study plans and long-term study plans, yet I have not seen this important distinction made in writing. Tactical pattern study, the study of how chess progressed in the elite, and the study of theoretical endgames can each be done very effectively within two months. It just depends if you have the time and desire to put in the effort. In my case, I barely had the time, but I happily did so. Later I never had any issues with theoretical endgames, basic tactical patterns or not knowing strategic and tactical ideas played by the greatest players of the past.

You would get more benefit if you re-reviewed them all quickly every day for the next week. One thing about human memory is that it gets strongly reinforced by redoing things on multiple days, even if it’s just a glance. When working on juggling, it’s vastly more effective to work on something for five minutes every day for a week than for an hour straight on one day, even though that’s almost double the time.

Having a consistently high level of effort and keeping a study plan that you can maintain is essential if you want to make big strides in chess as an adult. I never wavered from that. It can be solved by facing up to it and asking
yourself what is a solid strategy for working every day on this. You need to study something that you can put a lot of effort into on a regular basis. That being said, I have had a student who went from 1500 Elo to 2000 Elo (a 500 rating point jump) within less than one year of training with me. He actually did not do any training outside of our analysis sessions. The idea that you need to study x books, or y amount of problems is definitely not correct. It is just that few people have access to experts that can help guide them.

The best idea for training games would be to play someone 200-250 Elo higher rated than you as frequently as you can. Record the moves and analyse them with a coach. This is a very simple training routine many of my students have done.

Botvinnik commented that one hour a day for 5-7 days is better than one day of intensive working. Limiting things to one-hour spurts allows you to focus on efficiency. I’ve seen experts list the number at 75 minutes in textbooks, but I find an hour without break more manageable. An excellent report in December 2015 by Cal Newport noted, “The bottom line is that if you are intrigued by depth, give real depth a try, by which I mean giving yourself at least two or three hours with zero distractions. Let the hard task sink in and marinate. Push through the initial barrier of boredom and get to a point where your brain can do what it is probably increasingly craving in our distracted world: to think deeply.”

I like evaluation exercises, calculation exercises and candidate-move exercises. For evaluation exercises, simply look at a position and evaluate it as equal or better for one side or the other and by how much. This gives a lot of insight into how you think about positions and sheds light on which types of positions you might aim for in your calculations. For candidate-move exercises, the simplest thing is to find a rich position with many ideas and try to list what you think are the best five moves in the position. Try to give a short variation for each of those moves and write it down. Coaches can help a lot in this regard, by pointing out which moves they would consider. I recommend saving a database of candidate move training positions on your computer with your solutions to them. It does not take much time if you are organized and have the database already made.

While I was trying to get better at chess (when I was 1600 strength), I studied
games collections from many of the best players in the world or past legends (Keres, Geller, Beliavsky, Dreev, Bologan, Anand, Karpov and Kasparov). At one time in 2007, I believe I had studied from cover-to-cover every single game collection that was written by a player over 2600 FIDE about their own games. That was the culmination of my goal, which I decided on without any guidance. Despite my relative lack of experience (I had barely played any tournament games), my overall level of understanding and knowledge was quite high. With this strategy, I gained over 800 Elo points before switching to being a full-time coach in 2012. The point isn’t to mindlessly study from books, but to have some structure to your life, to feel good about yourself, and to feel like you have been productive in your chess development. I do not think what I did was nearly the most effective thing to do, but I set tasks for myself, I enjoyed them, and I just went and did them. That was enough to assure consistent and stable improvement all the way up to master level. I believe that is what players are looking for in any case.

I had a student who was solving one hundred tactics per day. Although this may be an effective method for people in the short-term, as a long-term chess study plan, it is quite tedious and most enthusiastic players will just drop out of it over time. My approach was rather different. By studying games collections (one or two games per day well-annotated by great players), I developed my chess understanding (sucking in the understanding pointed out based on certain principles that decided games), and decision-making skills by learning from the explanations of great players on how they made their decisions. I also used these examples to stay inspired and motivated to work on chess. I can distinctly remember when I was rated approximately 1750 and I studied two powerful games from Anand’s best games book the morning before a tournament. I felt invigorated and went to the tournament and played with a lot of energy. To improve my chess logic, I worked on positional exercises, where I could look at positions and try to break them down and understand them, with the exercise not being strictly about seeing an obscure tactic (which is often the case in tactical exercises with an ‘ooh’ factor). I have passed on this training concept to a student of mine who was previously only working on tactics. Now he studies one game per day from a game collection (such as Anand’s) and does a couple of positional exercises per day (e.g., from the book *GM Preparation: Positional Play*), where he feels significantly more engaged in the chess content than by doing tactical
exercises. Once a month I recommend playing through a bunch of grandmaster games (say, Fischer’s games) without commentary to pick up on patterns played in those games. You may quickly get a feeling for how a strong player develops his pieces, how he converts his edges, and how he utilizes the energy of his pieces. Such intuition and patterns can be quite useful. I don’t view this as something to do regularly, but it should be something that you do every so often to keep your chess fresh.

Kramnik’s best games book was instrumental in my chess development. It is a nice collection of mostly positional wins. Positional chess is more likely to make an adult player successful. Positional play is logic-based and always founded on clear reasons, which is easy for adult players to digest. That also means that such ideas are going to be the easiest to apply in your own games. I realized I would never calculate like most talented youngsters and accepted it. But from these games I picked up some openings ways, ideas about how to maintain a slightly better position, and examples of how to squeeze in endgames. I learned a lot from studying like this just as a 1600-1700 player with no chess background or education.

On my computer, I have a file called ‘Chess Fundamentals’, which features simple positional errors by grandmasters. Whenever I see a clear positional error by a GM, I put it in this database. I also have a folder called ‘Evaluation Exercises’, which has some unusual positions that are worth solving. Obscure structures or surprising computer evaluations sometimes provoke me to put examples into this folder. I also keep a folder on my computer called ‘Surprising Moves’, and another called ‘Simple Examples’, which have simple yet effective answers that are perhaps not so surprising but not that easy. I also like the idea of storing specific examples in ChessBase which feature, for example, a bad queen. Saving five or six positions in which a bad queen has a major influence on the outcome of the game can help you appreciate good and bad squares for the queen and the general relevance of the queen’s location. You can also save examples as you go. For instance, if you see an instructive example of one side winning a complex game with an isolated queen’s pawn, you can save the file to a database called ‘IQP’. I wholeheartedly recommend saving the very best and most instructive examples, and make sure that they are not refuted by computer analysis. In a few months, you can build up an impressive collection of great training
material that you know very well because you put it together yourself.

It has been disappointing to see some chess-players get sucked into ‘rapid chess training programmes’ that aren’t based on all of these strong and sound fundamentals I have described here. I believe one will not really find a better chess training programme than having a regular routine of a well-analysed game or two per day (that gives you some inspiration and understanding) and a few puzzles that can help with your specific chess decision-making (and help you be aware of where you may be misfocusing your thinking or misassessing positions). This can be just an hour or 90 minutes of work per day, which was manageable for me even when I worked 50 hours a week. For that reason, it seems to be fairly effective and not too time-consuming for almost everyone. Assuming you can’t play a lot of over-the-board games, I don’t see a better option.

I was very unusual in that I studied over 100 books by the time my rating was 2200, yet I had practically no games in the database. If I could have done things ideally, I would have. The ideal situation for most chess-players, myself included, would be to play tournament chess for one week (7-9 games) study for two weeks, and play another tournament again. This would involve playing approximately 150 games a year.

You sometimes see claims that it is useless to study chess for seven hours in one day, but this misses the point that you can learn an incredible amount if you know how to use engines and do not waste that much energy in doing so. When people argue that it is much better to do just a few hours of work a day, they are generally referring to intensive analytical work at the board. In terms of effective chess work on the computer, players should learn to enjoy doing it for hours. I get pleasure from looking over a lot of positions, discovering little secrets, and picking up ideas that improve my understanding. About one hour of intense calculating work is all I can do in one sitting, but in terms of game analysis I can do a lot more. I do not see anything negative that could come from it. You may experience some diminishing returns after about four hours, but if you love it, and can do it, there would be no reason not to do it – the work is still useful. The law of diminishing returns kicks in quickly in almost all sport training once you acquire the basic training methods. Chess-players should be aware of this too and find a routine that suits them best.
Because humans adopt traits of the individuals they spend the most time with, we need to be conscious about what influences we allow into our lives, especially if they might inhibit our development or strength. Analysing with players who have a lot of incorrect ideas about chess can wear off on you, and cause you to need to unlearn things. When I sense that some of my opponents do not understand fundamental things about chess (such as pawn-weaknesses, or when they are large amounts of material down), I often lose interest in analysing with them after games or working with them. One international master in particular is known for analysing positions where he is a piece or two down for no compensation, as if his position is completely fine or capable of being defended. Such time-wasting exercises are not only useless, they are frustrating.

The best way to overcome a tendency to study in a shallow way without delving deeply into positions is to study on a board with someone else checking your lines with a book or engine and motivating you to work and analyse. This way you slowly see everything on the board and understand everything on the board yourself. When you understand it yourself, it’s more powerful. That is why playing is always the number one source of improvement. I find it boring to try to calculate 10-ply lines given in books, but if someone had me generate the candidate moves one by one and guided me along in the line, it would be fun. The more tedious chess work is simply less tedious when there’s a social aspect embedded in it.

Consistency is one of the most important aspects of a training routine. Maybe you will not see progress instantly, but you will definitely see it gradually as your entire game evolves. How you choose to study chess should be aimed at whatever you can do consistently. Much like going to the gym on a regular basis will make you more fit, you need to figure out what you like to do at the ‘chess gym’ on a regular basis. It used to be believed that it takes 22 days to develop a habit. While that may be good motivation to get people on the right track, a later study from 2014 concluded that it takes more than two months to really develop a habit. I think the most logical and easy to apply strategy is to study four pages a day from a book, solve tactics regularly, and play online games at least a few days a week that you think about later with the questions in Chapter 9 (‘Analysing Your Games and Self-Improvement’). The variety here makes everything less tedious and allows you to apply ideas from book
study, apply tactical patterns from tactics you solve, and seriously think about the games you have played, even if they were only blitz or rapid games.

Once a month, I recommend reviewing your analysis of all of the games you played in the last month. It is even better if some of those games were analysed with a coach. Additionally, you should briefly play over large quantities of grandmaster games to ‘drill’ your pattern recognition and develop your awareness.

One useful training task is looking at long streams of difficult moves played in GM games or played by computers and sitting down and trying to think of a simple way a practical player could have arrived at all of those moves over the board. Finding the essence of the line in human understanding is a task I like to perform to stay sharp. It is something you need to do regularly in modern chess and even grandmasters ask me to help them with it.

A lot of people think you need a ‘perfect training plan’, having pointless debates about whether one form of productive work is slightly more effective than another, but really the idea of training below 2000 is fundamentally to improve your basic competence in areas where you are weak. If they would just do effective work all the time, they would see consistent progress. The best training routine involves task-oriented things that you enjoy doing. Differentiate between temporary and long-term chess work. I have had students who barely studied or developed a classical chess education in any way who became 2100 and up by essentially just playing and analysing a lot. Of course, it helps to have a broad base of knowledge in order to learn more from the games you play and analyse and to improve, for example, your awareness of certain ideas and structural understanding.

The most useful and simple form of visualization training is to play out specific difficult tactical lines in your head. Difficult tactics and difficult games are the best resources to use for improving your visualization. Try to conceptually understand then fully visualize the key sequences in your head. Look at the board, remember where the pieces are, and close your eyes and try to visualize the surprising or difficult sequence.

There is a common misconception that all grandmasters spend many hours a day on chess. In *Secrets of Practical Chess*, John Nunn explained that many
grandmasters merely spend 30 minutes a day flicking through chess magazines when they are not actively playing events. I lived with two grandmasters in Spain. They did not spend any time studying chess. I was studying about 6 hours a day at the time. They saw me studying interesting positions, glanced at the board and simply walked by. They just played in league games, got their income, gave lectures here or there for money, prepared for games and analysed those games with the computer. That was the extent of their study, with occasional study of some opening variations that interested them. Players in the top 150 in the world probably spend 4 hours a day on the game at least. Eager players I know tend to study chess all the time whenever they are able to (that can be up to 7-10 hours a day), but look at it this way: when you play a 9-round tournament, it’s about 35 hours of raw playing, with about an hour of preparation per game and approximately an hour of analysis. That’s 7 hours a day of intensive chess during a tournament, and that’s the bulk of their time on the game.

It is hard to say how much chess training I did in my peak training periods because a lot of it was passive study. I worked on chess in some form 7 hours a day – most of the time when I was awake and had free time. Passive study consists of looking over games without putting in that much effort, or using an engine. Many players think that you have to be dialled in 100% to gain much from chess work, but this is not true. I can learn from analysing my games without focusing 100% of my energy on understanding the position. Watching chess videos is also passive learning. You can’t really work at full intensity for more than 4 hours anyway. The late Grandmaster Gyula Sax talked about how Judit Polgar used to drop pieces in the 4th hour of analysis when they worked together.

I was able to play a lot and studied chess many hours a day during that time. I played about 100-150 rated games a year from 2008-2011 when I went from maybe 1600 USCF strength to 2500 USCF. I’d say I was playing, analysing, or studying pretty much every possible minute. Most people will not have that level of devotion, or simply cannot because they have to work more. At the beginning in 2008, I worked 40 hours a week. That was rough. I never got to study nearly as much as I wanted to. Once I was able to play and study more, I was a lot more relaxed and saw immediate gains.
For your temporary study, do the basic things to establish competency, or get the basic knowledge, then you don’t need to do them again. If you develop a really solid base from early on, you may never be weak tactically or in the endgame. That is essentially what happened to me in my chess development, and as I continuously reviewed well-annotated games by strong players, I reinforced everything and constantly expanded my knowledge, competence and awareness.

In my task-oriented approach to chess, I usually had things I really wanted to study at all times, so I studied them in a lot of detail. I practically always had a clear task to work on. It went from *Secrets of Practical Chess* by Nunn to a Rowson book to Anand’s games to Kramnik’s games to other concrete tasks I wanted to complete. Before I was 2200, there was always something I was working on and very interested in. I did not exhaust those basic tasks until I was already well over 2200 strength. Just by pursuing tasks that were fun to me, they propelled me to the level of National Master strength.

My student who went from 1500 to 2000 in six months simply made sure to play at least a few 15-minute games on ICC per day. We worked together three hours a week on average (usually 30 minutes a day, skipping weekends). This was my fastest improving student, and he never properly read any chess books in his life. He studied one or two books with puzzles in them for travel reading, but that was the extent of his lifetime chess study. He definitely understood the importance of playing. He was constantly picking up new concepts and ideas from me and being able to apply those fresh concepts in his new games immediately because he was playing so much. Playing with constant guidance is a very good combination.

Your beliefs directly influence the amount of effort you put into things. This is why it is especially important to have sound and empirical views with respect to chess improvement and training.

Playing 100 tournament games per year is excellent, but giving a set number of games that every player should play in a year is not helpful. If you are capable of playing one serious game every day, you should do so. However, I have never met a chess-player who was actually able to manage this, so it is not a realistic piece of advice. Many players are only able to handle playing one nine-round tournament per month healthily. It is important as a player to
establish your threshold. Try to play as much chess as possible. If you are not able to handle the most you are economically capable of playing, then tone it down a little to what is manageable for you. Playing serious games is so important because of the amount of effort and energy you put into the games. The most important factor in development (shown in sports psychology) is the effort expended. You’ll have to find a routine that motivates you the most to put a lot of effort into the game. Your training should also ideally emulate a real game as closely as possible. For me, games collections, playing and analysing were very stimulating. I also liked Nunn’s books a lot and made an effort to study them whenever I had spare time. You will have to try to find things you specifically like that are good for your own personal development. It would be nice if you were able to get in some training games every day.

When people compare chess to other fields, they are making the logical fallacy of a basic category mistake. One cannot compare, say, a language that can be learned in 2,000 hours, to skills that have varying lengths of time to master.

A good training plan would be to start with about 1,000 puzzles or so, memorize them and their solutions so that you can play through the entire thing in less than an hour, solving every one in three seconds. Take that and do it every day, adding about 100 puzzles at a pace that you can handle. This is a good way to train as an ambitious adult to compensate for the lack of speedy pattern absorption that juniors have.

I always had short-term training plans I was pursuing at any given time. I made it a goal to read four pages per day of a chess book I found to be instructive and interesting. Outside of that, I gave myself constant tasks to work on that did not take too long to complete. Sometimes this was learning a new opening, updating an opening file, or analysing a few of my old games that were insufficiently analysed. I constantly worked to patch up my opening weaknesses and kept notepads on my desk listing openings I felt the weakest in, so that I knew exactly what to work on. When I wanted to learn a new opening, my first task was to check the classic games in the variation or the games of the best proponent of the variation. When learning the King’s Indian Defence with Black, this meant studying Bobby Fischer and Garry Kasparov’s games. Thus, the task I set myself was to create a database with
only Fischer and Kasparov King’s Indian games and go through them all. I planned to complete the task of going through all of these games in about two weeks and calculated how much I would need to study each day to complete the task.

When I wanted to update an opening file, I checked the recent grandmaster games and checked my saved opening file with an engine, adding in relevant omissions and fixing errors. Here the task was to put all of the recent grandmaster games into a database and run my analysis through an engine. When I wanted to analyse old games of mine, I often grouped them together by opening so that I could draw broader conclusions about the opening, the pawn-structure, and apply newly learned ideas to the analysis of the next similar games I analysed. Putting this into practice, my training for a day usually looked something like this: four pages studied from The Quest for Perfection by Paul Keres and John Nunn, ten Fischer and Kasparov Black King’s Indian games played through, fifteen minutes updating a Kan Sicilian file, and three of my 5 Bd2 Grünfeld games as Black analysed in tandem. All of this type of work, on average, took me about two and a half hours in a day. Some days I only worked for one hour, and other days I worked for five hours. It was important for me that I had multiple different tasks for variety that all interested me, and all involved working towards the completion of short-term obtainable goals. Once you get into this kind of a routine, chess study becomes more and more fun and easy.

If you are nearly done with a book and are studying a few at once, make the almost completed one top priority and try to finish it. Completing tasks like this is most motivating for a lot of people.

When I was about 1700 strength, I went through a couple of complete books with difficult calculation exercises in them. After that, there were serious diminishing returns on doing deep calculation exercises. At that point, other areas of my game were lagging behind the most and I just needed to play more tournament games to see results. After a lot of serious study has been done without much tournament activity in the meantime, simply playing many games will often lead to gaining a lot of Elo points. This is why many of my adult students under 2000 just need to play 100 long tournament games as soon as possible and they will see their rating go up 100 or 200 points at
least. After having many lessons together, they have learned a great deal and acquired many new ideas, but just have not had the opportunity to apply it due to a lack of serious tournament practice. This was also a problem I encountered in my development when I had few tournaments available to play.

Some players feel that their main issue is converting advantages, but they do not know what to think about in this regard or what to study. Converting advantages is not easy and requires paying careful attention to the opponent’s resources so that you do not blunder anything or allow them any chances. The players with the best technique were known for squelching any possible counterplay the opponent might have had. This means that rather than playing automatic moves, they were extremely conscientious, always preventing the opponent from getting the activity he wanted, while simultaneously trying to play the most accurate moves.

If your main issue is converting advantages, there are two main tasks you should undertake:

1. You should put together a database of the players with the best technique, like Vladimir Kramnik, Anatoly Karpov and Magnus Carlsen. Filter the database to include only wins by those players, and manually delete all of their wins that were not the result of a technical conversion. With a database of a few hundred games, you should then play through the final phase of each game to try to follow and understand how they converted these superior positions so cleanly without allowing counterplay.

2. Study books like *Recognizing the Opponent’s Resources*, *Technique for the Tournament Player* and *Positional-Decision Making in Chess*. At a rate of about five pages per day, you can complete these three books in just over four months.

After these tasks have been completed, your technique should be excellent.

For many, lessons are a commitment device: they cause a student to prepare for a few hours for the lesson, focus intently for an hour, then review the material after the lesson, preparing questions for the next session. In essence, a one-hour lesson promotes four or five hours of solid chess work that
otherwise was unlikely to take place. This is worth dwelling on, because I usually have a ton of questions and prepare material myself whenever I take a lesson. For this reason, it is good to establish a weekly schedule and get into a routine for working on chess, being critical of what you study, and then asking your coach at the end of the week to answer the questions that were unanswerable independently.

For talented very young players with a relatively strong tactical grasp already (such that doing sixty minutes of tactics a day would have sharp diminishing returns), I would try to find something in chess you really enjoy studying and spend three hours on it per day. For example, if you really like the games of a specific player like Magnus Carlsen, play through Carlsen games in ChessBase for a few hours per day with an engine on to pick up all sorts of new ideas and concepts you have not seen before. Adult players will generally be slower to pick up on these patterns from seeing so many games so quickly, but players under age 11 who are proven to grasp abstract concepts significantly worse than adults do need to see specific moves on the board. For them, a detailed abstract logical discussion may prove unhelpful, while seeing direct tactics and patterns is likely to click with them. Adults, on the other hand, tend to favour simple logic, so for adults who have the time, I would recommend studying books with clear explanations of the reasoning behind each move played.

When there are numerous classic games in a given opening you want to learn, you should definitely make a short-term plan to study all of those games, if only briefly. With so many players struggling to win or set problems for their opponents with Black, it is of great importance nowadays to get ideas about how to win games by studying decisive games by great players. By studying these games, you see what weaknesses they focused on and where they focused their play, immediately giving you clues about how you might win practical games in that opening. For example, before playing the King’s Indian Defence with Black and the Ruy Lopez with White, I studied all of Bobby Fischer’s games in these openings with the colour concerned and developed a very solid understanding of the opening before delving into concrete lines. The nice thing about doing this before plunging into heavy concrete opening analysis is that this task of going through the key classic games is a temporary one that only needs to be done once. You may just find
that all of Fischer’s ways of handling the opening appeal to you more than
the current main lines, which can save you a lot of time later on when
deciding between variations. Some variations are so new that no classic
games were played in the given line, but where classic games featuring world
champions exist, the games should all be looked at because it does not even
take so long to do so, and the possible benefits are enormous.

When playing over annotated games in a chess book, my suggestion would
be first to read all the text to the game. That will give you a clear idea about
what to expect in terms of content, ideas and what sort of positional and
tactical ideas were played. When making the moves on an actual board, it is
easy to lose your place when you read a long section of text, so it helps to
have read it once beforehand, when you may actually remember exactly the
point the author was trying to make before re-reading it the second time.
With a book like *Understanding Chess Move by Move*, I liked to play out
everything on an actual board. Only in extreme cases when I felt like there
were too many annotations and notes did I really feel the need to play
through the entire game with ChessBase or a digital board. Additionally, if I
get the impression that the analysis in a book is not particularly good, I will
feel compelled to check a lot of lines with the engine, and sometimes even
give up on the book altogether if there are just too many mistakes. Often
though, the book analysis is completely fine, and I may just need to check
one position in a game with an engine just to figure out what I am missing in
one of the sidelines.

Playing strong engines all day is actually not very useful. You will get no
tactics practice whatsoever because the engine will never allow it. You will
just get wrecked every time, and may just learn to get a little paranoid about
your weaknesses, but it is no fun at all. You will never learn to attack
weakness. You will hardly get any chance to play patiently or squeeze the
opponent or highlight weaknesses, because the opponent will play with an
absurd amount of energy and accuracy at all times. By contrast, humans
usually slack on the energy and activity part in their play, and sometimes sulk
into passivity, even if not intentionally. The engine never does that. You can
play 2200-level moves against the engine and get crushed every single game.
In the end, it doesn’t teach you much except to highlight exactly how you
lost. If the way it beat you is not instructive, then you learn nothing from the
game. Sometimes you won’t even really understand exactly how it beat you. In those cases, it is simply time wasted. In those cases, you have merely wasted countless hours while getting your confidence crushed by an engine that would beat Carlsen.

I only like to play against the engine to try to get interesting new ideas to play in the first 15 or 20 moves. Sometimes it suggests a brand new plan or idea which has not been played before. Sometimes I play against the engine from a set position just to see how it will handle a plan that slightly annoys me from the other side of the board, so at least I can see how the engine would beat me from a position that I thought was bad for the engine.

Looking at a lot of high-level chess games is very beneficial for almost everything. By doing this, you get more and more acquainted with the types of moves strong players play in every sort of position. If you have issues with punishing passive play, you will see the types of moves that do just that. If you have issues with getting your pieces out effectively, you will also see many solid examples showing you how to do this well.

One of my chess students has a study plan in which he lays out exactly what he wants to study every day. It keeps him honest and makes him work harder and study more. This is inherently how human motivation works though: studies consistently show that when we write down our goals and plans, we stick to them more often.

A common training method advocated for beginner and intermediate players is to select an interesting position, analyse it for, say, 30 minutes, and write down all the lines you calculated. While this can be useful, it is time-consuming, and if the position is not a critical position or one with numerous interesting moves for certain, you may waste 30 minutes thinking about a position that offers minimal instructive content. The problem is that you will probably not know if the position really has that much interesting content before you delve into it. This is one reason why I prefer more specific positions to study, and why I only go over positions with students that I think have specific ideas to spot or conclusions to draw. The main point of performing analysis is to look for possibilities that are actually promising. If there is nothing fundamentally instructive or promising in a position, you waste a lot of time going through it. The whole reason we choose books to
analyse positions from is because the authors are guiding us to instructive content. Picking positions at random defeats almost the entire purpose of studying approved training material from books.

A typical critical moment is one in which one side is one move away from completing development and equalizing, and the stronger side needs to see if they can manage to prevent their opponent from getting their last piece out effectively. In such a situation, you can analyse all of the possible moves that might prevent the opponent from healthily completing development and work through all of the principled ideas completely. So if you identify a position to be of this type, such a position can be interesting to work through methodically.

I think it’s a good idea to write down your chess plans for each day and write down what you did. You will get more done this way, and if you don’t complete some of the things you wanted to do today, you can put them at the top of your list for tomorrow and get them completed as your top priorities.

When I was 1700, I asked a 2550 grandmaster, “What should I study?” He emphasized that it didn’t matter so much what it was, just so long as it was useful and improved my chess and my chess knowledge in some way. After all these years, I see what he means. For chess-players, a great many things are helpful. So much so, that what is going to help us improve the most is studying and working on whatever will cause us to put in the most possible time on chess. For example: (1) Studying theoretical rook endgames: I might study for 30 or 40 minutes and get mentally wiped out and feel like stopping, because I find that plainly boring and exhausting; (2) Studying Karpov-Korchnoi World Championship match games from 1978 and 1981 I find very enthralling, and often study for 3 or 4 hours in a row. Perhaps this was what the grandmaster was getting at.

It would make sense because the core of chess processing is engaged in these kinds of study: problem solving, threat analysis, and basic scanning and observation of what is occurring on the board. This is something I advise to my students as well: just look at as much chess as you possibly can, whether it is videos or books may not make that much difference. As long as you are constantly thinking about chess, applying effort and exerting yourself, you should improve.
For difficult exercises, I would recommend *John Nunn’s Chess Puzzle Book*, *Imagination in Chess* and *Perfect Your Chess*. I propose seriously attempting three exercises a day, and write down your solutions in a notebook. When you fail to solve an exercise, write down exactly why you got it wrong and what you missed. This allows you to take the whole process more seriously and value gradual improvement over time due to hard work. Gradual improvement makes you feel good. Make sure you just do at least a little bit of productive chess work every day.

You never really plateau in your knowledge of, e.g., Semi-Slav middlegames, which is one reason why strong players study openings and their resulting positions nearly endlessly, and tend to stop studying endgames after hitting a plateau where they feel it would not be particularly useful. It is not merely an obsession with openings plaguing international masters and grandmasters. Endgame study stops being a purposeful use of time after a while, plus we already analyse our own games (which will cover many endgames) and study games collections, which will be full of the best endgames of top players, so it is not like we are missing out on anything. A holistic approach is best for practically every player under 2200, because they will be making a wide range of different mistakes in every area of chess strength.

Some club players say that they should not study chess because “I will never see those exact positions again.” This is an illogical argument because positional understanding is something you develop from analysing games. You also develop your pattern recognition and improve your overall chess logic from effective chess study. In other cases, your calculating skills and concrete knowledge in openings and endgames will improve from study. In essence, studying chess can very reasonably improve all areas of your game if done effectively.

Focus on whatever makes you spend the most time on chess – this might be solidifying and making sense of your repertoire, as opposed to theoretical rook endings if they make you uninterested in studying. We have weaknesses all throughout our play, so almost any kind of general improvement study is quite useful below 2000.

Beware of ‘analysis paralysis’ – that is, over-analysing a decision so much that you effectively become paralysed and cannot make a decision. In your
training, you just want to make sure that you are constantly doing useful and effective things. When I was regularly studying from chess books, I focused on getting material under my belt quickly, such as the easiest-to-digest game collections.

Studies (the biggest one coming from Norway) have shown that studying one hour a day, six days a week causes you to have significantly greater recall than studying two hours a day, three days a week: the former led to approximately 30% greater recall. Curiously enough, studies in exercise science have shown that working out your muscles six days a week versus three times a week (but doing double the load those three times) led to 50% greater gains with the six-workout regimen. These are among the most counterintuitive, under-reported and important studies I have ever come across, because intuitively it seems that it should not make much of a difference, but our brains actually are wired to recall better if less material is presented each day.

For very young players, focus on playing as much serious chess (long games) as possible, learning as much as you can from these games, solving tactical exercises regularly, and exposing yourself more and more to higher-level play and try to understand it the best you can.

The main pitfall to the common idea of a ‘20 minute’ exercise of comparing your moves with the engine is that it really depends what depth the engine analysis is. If it’s depth 20, I wouldn’t trust it. If the depth is 28 or 29, then that’s something. There is a lot of time wasted waiting for the engine though, so this might not be a very time-efficient exercise. Make sure you use the latest version of a top engine such as Stockfish, because it might be more than 50 Elo stronger than the one you are using. What you might want to do with very interesting positions is have the engine calculate for 20 minutes with 4 lines showing in Infinite Analysis mode. That will give the engine enough time to give a pretty accurate list of the top 4 candidate moves. What you should do then is try to understand why those moves are the top possibilities, and think about why you did not consider the ones that went beyond your move-search radar. Engines are so strong nowadays that you should be able to create very high-quality analysis with a little bit of practice analysing. Your own perception of what might be a strong-looking move to
the computer will also become more refined.

To improve one’s understanding and pick up lots of patterns, a good strategy is to play relatively fast games online, go through them with Stockfish, look at where minor transgressions occur and write the reasons for the missed engine moves in the commentary. This way you have a little library explaining engine moves. I like to keep a library exactly like this in ChessBase. Writing this out into words will not only rapidly improve your general understanding and fill your mind up with positional ideas and tactics you have not seen before, but it also helps you understand computer analysis better, and to become more attuned with how concrete chess is played in the modern era.

Every Monday when TWIC comes out, I recommend going over the high-rated games in openings you play. To get an idea of what was played in those games, clicking through them can be sufficient. Over time, you will get better and better at absorbing ideas and information this way. Even an hour of looking over recent TWIC games every week is a good start for staying fresh in your openings, enhancing your chess culture, and reinforcing good patterns.

Develop a clear preparation plan, even if you are not able to follow it rigidly every day. It is easy to talk yourself out of what you originally set out to do without a defined roadmap. If your end goal is to play five tournaments in a row and make a run for 2200 rating (or any specific achievement), have a plan for how to get there that you can trust and not overthink. In my case, I simply got into a routine and I never had to think about what I was doing for my chess work and training after that. Smaller, short-term goals along the way towards your bigger goals will help you stay motivated and accountable. I recommend writing everything down and keeping track of every positive gain you make along the way.

Spaced progressive reinforcement is an important part of one’s training and helps cement exactly what you know. I like to have my analysed tournament games, a small opening file with everything I play with one colour, and a nice batch of my favourite tactics and positional exercises organized in files so that I can go through them every month. At present, I have 150 of my analysed tournament games in a file, two small files with only what I faced in
the opening and where I would like to have improved, and 400 instructive positions that are among my favourites. Due to the amount of repetition with this material, I am aware of all of the main mistakes I made in all 150 of those games, what I should have played in the first 12 moves of all of the games I have played, and what the solutions are to nearly all of my 400 saved positions right off the top of my head. Since most players will not have too many tournament games to do this with, it should not be too hard for almost any player to do the same thing I did here, although a coach can help players under 2200 a lot with the opening improvements and game analysis. The main point is that our mistakes and improvements should be clear to us and understood well.
4: Elements of Chess Strength

Your chess strength is a collection of smaller skills stacked together. I have never seen a chess book attempt to lay out those skills, but I shall do that in this section because it helps us get a clear overview of the game and of our own weaknesses and where we may be lacking in our skill set. All of your development is based around making small improvements and gradually improving your play.

Before giving advice on what a player should study and work on, you have to understand the different elements of chess strength. If you do not know what skills and abilities you want to develop, you will not even know where to start in trying to get better. The most orderly way of thinking about playing chess (and different pockets of chess improvement) is to break it down into six categories:

1. Concrete Knowledge
2. Pattern Recognition
3. Calculation
4. Candidate Moves
5. Positional Understanding
6. Logic

An emphasis can be placed on the last two aspects, which help out tremendously in every other phase as well. I tend to focus on improving the logic and positional understanding of my students.

A lot of plateaux are very difficult to break through if you have no idea what is holding you back or how to assess what is going wrong. Understanding the elements of chess strength is very helpful in trying to break through a plateau.
Be careful about considering yourself ‘plateaued’ unless you have not improved in any noticeable way in 100 tournament games. I would be cautious about putting too much weight into a lack of progress in faster chess games. After learning many new ideas and clearly understanding the game at a higher level, you may not necessarily play so much more strongly in rapid chess, at least right off the bat.

Many amateur players are too literal with the ‘good/bad’ dichotomy – I am a good player or I am a bad player. That is the wrong way to think about it. Look at it from the perspective of progress and where you should be based on the amount of serious effort you have put into doing things the proper way.

Chess-players are often divided into calculating or intuitive players. One reason why players incorrectly distinguish between ‘intuitive’ and ‘calculating’ players is based on believing in the left brain versus right brain myth, which has been debunked for at least a couple of years (M. Rogers, 2013 among others). The idea is that calculating players play by logic, and intuitive players play by feeling. I do not like this distinction at all as it is a false dichotomy and extremely oversimplified. Most of the ‘calculating’ players I know mostly play by feeling too. It is only a small percentage of players who like to break everything down to its simplest components, and most likely these players are very academic and analytical. Chess should rather be broken down into its constituent elements that make up chess strength.

I have never seen anyone make this distinction or split before, but it strikes me as very useful. If you are getting stronger in each of these areas, it is hard for that not to translate directly to an increase in playing strength.

One thing should be clear about all strong chess-players: they all have an extensive knowledge base and solve problems using logic. Some solve studies more or prefer crazier moves, but there is a lot of overlap in their decision-making and thought-process. They play very good moves and find good solutions, especially when they need to. All strong players play creatively (not all the time of course, but that is an impossible standard) and come up with creative solutions. The role of logic in chess is difficult to underestimate from any angle we look at it from.
Concrete Knowledge

Concrete knowledge is knowledge about an exact position showing up in one of your games that you have studied. I have defined theoretical endgame positions as “exact positions in the endgame in which the best solution has been worked out, played and/or published, forming a body of theoretical knowledge. The most important practical ones may involve finding an ‘only’ move that is not so easy to find without knowing it.” Dvoretsky emphasizes approximately 220 theoretical endgame positions in his endgame manual. Nevertheless, most grandmasters do not know them.

For improving your concrete knowledge in the endgame, a good source is Nunn’s *Chess Endings* 1 and 2. For concrete knowledge in the opening, I make opening files and update them regularly with explanations. For chess logic, I propose studying games collections of top players where they explain their reasoning for their moves. For positional understanding, I like the new Gelfand book *Positional Decision-Making in Chess*. For pattern recognition, I either skim through very complex tactical examples for patterns or play blitz games and quickly check them with an engine. For calculation, playing is definitely the best way to improve because you are calculating non-stop for 3 or more hours, but most serious players have worked through one difficult calculation book at least. This is worth thinking about. I can recommend *Practical Chess Defence*.

Concrete knowledge is a wide branch of chess. It covers concrete positions in the opening or endgame that are already known in theory (or to you), where a body of knowledge has been built up. Techniques like ‘creating a second weakness’ do not fall into that category because it does not describe a unique position. Understanding that you should strive to provoke a weakness in a position would actually fall into the category of positional understanding, but could be figured out by logic alone in the position. Unsurprisingly, a lot of people underestimate the role of positional understanding and logic in the endgame.
Pattern Recognition

You can’t turn off natural processing in the brain that is always looking for patterns. There is only so much we can represent in working memory that we can report on thinking about, so we need ways of talking about everything that happens outside of working memory. Pattern recognition is an umbrella term for much of that. Everything comes down to patterns in the brain, so it is a catch-all in some ways. When people say pattern recognition they usually use it too broadly for things that do not apply in chess. Patterns are exact piece configurations applied in different positions. Some sources define patterns as ‘a recurrent design or structure within a game of chess’, but this is very vague and would allow almost anything to be classified as a pattern. For example, surely there are patterns of logic.

I shall only use the term to refer to applying direct chess patterns that the player has seen before, as opposed to treating everything in our chess knowledge as a ‘pattern’; the latter is in some respect the way De Groot and early researchers seemed to conclude it worked because they were finding much less conscious calculation than they expected. However, they discounted the importance of logic and appreciation of weaknesses, focal points, and other important factors in chess that strong players just sense more deeply. My pattern recognition is really not so good in chess. I mostly play by simple logic, and positional understanding (a good feeling for structures, and asking myself logical questions at the board).

There is a parallel controversy in cognitive science regarding how much of complex decision-making is conscious versus unconscious and the importance of each. The reality is that there is a dynamic and shifting interaction of both, with us delegating a lot to unconscious overlearned procedures but still holding a lot of strategy in mind. Sensing king safety, focal points and ‘tempo’ in a position is not related to pattern recognition at all really. If it were, that would defeat the whole purpose of the term ‘pattern recognition’ so as to be useless. Pattern recognition is an exact pattern applied while awareness is looking at a board and drawing conclusions based on a fresh position where no actual pattern applies. Awareness is what you
see when no exact patterns or concrete knowledge applies. When strong players solve my exercises, it’s almost always due to awareness, not due to pattern recognition or what falls under the vague umbrella of ‘experience’: they see a bad piece and exploit it, or see a weak king and exploit it, or see something to exploit and try to exploit it. The theory that chess is 99% pattern recognition is definitely false.

There are many patterns in chess, but almost every position is unique and requires thinking for yourself and applying logic. You have to think for yourself and not simply repeat the same patterns all the time. Nevertheless, patterns are very useful and guide us, and players with limited knowledge of common patterns in chess should try to acquire them as quickly as possible. These can be positional ideas, tactical ideas, or simple ideas in the endgame to convert a win or eke out a draw.

There are many situations where you might get simply overwhelmed by information or study material. It can be confusing to decide what you should spend your time doing. Players often get stuck with 20 or 30 chess books that they know they have no time to read. If they are books full of tactical patterns, one idea worth doing is trying to comprehend all of the solutions in the books and seeing if you can recall the answers in a week or two. This is a form of spaced repetition learning, which is one of the most effective ways to learn something. You can check in a week if you remember the patterns, ideas and reasons why the tactics worked.

Looking over decisive games for your side is useful in openings you play, as it helps you learn and reinforces good patterns of play. In many cases, this improves one’s pattern recognition in the realm of positional play and converting advantages. While many players have a great mental base for tactical patterns, they often lack positional patterns and patterns helpful for converting advantages.

Master players defend better than those in the past in essentially every area because modern masters handle material better, know more drawn positions, are more confident when defending, and find very difficult ‘only’ moves much more often. This is partially due to having seen them pop up many times on computer screens and partially due to the simple fact that players nowadays are exposed to far more games than players in the past even
possibly could have been. The pattern-recognition advantage of modern players is a major one. Giri has talked about this. Your defensive ability in chess will be closely tied to how many defensive patterns you recognize in game situations.

Pattern recognition is strongly overstated and widely misunderstood. While knowing and recognizing patterns (or micro-patterns of piece fragmentations in small areas of the board) is necessary for all players, strong players tend to play very well in a short amount of time based on their strong logical grasp of obtaining and generating active play quickly. This is not recognizing one set pattern on the board, but often based on realization of problems, the process of elimination, improving one’s bad pieces and recognizing potential danger. The role of logic in all of these decisions is strongly understated in current literature, even though logic plays a massive role in all these cases.

Once a week, I like to I pick up a tactics book, look through all the solutions quickly, glance again at all the exercises, and try to envisage the solutions in my head. This is great for both pattern recognition and visualization, giving players more patterns to mentally work with, and a better ability to see how these patterns play out in their heads. It is also simple and non-intensive work that can be done quickly. If you have no energy to spend 20 minutes solving each of 300 exercises, this is a nice way to improve your tactical ability and calculation with minimal effort and time exerted. If you repeat the process, the patterns will be firmly implanted in your mind. I have yet to see any other chess trainers suggest this idea, but it is a simple, useful and logical idea.

A major reason why we need to constantly maintain and increase our arsenal of patterns and our concrete knowledge is because people rarely come up with brilliancies or totally new brilliant ideas during a game; they are nearly always some form of a known idea or pattern. Usually if you are exposed to an idea enough, it becomes easy to find similar ideas in the future. This is exactly the basis behind seeing a lot of strong chess and learning a lot of good patterns.
Calculation

Calculation is what you do with your candidate moves and ideas and feelings about the position, but evaluation is a constant part of that. We evaluate in every position, and in every line we calculate: “this is good for me, this is bad for me”, etc. Strong players also think in a more nuanced way, such as “this may be equal but slightly less comfortable for me”.

A common mistake people make is calculating endless lines trying to find something decisive when the opponent has made no obvious mistakes so far and has no weaknesses. If they genuinely have no weaknesses, attacking something in the opponent’s position will not gain you too much. Thus the entire time spent calculating with the goal of winning material or creating a decisive attack was wasted. This is partially why you need to evaluate things sensibly and realistically. Strong players are very good at rejecting certain moves quickly based on simple and good reasons.

In your calculations, comparing two similar lines is often a simple way to decide between them without needing to work out precisely how either move goes. If you are a decisive amount of material ahead and the opponent has concrete threats and you have none of your own, you only have to establish what the threats are. Then you know what to counter and calculate.

To aid your calculation, there are some red flags that suggest you probably have no favourable tactic: none of your pieces are past the third rank; the opponent has no weaknesses; or you are seriously outnumbered by defensive pieces in whatever you want to attack. By the same token, players may stop being afraid of non-threats and ghosts when all of those advantages are in their favour. In some positions, going into deep thinks is just senseless. If you observe that you are blundering too often, most likely you do not have much of a sense of danger. That is definitely something to be more conscious about.

Assessing positions correctly allows us to calculate much more accurately by focusing on the most important and relevant lines, which saves us a lot of time. We are unable to calculate variations until the end and nearly always
have to rely on generalizations and assessments made about the starting position of the line and the positions in our calculations.

Many players and coaches act like there is some secret method of calculating: an occult way of working out positions that somehow has just not reached the masses but is empirically the best. Certain chess authors emphasized a perfect model of calculating, ranging from one distinct line of analytical focus (one of the more popular views) on one side of the spectrum to a full tree on the other end. But creating a mental model of conceptual calculations and trying to stick to it is not how players make progress with their calculation. They get better at it by increasing their awareness of many things, by evaluating things more accurately, and by saving time in their calculations. Of course, it is important not to re-calculate the same lines over and over again, but this is all a part of improved efficiency.

Nothing can quite mimic a tournament game where you calculate at full force for multiple hours and try to consider all of the relevant possibilities to calculate for both sides. For training purposes, positions can be used for calculation practice, but that is it. It is useful to write down what you calculated, and carefully check your lines against best play. If you find that you regularly overlook the best move or two in the initial positions you calculate, it is worth moving on to specifically doing candidate-move exercises. In calculation, the main thing is to continuously improve all areas where you are deficient. In practical play, a lot of the time a smooth calculation will work because you just notice a weakness and latch onto an idea that makes it work.

Unfortunately there is no arcane mechanism for evaluating positions, calculating, or listing candidate moves that can make a player instantly improve 200 Elo points. The best we have in any established literature is a rough guide of things to look for. In the superb book Secrets of Practical Chess, John Nunn explained that Kotov’s old ‘tree of analysis’ from Think Like a Grandmaster is flawed in many ways. Kotov was a famous grandmaster and chess teacher in his time, but too many exceptions exist in his model, and chess thought needs to be a lot more flexible and subtle. No strong players consciously make deep plans on every move; nor do they calculate elaborate concrete variations at many points during games. The
reason is simply because they do not need to. When you play the strongest positional move, it is usually based on reasons that are comprehensible and not particularly deep. In a sense, you could consider the way modern chess-players play and think to be extremely pragmatic. Mark Dvoretsky rightly points out in *Dvoretsky’s Analytical Manual* that, “Before concentrating on the analysis of a problem variation, it is still necessary to make some kind of assessment of the starting position.” Alas, even during concrete calculations at critical moments, asking ourselves relevant questions, assessing the position, searching for candidate moves, and raw calculation are all still necessary.

A linear analysis often leads players astray in their calculations, focusing on irrelevant things and looking only at the most forcing lines rather than conceptual ideas for attacking. I am always thinking about weaknesses and improving my bad pieces, even when attacking and calculating. My suggestion for improving your ability to evaluate positions, to calculate, and to spot the best moves in a position is to practice all of those things regularly based on an examination of your own games by selecting specific problem positions to focus on. When you miscalculate key lines during a game and look over it afterwards, figure out the reason for your miscalcation and what you could do next time to avoid such an error. Do not treat this exercise lazily. Keep a database where you store all your games and make sure to note in the game commentary why you miscalculated and what you might do differently or understand about the position. More often than not, it is not merely a miscalculation that occurred, but also a misjudgement of some important element in a position, such as misevaluating the safety of one of the kings in a specific variation.

The overlap between calculation mistakes and positional mistakes is enormous, so miscalculations highlight things to work on in many areas; it is a multi-purpose exercise. It is difficult to discuss evaluating positions without focusing on key aspects of a position, and focusing on key moves in a position.

It is important to realize when calculating that, in principle, you do not strictly need to calculate the exact consequences of your intended move. You only need to convince yourself that it is better than the alternatives.
Sometimes this can be done rather quickly. In most cases, even for elite grandmasters, you will be relying on approximate variations. A typical example is when you are slightly worse statically in a complicated position, but have the option of a dynamic sacrifice that is hard to evaluate, but surely gives you good compensation at the least. It is common to hear a grandmaster say he would rather sacrifice and get a draw by perpetual than have no plan, give up the initiative and probably be worse. A lot of exercises I give to strong players fall in the category of needing a dynamic solution because statically things are going badly. Much of the time, a strong player simply realizes that he is not worse with the sacrifice, and that already convinces him it is the right move, because that is definitely better than having a worse position. Thus, evaluating the position correctly is closely tied to making the right move and one of the reasons why I like evaluation exercises and ones in which the emphasis is on urgency to change the static features to influence the evaluation of the position.

Calculation is just one aspect of chess and chess strength. A lot of the time simple logic will dictate which way to go. You should always be aware of weaknesses, bad pieces, and the main ideas the other side wants to implement. That will guide your calculations and your logic.

With respect to calculation, playing a lot definitely is the best thing you do, because a game is essentially three hours or more of constant calculation. In addition, going over games where sharp tactical lines were analysed or played is very helpful. You do not have to see all of the tactics in the analysis, just make sure to understand them and try to improve your awareness of the factors that led to those tactics existing.

For humans, we very often get better at cutting off our calculations or evaluating key positions within our calculations, which leads to much greater efficiency. I like the following quote from Gelfand: “One of the favourite questions I hear from chess amateurs is: ‘How many moves ahead can you calculate?’ I try to explain that sometimes you cannot foresee more than 2-3 moves, as both you and your opponent have too wide a choice of possibilities.” He made this observation in his notes to the extremely complicated game Gelfand-Kasparov, Linares 1989 in his first book. Anand also wrote that there are many positions where he doesn’t even calculate
anything. For instance, in his best games book he wrote that in certain critical positions, he may let his opponent expend a lot of time and energy calculating in a critical position while he relaxes and waits for his opponent to choose between three or four tempting options.

This may sound contradictory to my overall point, but I shall add another quote: “I do not think that computerized commentaries à la Hübner or Khalifman are an adornment to chess, or that they are useful to chess-players. A player should develop his tactical intuition, whereas catalogues of variations try to replace this with a total calculation of the possibilities.” – Korchnoi. While this may be an unfair characterization of those two grandmasters’ work, I do see his point. When players see extremely extensive analysis that goes far beyond what anyone could calculate or see at the board, it may intimidate them and give a false impression of how strong players actually think at the board. Understandably, very heavy analysis is sometimes done for entertainment purposes, but if the emphasis is on instruction, it is imperative to select and show only the most important and relevant variations that can be explained and grasped sensibly. Connected to that, tactical intuition is important. In my experience, all strong players strive to develop that so that they can calculate less but sense and see more. I would say ‘sensing’ is more important than seeing. You develop it by seeing loads of games and noticing patterns that lead to favourable tactical operations occurring. Or you simply analyse your games and think about the situations where tactics occurred within those games and try to understand what led to them existing.

In general, people are able to manipulate eight pieces of information at one time based on limitations in short-term memory. To an outsider, a grandmaster manipulates hundreds of pieces. In actuality, he can have an average short-term memory and operate on eight pieces which contain many smaller ones because of understanding and awareness, which quickly guide him to what is relevant in a position.

Almost all of the effort in playing blindfold is just remembering where all of the pieces are, which is why it is not as effective as other methods for improving your calculation. It’s a form of mental overload, yes, but not the most effective. And if you forget where the pieces are in a multi-hour
blindfold game, it amounts to hours lost for very little gain. If you just calculate training positions, you can try to solve them in your head and you get all of the benefit for blindfold training but without the overload and potential time wasted.

Your calculation is how accurately you work out and assess lines and variations. Width and depth of the calculations are both important, although very long lines are far less common than many people think, except in very concrete positions with few options on each move.

For short lines, or for width, visualization is less important than other factors. Having a full grasp of what is occurring on the actual board is the most important. It is not necessarily the case that blindfold chess helps you that much with visualization of future positions, just with the current one you are trying to focus on. Visualization of future positions (or deep visualization) is a part of calculation, but is not necessarily the same as blindfold chess, and not necessarily training the same skills. This is a point worth considering for those who spend a lot of time with blindfold training. It is mostly positional understanding and asking questions: bad pieces, weaknesses, opponent’s ideas – these are about awareness rather than deep visualization because nothing is calculated in answering these questions.

When you do not have to see anything that’s not already on the board, I don’t refer to it as visualization. I think it’s better to reserve ‘visualization’ as a term for describing deep visualization. Certainly it is necessary at times, but the best way to improve your calculation is always going to be playing tournament games in which you calculate non-stop for hours. Training can attempt to mimic it, but unfortunately almost always fails to replicate it in intensity, length and efficacy.

Calculation is for concrete lines. If the position is completely closed and there is no direct tension between the pieces in the immediate future, there is very rarely anything to calculate. When everything is defended for both sides and there are no exploitable weaknesses for either player, it is rare that much calculation is necessary. A typical example of when judgement should cause us to cut off a calculation quickly is when one side has, say, the bishop-pair for no compensation in a variation you are thinking about. If you can really establish that there is no compensation for it, you can evaluate the variation
in your calculations as simply better for the side with the bishop-pair with all else approximately equal. Unless there is a forced way to win material or change the position dramatically at that point, trying to calculate that line more deeply will be pointless. As is easy to see, judgement plays a major role in calculating variations that are not concrete.

Sometimes calculation can be detrimental to finding the best moves when schematic thinking and simply visualizing a goal position and how to get there is far more productive. This occurs frequently for the stronger side in positions in which the opponent has no counterplay.

During long calculations, the best aid to get the correct material-count in your head is first to determine the pawn-count at the end of the variation. This only takes a few couple of seconds at most. If the sequence clearly wins a pawn for no compensation, you just need to make sure it works. More complex scenarios occur when strange material imbalances occur, but in those cases being clear about the pawn-count helps you evaluate the material more easily too.

Deep calculation matters most in concrete positions in long games. In blitz games, it is not even possible to calculate deeply. One can only try to see short lines and be aware of what is hanging on a basic level.

If you really want to focus on your calculation, you should work through an entire calculation book if you are not able to play 20 rated tournaments games a month. This was the situation I was in as a developing player. However, after completing one solid book on calculation, the diminishing returns I felt were quite sharp, and it did not seem worth it to continue investing a lot of time into it. At the beginning, your calculation should pick up quite a bit because it will be your first time seriously developing this skill. This is something that falls into the category of temporary training in my mind because once you have initially put in a solid number of hours to completing, say, one serious calculation book, your basic technique for calculating variations will be pretty stable after hundreds of exercises.

There are certain cases at the board in which we are prone to miscalculating just because we do not see a piece can go to a certain square (e.g., a variation in which a queen starts on d1, then makes it to f4 because a number of other
pieces left the fourth rank in the calculation). But that is something you gradually improve from failing on many difficult positions and exercises. In my case, calculation is always clearest to me when I close my eyes and visualize the entire tactical sequence and piece-paths in my head as clearly as I can. I do not think there is any special way to suddenly see a great move at the end of a line besides studying many examples, playing and working on calculation. There are other aspects of calculation, like applying logic and comparison, which are easier to discuss and provide advice on.

Calculation is improved the most from serious long games and your analysis of the lines you calculated in them. For most players, there are a number of useful guidelines for calculating variations, but most of it comes down to experience (playing and analysing your games seriously), analysis, and familiarity with types of lines and ideas.

A common problem many players have is seeing one not very important threat, but missing another threat entirely. We all see ghosts or misassess threats, and one must gradually get better at filtering them out. It takes time and experience. There is no short-cut to assessing threats properly.

When it is my opponent’s turn to move, I like looking around the board, trying to be aware of important aspects in the position. Spotting undefended pieces and pawns with a quick search is very helpful and nothing too strenuous. Anand referred to situations where there are at least two or three different moves that are all difficult for the opponent to calculate. You can either tire yourself out and try to calculate all of them, or rest for a few minutes and wait for one of the moves to show up on the board. A sound middle ground I would suggest is just to be aware of all of the undefended pieces and pawns for each side, and try to envisage certain tactical problems that may arise over the next few moves. This may be possible to do in a quick ten-to-fifteen second search, so that would be my ideal approach.

An important thing to remember when calculating is that your idea might be right, but the execution may be the only thing that is wrong. Very direct ideas frequently do not work, so we need to combine many ideas and threaten all of them at the same time to add more force to our play.

If the opponent surprised you with a move you completely overlooked and
you now think you are losing, it is important to consider all possible moves before consigning yourself to the idea that you are lost. Avoid calculating random lines. Before you plunge into aimless calculation, just look around the board and make initial observations first. Then draw up a list of candidate moves based on your observations. Do not just start calculating one move that happens to catch your eye. With respect to choosing candidate moves, specifically in tactical positions that may contain a win, the most logical idea is to go down the line from most valuable to least valuable pieces to target, because if you can win the most valuable possible pieces, everything else is irrelevant. Thus, if I have a very strong attack, I will first look at moves that directly threaten the king. If I determine that none of those moves are effective, I move along to consider all the moves that directly threaten the opponent’s queen. I then move on to attacking the opponent’s rooks, and continue down that path. With this introduction into selecting candidate moves, we should jump into the topic more directly.
Candidate Moves

There are many definitions of the term ‘candidate move’, but almost all of them have a lot of exceptions. The simplest functional definition is a list of all of the reasonable moves you should consider that are logical based on your goals in the position and the things you have noticed on the board. This implies there is some merit to the moves considered and they are not random. By pointing out that they are reasonable, it is implied that none of these candidate moves can be rejected instantly.

The choice of candidate moves depends on your understanding of the position at hand. If we consider many bad candidate moves, this shows a lack of understanding and a poor grasp of what is relevant in the position, which leads directly to one of the reasons for seriously analysing your games. You can reduce time wasted on a lot of superfluous candidate moves in future games by regularly making a note of all the moves you seriously considered playing during your games. You should do this in as many positions as possible and consciously seek to improve at realizing what is important in the position and what you missed. The fact that you can do this is another great example of how logical the game of chess is.

In Klein’s naturalistic decision model, people recognize a candidate by feel and then plug it into a simple model to see how it plays out, and then try another candidate if it doesn’t seem to get a good outcome. The difference in chess is that we are not recognizing candidate moves by feel, but more by logic based on what we observe. For example, a knight is threatening to come to d4 and we think of all the moves that deal with that attack: they are all logical candidate moves to consider. In a sense, these are sometimes more like logic exercises than chess exercises. Sometimes there is one key feature which is so prominent that you should consider all the candidate moves that deal with that feature, threat or idea. Not considering one of those candidates is a logical failure and shows a flaw in your ability to spot moves. This kind of thing highlights just how logical the game is.

Part of the discipline is remembering to consider multiple candidates
systematically. This is where the naturalistic model diverges a bit. They don’t generally find multiple candidates being considered, mostly one at a time which is then acted upon. That’s perhaps where chess is a different and more logical problem solving domain than the ones they study. As a general piece of advice, the first candidate moves you select should be the progressive ideas: the most direct ideas that deal with the first threats or problems you have identified. That does not mean these are the only candidate moves I would select. Often we consider a couple of sensible candidate moves early on, and examine other candidate moves afterwards only after sensing the problems in the position more accurately by calculating the candidate moves you initially selected.

In decision-making theory, the difference between masters and amateurs is a central topic. Both know the patterns and principles, but masters are especially skilled at feeling or intuitively sensing what is correct, while amateurs tend to base their decisions on the wrong principle. In chess, this is not exactly the same, because, in general, master players believe different principles and know a lot more patterns than amateur players do. Nevertheless, there is certainly some truth to this idea in chess, and one senses this especially keenly with the candidate-move search. Going over positions from the angle of highlighting the best candidate moves can help build your intuition by focusing on the most important aspects of a position. Usually players simply get exercises wrong due to not considering the correct first move. With a more professional search for candidate moves, they would have a better chance of solving their training exercises.

Checking multiple lines of potential play is very important, and helps you avoid becoming overly focused on a narrow range of moves (or even a narrow part of the chessboard) that causes you to just not consider important candidate moves. When you consider multiple candidate moves, you increase your chances of finding the right move. Sometimes merely considering at least two candidate moves will cause one of them to jump out at you as obviously better than the other(s).

When I find tactics over the board, it is usually because I was focused on that part of the board or I noticed something that could be exploited. In other words, I was consciously looking for something. This is why we have to
spend some time in complicated positions looking for tactical options. It takes time to come up with our candidate moves. This is why we need to scan the board first before plunging into long calculations and thinks.

With one student in particular, during lessons we made it a routine to list as many reasonable moves as possible in many positions that were not all that concrete. This helped her appreciate the nuance and complexity in a wide range of positions, and see a lot of different ideas for generating play and handling positions. You can consider this one of the best mind-expanding exercises in chess if done properly with something to guide you, such as a stronger player.

Candidate-move exercises can be used to improve your divergent thinking, since the idea is to consider many solutions. Exercises that help develop your ability to list candidate moves often feature positions where there is the same underlying logic to all of the best moves, so grasping that one logical point will lead you to consider them all.

Sometimes you will get into situations where the opponent directly attacks something that can be defended in numerous ways. I remember vividly going over a game with a student in which White played Bf3 to attack a pawn on d5. Black was forced to defend it and had four ways to do so. That immediately narrowed down Black’s options to four moves. From there, two of the options were clearly inferior and capable of being discarded. In such an instance, it is extremely important that you consider all of the sensible options before you start delving into things. You may realize one of the moves is clearly the best just by broadly considering everything. Often when I work with players under 2000 and something needs to be defended, I ask them to list the moves that they would consider. It is common to see players stumble or not know where to start or what to look for. Almost every time I can within five seconds narrow down the possibilities to moves that deal with the obvious threat at hand. Then we work with those possibilities to choose the best one from them. Players must consciously develop this skill, which is not actually that difficult once you start thinking about it. Any 1600 player should be able to list the ways to defend an attacked pawn or the various ways to develop the queenside when it’s in an undeveloped state; in the most basic sense, this is applying logic in chess. A lot of players recognize a
problem (or a goal) and look around aimlessly for a solution. Instead of this chaotic approach, they should list the options and mentally work through them.

It often happens that a player is about to lose a pawn, the exchange, or more (as one example, this happens due to unbreakable pins) and faces a very important decision on the next move. With the game hanging in the balance, it is especially important during critical moments like those to make sure you are not missing any potentially game-saving candidate moves that might challenge an opponent’s piece, attack the opponent’s king, or otherwise interfere with the opponent’s obvious goal of winning a large amount of material. Sometimes a candidate move of this sort can be played by a method of elimination, after realizing it is the only move that does not lose. Hence, here we can see an interconnectedness in improving both your basic move search and basic thinking techniques that can save you a lot of points over the board.

Strong human players are familiar with a wide range of ideas, so naturally they consider a wide range of candidate moves in their analysis and abide by their own version of the ‘most obvious move’ principle (discussed in the next chapter). Inevitable moves aid in calculation – moves that can be played at any time are different.

Preventing major weaknesses by creating minor weaknesses (which often are not exploitable at all) is a very important strategic concept that is rarely discussed in chess literature, but very relevant to the following position.
White to play

First have a think about this position and try to list all the reasonable candidate moves.

Let’s go through the options before drawing some conclusions.

a) 11 Nd5 Nd4 =+.

b) 11 Bd5 Nxd5 12 Nxd5 Ne7 =+.

c) 11 Bg5 Bxf3! (11...Nd4? 12 g4! +/-) 12 Qxf3 Nd4 13 Qg3 c6 14 Kh1 a5! (after 14...Kh8 15 Qh4 White keeps a little bit of pressure) 15 f4 Nxb3 16 cxb3 Nh5 17 Qh4 f6 =.

d) 11 Be3 has the benefit of being solid with no special weaknesses, so strong players are likely to focus on that first. This is because it is likely not to change the evaluation of the position negatively, while still dealing with the threat of ...Nd4 effectively. 11...Nd4 12 Bxd4 Bxd4 (12...Bxf3 13 Qxf3 Bxd4 14 Nd1 c6 15 c3 Ba7 16 Ne3 a5 =) 13 g4 Bxc3 14 bxc3Bg6 15 Qe2 c6 =.

e) 11 Ne2 Bxf3 12 gxf3 a5! 13 c3 a4 14 Ba2 Bb6 15 Kh2 d5 16 Ng3 Ne7 (D) gives Black the better side of a very complicated position.
White does have a trump in the bishop-pair though. Against a weaker player, 11 Ne2 has some logic to it – Black has changed the position dramatically and needs to play accurately in the new position on the board. It is a critical moment for him, since if he lets you execute your plan of c3, Kh2 and Ng3, you may get a nice attack.

f) Calculating the lines after 11 g4 is a mess. You would probably choose 11 g4 based on the opponent, your mood, and factors like the tournament situation. Some players are scared to sacrifice material, even relatively strong international masters. If you sense this is a deficiency in your opponent’s play, 11 g4 Bg6 12 Bg5 may just net you a free edge. Against a much stronger opponent, 11 g4 has the potential to randomize the result, which may benefit you if you are the weaker player. Here is some analysis: 11 g4!? Nxg4! (11...Bg6 12 Bg5 Nb8 13 Nd5 Nbd7 14 Nxf6+ Nxf6 15 Bd5 Rb8 16 Nh4 +=) 12 hxg4 Bxg4 13 Be3 (D) and now:
Black to play

f1) 13...Nd4 14 Bxd4 exd4 15 Nb1 Kh8 16 Nbd2 f5 17 Be6 Bxf3 18 Nxf3 fxe4 19 dxe4 Qf6 20 Bg4 Rae8 21 Qd3 Qg6 22 Nh2 Rxe4 23 f3 Re2 24 Rf2 Qxd3 25 cxd3 Re3 =.

f2) 13...Kh8 14 Kg2 and here:

f21) 14...f5 15 Rh1 Bxe3 (15...fxe4? 16 Nh4! +/-) 16 fxe3 fxe4 17 Rxe7+ Kxe7 18 Qh1+ Kg6 19 Nh4+ Kh7 20 Nf5+ Kg6 =.

f22) 14...Nd4 15 Bxd4 exd4 16 Nd5 f5 (16...c6 17 Nf4 Qf6 18 Nh3 Bxh3+ 19 Kxh3 Qh6+ 20 Kg2 Qg6+ 21 Kh1 f5 22 e5 dxe5 23 Nxe5 Qh6+ 24 Kg2 Qg5+ 25 Kh1 Qh4+ =) 17 Rh1 fxe4 (17...h6 18 Nf4 Qf6 19 Rh4! g5 20 Nd5 Qg7 21 Rxg4 fxg4 22 Nh2 c6 =) 18 Rxe7+ Kxe7 19 Qh1+ Kg6 20 Nh4+ Kf7 21 Rg1 Qg5 22 Kf1 Qc1+ 23 Kg2 Qg5 =.

Let’s say you calculate 11 Bg5 Bxf3 followed by ...Nd4 and ...c6 and don’t like your position. Or you calculate 11 Be3 Nd4 12 Bxd4 Bxd4 13 g4 Bxc3 14 bxc3 Bg6 and find it unappealing, or calculate 11 g4 Nxd4 and dislike it – playing 11 Ne2 gives you the bishop-pair and a tangible thing to play for.

When I analysed with one strong grandmaster, when we looked through a wide range of possible continuations, he would often say things like, “Well, at least I have something to play for here. I have the bishop-pair in this line.
In all the other lines I really had nothing to play for.” That is, all other lines offer no tangible advantage of any kind. “I’ll probably beat a weaker player here with the bishop-pair.” I could see a 2600 playing 11 Ne2 here against a 2300 by a process of elimination.

This is a good example of a judgement call where White has a wide range of different choices, but the main point is to consider all the best options. There is no real reason to fail to consider any of the best four moves. These candidate moves deal directly with Black’s plan to play ...Nd4 and destroy your kingside structure: 11 g4 (directly, by breaking the pin), 11 Be3 (by intending to take the knight once it arrives on d4), 11 Bg5 (intending to meet ...Nd4 by g4) and 11 Ne2 (preventing Nd4), so once you identify the main threat or idea in the position to focus on, you can logically decide on all of the moves to consider – and then choose between them.

In about 95% of exercises I send to players that they get wrong, it’s because they don’t consider the first move (it was not one of their candidates), while maybe another player would consider it immediately. So it is something good to look at and think about.

Undefended pieces are a major basis for finding double attacks. Often when two things are attacked, they cannot both be defended. This is one of many reasons why tactical weaknesses like undefended pieces need to be spotted and recognized, even if at the particular moment they cannot be exploited. Tactical awareness is vital, especially in shorter time-limits and in time-pressure when we do not have time to calculate thoroughly or search for candidate moves in as much depth as usual.

When you lose games to higher-rated players, a major reason is because your opponent played moves that you did not consider at all. We must consciously try to understand why we rule out moves unnecessarily so as to avoid making this mistake in future positions. Sometimes you do not rule out the move, but just fail to consider it due to focusing your search too narrowly. When chess-players lose to superior opponents, an important factor is almost always that the superior player carried out moves and ideas that the weaker one did not think about for a second. That is why I emphasize good move search and
candidate-move selection and thinking broadly about one’s weaknesses, worst-placed piece(s) and the opponent’s idea(s). Players who develop a good feeling for all of these things tend to understand chess pretty well and are capable of grasping what is going on in any position by breaking the position down mentally into more digestible chunks of information. Chess improvement is a constant work in progress and our understanding is constantly growing, but once you first start moving in the right direction of beginning to grasp deeper concepts, things start flowing like a waterfall.

In terms of candidate moves, it is very important to consider moves early on that have the potential to dramatically improve your position or change the course of the game quickly. It does not matter if calculation shows the move is weak, just that you considered a move that might dramatically change the game. This is especially important when attacking, defending, and in clearly worse positions. When players blow dominant positions, it is often because they completely missed a surprising move of this type. Similarly, when students look at a position for ten minutes and cannot get the answer, it is usually because they are not seriously considering the best first move.

A lot of chess thinking is very conceptual. For instance, imagine that in a pawn-structure there are only two pawn moves you can play that create tension on the board. In many cases, amateurs will consider just one of them, whereas stronger players will (usually) be comparing the value of the two pawn-breaks and logically choosing between them and weighing their respective values and drawbacks. Some may consider this higher-level thinking in chess, but once you start approaching the game this way for the first time, you will see it as richer than you had previously imagined. Recently I gave a lesson to a student who had White and obtained the pawn-structure c4-d3-e4 in the centre against his opponent’s c5-d6-e5 structure. No pawns had been exchanged yet. Due to the position being completely closed, pawn-breaks were of paramount significance strategically. White had two pawn-breaks to play for: b4 or f4. My student told me he simply had not considered playing b4 at all. When we did a simple comparison of the two pawn-breaks in the concrete position at hand, we agreed that playing for b4 was risk-free, improved many pieces, and generally benefited White’s position with no possible detriment. Although my student was more than 1000 Elo lower-rated than me, he completely understood how a strong player...
would think about the position and play it, in such a way that he could do so himself.

Considering multiple candidate moves in every position reminded me in an odd way of the general modern scientific procedure. A famous scientist said in a lecture how amazing it is that we’ve managed to find an intelligent method that compensates for our lack of intelligence: you test things all across the board according to a set pattern rather than relying on human observation. In the same way, we should accept our limits at chess and the fact that we will miss a lot of moves at random if we just rely on what we happen to latch on to, but if we have some kind of routine where we force ourselves to look for everything, it’ll deal with a huge part of that problem. It is also similar to how there is great potential for changing individuals and companies if you can find the right cues to generate automatic habits. If you just automatically scan quickly for candidate moves, you are doing a total no-brain low-energy thing which instantly improves your odds. There is no reason I can see for this not being the number one thing to concentrate on, instead of fixating on depth of calculation. As other strong players have frequently told me, they just simply have not thought about it in much depth because it is a natural process for most of them.

We tend to remember important candidate moves that we missed. When I considered many moves in a specific position I played, I will often go back over the position later with an engine and have it show 4 or 5 different lines. Often I did not even consider a few of the suggested moves. That is often a Eureka moment and causes you to think about why you completely overlooked these sensible and strong moves. This is a common routine that helps you get better and better at honing your move search in a simple way that does not even take very much time. If I did not miss any major candidate moves in a game, I am usually quite happy with the structure of my thoughts in that game.

Candidate-move searching should involve scanning the board quickly for all possible moves that have the potential to be decisive (or dramatically alter the evaluation of the position), which is why I do not think that it is worth spending more than ten minutes on a candidate-move exercise. If you do not consider the correct move at all after ten minutes, you should reflect on why
it was outside your grasp. Strong players are good at rapidly guessing the correct move in very difficult candidate-move exercises because they are skilled at quickly judging what might be decisive or what might be the best move. This is what the vast majority of players are trying to work up to.

A common suggestion is to focus on moves that attack clear targets or change the structure favourably. This is the right idea, but too simplistic. Even in terms of attacking stuff, the priority should be to attack the king, attack the queen, attack the rook, attack minor pieces, then moves that improve your structure and reposition pieces in this order. We can only consider one move at a time, so there should at least be some order to one’s thought-process. With a thought-process like this in an attacking position, a 1700 player should be able to consider the same candidate moves a 2400 player does.

Blunderchecking is important, but do not second-guess yourself unless there is a reason to. Additionally, if there is literally only one candidate move you are considering, there is little or no point calculating it for five minutes before playing it. If you are convinced that there is nothing else to consider, just play the move immediately. You cannot gain anything by wasting time.

There is no sure-fire way to consider all the best candidate moves in a position. If there were, it would be easy for a beginner to follow a simple blueprint and consider all of the same candidate moves as an experienced grandmaster. In practice, in nearly every game that someone loses, it is because they completely missed an important candidate move, either one that showed up on the board, or was relevant in a short variation not far afield from the game continuation. With respect to candidate moves, we need to think about them intelligently and constantly improve our ability to consider the most important ones through serious analysis of our games and getting experience and reflecting on which types of good candidate moves we tend to miss. For starters, it is important to consider multiple candidate moves in every position. One of the most striking things about watching elite grandmasters analyse after a game is how they tend to consider so many possibilities that were alien to the spectators. Most importantly, even when they play blitz, strong players consider multiple moves right away and, with limited time for thinking, comparison is a common tool for choosing the most logical of the various candidates. Often one move has some positives or
aggressive possibilities that the other moves do not, while carrying no downsides.

The simplest example of considering candidate moves effectively is when there is an essential strand of logic in the position that can guide you to the most logical moves to consider first. There are many situations where this occurs. Sometimes in a calm position you have the bishop-pair for no compensation and only two moves allow you to maintain this advantage. Assuming there is nothing else of drastic importance on the board, those two moves would probably be the only serious candidates to consider if you assess the position as simply better for you. We assess every position we play and calculate, so it is especially important to constantly improve your ability to assess positions correctly. Another hypothetical example is when you have a clearly better pawn-structure and only a few moves allow you to maintain that structural superiority. If there is only one move that allows you to maintain that structural edge and it has no refutation, that would be a simple instance of effectively using the process of elimination. In more concrete cases, when there are pieces directly threatened or which can be threatened, the number of relevant candidate moves to defend or attack a piece is usually quite small.

It is important not to misunderstand the common phrase, “When you see a good move, look for a better one.” This expression is tongue-in-cheek and its main goal is just to avoid the anchoring bias of considering only one move in a position and becoming psychologically anchored and attached to it. If you consider multiple candidate moves from the start, this most likely will not be a big problem for you. Obviously if you see a sequence that wins by force with zero complexity, it rarely makes sense to look for something better unless there is literally mate in a few moves. As the excellent books Secrets of Practical Chess and Improve Your Chess Now have already critiqued previous candidate-move and calculation methods of the past, I can only reiterate that there is no simple method that a beginner can apply to start calculating like a grandmaster. Chess is not that easy, and calculation is one of the hardest parts of the game. Creating a detailed tree of calculated variations in your head and storing it there for a while is cumbersome, impractical, and mentally very taxing. More frequently in complicated positions we only notice important possibilities in the position or a few
moves down the line after thinking about the position for a few minutes. In such cases, it is absolutely essential to reconsider moves or lines you may have discarded after already calculating them. According to some older calculation methods, going back and recalculating lines is a cardinal sin, but it is logical that in the face of new pertinent information, you adapt your views accordingly. Instead of trying to build a huge model of variations in your head, strong players usually simply evaluate moves and choose the move they evaluate as the best. This does not necessarily mean comparing the final position of each of your calculations of each line, as that is also not always practical, necessary, or even useful. As a simple hypothetical example, let’s say I conclude, “Ne4 maintains the status quo in the position with a comfortable advantage and no counterplay for Black” and “Be3 allows Black to simplify the position and equalize.” In an instance like this, it would be pointless to compare the final position of your brief Ne4 calculation with the final calculation of the line you worked out for Be3. You already know which move is better without doing any mental gymnastics.

Be careful with trying to apply generalities to chess that you have heard in other fields. As one example, the common expression, “The first idea you have is usually the right one” has very little value to chess-players. In fact, it is a huge mistake not to consider multiple candidate moves, and many players are guilty of the anchoring bias, where they cling too strongly to the first idea they considered. For most players below 2000, the exact problem they have is that almost every game they play against masters involves stronger players playing moves they simply had not considered.

In the analysis of my games as Black in which I failed to generate major winning chances, miscalculation was not the problem at all. It was always that I entirely missed a way to fight for the initiative. Candidate moves and considering basic concepts you can play carry enormous weight that influences many games.

You should not list all the candidate moves in a position right away, because in some positions it may be unnecessary and simply waste time. First determine if there are any moves that directly threaten mate. If so, check those first. Then determine if there are any moves that directly threaten the opponent’s queen. If so, check those immediately. After all, if you can force
mate or win the opponent’s queen for very little material, in most cases, you will win the game immediately and all other moves will clearly be significantly worse and not worth spending time on. If there is no issue with the opponent’s king or queen, next you can check direct attacks on rooks and then on minor pieces. In a lot of positions, you will immediately realize there is no direct move winning material. In such cases, you can then list the candidate moves, starting with moves that might improve your pawn-structure (or give you a direct initiative) and then moving on to moves that reposition your pieces. The main exceptions occur when a winning move involves a move with a non-obvious threat that is not so direct. It is important to get more and more familiar with examples of moves of this type so that you can get better at spotting them.

In the initial candidate-move search, it is helpful to bear in mind the witty investigate adage, “you never rule out, you only rule in”. When looking for candidate moves, we try to rule in and seriously consider strong ideas and concepts that intuitively or logically might not attract our attention quickly and automatically.

One of the many reasons why candidate moves are so important is that considering them carefully helps avoid excessively forcing thinking, because in many cases, a move you think is forced is really not so, and the candidate-move search helps slow down and widen your thinking and appreciate more of the depth of the position.

When you recognize that after any natural continuation, the opponent is simply positionally better, this realization serves as a good basis to look for shocking moves, or any move generally that may dramatically alter the position. If you assume you are going to lose with natural play by both sides, shaking things up is clearly something to try for if it is not significantly weaker than regular continuations.
White to play

Black threatens the b6-bishop. Most players are taught that when something is attacked like this, we either need to defend it or move it away. Thus, we usually just have a few candidate moves to choose from that either do one or the other. It is important not to forget about the third possibility: counterattack. Here White is able to attack the c4-pawn with 1 Ne2!, which exploits the b3-knight’s bad position. White has only a few moves that do not lose material. One of them is retreating the bishop (1 Be3), but then 1...Qg4 targets both f3 and e4. The strongest move is simply 1 Ne2!, which many players incorrectly filter out, possibly due to its slow appearance. White ends up trapping the b3-knight and obtains a decisive advantage.

1 Ne2!

1 Be3? Qg4! 2 Ne1 Bxc3 3 f3 Nd4! 4 fxg4 Nxc2 5 Nxc2 Re8 =.

1...Qb5

After 1...Rxb6? 2 Qxc4 White traps the b3-knight and wins.

2 Bc7 Bg4

If Black plays 2...Ra8 instead, White answers 3 Bxd6 with a decisive
advantage.

3 Bxb8 Rxb8 4 Kg2 Bxf3+ 5 Kxf3 Qa4 6 Qa2 Rxb4 7 Kg2

and White succeeds in consolidating his advantage: 7...g6 8 f4 Qa5 9 Nc1 Ra4 10 Nxb3 cxb3 11 Qxb3 Rxe4 12 Rf2 +–.

When you have equal material and cannot defend an attacked pawn, very often you need to look for something else to maintain the balance. This is usually based on a weakness in the opponent’s position. The candidate moves I looked at first for White in the following position were based on the assumption that the e4-pawn could not be held under normal circumstances and he needed to look elsewhere.

![Chessboard with notation]

White to play

E. Knudsen – Mahmoud

Arlington 2015

28 Qf2!

28 Bf2 exploits the fact that Black cannot take on e4 with his queen because
of the fork on e7. However, while after 28...Qg5 29 Be3 Qd8 the queen has
been chased back, White’s structure is still worse and Black has a slight pull.
28 Bxc5 Rxc5 =+ also favours Black.

28...Qxf2

After 28...Qd8?! 29 Qf5! White threatens Bg5 and keeps a solid plus in view
of his bishop-pair.

29 Ne7+ Kh8 30 Bxf2 Nxe4 31 Nxc8 Nxf2+ 32 Kg1 Nxd1 33 Nxd6 Nb2 34
Nxb7 Nbx4 35 bxc4 Rb8 =

White to play

Jaus – Kislik

Training Game 2015

Black has a direct threat to f3 and will take on f2 if White moves the knight.
During this brief training game, I realized that taking on f3 was not as clear as
it looks, because Black’s king is extremely exposed. If he plays the surprising
12 Rg1!, White will not be worse. The important thing here is to consider the
move in the first place. Once you consider it a candidate move at all, it will
not be easy to discard it, and it is likely you may convince yourself it is the strongest option.

12 Bf4?!

With 12 Rg1! White plans Bd3. Then:

a) 12...c5 13 a3 Bxc3+ 14 bxc3 cxd4 15 cxd4 Qe7 is not worse for Black.

b) 12...Qf6 makes sense, keeping an eye on f2. After 13 Bf4 c5! Black plans to complete development with the simple ...Na6. 14 a3 cxd4 15 Qxd4 Qxd4 16 Nxd4 Bxc3+ 17 bxc3 offers Black a choice between pushing the e-pawn forward with 17...e5 to go after f2 or playing simply 17...Nc6. In both cases, Black’s pawn-structure is slightly better and offsets White’s bishop, leading to a balanced position.

12...gxf3 13 Bxf3

White threatens Qd3.

13...Qe7! 14 Rh3!

14 Kf1 Bxc3 15 bxc3 e5 –/+.

14...Rf7 –/+  

White does not have enough for the piece.

In the following position, list the candidate moves for White.
Three candidate moves threaten to win immediately for White, and must be the first moves looked at because if one of them wins, there is no need to look at anything else. I am talking about normal logical moves that threaten to win.

a) 20 f5 Nge5! 21 fxe6 fxe6 22 Nd4 gives White a target to attack on e6, but loses White’s centre and gives Black too much activity. After 22...b4 23 Na4 White’s knight is not very effectively placed on a4, and he is worse after 23...Bxe4 24 Nxe6 Qb7 25 Rg1 Rfe8 =+.

b) 20 Nb4!? is a fresh idea to take advantage of, due to the black queen’s potential problems on the c-file. 20...d5? looks like an obvious reply, but it is refuted by direct play: 21 Nxa6! Bxa6 22 Nxd5! is a lovely consecutive sacrifice of both knights, so that White can take on b5 next move and have a strong passed pawn on a6 supported by the bishop-pair: 22...exd5 23 cxb5 +/=. The correct course is 20...bxc4 21 Bxc4 Qa5 =.

c) 20 e5 d5 21 Nxd5! exd5 22 cxd5 (D) and now:
Black to play

c1) 22...Qc3 23 d6 Bd8 24 Bg4 and here 24...f5! is a hard move to see. White won’t take because 25 exf6 Nxf6 gives Black excellent play with unbalanced material. Following 25 Bf3! Qxd2 26 Bxd2 Bxf3 27 gxf3 Nc5, deep engine analysis claims a draw for Black after both 28 Nd4 and 28 Nb4. It would be a lot of fun to play with those pawns here. Most humans would not play confidently with Black.

c2) 22...Bc5 23 Nd4 (now White’s threat of b4 must be dealt with) 23...b4 (23...Qd8 24 Bf3 Bxd4 25 Qxd4 Rxc1 26 Rxc1 Qb8 27 Kg1 Rd8 =) 24 a3 a5 25 axb4 axb4 26 Nc6 Bxe3 27 Qxe3 Qb6 28 Qd4! and objectively the position is approximately equal because White manages not to lose any material, while keeping a watchful eye on b6. Black has no easy way to destroy White’s centre. In a practical game, it is easy to imagine all three results taking place.

The following position is one of my favourite calculation exercises. White is able to win by force by reasoning through his calculations logically. Conceptually, the main defensive idea at the end of the main line is not so difficult to find.
21 Qc4+!

In the game I played 21 Bxd6? cxd6, but this was a crucial positional error, improving Black’s pawn-structure and allowing him to play ...d5. I simply misevaluated the resulting position, which is very difficult to defend. After 22 Kf1? d5 –+ White lost rather miserably without any counterplay. Absolutely the only chance was to seek counterplay by attacking c6 with 22 Rac1! d5 23 Rc3. Then:

a) 23...f4 24 exf4! (24 Rdc1 Rg6 25 Kf1 Rf8 26 Rxc6 exf3 27 Nxf3 Rxc6 28 Rxc6 fxe3 29 Qxe3 Bxf3 30 Bxf3 Qxf3 31 Qxf3 Rxf3 32 Rb6 Rc3 33 Ke2 d4 34 b4 Rb3 35 Rxa6 Rxb4 36 Ra5 h6 37 Kd3 leads to a draw) 24...Rxf4 25 Qe3 Rbf8 26 Nd4 Bxd1 27 Ne6 Rxf2 28 Nxf8 Rxf8 29 Rxc6 Bf3 =.

b) 23...Rbf8! 24 Rdc1 Rg6 25 Kf1 f4 26 exf4 Rxf4 27 Rxc6 Rxc6 28 Rxc6 exf3 29 Nxf3 Bh3 30 Qd3 Bxg2+ 31 Kxg2 Qg4+ 32 Kf1 Qxf3 33 Qxf3 Rf3 34 Rb6 Kf7 35 a5 Rh3 36 Ke2 h5 37 Rxa6 Rxb3 38 Rd6 leads to a draw.
21...Kh8 22 Bxd6

White has threats of Qxc6, Bxc7 and Ne5, so despite Black’s three possible captures, he cannot stop all of White’s ideas.

22...exf3

22...cxd6 allows 23 Qxc6. It’s easy to miss this move because a few moves ago, c6 was off-limits. This is a case where rearranging the order of moves might have helped, although it’s still possible one may simply cut off the calculation and get it wrong anyway. Then both 23...Bh3 24 Rdc1 Rg8 25 Kf1 +– and 23...exf3 24 Nxf3 f4 25 exf4 Rbf8 26 Rxd6 Rxf4 27 Rd5 (27 Nh2 Rxf2 28 Rxf1+ 29 Nxf1 +–) 27...Bxf3 28 Rxf5 Bxc6 29 Bxc6 Rxf2 30 Rd1 +– are winning for White.

We now return to 22...exf3 (D):

This was the line that worried me, although I can see now that it loses for Black. So let’s consider the logic after 21 Qc4+ Kh8 22 Bxd6 exf3 – what are the candidate moves? Well, the d6-bishop is under attack. The g2-bishop is under attack. Let’s consider all of the piece moves. King moves? Then ...fxg2 and you lose. Rook moves? Then take on d6 and the party is over – g2 is still
under threat. Queen moves? Same thing. Within twenty seconds, I have ruled out all other possibilities besides a minor-piece move. All clearly lose a piece (the other piece is still under attack, with mate coming). So it’s going to be either the d6-bishop moving or the f3-pawn being captured. As ...Bxf3 still gives Black an initiative (d1 under threat, d6 still under threat), taking on f3 is logically much less desirable than moving the d6-bishop. So we have dark-squared bishop moves: 23 Ba3?? fxg2 leaves the bishop in no man’s land. 23 Be7? Rg6 leaves the bishop unable to defend the king position, so it looks questionable. The question then is about how 23 Bxc7, 23 Bf4 and 23 Bg3 work out. Actually all of them are better for White... and none of them are hard-to-see moves. You should consider all of them. So one can reply, “Candidate moves? Well, rook and queen moves look awful, 23 Nxf3 doesn’t work as you mentioned, so let’s try 23 Ba3, 23 Bxc7, 23 Be5, 23 Bf4 and 23 Bg3 and see if we can’t figure out a difference between the moves.”

23 Bxc7!

The other lines are as follows: 23 Ba3?? fxg2 24 f3 Rd8 25 fxg4 fxg4 –+; 23 Nxf3? Bxf3 24 Bxf3 Qxf3 25 Bg3 Rh6 26 Bh2 Rg6+ with a draw; 23 Be5?! Rg6 24 Qf4 Bh3 25 Qxf3 is messy; 23Bg3 f4 24 Bxf4 +/–. 23 Bf4 fxg2 24 f3 is a good option for White, but the text-move is clearer.

23...fxg2

Or: 23...Rg8 24 Nxf3 Bxf3 25 Bxf3 Qxf3 26 Qf4 +–; 23...Rg6? 24 Bxb8 fxg2 25 f3 +–.

24 f3! Bxf3

24...Re8 is met by 25 Qf4! +– (and not 25 fxg4? fxg4 –+).

25 Nxf3

Not 25 Bxb8?? Qh1+ 26 Kf2 Bxd1 –+.

25...Qxf3 (D)
26 Qf4!

Again White must avoid 26 Bxb8??, this time due to 26...Qxe3+ –+.

After the text-move, the party is over: White defends everything. This is very hard to see from afar. On move 21 it is really hard to imagine that the queen will win the game by coming to f4 and saving the king. This is another excellent example of Nunn’s point about the queen as a stealthy long-range defender capable of defending one’s entire kingside in some cases.

26...Qxf4 27 exf4 Rc8 28 Be5 Rf7 29 Rac1 +–
Positional Understanding

Usually when players under 2000 make mistakes that are not of a tactical nature, the fault lay in their logic, evaluation or the positional understanding that they applied to the position. That’s a broad generalization, but highlights the tremendous importance of analysing your games and the way you can improve your chess skills in multiple different ways just by noticing one error. Positionally correct moves usually involve simple exchanges, improving pieces or understanding the structure that you are playing. Such moves usually jump out as ‘healthy’. I have never seen a healthy move I would consider to be illogical. Improving pieces is both logical and positional. Positional play and calculation are almost always connected as well, because attacks that work are based on exploitation of weaknesses and focal points. A refined positional sense leads to keen awareness of both weaknesses and focal points.

Having a chess education and logically applying your learned knowledge in unfamiliar territory is a huge part of chess strength. Positional play is more interesting and abstract than the brutality of seeing a direct tactic show up on the board to refute your play.

Positional understanding can be developed by doing a couple of positional exercises per day, increasing one’s positional awareness, and perhaps even analysing risky positional plans with engines to get an idea how different plans play out or are refuted in practice. This is mentioned in Chapter 8, ‘Engines in Chess’. On a related note, one student of mine keeps a ‘Positional Plans’ notebook and database, where he keeps track of such ideas. These can be very interesting and valuable for some players. I keep a notepad next to my computer where I write down positional questions I have whenever I see a game and get curious about something. These little slivers of curiosities can propel us a long way towards the truth.

Some players can still become very strong by bypassing positional understanding through extreme confidence, deep preparation based on playing extremely tactical opening variations, deep calculation, and a focus
on attacking weaknesses in the opponent’s camp. I do not recommend this approach though. Anything besides a holistic approach can hardly be a universal method that all players can apply.
Logic

A lot of chess-players mistakenly believe that because they are generally good with logic in other areas, that their chess logic will be beyond reproach. This is actually almost never the case. A 2000 player nearly always uses 2000-level logic to dictate his decisions at the board. Logic is so important that if such a 2000 player had logic significantly better than what you would expect from a 2000 player, he would almost certainly be higher rated. I have encountered 2000 players who believe they play chess with logic typical for a 2500 player. The self-delusional grandeur of such beliefs based on no evidence allows people to connect everything to their ego, which prevents them from improving because they will never make any honest attempt to fix their problems. By not being humble enough, many players consign themselves to a future of no improvement. I always readily admitted my mistakes, and made my first goal after each of my games to patch up as many of the errors as possible that I had just made.

When conceptually thinking about things in chess, almost everything boils down to logic. When you consider how to improve a piece, where your king is safest, or how to challenge a devastating enemy knight on e5, the natural tendency is to look for all of the ways to achieve your desired goal. We almost always make logical errors, faulty analogies, and hasty generalizations at the board. This is one of the great values of being aware of as much of your conscious thought as possible at the board. After the game, it is much easier to correct your fallacious thinking if you have a good grasp of what your actual thinking was. For many players, simply being more conscious of your own thinking at the board will help your chess.

Without the aid of logic, most players are reduced to scanning the board for visual cues and latching onto ideas (usually running excessively with the first idea they see) and trying to make things work, even with no serious justification. This is also an explanation for why many players go for unjustified attacks that they would almost certainly reject if they formulated their thoughts into a basic logical argument. If they tried to create solid premises for the conclusion that they have an objectively strong attack, many
players would realize immediately that their attack (or idea in general) does not work. In a very general sense, becoming more logical in your play is a very good idea and something almost every chess professional works on doing.

Logic and positional understanding are closely related. In many cases you use your positional understanding to aid in a decision you make mostly through logic. Without good positional understanding, your logic at the board lacks a proper assessment of positional factors, missing key parts of the logic of a position. One move weakens a square, one move loses a pawn, one move is a little passive, but creates no weaknesses. Intuitively, I want to play the move that retains material equality and does not create weaknesses. A player considering his worst-placed piece should, without any special ‘understanding’ consider redundant or ineffective pieces as ones that can or should be improved so I think they can use logic here, even without ‘knowing’ something. Calculation is usually very specific to the position while positional play is often more based on general considerations and the structure.

If you are consistently improving in all of the main areas of chess strength, you are definitely getting better at chess in a stable way. This is a much more concrete way to look at chess improvement than using vague terms like ‘improving imagination,’ ‘fostering talent’ or ‘displaying technique’. People like real things they can see, especially when they can measure it.

Complex exercises can be good, but drilling seems to be the wrong word. Drill implies fast but almost everything useful in chess is not so fast or simple. Drilling works for players with no knowledge in a specific area in chess or perhaps memorizing a few variations before a tournament game. Those are about the limits of its application as I imagine it. Improving in all of those areas I listed that everyone has flaws in can be done universally by looking at your games.

Calculation is hard, and based on many things, including evaluating positions well and cutting off lines by making judgements. Many players do not calculate what happens if the opponent plays a simple useful move in their calculations. In such cases, it is a move that should be arrived at logically but is often completely overlooked by a player. Essentially Kotov’s tree of
analysis isn’t applicable at all, and is merely confusing to amateurs. It paints a shroud of mystery and complexity around chess, when thinking about chess positions and listing candidate moves is actually not so complicated.

In chess there are so many ideas, and things are so concrete. You get a feeling for certain types of moves in chess – and then they don’t seem so shocking any more. These can be slow moves, they can be intermediate moves, they can unusual king moves, they can be allowing unusual pawn-structures or pushing pawns you did not think you should push. There are examples of all of those things scattered throughout the book.

I prefer for the focus to be on logic and understanding rather than on spotting ten-move lines. During lessons, I tend to suggest simple and strong moves that rarely rely on insane calculation in order to be able to play the best move. That is realistically how chess is: the focus in real high-level chess is more on consistency than anything else. The goal is to consistently play more good moves throughout a game than your opponent does.

Many players have a tendency to get obsessed with irrelevant details about their chess study when they should continuously work on their “chess muscles” (as Kasparov calls it) and being able to figure things out. A huge element of this is improving how logical you are when you look at a chess position, think about it, and analyse it.

Every strong player uses logic or has logic in mind in every position. Even when they quickly see a move in blitz, there is a reason they were drawn to the idea. They have honed their move-search ability. They are good at scanning the board quickly and logically homing in on and narrowing down their options. It would be easy to make grandmaster in 3,000 hours if chess were all (or even heavily) pattern recognition: you would just learn a ton of patterns and that would be that. You actually have to develop your skill at playing chess, finding moves and calculating. These are all a huge part of the game, where logic plays a massive role. How chess is played and thought about by strong humans and the very nature of the game are both extremely logical from this perspective.

Games collections are extremely useful to get an idea about how strong players think about the game. It is not even necessarily so much about
positional techniques or tactical motifs when you study a well-annotated game collection by a top player, but rather clear insight into the logic that he uses at the board. Since logic is such an important component of the game, this is one of the best ways besides playing and analysing to improve your overall chess logic. Few players pay any attention to the importance of logic, practical thinking, the method of elimination, urgency, critical positions, and bad pieces in their chess development.

Why is it that GMs can grasp the best move with little calculation? In certain positions they know logically there is only one possible way to play for an edge or to equalize. They are able to rule out everything else as just bad, or at least significantly worse. It does not require unique skills to decide a move is absolutely necessary. If they do it quickly, they figure it out with simple logic, not with calculation. As long as amateurs keep thinking everything is pure calculation, they will be deceiving themselves and preventing their own chess development. It is precisely the positional points that amateurs struggle with the most. Any 1500 player can understand a simple win of a piece. Understanding paralysis or long-term pressure worth one or two pawns though is a much deeper issue.

It is very important to be able to solve problems at the board through awareness, based on asking questions and coming to realizations on the fly. Coming to these realizations highlights the logical side of chess. Many of the deeper realizations you draw during games will come in helpful in later games. For instance, an insight you suddenly grasp about an unpleasant pawn-structure may immediately spring to mind the next time you see the same pawn-structure arise, or even potentially arise. One of the main reasons why I like to focus on awareness is because it is crucial for learning, improving and adapting.

When I follow top-level games, I can see the ideas cascading and what they are trying to do and achieve. I sometimes like to look through games and logically try to understand the point of each move: not necessarily what was calculated, but just the point. If you can see the idea behind each move played by both players, games make a whole lot of sense. Naturally, you will start to apply the same kind of logic in your own games. You may notice a higher level of purposefulness than some of the moves you play in your own
games and make a conscious effort to correct that.

Calculation involves working out the long-term results of the main candidate moves you have considered, and is usually aided by logic. Deep calculation specifically refers to moves that can only be found through this method, usually involving completely forcing lines (otherwise you would not be able to go that deeply with any certainty that you are considering the best moves). People tend to forget about or neglect the role of logic in the decision-making process, but it is obviously there.
5: Different Types of Training
All tactics flow from a weakness that is insufficiently defended. This is the elementary reason why weaknesses are so vital to recognize and observe when looking for tactics. Thus tactics and positional understanding are always intertwined: if you grasp weaknesses well, you will be best equipped for spotting tactical vulnerabilities. It is odd that when I hear discussions about what relatively inexperienced players should study, there is virtually never any comment on ‘developing one’s chess understanding’ or ‘developing one’s chess logic and decision-making skills’. Surely these will count for more than anything else (assuming you aren’t blundering an unusual amount).

If you are feeling very weak tactically, then trying the tactics servers on lichess or chesstempo certainly cannot be a bad use of time if it’s a controlled amount of time every day. For players below 1800, I recommend using CT-Art 5.0 and trying to get all the patterns down. For tactical training, I am not a huge fan of exclusively using online tactics servers due to the presence of multiple solutions on almost every server. Strong human players tend to like to play the simplest and clearest win, while computers just focus on numbers. It is annoying when you play the best move and the automatic computer judge of online puzzles says you got the exercise wrong.

If you are doing very fast tactics online for a rating on a tactics server, it makes sense just to get a quick overview by checking the material situation on the board, then look for weaknesses and immediately calculate the most intuitive move as deeply as you can before you move on to the second move. Online tactical servers help you get in the habit of scanning the board quickly, making quick calculations and making short calculation trees in forced lines. There will naturally be diminishing returns on this skill, but in the early phases, you should see noticeable progress in your tactical vision.

We remember tactical patterns the best when we go over many tactics in a row with similar pawn-structures because we mentally connect the tactical ideas most simply this way. The fact that I have never seen a tactics book
exploiting this feature of the human brain demonstrates a major gap in the market and a flaw in most tactics books.

Everything you do to improve your chess with chess material can make you better, but the focus is on efficiency. How you use your time away from the board is a huge part of what ends up converting into overall chess skill. For your average player, studying too much Tal or fantastic combinations all the time can actually be detrimental by losing focus on what practical chess is actually about. There is a lack of metagame thinking in this obsession. The diminishing returns are pretty heavy on basic tactical exercises. At a certain point, you barely gain anything because you’d see these simple moves in a long game anyway. I have not gained much from simple tactical exercises since I was 2100.

‘Decisive-blow syndrome’ often comes from doing all tactical study and treating the whole game like a tactical exercise. Then you get positions with nowhere to go and nothing to do. I know how that is because it defined a part of my chess development when I played only razor-sharp opening variations and tried to play for mate directly in every game. In quiet positions, I still insisted on looking for decisive blows or trying to harass the opponent’s king. After losing enough games when I was unable to land blows against my opponents’ rock-solid positions, I finally began to appreciate solidity and subtleties relating to when attacks may and may not work. “Chess is 99% calculation” is a popular saying. Unfortunately, it has no real weight and the majority of strong players I know are tired of hearing it. The easiest way to tell that this is false is that very strong grandmasters like Magnus Carlsen still play extremely good chess when they have no time to do any kind of meaningful calculation to work out tactics, like in blitz and fast rapid games. The reason he is able to play so well is rather because of awareness. With this in mind, your efforts in chess should be mostly focused on improving your cognizance.

Speaking of basic positions in chess, I had a student of mine Google basic mates and found a few lists: one of them had 28 mates by name – she knew maybe 10 of them, or had seen them before. I suggest chess-players find a simple and reliable online source for basic mates, basic endgame positions and the like. Really it’s just one afternoon on the Internet checking Wikipedia
to get your essential basic positions down. You can easily make digital flashcards of 20 basic endgame positions and 28 basic mates – one day and you can be done. I used to keep an online database of digital flashcards and run through them every day. I’d go through 300 or so in just about 20 minutes. There’s really no excuse for someone who has played chess for ten months never having seen some totally basic checkmating ideas (or 3-ply sequences).

Basic tactics in chess should be learned quickly and systematically with a program or computer-checked books that are well-organized. After doing this, most players will never really deal with basic tactics being a major weakness in their game. I did 2,000 mates from a book one summer and then moved on to solving a lot of semi-difficult tactics. I got good at looking for moves that beginner players are especially prone to missing. This kind of basic tactical work falls into the category of temporary chess training, as you only need to do it once. Then you can focus on more abstract concepts.

You can break down any amazing idea into basic concepts; any complex tactic can be made to make sense by breaking it down simply and conceptually. Thinking about and trying to understand tactical ideas conceptually will do more for your tactics than just trying to solve endless amounts of extremely difficult ones. Very few players who are starting out in chess realize that every effective tactical solution is based on a weakness being present. Improving your tactical understanding and tactical play therefore also includes improving your positional understanding and your general feeling for weaknesses.

While solving tactics, it is helpful to ask, “Which moves are threatening enough even to give me the possibility of gaining a large amount of material or a decisive advantage?” In many ‘to play and win’ positions you can narrow down your choices very quickly by targeting only the moves that might potentially be powerful enough to win on the spot. In certain cases, the idea might not be that obvious, but this awareness is definitely something every player has to try to develop.

In certain positions, tactics appear out of context; they just seem random, with no logical flow; you do not see what the stronger side was trying to achieve at all until you investigate the position with computer analysis. If a
tactic does not make sense to you, do not trust that it is the best until you can give a sound logical justification for why it works. Forcing yourself to understand obscure tactics will give you the greatest possibility of replicating such tactics over the board. In some cases, we find out that a move was overestimated by the computer in the process of playing out a strange-looking tactical line and trying to understand it.

If a tactical exercise dumbfounds you, even after seeing the solution and thinking about it a lot, I would set it up on a board, imagine the correct solution being played out in your head and really think about why it works and what weaknesses allow for the winning tactic to work. This process will probably be quite insightful. A lot of ‘aha!’ moments occur like this.
Endgames

Popular Views on Endings

When deciding how to spend your time studying chess, you have to determine the relative importance of endgame study. This is a strange subject specifically because there appear to be only two popular viewpoints: either you think people should spend a lot of time studying endgames because they are very important, or you think people should spend almost no time on them. My stance is more nuanced: the amount of endgame study you should do depends on your level of competence, and it is vital to make a clear distinction between temporary study and permanent study in your training. Most of your endgame study at the start should be of a temporary nature and can be done very quickly because it is mainly based on learning basic theoretical positions.

For players starting out, you will hear a lot of players try to convince you that you should study endgames first. Some people say that endgame study is most important for beginners because “you should start from the end, so that you know which endgames to go for, where to put your pieces, and which pieces to exchange. Studying endgames teaches you how to calculate, and you learn about effectively coordinating your pieces.” Some form of this argument seems to be given in the majority of endgame books to persuade you that endgames are the most important thing for improvement. I wish that more books would emphasize what is known from sports psychology: that playing is always going to be the top priority, assisting learning and improvement for any developing player.

Even with respect to the exact claims quoted above, they do not in any way succeed in making a convincing argument about the supreme importance of studying endgames. Firstly, if you want to study and understand piece exchanges and how they play out, you will do best by emulating realistic game situations with piece exchanges as closely as possible and understanding them. Even very strong grandmasters often do not know which
endgames to head for in a wide range of situations, so it is important not to overestimate the amount of understanding you will gain about piece exchanges from studying some endgame examples. Much of the reasoning when simplifying towards winning endgames is done by analogy, and studying full grandmaster games that are well-annotated and won in the endgame will most likely serve this purpose more effectively. Additionally, if you want to improve your calculation or your pattern recognition, you are best served by specifically targeting those areas rather than endgames. This is especially true because you will learn the most from your own games and oversights and should emphasize those the most.

With respect to the last point in the quote above, to improve your understanding of piece coordination in complicated situations, studying games by players with a fantastic feeling for harmony is very good. I studied games collections by Michael Adams and Anatoly Karpov when I was under 2000 strength, which helped give me a good sense of high-level piece-play in middlegames. Studying endgames clearly is not a bad idea and will not hurt your chess, but be careful not to persuade yourself to believe unfounded things and then casually repeat them without thinking them through. Endgame book authors clearly have a vested interest in making you think it is worthwhile to buy a lot of endgame books. I certainly own plenty of endgame books myself, but one should understand the reasons why.

There is very little evidence supporting the claim that intensive endgame study (compared to other study options) will dramatically improve a 1600 player’s positional and tactical play in the middlegame. Even 2700 players mostly play endgames move-by-move by trying to understand their goals and plans in the given ending and calculating out lines. Books like *Tragicomedy in the Endgame* by Mark Dvoretsky emphasize how frequently strong grandmasters do not know theoretical endgame positions. For that reason, I fail to see why a player 1000 points lower-rated should stress out about such things. It is important to note that if you have a better understanding of chess, it helps in the endgame as well. So I prefer to focus mainly on overall chess understanding, chess ‘culture’ and practical decision-making for the allotted study time available.

It seems that every amateur player has been told countless times that
Endgames are vital to study on a daily basis. I know one explanation for how the misguided endgame study obsession started: Capablanca stressed its importance 90 years ago when there was no good material on positional play or openings to study. Back in the 1930s, there was no reasonable way for a strong player to study positional chess, but endgame reference works and studies were quite popular. There was simply a large supply of endgame material to study and practically nothing else, and the ancient logic was repeated without anyone really questioning it or where it came from. Theoretical endgames and endgame studies were two of the few things you could study which would be analysed rather accurately. Had there been good books on simple chess logic and positional play, I suppose Capablanca and other top players would have advocated that rather than endgames. It is worth noting that adjournments were a huge part of the game back then, so naturally very serious work was done on endings.

Endgame study can be divided into three types of endgames: Theoretical endgames are usually specific positions with known solutions. Practical endgames are ones played at the board without the outside help of rules or theoretical references or analogies to known positions. Technical endgames covered in books are usually ones in which one side is trying to convert a large advantage. Despite the fact that these distinctions are very important, few players ever make them. Teaching theoretical endgames to 1400 players or telling them to ‘study endgames’ is incredibly vague. No one really knows what such a plan is based on or the evidence of its merits. A lot of coaches say ‘study endgames’ even though it really means nothing without clear specificity to most amateurs. As a result, many amateurs buy some clunky and boring endgame books that they know they are going to put no effort into. It is clearly demonstrated that without a high effort factor, the results will be consistently lower. The effort factor cannot be overstated here. When I was starting out, I liked clear and effortless ideas so I read a short book on his own games by Michael Adams (mentioned earlier), who played in a simple and logical way with clear plans. I read his 180-page book in about 3 days. The effort was clearly there and the results came naturally.

A common problem with heavy endgame books is that they usually give equal weight to all of the material, when often just ten pages or fewer feature the most important points in the book, but are not emphasized in any
important way visible to the reader. For this reason, I am starting out this section by highlighting the most important basic general endgame points.

I view basic endgame competence as ‘temporary study’. Over the board, you will get plenty of drawn endgames that you just realize are drawn through looking at the position. We should obviously analyse all of the endgames we play ourselves, and playing a few hundred games usually gives us great material to study and learn from. What we study in these games will be far more memorable to us than something abstract in a book.

By contrast, tactics are something even a beginner can totally get. If there is an immediate mate, they can understand it right away when they see it on the board, just like they can instantly grasp the direct win of a piece. The reason why endgame study has tremendous diminishing returns is because after extensive endgame study, what you study will be a repetition of about 90% of the same ideas. Middlegames feature more possible piece configurations and less diminishing returns from repeated study.

Early on in your chess development you want to learn principles and patterns. While a concept like zugzwang is instructive in its own right, it has little carryover to common middlegame positions. Likewise, seeing many examples of active kings early on in someone’s chess development may confuse them and make them not realize the importance of having a safe king in a middlegame with a board full of pieces. In other words, the general principles that can be learned from endgames mainly relate to piece-activity and the function of the pieces and can also be learned from simple and clear middlegame examples that will not confuse the message. Identify in your own play what your weaknesses are and only plunge into very detailed endgame study if you notice you have repeatedly made simple mistakes in specific types of endgames.

I have encountered a number of players under 1800 who told me they had studied numerous endgame books. I could not confirm or deny any of those claims, but when I asked them questions like, “What are the most drawish pure endgames?” none of them had picked up the basic endgame understanding they would have gained from skimming the text in some good endgame books. This is one of the problems in general with people studying a lot of endgame books early on in their development: if they are studying
them constantly and still not picking up basic endgame understanding, it is largely a waste. In a one-hour lesson, a good coach can teach them the bulk of the key endgame concepts and pieces of understanding they should have to play simple endings competently.

In modern-day chess, you often have just a few minutes left for the endgame and must use your experience, calculation and logic to find the best moves quickly. In my own play, I was never weak for my rating in endgame play because I studied endings properly one time through and occasionally reviewed my knowledge (for one day about once a year). I very rarely reach theoretical endgames, and have never had the Vančura position once. It is nice to have general knowledge of theoretical endgames of course, but if we want to discuss the most practical and efficient use of time, I would rather spend it by deeply analysing rich positions or working on my opening repertoire.

Things like learning basic tactical patterns and basic endgame ideas should be studied at an early stage in a very short amount of time. In two or three months a diligent worker will not need to dwell on the basics at all any more and can move on to the more permanent type of work. Most tournament chess-players play chess for more than five years, so a couple of months is a tiny amount of time in the grand scheme of things in a chess-player’s career. Basic endgame techniques and ideas can be studied similarly in a few weeks for conscientious learners. These are simple things that you learn once and understand immediately and thus are temporary things to study. This is the opposite of permanent study which is more complex and on-going learning (master games which are well-annotated).

A good idea is to make digital flashcards of the most important endgame positions you have seen or played. You can store them online and add more at any time. Quickly clicking through such flashcards is an extremely easy and consistent way to stabilize your endgame knowledge with almost no work or effort. This is a very simple process and allows you to send chess material to other players as well if you are interested in collaboration. For all chess study, there is a question of transfer. That is, when you do training for something, it is an important dimension of training to explicitly set performance criteria for how well your skills and knowledge can be applied
to other things. The diminishing returns on endgame study are actually rather high, which is something I have not seen pointed out before. Once you become familiar with basic winning methods and basic thinking techniques, such as when converting advantages, most of the time your future study will be full of ideas very similar to what you have already studied.

Endgames are inherently simpler and easier to understand for strong players. Once players reach a certain level of competence, not much that occurs in endgames is going to be too surprising. Many strong players have told me personally that practical endgame play is essentially about thinking concretely and calculating well. It is considered some kind of mystery why strong players study openings so much, but I think this mystery is easy to break down and understand. I do not think that it should be a big mystery, but I have not seen anyone actually explain it in text. 2200s play endgames better nowadays and do not collapse as easily as they used to. The ancient advice was to trade into endgames against weaker players and beat them in the endgame. Nowadays everyone tends to play the endgame better because engines so accurately analyse them and they are typically quite easy to understand. In relatively simple positions, as a whole, people make fewer mistakes than they did in the past and endgame superiority is much more difficult to achieve.

If you analyse all of your games and work on chess in a professional manner as I suggest doing, your endgame play and ability to convert advantages will get better without extensive isolated endgame work. Yet I see no reason to delineate that one topic specifically. I do not find it so useful to devote a lot of time to books on endgame technique. Most of the time poor endgame technique is the result of overall carelessness (and more psychological factors explained in books like Grandmaster Rowson’s *The Seven Deadly Chess Sins*) than any lack of general endgame knowledge or techniques for converting +1 positions.

I think most players can study a book like *Endgame Strategy* by Shereshevsky and have a general idea of how to play endgames after that. Essentially he covers the main positional and thinking tools in endgames, such as patience, exploiting and creating multiple weaknesses, and the formulation of a decent strategy. You can skim the central arguments of such
a book in an afternoon, so this should not really be a heavy part of a chess-
player’s training diet. Grasp the psychological factors (Rowson’s book is
good for that) and basic ideas about winning dominant positions
(Shereshevsky’s book is good for that), and after that, I would not really
focus specifically on the topic. There are more important, practical, and
applicable things to work on. Even in endgames, players need to consider the
proper candidate moves and evaluate positions well. Solving candidate-move
exercises and evaluation exercises helps for this. Improving your overall
chess logic helps for every aspect of your play. I would not devote more than
a few weeks to the topic of technique. ‘Technique’ is in some sense a circular
term that refers to the skills you use to win or hold positions where winning
or holding is ‘a matter of technique’. Those are not special or unique skills,
so the term is both circular and empty. Practical endgames are the most
fascinating to me, but generally have more to do with playing good moves
and calculating well than anything else.

There is a massive indelible effect from having a couple of games in which
your opponent saves the game in a pawn-down opposite-coloured bishop
ending. You get a feeling for the drawishness of certain types of endgames.
This is just from purely playing and analysing as an amateur, with nothing
else. You need to develop a good sense for which pieces to trade off (going
into endings), which endings are drawn and which ones have winning
chances. This is something best learned from playing and analysing. One
game over the board where a position that you thought was +– turns into a
draw has a major effect on a player. You probably will not forget that for a
while.

I completely fail to see the logic in telling any player below expert to study
endgames one hour per day. If you are analysing endgames you play (after
the game), and looking up key basic positions such as the Lucena in a reliable
source (such as a basic endgame book or even Wikipedia), you will do fine.
There is not a lot of time that should be spent specifically on technical
 endings if you are aware of important basic endgame knowledge (which
should be learned very quickly and early on) about things like the drawish
properties of pure opposite-coloured bishop endings, rook endings and queen
endings. In opposite-coloured bishop endings, the main issue is that the
defending side has a very easy time defending everything by putting his
pawns on the same coloured squared as his bishop, while in rook endgames and queen endgames, the stronger side’s king is frequently harassed by checks when it tries to become very active or support the advance of a passed pawn.

At 2450 FIDE (2550 USCF) level, where it is extremely hard to get better by normal means, it can make sense to delve deeply into some technical and theoretical endings. If you study Dvoretsky’s *Tragicomedy in the Endgame*, you will see that even some very strong players (2700+) don’t know certain theoretical endings particularly well. Even at an elite level, one can get by with just the ‘blue’ positions in Dvoretsky’s *Endgame Manual*. However, I doubt that even world-elite GM Anish Giri has memorized all of them. With a few minutes left on the clock on move 82, it is unlikely for you to remember a theoretical position you spent a few minutes on six months ago. I have worked with grandmasters who did not know, for instance, many simple rook endings with rook and four pawns versus rook and three pawns on the same side of the board. It is important not to underestimate how difficult chess can be at higher levels.

A common logical error people make in support of studying endgames is the following: they work with a strong coach, study some endgames together and conclude that their leap in strength was due to studying theoretical endgames. What is far more likely and logical is that their leap in strength was due to (1) playing a lot; (2) analysing their games seriously with a stronger player or coach; (3) increased confidence from working with a stronger player; and (4) overall better understanding of the game. Anything other than a holistic approach trying to value every phase of chess improvement is a cop-out.

Endgames are fundamentally simpler due to fewer pieces being on the board and engines being able to calculate nearly all possibilities much more easily, aided by tablebases. It is not hard to understand most good endgame moves and the logic behind them if you practice trying to understand them.

A student of mine rated well below 2000 found the solution to the Lucena position over the board in one of his games. He later said it was a simple interference idea he found after conceptualizing about the ways to win, rather than just calculating random moves. Similarly, the same player found many zugzwang solutions, simply based on logic and being familiar with the
concept of zugzwang after seeing various examples. The important thing here is that he had basic endgame competence, despite very little actual endgame study. He still knew fundamental concepts, had seen examples of them, and could apply the ideas. It helps to build a solid base of knowledge, not just in the endgame, but in all phases.

Failing to convert winning positions is very rarely anyone’s main problem. One of the reasons for this is that positions that are winning are fundamentally easier to play; it takes major blunders to make a clearly winning position deteriorate to a huge extent. If you are skilled enough to consistently outplay people from equality, it is unlikely that you are unable to win those games: winning the won positions is a far easier task than steadily outplaying everyone. Unfortunately, a lot of people who say that failing to convert winning positions keeps them from advancing a few hundred points are not getting better mainly because they do not admit the mistakes they make in the first place. They can surely improve in all areas of chess, but by blaming one unlikely area, they seem to believe they are absolving themselves of the need to work on the most important areas of the game. Be honest with yourself and avoid falling into the trap of making excuses like this one.

One way in which it makes sense to teach endgames to beginners is that some endgame positions can be taught to and understood by nearly complete beginners, whereas middlegames generally cannot. This is largely due to the small number of pieces on the board and the fact that endgames are often decided by one simple theme. For instance, promoting a passed pawn is a common theme that can justify sacrificing multiple pieces in an endgame. Oddly enough, despite being the best argument for promoting endgame study among beginners, I cannot recall reading this before in print. Subtle concepts may be best demonstrated to beginners through simple endgame positions, although there are perhaps not so many concepts of this sort to learn in chess.

**Important Things to Know**

In the endgame, a useful idea is to think of the king’s value for activity and
attacking as 4, which is more than either of the minor pieces. This helps in certain positions when deciding whether to activate your king or a minor piece. Of course, all decisions must be made based on the exact position, but this is a very relevant thing to consider nonetheless. Additionally, rooks gain slightly in value as more pieces come off the board and they have more open lines to slide through. The bishop-pair also gains slightly in value as more pieces come off the board and diagonals open up. Promoting pawns is extremely important in endgames, so you always need to look out for ideas to do so in all types of endgames. A far-advanced pawn is frequently worth two pawns or more in an endgame. Likewise, an active rook frequently compensates for a pawn with limited material the same way an extremely active king often does. Materialism in endgames is usually what leads to extreme passivity and bad play. It is important not to be too materialistic in a wide range of endgame positions because activity, king position, or promoting a pawn may matter more in the given position.

Most winnable endgames one pawn up by ranking:

1. Pawn endgames.
2. Knight endgames.
3. Same-coloured bishop endings.

Here are the most drawish endgame-types one pawn up by ranking:

1. Opposite-coloured bishop endings (it is hard to push pawns on the square that your bishop does not cover).
2. Rook endgames.
3. Queen endings (due to the great amount of chances in general for the weaker side to get perpetual check).

It is essential to realize which types of endgames are drawish to know what to aim for when a pawn down, and what to avoid when a pawn up. Conversely, it is important for both sides to know which types of endgames offer the best winning chances. Having two pieces on the board for both sides is generally
Knowing that rook endings have strong drawish properties and that queen endings and opposite-coloured bishop endings are drawish goes a long way with respect to what you might want to avoid when consolidating a material advantage through exchanges. Knowing that rook endings are the most probable type of endgame to occur is also useful, because developing proficiency in them can pay off big. King and pawn endings, knight endings, and same-coloured bishop endings offer the most winning chances when one pawn up (in that order). Most other pure endings are difficult to win when a pawn up because of the difficulty of advancing the pawns or the potential for the opponent to get perpetual check.

I saw one instance in which many players were standing around analysing a position with a queen, knight and rook for both sides, but Black was a pawn up with thirteen pawns on the board and had the choice of which pieces to trade off. Black traded rooks and knights and got into a very drawish pawn-up queen endgame that the engine evaluated as -1. Instead of the game continuation, I suggested simply trading rooks and queens to get a knight endgame a pawn up, which would have been very easy to win. Initially, engines at depth 30 gave -1 for my suggestion as well, then after a few moves were inserted, it became obvious it was an easy win. Simple logic like this sometimes eludes a whole crowd of players and even engines at medium depth.

A helpful point to remember is that if you are a pawn up, the chances of winning are greatest in a pure pawn endgame. If there are many pawns on the board and your pawn-structure is healthy, being a pawn up is usually enough to win, and this can often be determined with very little calculation as long as the opponent does not have a fortress. What makes pawn endgames so much less drawish than other endgames is that the weaker side has no possibility of attacking the opponent’s king with a piece, so attacking pawns and promoting pawns are far easier to do. The general saying is that if you are material up, trade pieces so you can head for a pawn endgame ideally, while if you are material down, trade pawns so you can head for a pawnless position where
the opponent cannot promote anything or has too little material to win. King and pawn endgames are the worst possible endgame to simplify into when you are a pawn down unless you are completely sure that it is a draw.

Ascertain what will happen if you play passively in a given endgame. Then you will grasp the importance of counterplay in the position. For instance, in an f- and h-pawn rook endgame, one must always maintain counterplay or else the stronger side will keep pushing his pawns up the board. As the defensive side, endgames usually share a lot in common with middlegames. In most cases, we have to observe the opponent’s threats and react to them.

Doing nothing is sometimes very important in endings: if your position is slightly worse but you see no way for the opponent to improve his position, there is no reason you should try an extremely weakening and dubious move that hopes for a blunder. Instead stick to your conviction and make him show you how he plans to make progress; put the burden of proof on your opponent to demonstrate something. If he is a pawn up in a rook endgame but cannot queen a pawn, mate your king, or win more material, odds are that the position is drawn. In such cases, we do best to keep calm and understand what the opponent’s threat is. If we have less activity and worse pieces, but there is no threat and we have no way to improve our position, we should sit tight.

Here is what I see as a list of major rook-endgame themes: Blocking and Domination, Opposition, Latching, King Behind the Advanced Pawn, Intermediate Check, Need for Speed, Check the King into Passivity, Process of Elimination, Active King, Active Rook, Frozen Pawns, Rook versus Pawns, Compensation, Doing Nothing, Taking Material, Active Defence, Activity over Material, and Removing the Defender. If a 1900 player is familiar with all of these ideas, he should be quite good at rook endings.

In inferior endgames, think about the opponent’s threat and how to counter it, just like in any other phase of the game. Threat detection and repulsion is a huge part of playing strong chess in general, and clear endgame examples can help you develop this to a certain extent. It is important to realize that examples taken from earlier in a game can help with your endgame play too. This is one of the reasons why strong overall chess logic is so important.
There are a multitude of positions that were regarded as slightly better for White in the 1990s, which are now known to be just theoretically equal because Black can simplify into a drawn or equal endgame by consistently trading pieces. Players have become better at recognizing the drawishness of certain position-types and exact positions, as well as figuring out how to hold those endings.

Your play in the endgame gets better by looking at openings and middlegames, and becoming more familiar with the pawn-structures played in them. Pawn-structure carryover into later phases is something we all have to pay attention to and learn from. This is one reason why studying the model games of a player you admire in an opening you play can help you develop a good handle on the resulting endgames. 50 hours of practical endgame play is all that many players need to have thought quite deeply about endgames and realized a lot about them on their own, without any book intervention. In practical chess, you will go through these hard times where you don’t win an easily winning endgame. As a result, you should analyse the endgame you ruined and internalize all of the winning ideas you did not find. This emphasizes how vital our tournament games are in developing our endgame knowledge and understanding.

One key thing that many players learn with experience is that they almost never want to go into the endgame when they are attacking in the middlegame but have a bad structure. A good example is when White throws everything forward in a kingside pawn-storm in the Sicilian, but almost any endgame will be bad for him if Black merely survives the attack. Usually trading into endgames is related to the pawn-structure and the side that sticks to a solid structure tends to risk nothing, while being overextended can be a major issue. During middlegame play, ask yourself if you would want to play your current position with all of the pieces traded off, and if the answer is no, you will probably do a good job of avoiding bad endgames.

If I am defending a worse endgame, and there is a choice between a passive move, and a move that looks complicated but leads to a lot of pawn exchanges, it makes sense to calculate the complicated simplifying line first, as it may actually lead to a draw by force instead of a long, passive defence. Sometimes players are afraid to calculate the more concrete solution, since it
superficially seems like a bigger risk if your calculations are wrong. I have made this mistake myself as the defensive side. At least make sure you analyse what happens in the most forcing line possible. If it draws, there is no need to look at anything else.

Logic in endgames is extremely important. In the endgame, we are dealing with threats and thinking of how to counter them, just like in the middlegame. We apply the same kind of thinking and threat assessment as we do in other phases of the game, making most of the thought-process the same, but with a simpler search for the best move due to fewer pieces and fewer threats to our king in general. Major oversights in endgames are usually related to a lessened sense of danger (or potential to attack or win material), and less natural threat detection in your thought-process.

People have the tendency to think of endgames as a phase of the game where there aren’t attacks and sharp tactics, and turn off their tactical brain. However, endgames are very much about calculation, recognizing threats and creating threats of your own. Some players not commonly thought of as positional or technical players frequently play endgames well because they are good at calculation and threat detection. The process of elimination is quite important in endgames. For instance, if the opponent threatens to win by queening a pawn, we are forced to look for any move that stops the winning idea.

There is a general rule that a rook ending with 3 vs 3 on the same side and an extra rook’s pawn is generally drawn if the defending rook is optimally placed, and I found this to be reliable in over-the-board games even though I had not studied the specific theory in great detail. General logic does still help very often in complicated, concrete endgames. We have to use something to guide us through unclear positions, and that something is logical and useful generalizations we develop from playing and studying a lot of chess.

Players under 2000 do not need to get heavily wrapped up in endgame theory. Learn the basic logic that applies in endgames and basic endgame principles, but don’t overwhelm yourself.

Endgames are obviously not a quick-fix secret. There is nothing that will turn a 1600 player into a 2000 player with little study, so people need to be
objective even about what they can gain before plunging into many hours of work. False expectations will only lead to letdowns.

**What to Focus On**

If you are a serious chess analyst you should have the 6-man tablebases installed and working on your computer with an engine. I prefer the Syzygy bases because they take up the least amount of space and work with most modern engines. In certain positions the computer will instantly give you the right answer. In the majority of those cases, the position will not be so complicated, so you can perhaps understand it immediately. I usually move past those ones pretty quickly. This is partially why engine work is rather interesting. Sometimes you really do not need to spend hours analysing a position as a human player. I find that in most endgames I look at, the engine immediately gives me the right answers and conclusions, so I do not need to waste an hour trying to figure out everything and still the solutions instantly make sense to me. This is a valid argument for professional players deeply studying opening positions and typical position-types with the bulk of their chess time. They are in essence trying to grasp some logic in a very difficult position that doesn’t readily make sense, which is not the case for most endgame positions.

Working with grandmasters, when we go over endgame positions (as long as it is not a difficult study), when I tell them the best engine move, they tend to understand the solution immediately. It is quite different when we study middlegames and openings. That is the main issue in complexity and understanding positions as a human player.

Check the relevant section of an endgame book if you have a major misstep in a typical type of ending. Use it as a reference to get general ideas when you misplay typical positions.

For temporary study, I would advise weaker players to spend a few months and do four pages a day and get two absolutely basic endgame books under their belt. I am not even sure I know a single player under 1700 who has
legitimately done that in cover-to-cover fashion. Remember that it is a temporary issue and an issue of competence. Playing is where you learn the most about endgames. First of all, as many strong players have said before me (Negi, Illingworth, etc.), endgames are mostly about calculation. ‘Studying endgame books’ usually means learning themes, with very limited focus on calculation. Studying more complex positions improves logic and calculation, which is very useful in endgames as well so you kill two birds with one stone. The point should be to achieve a certain level of proficiency in both areas so that you do not need to continuously study them. In my case, I studied *Chess: 5334 Problems, Combinations and Games* by Laszlo Polgar (a huge book full of basic mates), as well as *Secrets of Chess Tactics* by Dvoretsky, *Imagination in Chess* by Gaprindashvili, and *Perfect Your Chess* by Volokitin and Grabinsky. At a rate of 10 pages a day, I finished all four of those books in four months. Since then, my tactical play has been perfectly fine for my standard of play.

The same was true for my endgame study. I studied some Dvoretsky material and a couple of other simpler endgame books like *Understanding Chess Endgames* by Nunn and my endgame play was never a weakness at any stage in my chess career. Studying the verbal commentary of grandmasters in the top 50 in the world definitely has value at all stages of your chess development. I also studied a couple of other books where the emphasis was on thinking and understanding rather than memorizing. Study of practical endgames is rarely mentioned or emphasized by people who vaguely speak of ‘studying endgames’. The most that I ever learned about endgames was from self-analysis and from looking over endgames I had played where I learned from my mistakes. It can even be helpful to keep a small PGN database of endgames that you have recently played so that you can include good analysis and commentary.

**Studies**

When asked what a serious player ready to work hard and improve his tactical vision should study, elite Grandmaster Baadur Jobava replied, “First of all you must try to solve studies. There are many fantastic composers like
Kubbel, Grigorian, three-time World Solving champion David Gurgenidze from Georgia (he has some fantastic studies on rook endgames). Really, if you want to improve your calculations and understanding of the game then you must solve these studies, and also ones by other great composers like Kasparian and Pervakov. Also solving combinations is a good way to improve. Dvoretsky’s books are very good and have many complex questions in them. I have not really studied recent books written by new authors, not because I don’t like them, but because I am an old-style player. Three hours of studies and three hours of practical combinations will help you immensely. Put the time on your clock, begin with not-so-hard problems. If you begin with mate in five moves of course it will be tough for you, but if you start with mate in two and slowly move up, it won’t be too difficult.”

I do not know which target audience this is intended for. None of my students under 2000 would have any fun solving any of those studies, and I imagine very few of those studies would actually get solved. I do not think it would be a productive use of three hours. Many studies involve finding a mate on move 9 or 10 in a line, but do not have much instructive value in them because they are too far removed from the kind of thought-process that helps us the most at the board. Sometimes players just say anything, because they are expected to say something when being interviewed. Most likely Jobava was speaking off the cuff and probably did not put a lot of thought into his recommendations. He was just mentioning what he did.

Although I have to admit, even when I did studies with IM Agopov when we had training camps sometimes, some of them just weren’t fun due to both of us not finding anything after a while. And I must admit, the positions did not resemble a real game – in a game, you are thinking through a lot of ideas you previously thought about and calculated, and possibly relying on some plans or ideas you looked at earlier in the game. In some of these studies, we were just scanning the board for 30 minutes in a complete state of confusion. Plenty of positions we had no idea about, and it’s because we didn’t spot some absurd king-walk idea on the ninth ply or something.

I value the importance of practical over-the-board decision-making. Part of the artificiality of studies is that they become significantly easier if you’ve done thousands of them already, are familiar with the solution-types and
common shocking patterns or sequences. But if you are not, and haven’t been served up thousands of studies in your chess youth, most of them will just seem like a waste of time because you won’t generate good ideas quickly. Another issue is that a lot of trainers like to have their students find candidate moves in a reasonable sequence. In a lot of studies, the best move might just be the tenth candidate move you consider, and that does not resemble a real game very closely. Truth be told, for most people who manage to solve a study with such an obscure candidate move, it is because they saw a similar idea before. That is the main reason why I do not suggest heavy usage of studies. I know a coach who trains some of the top juniors in the world under age 12 and he told me his students are quite sharp in these studies. That is interesting, but nevertheless probably a tiny sliver of the chess population trying to improve. These kids are also not the type that have any trouble improving naturally in the first place.
Historical Games and Keeping Up with Chess ‘Culture’

Virtually every tactical or strategic idea you will ever play in your life has been used before in a similar fashion by a very strong player. There are still many players out there who believe in the magic of creating their own tactics over the board, but chess is actually a lot more banal than that. One should seriously study famous games in specific pawn-structures and position-types. You should know about how Kasparov shook the chess world with his unusual brand of intuitive pawn sacrifices in the peak of his career.

Playing through large quantities of games is a necessary task for all chess-players. Usually this takes the form of either playing through the games of a great player, recent games played by top players, or a large number of games in a specific opening. When I am looking to play a new opening with Black, I gain a feeling for the opening by figuring out the various ways in which Black can win in practice in the line. The easiest way to do this is to search in Mega Database for the games played in the most recent years where Black won at grandmaster level. The key idea may be the creation of a specific weakness, an interesting pawn sacrifice or a risky pawn-break, but all such things are useful to add to your general repertoire of knowledge about the opening. Most of the wins are usually straightforward, but it often happens that there are some very quirky wins along the way that leave a deep impression and that can be applied in your own practice immediately. Notice that none of this involves rote memorization. It is much more practical just to focus on the reasons behind the moves and understand the cause and effect aspect of the moves and games.

You must work on your ability to play over games and learn something from them. This is important because it allows you to grasp and absorb a large amount of information in a relatively short amount of time. This is where having a strong chess education, good fundamentals, and a good grasp of evaluating positions comes in extremely handy. I developed this trait by playing over thousands of games and studying a wide range of openings and
the typical middlegame positions that arise from them. Conceptualize the games you study so you are better able to visualize what happened in them and see the game shift from phase to phase.

Once a week, like many titled players I know, I play through approximately one hundred recent games played by strong grandmasters. I often play through the games very quickly, and I liken it to a security guard looking through surveillance footage. I am simply looking for things that are weird, or jump out at me as important to look at or understand. This adds some meaning to the phrase ‘normal chess moves’, which is commonly used by ex-Soviet masters, but not generally understood very well in the West. To get a feeling for what is ‘normal’, it often takes being aware of most of the main and important ideas played in specific openings and pawn-structures. I have been amazed working with grandmasters who can recall how Aronian, Carlsen, Kasparov or Karpov played a certain position-type that suddenly pops up on the board. One sees this much less frequently at lower level. Every serious chess-player should have an awareness of many of Fischer’s games, many of Karpov’s games, numerous Kasparov-Karpov world championship match games, and Kasparov’s most famous wins.

Simply put, players should know the best moves and plans used by the greatest players ever. They should know why the best players won the world championships and what were the main things learned from those matches. That is a huge element of chess culture, and in a relatively short amount of time (a few months), any player can fill major gaps in their knowledge in these areas. After that, they can just make it a routine to follow what is going on in the chess world. It often just takes a few minutes a day to see what happened in the latest tournament games.

It is just a part of staying relevant, keeping up, and building a knowledge base. This is all relatively passive learning too, but it is useful, simple, stress-free and important. I should not encounter any 2200 players who have been playing chess for 10 years and are not familiar with the Kasparov-Karpov matches at all. Nevertheless, I encounter them daily. I can’t help but think that if they had a broader chess education, their chess would be richer and based on superior understanding.

I recommend that players study every game played in a world championship
match from 1930 to the present day. You can blundercheck the entire set of games using an interface like Fritz (using Stockfish, Komodo or Houdini at a low fixed depth like 21) and play through every game within a week. One can develop an enormous amount of chess class by seeing the development of chess in perspective and the tactical and strategic ideas employed to win decisive historical games. In this same vein, I enjoyed the book *The Development of Chess Style* by Max Euwe and John Nunn when I was 1800.

The fact that it does not take very long to go through and get a rough idea of what happened in an enormous number of games makes it all the more surprising that so few players actually do it. Most chess coaches do not stress the importance of this point and I have not seen it mentioned in a book before, so it could just be that many players simply did not think about doing it. The study of these famous games is not something that I view as a permanent thing. Essentially you should do it once in your career in a relatively short amount of time. Then you would never need to worry about a lack of historical chess knowledge or a lack of knowledge of how the best players historically played and how they won world championships.

You may want to consider playing through the games on an actual board rather than a computer. People tend to do things on a computer without really focusing on what they are doing. They may do it a lot faster, but absorb a lot less. So you can do the analysis and dig up the games on the computer, but it will probably be best to play over the games on a board. When I trained with Grandmaster Safarli in 2008, we played through Bobby Fischer games on a board together and thought about the reasons behind each of his moves verbally. It was a very interesting exercise, and one you can do with any chess friend. You could really feel the power in some of Fischer’s moves when played out on the board. It does not quite have the same effect as clicking on a mouse or sliding ahead with the arrow keys.

The pieces and the board have a strong impression and many players have a greater urge to make things aesthetic. You also appreciate things more and remember things better by seeing it as it was played on the board. You feel closer to the action and it more closely resembles a real game situation. Forward-moving forcing moves especially have a certain power.

“There is no better way to improve your chess than to study games by great
players” has been quoted to me hundreds of times. Although it certainly is a good training idea and I advocate studying well-annotated grandmaster games, the statement itself is false. It is the third most important thing after playing and analysing.

I remember Grandmaster Helgi Olafsson telling me that I should know more about the history of many openings. I would ask him about some line and he would refer to some old games or discuss how these lines were developed and said that kids today lack this knowledge.

When I was in high school, a friend of mine told me he had read an interview of Vladimir Kramnik in which he said he was going through hundreds of games per day in ChessBase, presumably while looking for opening ideas. Carlsen has also acknowledged that he plays through essentially every new game, even those from the Norwegian little girls’ championship. One should naturally become a part of chess culture. Those who have been in the chess world for a while should make it a routine to spend 45-90 minutes a week playing over games by strong players in TWIC.

An exercise to improve your general interpretation of games is to look through, say, the first 20 moves of a game and annotate your impressions of the moves. This is a small enough chunk of moves that it can be done in a relatively short amount of time without overwhelming yourself. These annotations can even simply be evaluative symbols such as ?!, ?, or !, so long as you are showing your interpretation.

Additionally, looking over historical games has excellent value because you can develop a logical and positional understanding of the progression of openings and position-types. This is developed most strongly when you see why a given opening variation is refuted or consigned to the waste bin. Assuming the game in question shows Black losing due to White gaining a stable plus from the opening, this also teaches you what a real advantage is in grandmaster play, what an advantage looks like in that specific pawn-structure and opening line, and develops your understanding of how to obtain an advantage and what to look for when seeking one. In essence, this task increases your concrete knowledge as well as your overall awareness.

I drew some conclusions on the Ruy Lopez after analysing 200+ games of
Fischer’s in the Ruy. I looked over these games with a grandmaster on ICC, talking about the moves as they showed up on the board. Then I finally felt confident enough to intuitively sense where I should be fighting for advantages as White and how I should seek initiatives and the provocation of weaknesses with Black. After this work, I felt ready to spend ten hours giving an international master a grounding in how to play the Ruy Lopez. It was a demanding task because I had to computer-check my conclusions with the latest engines and examine the latest games in everything I showed him, but it caused me to become very confident in typical Ruy Lopez structures and draw many new conclusions. It all started with studying the classic games in the opening to become aware of where the pieces typically go and how games are typically won or lost, which took less than two weeks to do.

When checking these classic games, concrete moves, plans and lines were studied, but most importantly understanding was developed and a feeling for where deep weaknesses lie that can easily influence the course of the game and its outcome. If you neglect studying the greatest games ever played, you skip over a great opportunity to see the best examples of positional play, or otherwise deep chess moves ever played.

When learning an opening for White especially, it helps to press the x button in ChessBase after each white move to get a clear idea of what his intentions were in the early middlegame with each of his moves.

“Botvinnik was unhappy with my play: it reminded him of his ill-starred game with Tal (6th match game, Moscow 1960), where out of nothing with ...Nh5-f4 Black also placed his knight en prise to the g3-pawn. My teacher strictly told me that I needed to study the heritage of the ‘King’s Indian classics’ – Boleslavsky, Bronstein, Geller, Gligorić, Petrosian, Fischer, Stein... And when I arrived home, from all possible sources I began copying model games into a special notebook, and later I looked at them. I also kept up with official theory. I tested variations in practice, and I gradually accumulated King’s Indian experience.” – Garry Kasparov.

World-championship games are the most important of all historical games and some of the highest-quality chess games that exist. Outside of more general reasons, studying the best classic games improves your positional understanding and feeling for piece harmony by giving you very accurate
examples to emulate.

A very useful strategy for understanding the ideas of one player you like the most is to go through a strong tournament he played and just try to understand the threat or point behind each of his moves. We tend to get bogged down in complicated lines, but this keeps the focus simple.

When I study games collections, I always try to understand all of the decisions made by the model player. If you can understand all the decisions they made, you are the most likely to be able to emulate those decisions. When I study master games, I always try to guess what both sides are trying to do, and simply make sure I understand everything I am studying in the game that I am looking at.
There are three approaches to learning from blitz games: be extremely analytical like I am and try to learn everything possible, comb through for eye-catching things that you just know are important, or search for one main thing to take away from each game. All different approaches may work for different players.

One of my students gets really depressed about his play in 15-minute games. Fast chess can be a metric, but it does not measure your strength well, since a major element of your strength is how you calculate, think through positions and use logic at the board. There is very little time for any of that beyond a superficial level in faster chess games.

“Intuition in a sense depends on knowledge; the more you accumulate, the better your intuition becomes... Simply speaking, you may like some positions and dislike others, some positions you have faith in, whereas others you do not trust at all – this is what constitutes intuitive judgement. In a favourable position, intuition plays a less significant role, whereas in blitz, it is the most important thing.” – Vladimir Kramnik. His comments on intuition provide a good argument for why experienced grandmasters can benefit from blitz, but most amateurs do not gain much from the purely playing aspect of it.

Strong players should run all their blitz games through an engine and check the opening so that they actually learn something. Intellectual curiosity is very useful in this case. I know many IMs who play blitz and analyse the games or at least check the openings briefly. One common time-saving routine is when they play 50 blitz games in a day and later click through the games rapidly and look for the most important opening lines they did not know how to handle. They proceed to spend between 30 minutes and an hour looking up lines. Many of the top blitz players on the Internet Chess Club do this.

Blitz is heavily about threats and threat recognition, so exercises dealing with
unexpected threats are useful for improving your rapid vision. Knowing the main plans in your openings is extremely useful too of course, so try to patch up some of those holes. Mostly check your blitz games for tactical errors and see if you notice any types of tactics (or threats) that you miss frequently, because you will want to watch out for them specifically during your games. One of my students was rather blind to rook tactics for some reason, but being more aware of that fact made a lot of those tactical oversights disappear.

In the worst-case scenario, blitz instils bad habits, superficial thinking, and even bad patterns due to playing relatively weak moves quickly, thinking they are good ones and repeating similar ideas and thought-processes next time. That is the far end of the spectrum: minimized move search (no decent search for candidate moves), not much calculation, a panoply of tactical errors, and not checking the games afterwards so that inferior ideas may be cemented in your mind. At a certain level, players become strong enough to grasp a lot of deeper positional points just from playing a lot of fast chess games, but they have to be sure that they are actually acquiring correct ideas.

In the opinion of speed chess specialist International Master Daniel Howard Fernandez, “When players 2300 and up play bullet, there is some actual sophisticated processing going on sometimes. It could be possible to gain something, however small, from a bullet game against another IM.” This was an interesting comment and distinction. I can certainly see how a player with his board vision and level of pattern recognition could learn from a wide range of tactical patterns he sees on the board in very fast games, and how weaker players would usually see none of that and thus gain very little. He may also grasp many subtle positional points in fast chess games that would go unnoticed by players under 2000 playing 5-minute games. Thus how you benefit from fast games depends on what precisely you are doing in those games and how strong you are. For amateurs, this is a particularly bad area in which to emulate strong players.

A lot of well-respected chess coaches talk about unlearning bad habits. That is essentially because a large percentage of adult players started chess with no trainer, were not taught to play properly, and played hackneyed blitz for years without noticeable progress. Almost all of the top chess-players in the world
experienced the opposite. When strong players I know play blitz, they seem to learn quite quickly from their games and mistakes and that is partially based on their chess understanding and culture.

Playing blitz has very minimal benefits for beginners and generally players under 1800. The main thing you will learn from those games is the types of tactical blunders you are making and a basic feel for the positions, but that is only if you properly analyse those games in some sense, such as running automated blunder checks after playing a series of games. The simple fact is that basically no beginners do that, so these blitz games just end up being an enormous waste of time. Simply blitzing out moves in an attempt to win on time is a very bad strategy for any player who wants to get better. That time would be much better spent playing 45-minute games. Amateur players also need to take longer to understand fundamental aspects of a position, so it is logical that they should gain a lot less from playing fast games.

At IM level or even lower around 2200, it can make sense to use blitz to test out openings and get in some games against grandmasters. After all, above 2200 strength, hardly anyone plays longer than 15 minutes online, so for training with long games there is basically not even an option to do so. Players under 2000 will not have an issue finding opponents of a similar strength (or 200-300 Elo higher) at any time of day on the online servers ICC and PlayChess (and perhaps even chess24) for 15-, 25-, or even 45-minute games. The longer the games the better, as this allows you to think more deeply and develop your basic evaluative and calculating skills and ability. As an amateur, your national chess rating is based on games not played under these conditions (blitz) and is what people tend to judge your strength by, so it makes sense to practice under similar conditions and hone your calculating, evaluative, and logical skills to be able to play as well as possible in that time-limit.

I did not benefit a lot from blitz below 2200 level. It is easy to see how Carlsen benefits from blitz immensely at his level, such as in marathon matches with Nakamura in the past and testing lines with his trainers for the world championship. The World Champion can maintain a high enough standard of play even in blitz games that the games are worth analysing or studying in some depth. The opening play is at a high enough level that ideas
can be gained from the games and used in world elite tournaments. You need to think consciously and with a clear perspective about what you are gaining from the games. Many international masters and grandmasters I know will use blitz to perfect a well-crafted opening repertoire that they can play consistently against grandmasters. This involves looking up variations after you are done playing for the day (or after each game individually). In general, players under 2000 will not do anything of the sort.

Very strong players often understand clearly why they lost their blitz games and what mistakes were made without even analysing them a lot of the time. This helps them benefit from very fast games, whereas amateurs in general will understand very little about the mistakes made and why they lost without deeply analysing the game. Thus, as an amateur player, I always analysed the games I played at all time-limits, but I did not spend very much time on blitz because the quality of my play was too low and I was not able to apply the new thinking ideas I had studied and learned at that time-limit.

Most players do not start to play blitz strongly until they are close to master level and have sufficient opening knowledge and enough tactical patterns in their head that they can sustain reasonably high levels of play in the opening and wade through the middlegame with few major tactical errors, even in a blitz game. For most players under 2000, playing blitz games cluttered with blunders is not that instructive unless you very seriously analyse the reasons for those blunders and how to prevent them and improve your tactical awareness for future games.
Books

How to choose one’s first five books is a very hard question, but I think a huge chess book full of simple mates is a good starter, like I began with:

1. *Chess: 5334 Problems, Combinations and Games*

2. *Reassess Your Chess*

3. *The Amateur’s Mind*

4. *Understanding Chess Move by Move*

5. *The Complete Book of Chess Strategy*

1 and 5 are almost purely for patterns and ideas that you won’t have seen before, and which you can start applying immediately. Later on in one’s chess playing, the execution of those ideas will matter a lot, but at the start they form a basis for your own pattern recognition, making it much easier to find moves at the board. Books 2-4 explain important thinking methods and the types of logic you want to use when you are playing, so this is not a bad way to start out if the books are not too advanced. Shereshevsky’s *Endgame Strategy* is a good book to move onto for understanding endgame plans and converting advantages.

I have realized that the most helpful thing to do when studying games collections is to focus on understanding all the decisions made by the model player and what their plans and threats were. I really wish I had thought more of this idea when I was studying games collections. Having a really clear understanding of the point behind all of, say, Anand’s moves in his best games book would give you a very clear perspective on the kind of power with which he played his games and allow you to emulate the same kind of initiative-seeking while understanding exactly what he was trying to do.

If you have just finished studying a very complicated game that you are not
sure you fully understood, play through it from start to finish and just try to grasp the threats the stronger side created, move-by-move. The play will make much more sense to you and seem quite coherent if you can do this. When playing through a complicated example, try to play through the most difficult sequence of the game in your head, discussing the point behind the moves in your head as you play through it. This will help your visualization mesh with your understanding of the game and what was transpiring on the board. Calculation goes hand-in-hand with logic and positional understanding.

I recommend playing out all book variations on a real board and making sure that you understand the concept of each of the examples. You need to really understand the author’s intended lessons or else you will not get that much out of the book.

When I started out in chess, I felt completely lost. I did not know what I should be doing. I did not know what books to buy, which authors were good, what programs to use, what chess strength is comprised of, what to work on or how to think about chess. As mentioned above, for my first chess book, I ended up buying the enormous book Chess: 5334 Problems, Combinations and Games written by Laszlo Polgar, and studied it from cover to cover. My next step was to learn basic concepts of chess strategy from books.

With training material, besides the patterns, concepts and ideas in a given game, you should mainly think about the take-away from what you have studied to judge whether it is useful. For instance, if you buy a book about chess training that does not give you clear ideas about a training plan, the book has failed at its intention. Oddly enough, in most chess training books, I cannot find any information about how the authors think chess should be studied concretely. In most books on calculation, I similarly cannot find any information on the author’s approach to establishing and listing the candidate moves.

An easy argument against many chess books is that the author is cherry-picking examples to support his claims. This book is a little different because the majority of the examples are aimed at improving your general awareness, rather than aimed at proving a theory. For example, I am not praising the greatness of any opening or specific attacking theory. This book is about
using logic on and off the board. I have not created an easy-to-use system which simply does not hold up by itself to 1600+ play. Essentially this book tells you how to use your sense, to stay motivated, and to avoid getting sidetracked by bad ideas or pieces of advice.

It is important to spot credibility. You need to look for credible sources that you can trust and if someone has a clear bias, it is less likely that the material will be trustworthy. It is not helpful to be told things that are not true or not supportable.

Some books fall under the umbrella of presenting crazy or strange ideas, when sometimes the author does not even know what he is showing, how to explain it, and how to find such ideas in a practical game. Amateurs should be careful about self-criticism after being unable to find a lot of the weird solutions. Chess, after all, is usually just about playing as many good moves as possible as consistently as possible.

Chess-players often condescendingly use results-oriented thinking to judge the play in a game. Worse yet, they give lines in their books, or criticize players after games to tell you how poorly your opponents played. This is known as false omniscience IBS(!) (intellectual belittling syndrome), and chess-players should make an effort to point it out and eradicate it.

Novel games with weird ideas make it into most books, so amateurs often get the wrong impression and think that you need to do something amazing to win games. You might be forced to come up with one creative or unusual idea to play for winning chances in a sterile or totally balanced position, but once you are already winning, you just need to play accurately and you will win most games without being fancy.

Some players in the world elite essentially just look through games collections, as those are some of the only books they consider to be worth their time and interesting enough. From working with a few 2700 players, they did not care about calculation exercises or the like. It was mainly about picking up little patterns and little things that go in the back of their minds here or there. Seeing weird tactics they have never seen before is another thing that might be eye-catching for them and may help them spot the same kind of tactic faster over the board. What is interesting is that amateur players
often imagine serious calculation work is extremely important (and you are seriously missing out on something if you are not doing it), while the strongest players I worked with did not give much of a second thought to it. Of course there are exceptions like Boris Gelfand, who praised the book *Practical Chess Defence* and the exercises in it. The reasoning is often, “I can spend 30 minutes thinking about this training position or I can just look up the solution and learn the pattern or the weird tactic in a few seconds and see something similar in a real game with less effort.” For most tactical positions, they know that if they look at the computer’s solution, they’re probably going to understand the answer in a few seconds. The whole position logically makes sense to them so quickly that they do not really want to invest so much time into it. The positions they are the most interested in studying are the ones that are the hardest to understand and that’s why they focus on opening lines that extend out into complex middlegames. It is not like there is nothing to be gained from trying to understand a very complicated middlegame position that occurs in an opening you play. It is just that when most amateur players do this, they don’t do what strong players are doing. They often don’t understand what’s going on and try to comprehend it. They don’t work through and really try to solve what’s going on in the position.

Many players have a hard time adjusting to the current times. Sometimes it is not even amateurs who struggle from this, but coaches as well. The most glaring example is the difference between books from the 1990s and now. It was common in the 1990s to tell someone they were out of form if they could not solve a difficult exercise which was solved by a human player at the board. This made good sense most of the time. Such books were written at the analytical standard of 2800 approximately. Nowadays with the top engines being over 3200 strength in long time-limits, it makes far less sense to criticize a player for not finding all of the 3200-level tactics and ideas that the computer finds. One has to recognize the difference between human moves and computer moves. Yet many book authors still pretend this is the 1990s and if you do not find the best computer move, it must be due to your lack of concentration and poor chess condition. This thought is extended to criticizing the over-the-board play of world champions and claiming that they cannot calculate in certain cases. Most of the time, egregious oversights by great players are due to time-pressure and it does not make sense to scold them so harshly for them. I have refrained from doing so in this book,
although positional mistakes are worth dwelling on. Many times such mistakes are made due to carelessness or superficiality rather than due to lack of time. Sometimes strong players will not find the only drawing or winning move in simple or known positions. They may end up in a chess ‘hall of shame’ book for doing so, but with low time it is very hard to play all of the best moves. Most of the time these endgames occur when they have little time. I do not fault players for not knowing all sorts of theoretical endgame positions which occur with 7 or 8 pieces left on the board.

Time, resources and opportunities are key to mastery. Some hypocritical books pretend that this is not the case when, clearly, you need money to buy books and then money and time to compete. Those that are lacking in any of those areas don’t need to feel discouraged about a lack of chess improvement.

The mantra of learning from the greats is very relevant here. In most fields outside of chess (such as investing and finance) the logical thing to do is to find the most successful people in the industry and study their thinking and decision-making. That is exactly what I did: I put together a list of 40 books by the strongest players in chess history who wrote instructional material and went through each book. I wanted to know how the best players thought at the board. For some reason, very few players I know under 2100 spend any meaningful amount of time studying games collections. It seems like they get so easily tricked into buying books on irrelevant subjects that they miss out on the best content.

I studied the best games collections by Euwe, Smyslov, Geller, Fischer, Tal, Keres and Karpov, and Tal-Botvinnik 1960. That gave me a very good base of knowledge for games played before 1975. I have not met any player in my adult career who has actually studied all of these books from cover-to-cover like I did, so perhaps I overstated the importance of classic games. Some of that time would have been better spent playing and developing skill. I decided a long time ago that I would never read a book about these players unless it was written by the players themselves. I do not care all that much what a nondescript titled player has to say about the games of, say, Keres. What Keres wrote himself showed amazing penetration into the position. His clarity of thought was breathtaking the first time I read many of his explanations. A random international master or grandmaster analysing a top
player’s games with modern engines may do a good job of covering the key mistakes and winning ideas, but that level of penetration I am afraid is just not possible to mimic.

For what it is worth, *Grandmaster Chess Move by Move* by Nunn, *Jon Speelman’s Best Games* and Keres’s books *The Quest for Perfection* and *The Road to the Top* had the clearest logic of any games collections I have studied.

I read everything I could find by the best modern players on their own games, which actually did not take that long because elite players generally do not write much about chess or publish very much. Perhaps there is a general impression many chess-players have out there that they cannot understand the writing or commentary of strong players. I do not agree. I was able to read Fischer’s book on his games when I was 1600 strength (or unrated). It might be a little difficult to get into some of these books at first, but you can adapt and get used to them quickly. These players are just talking about moves they thought about during the game, why they thought about them, and why they played what they did. I do not think anything makes Anand’s or Karpov’s books of their best games unreadable for 1400-1600 players. If anything, I think there is a major lack of perspective regarding how strong players think about chess among most players. If you do not have much time, spending 30 minutes a day studying annotated games by some of the best players ever definitely cannot be bad and goes a long way towards improving your general chess logic and decision-making. Ten books can easily be read in less than a year and provide a very good basis for a player’s chess culture and understanding.

There are many books on attacking chess that are a collection of assorted tactics in winning positions. Sometimes they are split up into themes like ‘breaking down the opponent at his strongest point’. The problem is that it is not so easy to determine what the real take-away is from such study (which is one reason why it is so confusing for an amateur: they try to determine what ideas they can start applying right away), because this is not a real concept to apply at the board. It is neither a thinking concept nor a positional concept. It happens in some games, but it is by coincidence, not by design. I suppose by a stretch you could say it is a surprising positional detail when someone loses
a game due to a point cracking that seemed solidly defended. Nevertheless, that is why focal points are important. Either they are attackable or they are not.

White has classical plans in various openings, but executing them does not always secure an advantage. While many older books painted a picture of a pawn-structure as being ‘strategically lost’ for the opponent, what Botvinnik and others should have said is that if Black has a lifeless position with no counterplay, he might lose without a fight. With play or some pawn-breaks, it is much less clear, and must be assessed in each case differently.

After speaking to the two most successful chess coaches in history (in GMs produced), and experiencing students myself as one of the top coaches online, I can say with confidence that it seems like very few players at all really have issues with winning +2 positions while attacking. In other words, it never really holds someone back by 100 or 200 Elo. I really enjoy fun books, but an important issue is that readers often misinterpret the advice and get misled. The same thing happens when players study very difficult tactics books and get lambasted by the author for not seeing the solution that, in many cases, his 3200 engine found. My speculation is that many of these chess authors do this entirely by accident, not being aware of the image they create and the way the reader will respond to the ideas in the book. If the response is negative, it is worth changing the message.

I studied lots of books like *Imagination in Chess*, *Perfect Your Chess*, *Secrets of Chess Intuition*, *Secrets of Chess Tactics* and *The Magic of Chess Tactics*. On top of this, I was always studying complex tactical games from games collections *à la* Shirov (*Fire on Board*). Because of this, I built up a very solid base for my tactical knowledge.

It is OK not to have much information or to get the wrong answer, but the worst type of wrong answer is one that everyone thinks is right and gets people deeply invested in so as to preclude further investigation. This is very much the case with how a solid chunk of amateurs approach studying chess. Oddly, I almost never see amateurs studying games collections from the best players and trying to understand their thinking and play. Much more often I see them studying some tedious theoretical endgame that you can test them on next week and they won’t get right anyway. Your chess study should
really improve your understanding of the game.

A lot of old books showed one side losing, and acted like that side lost because the other side played perfectly or had magical movements. This is very frustrating for objective analysts. Chess objectively leads to a draw, as is easily evidenced by the computer world championship, elite correspondence chess, and just generally being aware of how drawish chess actually is from analysing a lot with engines. White’s edge is very tiny in all of the main defences to the main opening moves. If you hear someone analysing and saying White is better, they should be able to tell you why. It shouldn’t just be ‘White is better because White is White’. There should be a concrete logical explanation for why one side has an advantage. It works backwards too: if one side has an edge on move 13 for instance, I can often figure out what Black did wrong compared to the usual ways of handling the position-type or structure that are known to equalize. This is one of many reasons why a broad and deep chess culture is very useful.

One of the things that has really occurred to me about chess training materials is that less is more in the sense that players get overwhelmed extremely easily by huge quantities of books. There is no point from the standpoint of basic disciplined study in buying ten Aagaard books and ten Dvoretsky books when none of them have been completely read. Buy one book. Finish that, and then go on to the next. Focus on what you consider to be the most vital thing for you to work on. Advice for amateurs here is clear: speak to a strong player about your chess decisions, as the oversight of a second opinion is extremely helpful. Strong players may easily guide you away from very poor decisions. It is more important not to do the wrong things than to aim for perfection in your study. Many things would qualify as very effective training material worth study, and obsessing over similar instructive items seems much more counterproductive than just studying them.

Grandmasters that play relatively simple, straightforward logical chess tend to be the easiest for relative beginners (1000-1600) to study effectively. Michael Adams, Peter Svidler, Sergei Rublevsky, Victor Bologan and Vladimir Malakhov come to mind. Bologan’s book of his best games and the two books by Michael Adams at the beginning of his career are full of wonderful explanations of logical middlegame decisions made based on
simple, sound reasons.

Below 2000, chess fundamentals and understanding are very important. I was able to get to 2200 strength mainly by studying games collections by elite GMs and having a very clear idea about how strong players think about chess and what kind of ideas they try to implement during games. Certainly to get to IM level, playing 100 games a year is optimal, but just because something is not optimal does not mean it cannot be very good. A player came to Hungary seeking IM playing 50 games a year and also reached the IM title. It happens.

I would not study any books with inferior quality of analysis. There might be some useful things in them, but if you are reading the books critically, you will spot enough mistakes on your own that you might not want to finish them. You will have to question nearly everything in them.

When judging a ‘best games’ book, keep it simple and judge by: (1) quality of the analysis; (2) quality of the games; and (3) strength of the players. This is how nearly every strong player I know would judge a book. Suppose there were a famous and much-vaunted book that you could objectively assess as follows. Analysis quality: 4 out of 10. Quality of the games: 5 out of 10. Strength of the players: 6 out of 10. Why would you choose to study this book over something that is much higher in all three categories? Quality of material is more important than reputation and the number of times a book has been uncritically recommended. Keep your eyes and your minds open.

Everybody wants to be a grandmaster, but almost no one wants to read a 500-page book by Dvoretsky. Most club players I encounter regard Garry Kasparov as the best player of all time (or at the very least, one of the best), yet I cannot recall ever seeing a club player working through his big blue Garry Kasparov on Garry Kasparov books. You would think many players would want to read about the thoughts and logic of someone they consider the greatest player ever, even out of pure curiosity. My message is to be curious, to seek the best sources, and not to be afraid of what you perceive to be suffering or hard work. When I broke down difficult tasks into something as simple as ‘doing one game a day’ the book almost read itself. Some days when I was especially interested or motivated, I went through two or three games. Establishing a baseline that you want to complete every day serves as
a good starting point for long-term discipline in chess.

Get a few relatively light books with good explanations under your belt first. This will also help give you momentum and motivation to work towards more intense books. *Endgame Strategy* by Shereshevsky is a very good and relatively simple endgame book without a lot of commentary, so you can learn a lot of basic endgame principles from that book. By contrast, I would only use a book like *Fundamental Chess Endings* as a reference: if you play a tough opposite-coloured bishop endgame over the board and feel insufficient in such endings, then pop open *FCE* and look over some relevant endgames and read all of the text in that section. However, it is worth pointing out that *FCE* was the main endgame book Magnus Carlsen learned from as an 11-year-old, and he even had a copy with him at his 2013 world championship training camp. However, for most players it may prove too dry or overwhelming. A light book I like is *Secrets of Practical Chess*. This book has a lot of text in it, so it should be possible to read fairly quickly. A games collection I would begin with is Karpov’s *My Best Games* (published by Olms). As opposed to the recent books by Kasparov on his best games (which are also excellent), this book is about 250 pages shorter and has much lighter analysis.

My advice for completing a lot of books in a relatively short amount of time is to take the quickest and most enjoyable reads and go through those first. I was able to finish four relatively short books (about 150 pages each) in one month when I was very motivated. By contrast, if you start with a huge 600-page book with extremely dense analysis, you may never get through it and feel discouraged. In my case, I finished the two Michael Adams books from the early 1990s within two weeks. They were short, enjoyable, lightly annotated and very clearly explained. I was able to study three or four games at a given time in those books without any mental strain at all, but while still picking up instructive ideas and learning about amusing plans that led to him winning games against strong players. Unfortunately there are not that many books like this out there, but ideally this type of work would be optimal for someone eagerly studying chess as an amateur.

One of the most annoying things when studying a chess book is when you read a half-page explanation from an old book and find out everything
written there is completely wrong. In the end, it just amounts to time wasted for no reason. This is often just because of lazy generalizations and missing a concrete move, but sometimes the author just completely misunderstands the position. This happens a lot with King’s Indian positions in older books.

The best games books by Geller, Korchnoi and Keres are all great works by extremely strong players. These books tend to go under the radar: players who narrowly failed to become World Champion tend to be neglected. Read their thoughts and the logic they used at the board, because it is definitely useful.

While reading a chess book on a player’s games, I would just try to make sure you understand everything you study in the book. If all of the moves and explanations make perfect sense to you, the odds are high that you can remember it fairly well and gain nearly all of the benefits of studying it just by comprehending everything there. If something really makes no sense to you, make a note of it, and return to it later. Some people propose trying to guess all of the moves in a book as a timed exercise. Sometimes I like doing this, but this can be very time-consuming and sometimes 95% of the moves in a game are not surprising in any way, and spending a lot of time trying to guess them may just cause you to overthink a lot of positions and spend 4 or 5 hours going over a game that could be fully studied in 30 minutes. I find that when I go through any chess material, I am already trying to guess the next move as soon as the position comes up on the board, so I do not need to make it a special exercise requiring conscious effort. Ideally we should go through chess content we study with an active mind.
Analysing and the ‘Most Obvious Move’ Principle

Garry Kasparov said, “Like Dvoretsky, I think that (all other things being equal), the analytical method of studying chess must give you a colossal advantage over the chess pragmatist, and that there can be no certainty in chess without analysis.” He is absolutely right that deep analysis of your games and openings is far more effective than a less analytical approach.

Grandmaster and respected author Lev Polugaevsky stated, “Analysis is a glittering opportunity for training: it is just here that capacity for work, perseverance and stamina are cultivated, and these qualities are, in truth, as necessary to a chess-player as a marathon runner.” This is an interesting take, because most players fail to appreciate how helpful a training tool independent analysis is, especially if we save the results of our work. Additionally, Mark Dvoretsky famously remarked, “It is not possible to become a great player without having learned how to analyse deeply and accurately.” When I first read this as a developing player, I took it to heart and made it a goal of mine to analyse every day.

One of the keys to analysing well is quickly considering the types of moves that may cause the greatest positive evaluation change in the position. Practising and developing this skill is part of the reason why strong players tend to home in on the best moves in a position almost instantly in an analysis session. Even if the moves you suggest are not objectively as strong as you thought, logic leads you to the types of moves that might favourably change the position the most.

Good analysts are excellent at homing in on the relevant factors in a position tied to a specific piece of logic, causing them to find moves that do very specific things like attack the king directly, attack the queen, create a pawn-weakness, seek to win a piece, set up a direct threat, or create or solve a positional problem. Sometimes only one or two of these options are present in a position and a strong analyst will quickly spot and investigate each of
them. The speed with which the moves are found may appear impressive at first, but it is important to understand that the moves are found by latching on to direct pieces of logic. Concrete positions with only a couple of important candidate moves are ones in which a rapid analyst may be able to figure out the truth of the position quickly by moving pieces around on the board very rapidly. Less important or less concrete positions may be harder to latch a concrete piece of logic to.

Being able to play out lines and create accurate analysis is a huge part of being a strong chess analyst. Even on relatively weak hardware, a strong analyst can make up for the low-depth calculations by fully playing out the best lines and then scrolling backwards, after which you will see the engine’s evaluation change in the position you started from. This is because it saves the scores it has already seen in the hash, so there is a major boost to the engine’s strength by playing out lines and reverting backwards.

An important part of getting better at chess is constantly improving our reasoning at working with the characteristics of the positions in terms of a few simple principles and building our ability to analyse well. Improving your skill in analysing positions is very important. You can do this in many ways. Telling someone to set up a board and start moving the pieces around in any one of their games seems like a very easy but not particularly effective suggestion. There should be superior focus than that. Players need to analyse on their own and get good at doing so, specifically comprehending why positions suddenly collapse or what hints were in the position that led to tactical demise. Being aware of those tactical issues is huge for many players, who would otherwise ignore them without thinking about it. You really have to work on analysing and comprehending things on your own. When I was unrated, I analysed all of my games and filled them up with comments and questions, trying to understand positions I played all the time. It was harder then because engines were much weaker and often you could not get good answers, so you really had to make a lot of moves on the board to try to even make good educated guesses about the truth in many positions.

Most players seriously underestimate how many mistakes were made in a game. In almost every game there are evaluative mistakes, calculation mistakes, positional mistakes, opening inaccuracies, and logical mistakes.
That is one of the main reasons for analysing your games in detail: to patch up every area of your game holistically.

A very valuable way to get better at chess is to analyse weird positions that don’t seem to make a lot of sense, and try to figure out some deeper logic to the position. This is some of the most enlightening work I do on chess. I would say this happens a lot in the Dutch and Modern when I analyse obscure variations and positions. I am curious if this is a common thing for elite players too, where they spend three or four hours on something and have no idea what the overall conclusion was. It doesn’t have to be a specific opening line either; it could just be a confusing position from a game they played. When IMs hire me to be their coach and analyse their games, usually they want me to explain the confusing positions that make little sense to them. They know I’m so obsessed with the truth I will spend hours trying to figure it out and come to interesting logical conclusions while the vast majority of grandmasters wouldn’t do a second of work outside of a paid lesson for them on it.

In openings and middlegames, you reach an insane amount of completely bewildering or confusing positions – and Magnus’s coach (Caruana told me he does this too) loves to take these positions and have him analyse them. For strong players, they need complex positions to learn from, and a major part of the learning process is working through something difficult.

Things changed a lot with computers. Nowadays the positions which are the hardest for both humans and computers to understand tend to be the most interesting for strong players to spend time analysing. This is exactly why strong players spend most of their time analysing openings, because many positions are hard to figure out and rely on understanding and analysing positions deeply. Certain openings like the Dutch Defence and Modern Defence are a good test of understanding in general. With a generally superior structure for White, he needs to handle his position delicately to maintain an edge deep into the middlegame.

Analysing with other players is complicated because it is easy to get side-tracked with irrelevant lines. I like to have one player saving lines on a computer. The most critical lines should be checked first in whatever analysis is being done and both parties should be clear on how much time is being
invested into the analysis.

The concept behind the ‘most obvious move’ principle is always to make sure in your analysis to analyse a move that has a large potential to change the evaluation of the position. If a move may win, you have to look at it in analysis to understand the position from a human perspective.

This position arose in one of my students’ games. I found it very interesting that we were able to work out the win by analysing the most obvious moves for White in the span of two minutes without a computer. During an analysis session, you can go ahead and play through obvious and direct moves if they may win by force (there is no point in being overly prideful and trying to spend 30 minutes wasting each other’s time trying to calculate it out in your heads). Even if 1 gxf6! did not win directly, we at least had to check it. It is amusing how Black’s king gets pushed around in the main line. It is worth pointing out that if Black’s queen were on, say, c6, this entire combination would not work.

1 gxf6!

1 Bg3? e4 allows Black to play ...f5 and survive with a balanced position.
1...exf4

Taking is absolutely forced; otherwise Black just loses a lot of material for nothing.

2 Ng5+ Kxf6 3 Qg4!

This is an impressively slow move, but it has clear intentions. White threatens Nh7+ as well as Re6+ and the d7-knight. After 3 Nh7+? Kf7 4 Nxf8 Rxe2 5 Nxd7 Re6 Black retains material equality and holds the balance.

3...Qxd6 (D)

![Chess Diagram]

White to play

4 Red1!

This is the correct rook, as now Black’s only hope of blocking the e-file or trading rooks there falls flat.

4...Nd3 5 Ra3 N7e5

This is the only hope to hold on tight, but White still takes a lot of material back.
6 Ne4+ Kg7 7 Nxd6 Nxg4 8 Raxd3 Ne5 9 Rd5 +–

White wins the exchange and more, with a decisive material advantage.

This is an ideal calculation exercise due to the fact that the main line is forced for both sides. The main line is beautiful because it exploits bad positions of Black’s queen and king, and the tactically vulnerable position of his rooks. In the calculation, it is possible to get thrown off by 3 Nh7+?, but if you seriously consider 3 Qg4!, you will start to see how ominous the threats really are. If you see up to 6 Ne4+, it is likely you will realize you are winning.

The ‘most obvious move’ principle is very useful when playing through elite grandmaster games. With no engine turned on, simply make note of moves that occur to you while playing through the moves. After pointing out, say, ten examples of obvious moves that you are curious about and cannot figure out on your own, use the engine to help you work through the positions and understand why your move was not as good as the move played – or perhaps equivalent or even better.

The ‘most obvious move’ principle refers to things such as obvious checks, obvious captures (or recaptures), bringing an inactive piece into the game, directly attacking something, improving the worst-placed piece, favourable exchanges, natural simplification for the defensive side, execution of positional threats, aggressive-looking moves that move forward, pawn-breaks and carrying out the only idea to play for. This is very useful not only when analysing grandmaster games, but also when analysing opening variations and your own games with engines. It is far too easy to focus on the engine’s moves or on raw opening moves from a book or database, so it helps to look at the obvious moves to add a human flavour and help you understand everything as if you were looking at it on the board.

Even if you are not an extremely strong player, you may realistically analyse at a much higher level than your play. In analysis or in an exercise, you can be more willing to play things you wouldn’t dare play in a game, where the fear of losing is a greater factor. In exercises and in analysis, I first consider
aggressive moves that might win outright, because if they do win, then less
critical moves are obviously going to be weaker. The reason we can consider
these aggressive moves in analysis so quickly is because there are no
consequences: you can always take a move back in analysis if it looked
aggressive but does not work. Students sometimes ask me how I find
surprising and complicated wins so quickly when we analyse. The truth is
that they aren’t always wins, but I’ve become used to looking at the only
really dangerous moves in the opponent’s half of the board as my first
candidate moves, especially in analysis. This is something every analyst is
capable of getting better at. With practice, any player with experience
analysing and asking the right questions after his games can find key missed
opportunities and understand a lot of things that happened during the game.
Annotating is a great learning experience that will help you improve your
analysis and the quality of your play.
What Should I Walk Away from My Games With?

The goal of every tournament and training session is to get stronger and increase your awareness. It is important to be aware of this so as not to lose sight of the goal. You should walk away from your games with views on what occurred in each phase of the game based on solid evidence, rather than narratives and negative feelings. On a related note, you should also conclude your opening research the same way, with evaluations and ideas that soundly pass rigorous analytical tests.

I want to place a special emphasis on awareness, because stronger players simply appear to think more quickly and be more aware than their lower-rated counterparts in general. Usually this superior awareness is of the following: tactical possibilities, weaknesses, the correct evaluation of positions, bad pieces, and important moments. Players not developing their awareness of these things need to refocus their post-game analysis and how they interpret their own games. Playing gives you the ideal material to go over to judge your thinking and playing ability. It gives instant feedback on the quality of your play as well. Playing is extremely vital because of how aware of different things we become while playing a game. An unwinnable position that we played for one hour trying to win becomes etched into our minds better than any book example would. An unpleasant slightly worse position we are forced to defend for multiple hours has a much greater effect on a person than analysing a missed option post-game where your opponent could have put you under pressure but did not.

Keep getting in good games and thinking about weaknesses, improving your bad pieces, and noticing the opponent’s threats as often as you can. Simple awareness is a huge part of chess. A lot of the time an idea would never occur to us unless we were already aware of what we were trying to exploit, make use of, or react to.
What Should I Use a Coach For?

Just before becoming an international master, I took a couple of lessons from a 2550 grandmaster. If I did not understand a move of his, I would just ask him, “What was the idea behind your move?” and he would tell me. During analysis of my own games with him, if I failed to see why his move was superior to mine, I would ask, “Why is this better than what I played?” and just let him explain. With any move you do not understand, ask about the ideas and the thought-process needed to find the moves and ideas the coach is showing. Ask questions and try to learn. Avoid nitpicking the coach’s suggestions if the engine prefers another move by a tiny amount; in those cases you can ask the coach which move he prefers and why. The emphasis as a student should be on improving your own understanding of the position you are studying. Improved confidence was the biggest psychological side effect of analysing with strong players and taking lessons. Really try to feel the player’s strength so that you get comfortable with this level of play and the thinking it is associated with.

When I worked on opening lines with a 2550 grandmaster for the first time, I immediately felt I grasped where to look for opening advantages based on the types of tiny advantages he was seeking and that I had not considered to be worth pursuing or misunderstood.

A lot of the main pluses of having a good coach are outside of lessons as well. Added confidence as well as a strong resource in being able to answer any question is important in overcoming roadblocks.

Competitive chess can be expensive. If you play in a big tournament almost anywhere, it costs hundreds of dollars. It makes sense to take lessons that mirror a reasonable fraction of the tournament costs. Usually taking the plunge to decide on having a trainer of any kind involves having a small pool of money saved up.

It is a paradox of fitness I’ve noticed over the years – the people who insist they know how to train themselves, know their body, and don’t need much –
if any – help, always need the most help, while on the other hand the people who prioritize training, make sacrifices in order to get help, and take coaching seriously are the kind of people who actually can make great progress solo, but they would rather make better progress with guidance. This is the Dunning-Kruger effect in practice.

There are a few pitfalls to beware of when hiring coaches:

1. Some simply aren’t good teachers due to a lack of fundamentals (usually below 2400 this is true, and why generally I don’t advocate hiring FM coaches).

2. Many lack an understanding of how children learn, which is completely different from how adults learn. Psychological studies show that children under age 9 do not grasp abstract concepts well and teachers need to adjust to that.

3. Some simply aren’t very good at communicating with people, working with people, and building a strong relationship.

In a nutshell, a coach should help you with everything that a computer cannot: candidate moves, time management, critical moments, pointing out your errors, answering your questions, explaining things, a strong sparring partner, additional work, reduction of stress, emotional support and confidence, preparation.

Firstly, you can mark important opening positions to analyse with a medal in ChessBase to send to a coach. Additionally, you can mark all of the critical moments you perceived in your game with a medal. To make sure he looks at the game critically, as a student you should ask if you got the critical positions right to ensure that the coach looks carefully. Critical positions are ideal for the coach to judge your time usage. I feel like many of my weaker students don’t grasp when a critical position is on the board, and don’t look for candidate moves seriously when these positions arise. Here’s a simple example: a 1600 student is about to lose a pawn or a piece and needs to find an ‘only’ move in the position to get compensation. The student quickly makes a move and gets no compensation and loses without a fight, even though a strong move existed, maintaining the balance. It is important to deal
with psychological shocks by still being objective about what a critical moment is and what merits your time and a serious search for game-altering candidate moves. It can be useful to drink a glass of water to calm down, or take a minute or two to look at the board with fresh eyes. When you seem to be faced with a forced loss of something, you have to be careful and still play the best moves. That is definitely a critical moment worth spending time on and thinking on for longer than usual. Annotate your games and mark where you spent the most time. Then the coach can skip around to the marked positions and discuss the complexity and possible choices.

Coaches should encourage you to apply maximum effort to chess: “Faced with more challenging problems, the students who were told they tried hard did exactly that: they were resilient and, when failing, attributed it to insufficient effort, not an internal crisis. The ‘clever’ students, however, responded differently: they became over-concerned with failing, showing less tenacity as the questions grew tougher. Their anxiety levels grew and self-esteem dropped. And those children lied when asked how well they performed later on.” (Derek Beres, describing a study of 10- and 11-year-olds cited by Stephen Grosz). It is important to have a fact-based understanding of skill, effort, and the interaction between the two. When you realize the importance of the effort factor, you will feel much less bad about negative results where the effort was minimal, and will feel more of an urge to give it your all because of the influence it can have. Too many people place unobjective emphasis on intrinsic ability.

Even something as simple as looking at a random position and hearing the top three moves a strong player considers can be very useful. That is why working with strong players always has to be good, especially if they can explain ideas well. I think a student can make good use of any strong player by being a good student himself and asking good questions – such as selecting positions where he wants the stronger player just to list what he considers the best moves – and repeat this question for a wide range of positions. It is hard to believe any 2600 player in the world would do a bad job of passing on a lot of knowledge and ideas to a student in this kind of situation. A student should eventually hear his coach’s voice in the back of his head. A coach should be used to motivate you and get you more excited in the game, working better at the game personally, and more confident and
better fit for the sporting aspects of the game.

Training games I play with my students under 1800 really seem to help them out. Even if I just tell them the reasons behind my moves as we’re playing, they can see differences in our thinking. The most common effect is that they start to consider the opponent’s ideas a lot more seriously. Work a coach as hard as you can. Prepare as many important questions for them as you can. Be a curious and task-oriented student.

In my experience, children who have no coaching simply give up the game as so much of it remains a mystery to them. Even then, they may well have enjoyed dabbling in the game, and playing may have improved their general learning skills. Chess to some degree is a mysterious game. When relatively inexperienced students study with engines, there are still many simple things they don’t understand that a coach can clarify. There is a natural placebo effect (increased confidence for one, increased energy and motivation for others) in working with a coach. Players who are not ultra-serious about the game may easily just drop it without structured learning as a staple of their chess diet. Young players are much less likely to get obsessed about chess books the way I was, and can drop out much more easily.

For players serious about improving their chess, the only argument against getting a coach is a financial one. Even then, the time saved definitely has a lot of value. I have noticed the role of trainers seems to be underestimated in the public chess knowledge domain as well. There seems to be little emphasis on the fact that Chernin was paid $100,000 a year to train players to become grandmasters or that IM and GM trainers I know personally were gifted quarter million dollar houses by their governments in the past. When real-world practicalities are brought to the fore, great achievements seem much less magical and much more about realistic planning and maximizing one’s potential.

If you have a coach, it takes away most of the strain, struggle, and time wasted in development. I wasted a tremendous amount of time trying to solve problems in openings I was constantly losing in. This occurred regularly from 2000 up to 2330 or so. For many players, a (good) coach would just send a simple file, give a few explanations, and the player would never suffer the same problem again.
Ask positional questions and questions about structures from a notebook. If you encounter a pawn-structure that you know nothing about, make a note to study it more later. Star 10 positions you want to focus on specifically.

Get your coach to talk about ideas and concepts, how to find them, and how to know that you should focus on them. You can’t review a complicated game with a good coach and not learn something every time.

A coach who is an effective communicator will often ask if something is helpful or useful for his students, and take in feedback to perform more effectively in the future. You should not feel intimidated by a coach, so there should be close to zero negative feedback. That does not mean he cannot make criticisms, just that the coach should strive to empathize with his students and understand exactly why they make mistakes. If your coach is lambasting you, you can try to tell him to be more empathetic. It may not work, but at least it is an attempt to have a more emotionally intelligent exchange between coach and student.

It is important to ask a lot of questions in chess and engage your mind as much as possible. Be curious about a lot of things and use the knowledge of stronger players to help you pick up as much understanding as you can from them.

Ideally a good coach should be capable of leading the lessons effectively, working almost any time, explaining things clearly and naturally, analysing well, generating many ideas, being up to date with theory and with what is going on in correspondence chess and with the top engines. With some of these suggestions here, you can guide them to explain things to you that they may simply have never thought of teaching you about.

The level of seriousness, quality and effort was always higher when I insisted on having proper lessons with other players I wanted to work with around my rating. This was one reason why some international masters and grandmasters hired me to help them with opening analysis, tournament reports or analysing their games. There is a natural tendency to want to work together casually as friends, but if you have actually invested some money (a commitment device again), you will much more often want to schedule concrete times, prepare for the lesson, discuss exactly what you want to go over during the lesson,
and apply the most effort while you are working together.

Hearing how a stronger player thinks through a position helps a lot. If you reach a baffling critical position on which you spent 20 minutes, show it to a strong player off the cuff and ask for him to explain how he would think about the position and what he would think about it within a minute or so. This can help you direct your thoughts and focus at the board. Eventually, this should save you a lot of time.

When you do not know how to evaluate or judge a position or its main positional factors, it is a good idea to ask a coach or stronger player to try to get a deeper perspective. If you do this a lot, you may start to notice positions that confused you in the past may begin to make more sense.

During lessons with a coach, a good idea is to note the moves that your coach shows which you feel you would be unable to find at your current skill level. When some of my students started doing this, it also increased their focus and caused them to think more concretely about what they would find at the board. It often happens that only a few moves in an entire lesson are outside your grasp, but by thinking about those moves later, you can often think about the position in a way so that, on further reflection, the move makes more sense to you and is possible to find at the board.

Young players taught by experienced coaches have often realized that playing very conservatively is an effective strategy to gain rating in the long run. They also develop a concept of solidity at a very early stage in their development, which causes them to continually play sound and good moves. Thus they play more balanced positions and get experience in the types of positions that strong players play. Less time in their development is spent swindling or fighting from behind, and more time is spent improving their fundamentals and their understanding of generic middlegame positions.

Players below 2200 benefit a lot from simply hearing how a strong coach thinks about and thinks through positions. The ability to play patiently in chess is definitely a skill, and young players who play unusually patiently almost always have good coaches from my observations. Without even picking up so much concrete information from the coach, it is common for developing club players to play more calmly, more confidently, and to have
much more ordered and structured thinking without even really noticing it so much. This is one of the best side-effects of having good coaching if you have not taken any before. When international masters train with strong grandmasters, the most interesting thing to learn from is how the strong grandmaster thinks about positions and what he focuses on. Make sure to use your coach the same way.

Once a student of mine showed me ten of his games with Black in which he failed to generate counterplay. All of the games were about 20 moves or fewer, so we were able to cover all of them. It was a very interesting task simply looking over all of these games together in search of active ideas. In a lot of these games, the positions were closed or semi-closed and Black’s only way to obtain counterplay was through orchestrating specific pawn-breaks, so on nearly every move in such positions we looked for ideas to make those pawn-breaks work, sometimes even at the cost of a pawn. In my own chess development, I tended to face the same problem. Short games as Black in which I failed to generate counterplay would have been an excellent thing for me to go over with a coach in my most frustrated phase of development.

A good trainer points you in the right direction for the material to improve your tactical ability, explains the logic of tactics to you, and gives you a lot of good positional ideas that fill up your intuition. Mental flexibility is also dramatically improved from analysing with a coach.

A student of mine was playing 1 e4 e5 2 Nf3 Nc6 3 Bb5 g6 in the Ruy Lopez. Out of curiosity, I looked up the variation in the database and found 17 total games in which the player with Black was over 2700. Since it was so few games, I told him to go through these 17 games and write a report on them, trying to understand how Black won some of them and where his counterplay came from. After going through the report, I saw that he understood a lot about the variation after just spending a few hours going over the games by the best proponents of his side of the variation. I pointed out many side points that were not mentioned, but relevant to this line. A good coach should motivate his students to complete useful tasks like this and help them through the process.

Your aim should be to stabilize your openings so that you do not need to spend excessive amounts of time on them. This is a situation where a coach
helps a lot, especially if you are indecisive about your opening choices. My usual problem as a 2000 player was just lacking a nicely worked-out repertoire with good lines against the Trompowsky and other sidelines with Black. Had I learned good lines once with a coach, I would have saved myself countless losses in the opening and at least a hundred hours wasted analysing sidelines over and over again looking for solutions in my questionable home-made repertoire.

Lessons are aimed at filling a student’s head with tons of good ideas, improving his understanding of the game, and also improving his confidence and enthusiasm for the game. When you work in the right direction, you tend to see stable long-term results. One of my students was stuck at 1400 for a while and approached me for lessons. After four months, this student moved up to 1600 and her parents were impressed and asked me what I did differently from other coaches. I simply said we always worked properly, went over a lot of chess together, and the lessons made her feel good about the game and more eager to play and study. After all, one hour a week is not that much, but if a student can hear their coach’s voice in their head during games and feel more eager to study and play, the effects will wear off on them.

One of the major advantages my students have found in my approach to chess is that I emphasize understanding everything, and place far greater emphasis on logic and sound positional grasp of weaknesses than most chess literature. Thinking that chess is 99% tactics or 99% pattern recognition or 99% calculation makes no sense and just serves as an easy and incomplete way to think about the game. We gain nothing and lose a lot by thinking of chess this way. This is not an unimportant point: being objective in how you think about the game obviously helps your results, your at-the-board thinking, and your entire approach.

I have seen many hardworking players get stuck and fail to improve for periods of one or two years, then start working with a coach who introduces new ideas and training methods to them, while causing them to work harder and think differently, which pushes them off their temporary plateau.

Hiring a good coach or trainer can take nearly all the guesswork out of your training and preparation. Take the time to consult with multiple trainers
before you choose one. Once you have hired a trainer, take their advice very seriously and above nearly anyone else’s (exceptions can be made if a world elite player says the exact opposite of what your coach recommends). Stick to the plan you devised with your trainer as far as possible and do not let self-doubt get in the way. Despite my emphasis on having a plan regarding your tournaments and study material, as long as you are playing regularly, analysing those games well, working independently, and finding enjoyable and useful study material that helps you improve in all facets of the game, you do not need to overthink anything. A good trainer should be able to help you decide on, say, five or ten staple chess books that you should study over the course of your development.

Amateurs would do well to ask strong players which of the main engine errors they made are really important. Lots of times a position is a clear draw and a student gives lots of engine improvements thinking there is something when there isn’t. Also, the difficulty of playing a position is not taken into account by engines. A strong player may suggest a 0.00 move instantly that is met by an amazing computer defence that very few players below grandmaster will find, but a stubborn amateur will likely imagine that the .25 computer move is the only move to consider, even when it sets no problems. I always find many important ideas even when my students analyse their games with strong hardware and software.

A 2000 player may make 10 moves in a game that appear to be .2 away from the engine’s top move. In most cases he ends his analysis with the superficial impression he missed some more accurate computer moves. With a coach with good understanding, in many cases the student will learn only one of those ten moves was a meaningful mistake or a positional error. A competent coach helps them identify what their real errors were. Unless they really work hard to understand engine evaluations and why many .2 scores are meaningless, they will walk away from their own analysis with misapprehensions.

The engine will never help you learn how to think about and evaluate a position from strategic and positional standpoints. The engine will not explain pawn-structure transformations and the correct piece exchanges to seek. A strong coach can explain these points clearly and effortlessly.
It is excellent to use a coach for general opening questions like what strategy you might pursue in a given pawn-structure. Such questions may only take a coach 10 seconds to answer because they are so automatic for him.

Many players believe they can effectively go it alone, which is hard to understand if they have got nowhere doing that for years. While I did actually manage to reach a relatively high level working on my own, I wish I had not had to do it this way. Listen to the opinions and ideas of stronger players and try to incorporate them into your play. It took me an enormous amount of humility and hard work, as well as a willingness to look at the game from a meta-perspective, to reach international master in chess.

In my own personal development, I only got to work with grandmasters on special occasions, but I did have some training camps with international masters that were very helpful. A three-day training camp with IM Agopov was extremely useful when I was pursuing the IM title. I always felt that these days were incredibly productive.
“Should I be evaluating the position every 5 moves? Or every 10 moves? Or how often?” is a question I have frequently been asked in some form or another. The simple truth is that we are making judgements on every move and we must keep the evaluation of the position in mind in every position. At all times you should be aware of the objective evaluation of the position and how we stand. After all, you want to choose a move that you evaluate as superior to another move. If we evaluate the position as losing, we want to look for the move that gives us the best chance of drawing. If we believe we have a slight advantage, then we need to consider moves that we think will maintain this advantage. Chess is a logical game and the evaluation of every position always comes about as the understandable result of the previous play. Ideally our advantages from the opening will last and we will be able to build on them. First, it is important to discuss what having an advantage really means.
What is an Advantage?

An advantage in chess is either short-term (dynamic) or long-term (static) in nature, and it makes sense always to distinguish between the two when assessing that one side is better. As a matter of clarity and personal preference, I usually try to avoid claiming an advantage (presenting myself with a burden of proof) which is based on weak positional fundamentals. By fundamentals, I am referring to basic aspects of the position that are of a relatively permanent nature. An example of a weak fundamental can be a position in which one side has a slight initiative, but does not actually have a better pawn-structure or any major static advantages. Frequently in these cases, best play does not lead to an actual static edge, so we cannot call it a real advantage. A real advantage has permanency and a lasting nature to it. If it fades away instantly, it is not a real advantage.

Under a microscope, one can claim an advantage in chess in two main instances:

a) one has a better pawn-structure and the opponent has specific weaknesses that can potentially be exploited;

b) one has more material for insufficient compensation.

As a counterexample to the value of material, doubled f-pawns in a rook endgame are rarely exploitable. I will group examples of one side having an advantage due to an exposed king into the category of having a worse pawn-structure, because in those cases, the defending side suffers due to lack of pawn-cover, which is a key role played by your pawn-structure. If one side has a very weak king, it is almost always related to the pawns around his king position not defending the king sufficiently, which ties in to the ‘better pawn-structure’ statement. I believe we should strip away all of the pieces in many instances to look purely at pawn-structures and talk about pawn-structures in plain and simple language to give ourselves a clearer idea of the fundamental workings of the position.
“When you have the advantage, you must attack” is a popular saying. Unfortunately, this is vague and not particularly descriptive, so it is worth breaking it down. This is of great importance, because it is a frequently misunderstood topic for club players. With an objective advantage, in many instances, you have time to play slowly and exploit multiple weaknesses in your opponent’s camp because your advantage is not temporary and going away any time soon. In positions of pure paralysis for the opponent as well, more often than not, keeping your bind is the best way to play. By the same token, in many endgames, playing for zugzwang is the only way to win, whereas playing for an attack will throw away your advantage right away.

In all of the cases referenced in the previous paragraph, ‘attacking’ for a direct win would not be the strongest option. So the general rule about attacking with an advantage does not help players develop any kind of deep understanding of what an advantage is. What players should learn is that when our advantages are fading, positions become critical, and we need to play accurately and devote more time than usual to these kinds of positions. This is important to point out, because it is different from merely thinking that you need to attack when you have an advantage. Rather, you need to play concretely and fight to keep your advantage if it is slipping away. Similarly, if your opponent’s defences are falling apart, in many cases we should look for a direct win and play aggressively. If we have a large advantage and the opponent has a direct threat, then we also usually have to react to it. Thus, the main cases when we need to play concretely and very accurately with an advantage are when your advantage is slipping away, when your opponent’s defences are dramatically weakening, and when the opponent has a threat that may dramatically change the evaluation of the position.

Thinking you must attack with an advantage has almost no value as a general rule, unless your advantage is purely in dynamic factors like development. If you have an advantage in economy of force that is temporary, obviously you need to exploit that before the opponent has time to defend properly. That’s rather what the rule and overall takeaway should be. I never quite understood the ‘you must’ part of this phrase. If the advantage is static, why must we attack? The initiative is a dynamic advantage that may turn into a real, objective advantage later. Certainly having the initiative for free is better than having no initiative at all, but it is not the same as a real, tangible objective
advantage.

A position is equal if one side has no logical reason to be better. A lot of players don’t realize that chess has a tendency towards draws and equality unless there is a genuinely clear reason why one side is better. Partially in view of this, the game is extremely logical in the sense that every advantage has clear explanations for it.

In essence you just try to understand the reasons for why some positions are good for White or Black and constantly build upon these observations to improve your intuition for how you quickly evaluate positions. It is a never-ending process developing your positional understanding and evaluative skills. This is why it is very interesting to work with a stronger player or hear how strong players think about positions that are not immediately obvious to you. They almost always express some comments about the position that are evaluative in nature besides raw moves.

It is disheartening to hear players say something vague along the lines of, “I am better here because my bishop is a little better than my opponent’s”. In my experience, such a line of thinking only confuses them, causes them to focus on the wrong aspects of the position, and even causes them to misevaluate positions completely and overfocus on things that do not directly influence the evaluation of the position.

For the sake of simplicity, in this book, my views will not differ much from how engines evaluate the importance of an advantage in terms of how likely it will be in leading to a win. =, +=, =+, +/-, –/+ and –= and –+ are the most common terms used to evaluate a position. When a position is approximately equal (=), it means that one side has no prominent and clear objective reason to be better. Engines give positions with an advantage below +.30 as equal and between +.30 and +.70 as += (or =+ if that advantage is for Black). This means that one side has a slight advantage. At the upper end it is debatable and depends on the exact features of the position, because many +.60 positions are in fact positionally won for the stronger side. Positions between +.70 and +1.20 are given as +/- (or –/+ if that advantage is for Black), meaning that one side is nearly winning (or positionally winning, which very often converts to a win with objectively best play). An exception is often in pure endgames with a small number of pieces on the board, when you need a
bigger advantage to demonstrate a clear win. With a total of ten pieces or fewer on the board, if an engine (assuming 6-man tablebases are in use) does not find a huge advantage, there is very likely not going to be an objective win. Anything above 1.20 is referred to by the computer as winning (+− or − +). I will be using human judgement to make all of my evaluations in this book, yet this is a good rough outline for the value of an advantage and the likelihood that it will turn into a win. For engines, trends are clearly important here, and some scores are likely to change heavily in one direction or another with more moves included. These statements are assuming rough stability in the scores.

Players often have little idea about the meaning of computer evaluations, so here are some guidelines on how to interpret engine scores. A +.50 advantage (with no tablebase hits) is an objective win a little less than 50% of the time, while a +1.00 advantage wins objectively nearly 80% of the time. +2.00 is closer to 95%, and +3 should be winning in well over 99% of objective cases excluding a major engine error. Hence, +.50 usually refers to a meaningful but non-decisive advantage for White (+=), while a position that is +/- is at least 70% likely to be objectively winning. In practical games between titled players, if a player obtains a +/- position (often these positions are strategically winning if the reason for the advantage is structural) and can maintain it, the defending side very rarely manages to defend perfectly and hold the position, if it is at all possible.

Here is a simple and clear example demonstrating a major space advantage that leaves the opponent significantly worse: 1 d4 c5 2 d5 e5 3 e4 d6 4 c4 Nf6 5 Nc3 Be7 6 Bd3 Nbd7 7 Nge2 Nf8 8 Ng3 Ng6 9 Nf5 0-0 10 g3 (D).
The space advantage matters a lot here because it is not going away at any point, White can build on it with future pawn-breaks, and Black has a terribly cramped position. If a space advantage can disappear quickly, it can hardly be called a real space advantage. If you cannot make anything of the space or pursue a plan making use of it, your space also has very limited value. In this case though, White will keep his pluses and build on them, effectively refuting Black’s set-up.

The following game features a crystal-clear strategic advantage for White in the early middlegame that is easy to evaluate and serves as a good mental anchor to be aware of when thinking about pawn-structures and space advantages. Petrosian pressed his structural advantage home effortlessly against one of the greatest positional players of all time.

**Petrosian – Botvinnik**

*World Ch (7), Moscow 1963*

When amateur players say “study positional chess” to other players at chess tournaments, they often do not clearly understand what they are saying. They
are rarely referring to active study such as doing positional exercises, or comparing and contrasting various pawn-breaks in complex pawn-structures. What they usually mean is “Study one-sided games where one player had no counterplay and lost without a fight due to being statically worse right from the opening, even though most modern 2400 players do not easily grant such advantages to the stronger side.” Some of those games are certainly useful for illustrating the basic point about what constitutes an advantage. In the current game, Botvinnik essentially loses without a fight due to his inferior structure that came about from bad opening play. Most modern titled players can handle a simple, superior position with a clear, basic plan from the white side, but amateur players should at least be aware of some of these classic games.

1 c4 g6 2 Nf3 Bg7 3 Nc3

3 d4 c5 4 d5 f5 is an interesting fighting line.

3...e5 (D)

3...c5 4 d4 cxd4 5 Nxd4 Nc6 is a common modern move-order choice that avoids the Maroczy Bind because White lacks the time to play e4 and Be3 due to the pressure on d4.

White to play
4 g3

White does not have any real reason to delay playing d4. 4 d4 exd4 5 Nxd4 Nc6 6 Nxc6 bxc6 7 g3 gives White the best chances of obtaining a slight structural edge from the opening.

4...Ne7

4...Nc6 is more flexible if Black intends to put the knight here anyway.

5 Bg2

5 h4!? would have been the most awkward response for Black to counter.

5...0-0

5...Nbc6 6 d3 d6 7 0-0 a5 is also a typical way to play.

6 d4

6 h4!? h5 7 0-0 Nbc6 8 d3 d6 is a modern handling of the position.

6...exd4 7 Nxd4 Nbc6 8 Nxc6 (D)

![Chess Diagram](image)

*Black to play*
8...Nxc6?

Black did not appreciate that he would be strategically worse in this pawn-structure, which is similar to a Maroczy Bind, in that the c4-pawn restricts ...d5 and Black has no obvious breaks of any kind.

8...dxc6! blunts White’s g2-bishop and prevents him from using d5 as an outpost for the knight, while also accelerating Black’s development. All this more than compensates for the structural damage caused by the doubled pawns. 9 Qxd8 Rxd8 10 Bd2 Nf5 is completely fine for Black.

9 0-0 d6 10 Bd2

White intends to play Rc1 on the next move and ask Black what he is doing in the face of White’s simple and natural improvement.

10...Bg4 11 h3 Be6 12 b3

This is the simplest way to cover c4 and also b2, in case White plays Rc1 and Nd5.

12...Qd7 13 Kh2 (D)

Black to play
White is able to play extremely simply here to increase his advantage because structurally he is better, has more space, and has a useful plan of action with pawn-breaks available on the queenside. Black has no apparent pawn-breaks to go for and has to sit back and wait. Remember that in closed and semi-closed positions, pawn-breaks are often of great importance. Here Black cannot get any pawn-breaks in and has no real counterplay. It is important to understand that there are different categories of space advantages. The most important space advantages are ones in which you have a definite structural advantage and the opponent has no way of changing that any time soon. That is indeed a static advantage. Things are less clear when the side with the worse structure has counterplay or things to attack, or when one side has less space, but his structure is not necessarily inferior.

13...Rae8 14 Rc1

White is almost done with his development now, and will soon move the d2-bishop so that his queen can occupy that square.

14...f5

This looks natural, at least feigning some threats on the kingside. 14...Bf5 15 Bf4 b6 16 Nd5 Ne7 17 Qd2 +=.

15 Nd5 (D)

15 Be3 b6 16 Qd2 is another good way to bring White’s pieces naturally into the game.
Black should have tried 15...Ne5!, trying to gambit a pawn for clear activity on the kingside. This was his only chance in the game to go for something. 16 Nf4 Bf7 and now:

a) 17 Bxb7!? g5! 18 Ng2 Bh5 19 f3 c6 20 Ba6 f4! 21 gxf4 gxf4 22 Rg1! (22 Nxf4 Nxf3+ 23 exf3 Be5 =; 22 Bxf4 Nxf3+ 23 Rxf3 Bxf3 24 exf3 Rxf4 25 Nxf4 Be5 =) 22...Kh8 and a sharp battle rages on.

b) 17 h4! (White intends the simple Bc3 to improve his bishop) 17...Ng4+ 18 Kg1 +=.

16 Be3 Bg8

16...b6 17 Qd2 Nd8 18 Rh1 +=.

17 Qd2 Nd8?!

Black tries to hold his position together by solid means, but essentially loses the game without a fight. 17...b6 18 Rfd1 Ne5 19 Nc3 Qd8 20 Nb5 a6 21 Nd4 +=.
18 Rfd1 Ne6 19 Nf4!
White begins targeting the queenside by concrete means.

19...Nxf4 20 Bxf4
When you have less space, it is generally a good idea to trade pieces. In this case, exchanging pieces does not help Black because in the resulting position White has direct and easy play and Black is still very cramped.

20...Qc8 21 h4! Re7 (D)

22 Bf3!
I hesitate to put exclamation marks on some of White’s moves here because Black is so helpless and White can so easily improve his position. Black’s helplessness comes from a lack of targets and a lack of pawn-breaks, while White has straightforward play on the queenside.

22...Bf7 23 Qa5! Be8?
Black misses White’s threat. 23...Qb8 24 c5 b6 25 cxb6 axb6 26 Qd2 +/−.
24 c5! d5 25 Bd6! Qd7 26 Bxe7 Qxe7 27 Rxd5

Being a pawn and the exchange up, the conversion should be quite simple.

27...f4 28 Qd2

Even more accurate is 28 Rcd1 fxg3+ 29 fxg3 +–.

28...Bc6 29 Rd3 Bb5 (D)

![Chess Diagram]

White to play

30 Rd4! fxg3+ 31 fxg3 Bxd4 32 Qxd4+ Kg7 33 Qxg7+

33 Rd1 Qxd4 34 Rxd4 Kg7 35 g4 would be similar to the game, but slightly more accurate.

33...Kxg7 34 Rc2 Re8 35 Kg2

White calmly brings his king over to guard e2.

35...Kf6 36 Kf2 Bc6?

This makes the win too easy. 36...Ba6 37 b4 Re7 38 a4 c6 39 Rd2 Bc4 40 Rd6+ Ke5 41 a5 a6 42 e4 +/– is good for White, but there is no clear way
forward.

37 Bxc6 bxc6 38 Rc4 Ke5?!  
Now the win is simple due to White’s active pieces and better structure.  
38...Ra8 39 Ra4 a6 40 Kf3 Ke6 41 Re4+ Kd7 42 g4 +–.

39 Ra4 Ra8 40 Ra6 Kd5 41 b4 Kc4 42 a3 Kb5 43 Ra5+ Kc4 44 Ke3 a6 45 Kf4 Kd5 46 Kg5 Re8 47 Rxa6 Rxe2 48 Ra7 Re5+ 49 Kf4 Re7 50 Rb7

Now White’s a-pawn is too strong.

50...Ke6  
50...h6 51 Kf3 g5 52 hxg5 hxg5 53 Kg4 +–.

51 a4 Kd7 52 Rb8 1-0

The next example features another very simple position to evaluate from the opening, in which White has much more central control and a very easy position to play. Black was trying to create an attack, but had no positional basis to do so and merely weakened his own position. The game is also interesting because White did absolutely nothing special to obtain a large advantage against a relatively strong and experienced grandmaster.

B. Schneider – Van den Doel

Bundesliga 2013/14

1 c4 e5 2 g3 h5?!  
This move can be regarded as somewhat dubious because it gives White a small advantage in a couple of different ways. Main lines like 2...Nf6 are objectively much more likely to equalize.

3 h4!?
This is actually the main line in human games. 3 Nf3 Nc6 4 Nc3 g6 5 d4 exd4 6 Nxd4 Bg7 7 Nf3 +=.

3...Nf6

3...d5 4 cxd5 Qxd5 5 Nf3 Nc6 6 Nc3 Qd6 7 Bg2 Bg4 8 d3 grants White a small but safe advantage.

4 Bg2 Nc6 (D)

4...d5 5 cxd5 Nxd5 6 Nc3 Nb6 7 d3 Be7 8 Nf3 gives White a clearly improved version over a standard English Opening.

![Chessboard Diagram]

*White to play*

5 Nf3

White intends Nc3 followed by d4, but 5 Nc3 Bc5 6 Nf3 is a more accurate move-order.

5...Bc5

After 5...d5 6 cxd5 Nxd5 7 Nc3 Nb6 8 d3! += White benefits from not castling (avoiding ideas like 8 0-0 Bg4 9 Nh2?! g5), and can expand on the queenside by a3 and b4 without the slightest risk.
6 Nc3 a6
6...0-0 7 0-0 Bb6 8 b3 d6 9 d3 +=.

7 0-0 d6 8 d3
White aims to shut out the c5-bishop by playing e3 and d4.

8...Ng4
Although this idea missed the mark in the game, it is hard to suggest anything much better. 8...Bg4 9 Bg5 is very unpleasant for Black too.

9 e3
Black has run out of threats and dynamic pawn-play and just has less space and a worse structure, while White intends to open things up with d4.

9...Ba7 10 d4 0-0 (D)

11 b3
Now that the bishop has minimal scope on a7, White aims to develop his
remaining queenside pieces.

11...Rb8 12 Bb2

White continues with his solid and sound play, while Black is unable to generate any counterplay or anything exciting, so he remains passive and without much to do. Simple, solid chess often pays off when you have a better pawn-structure.

12...exd4

12...Bf5 13 Qd2 Re8 14 d5 Ne7 15 a4 +–.

13 exd4 Ne7

13...Nf6 14 Ne2 Bg4 15 Nf4 Qd7 16 Qd3 +/–.

14 Re1

White would like to play Ng5, when the knight will be tough to drive away. 14 Ne2 Ng6 15 Qd3 +/–.

14...b5

14...Bf5 15 Ng5 Qd7 16 Qd2 b5 17 cxb5 axb5 18 Rac1 +/–.

15 cxb5 axb5 (D)
16 Ng5

White has plans of Qd2 and Rac1 as well as Ne2 followed by Nf4. But 16 Qe2! Nf5 17 Nxb5 Bb6 18 Qd2 c6 19 Nc3 Ba5 20 Rac1 +/– looks even better.

16...Nf5?!

Moving the knight to f5 is inaccurate because White gets to put his knight on d5, which clearly dominates the position; not to mention, the pressure on d4 is barely meaningful. 16...c6! 17 Ne2 d5 18 Nf4 g6 19 Nd3 Bb6 20 Qd2 +–.

17 Nd5

White defends d4 and has Rc1 or Be4 in mind.

17...c5?

Black unsuccessfully tries to break out. 17...Bb7 18 Rc1 +/–.

18 Be4

18 Bf3! cxd4 19 Bxg4 hxg4 20 Qxg4 +–.
18...Re8?! (D)

18...Rb7 19 Nf4 cxd4 20 Nxe5 Nf5 21 Nf4 +–.

White to play

19 Qf3 +–

and White was completely winning in under 20 moves against a strong
grandmaster. He eventually won a long game on move 105, while not fully
losing control of his large advantage at any stage.

19 Qc2 Nfh6 20 dxc5 Bxc5 21 Re2 is also winning for White.

The following isolated-pawn position is favourable for White, but he needs to
choose the right set-up. White is better because the d4-pawn is difficult to
attack, the d5-square is not so easy for Black to control (the c6-knight is of
little help because it has no access to b4), and Black also has no obvious
square to put his queen on. White made a couple of inaccuracies here, but the
game is still attractive and an impressive win against a very strong player.
White’s intention with this move was to play Qd3 under improved conditions. Attacks involving the h-pawn are very common in standard IQP positions. Throwing the h-pawn forward is normally risk-free and weakens very few squares for White, so it essentially allows White to provoke problems without hurting his own position. Such relatively risk-free attacking options are very pleasant to play over the board because only one side ends up feeling pressure.

The text-move is probably the best practical move here in view of the maze Black has to wade through. However, 16 Qd3! is an objectively stronger move-order because it provokes ...g6 and allows White to reach a similar position to that which occurred in the game but in an improved version: 16...g6 17 h4 Nd5 18 Ne4 f5 19 Bxe7 Ncxe7 20 Neg5 +=.

16...g6?!
This gives White a free hand in his attack. 16...h6! is an example of a move that is very difficult to make in a practical game due to the difficulty in calculating it accurately. Now:

a) 17 Bxf6 Bxf6 18 d5 Ne7! (after 18...exd5 19 Rxe8+ Qxe8 20 Nxd5, taking on b2 loses: 20...Bxb2? 21 Qc2 +–) 19 dxe6 Qxd1 20 Rcxd1 Bxf3 21 gxf3 Bxc3 22 bxc3 Rxc3 =.

b) 17 Qd3 (D) was probably the move Grandmaster Safarli had in mind, and it looks quite scary if you cannot quite work out all the lines at the board. It is understandable that Rodshtein avoided this line.

After 17...hxg5 18 hxg5 g6 19 Rxe6!, the key resource 19...Nxd4!! is extremely hard to see. Black gives back a piece but is able to secure material equality. After 20 Nxd4 there are even two ways to hold the balance:

b1) 20...Be4 21 Qe3! (21 Rxe4? Nxe4 22 Qxe4? Bxg5 +–) 21...fxe6 22 gxf6 Bxf6 23 Qxe4 Qxd4 24 Qxg6+ Kf8 25 Rd1 Qf4 =.

b2) 20...Bc5 leaves Black temporarily a pawn down, but regains the pawn that is on g5 in both of the natural continuations: 21 gxf6 Qxd4! 22 Qxd4 Bxd4 23 Re7 Rxe7 24 fxe7 Re8 holds for Black, while after 21 Rd1 Bxd4 22
Rxₑ₈+ Nₓₑ₈ 2₃ Qₓᵈ₄ Black has 2₃...Qₓᵍ₅! =, a move that is very hard to see from afar.

1₇ Ba₂

White’s threat of d₅ needs to be dealt with immediately.

1₇...Nd₅?! (D)

1₇...Nb₈ 1₈ Ne₅! Nbd₇ 1₉ Nb₅ Rxₐ₁ 2₀ Qₓc₁ Nxe₅ 2₁ dxe₅ Ne₄ 2₂ Rd₁ Qb₈ 2₃ Bxe₇ Rxₑ₇ 2₄ Qf₄ +=.

White to play

1₈ Bxd₅

White was certain he could now press his opponent for a long time with a slight advantage, so it is hard to criticize this as an incorrect piece exchange. However, 1₈ Ne₄! would have allowed White to play around Black’s redundant (or ‘superfluous’) knights that both want to use the d₅-square. White threatens to play Qd₂ followed by h₅. After 1₈...h₅ (1₈...a₅ 1₉ Qd₂ Na₇ 2₀ h₅ also gives White a huge attack) 1₉ Qd₂ Kg₇ 2₀ Bh₆+ Kg₈ 2₁ b₄ +/- White threatens the simple b₅ followed by Ne₅, when Black’s kingside may crumble quickly.
18...exd5 19 Bxe7 Rxe7?!

After 19...Nxe7 20 h5 White plans Qd2-f4, and it is not easy to stop this simple plan; Black cannot do much in view of his inactive bishop on b7. 20...Nf5 21 Rxe8+ Qxe8 22 Qd2 f6 23 Qf4 +=.

20 Qd2 Kg7

20...f6! 21 Qf4 Rcc7 22 Nh2 h5 23 Nf1 +=.

21 Qf4

21 h5! f6 (21...Rcc7 22 h6+ Kg8 23 Qg5 f5 24 Nb5 +/-) 22 Qf4 +/-.

21...Qc7?

21...h5! 22 Nb5 Rd7 23 Ne5 Re7 24 Rcd1 +=.

22 Nxd5?!

This is a case in which it would be much better to continue attacking with equal material – i.e. 22 Ne5! Qd8 23 h5 Nxe5 24 dxe5 +/- – than to win a pawn that is hard to make use of.

22...Rxe1+

22...Qxf4 23 Nxf4 h6 24 b4 Rec7 25 Rcd1 +=.

23 Rxe1 Qxf4 24 Nxf4 Na5? (D)

24...Kf8! 25 Kh2 h6 26 Rc1 +=.
White to play

25 d5!

Now Black’s a5-knight is shut out of play.

25...h6?

This allows White’s rook to dominate, and Black is now lost. 25...Kf8 26 h5 Rc4 27 g3 gxh5 28 Ne5 +/–.

26 b4 Nc4 27 Re7 Rb8 28 Rc7 b5 29 Nd4 a6

29...g5 30 Nde6+ +–.

30 a4

30 Nc6 Bxc6 31 dxc6 +–.

30...g5 31 hxg5 hxg5 32 Nfe6+ Kg6 33 Nc5 Bxd5 34 Nc6 Bxc6 35 Rxc6+ Kf5 36 Nxa6 Rb7

36...Rd8! 37 Rc5+ Ne5 38 axb5 Rd1+ 39 Kh2 Rd6 40 f3 +–.

37 Rc5+ Kf4 38 Nc7 Nd6?!
38...Nb2 39 Nd5+ Ke5 40 Nb6+ Kd4 41 Rxb5 and if 41...Nxa4, then 42 Rd5+ Ke4 43 f3+ +–.

39 Nxb5 1-0

Evaluating positions well also helps assess whether tactics will exist. Some piece trades are actually favourable with the IQP; for instance, exchanging one or two pairs of rooks can be a good thing. But it’s rare for trading minor pieces or queens ever to be good for the side with the IQP. Exchanging queens tends to lead to an ending that favours the side with fewer weaknesses. With an IQP, White’s usual plans are based around either piece-activity, a direct attack, or playing d5. Fundamentally, Black has two strategies: control the square in front of the pawn, or attack the IQP. That is, the focus for Black (if White has an IQP on d4) is either on d4 or d5, depending on where Black’s pieces are set up. A firm blockade on d5 is usually the hardest for White to cope with and often turns into a direct attack on the pawn later.

If White obtains an IQP without making concessions in the opening, he is almost never worse, as seen in the QGA, c3 Sicilian, Nimzo, Panov, etc. If a player makes developmental concessions (such as White playing weird Qc2 or e3 moves in the QGD), then taking on an IQP is an easy equalizer or way to an edge for both colours.

The next example is important to look at from the perspective of evaluating space. Because Black has pawn-breaks of his own and can challenge White’s spatial plus, Black cannot be called statically worse because his lack of space is only temporary. Additionally, White has no plan or focal point to make use of his extra space. These are the two main factors to consider in deciding whether space matters:

1. Is it stable? and

2. Can something be done with it?
From the perspective of solidity, this position appeals to me a lot. Black has potential counterplay against the base of White’s pawn-chain on d4, as well as pressure against the e5-pawn. His last undeveloped minor piece can be brought into play via e7.

During a lecture I attended by an international master, he nonchalantly described almost this exact position as better for White because he claimed White has an attack. Chess is not so simple though. You cannot just obtain a better position by throwing your pawns forward in the opening with nothing in particular to target and no specific strategy. This is not an uncommon evaluative mistake though. I imagine that many players would optimistically interpret White’s space here, but they fail to realize that the burden of proof is on White to show his advantage, because Black is completely solid and nothing is apparently challenged or in any danger whatsoever.

Additionally, it helps to reason and look at it from another angle: has Black done anything wrong to reach this position? Coming from an Advance Caro-Kann line with 4 Nc3, Black put his knight on d7, its most natural square, hid
his light-squared bishop on the comfortable f7-square, and found quite acceptable roles for his often awkward dark-squared bishop and queen. Looking at the position and reasoning backwards considering the variation and position-type in general, Black’s play from a very solid standard main-line Caro-Kann has been quite sound. From my experience playing the white side of similar positions against grandmasters in tournament games, even when Black plays slightly passively or dubiously, the burden is still on White to demonstrate something due to the lack of obvious weaknesses in Black’s position.

11...c5

Or 11...Ne7 12 Be3 0-0-0 13 0-0-0 c5 14 Bf2 cxd4 15 Bxd4 Qa5 =.

12 Be3 (D)

![Chess Diagram]

*Black to play*

White threatens to take on c5 followed by checking on b5 if Black takes back with the knight.

12...fxe5 13 fxe5?!

Taking on e5 with the f-pawn leads to a static centre with good play for Black
on both flanks. Instead $13\ \text{dxe5!}$ gives White strong mobile kingside pawns and Black needs to play a radical flank stab of $...\text{g5}$ just to get counterchances: $13...\text{g5!}$ ($13...\text{d4?} \ 14\ 0-0-0\ \text{Rd8} \ 15\ \text{Nxd4!}\ \text{cxd4} \ 16\ \text{Bxd4}\ \text{Qc6}\ 17\ \text{Ne4}\ +/–$) $14\ \text{hxg6}\ \text{Bxg6} \ 15\ f5!\ \text{Nxe5}\ 16\ \text{Qb5+}$ takes play into a very complicated but equal ending in which Black may have wished he had one or two additional developing moves. $16...\text{Qxb5}\ 17\ \text{axb5}\ \text{Bf7}\ 18\ \text{fxe6}\ \text{Bxe6}\ 19\ 0-0-0\ \text{Nxe4}\ 20\ \text{Bg1}\ \text{Bxc3}\ 21\ \text{Nxc3}\ \text{b6} =.$

$13...\text{Ne7}\ 14\ 0-0-0\ \text{Nc6}\ 15\ \text{dxc5?}$

Now White’s centre collapses completely. $15\ \text{g5}\ 0-0-0\ 16\ \text{Bf4}\ \text{a6} =+.\ 15...\text{Nxc5}\ 16\ \text{Bxc5}\ \text{Bxc5}\ 17\ \text{Qg3}\ \text{Bf2}\ 18\ \text{Qh2}\ 0-0\ (D)$

![Chess Diagram](image)

$White$ $to$ $play$

Black has the bishop-pair and is strategically winning.

$19\ \text{Kb1}\ \text{Be8}\ 20\ \text{Bh3}\ \text{Na5}\ 21\ \text{g5}\ \text{Nc4}\ 22\ \text{b3}\ \text{Be3}\ 23\ \text{Qg3}\ \text{Nd2+}\ 24\ \text{Ka2}\ \text{d4}$

White resigned on move 38.

The following example features an interesting example of strongholds.
Strongholds are most easily recognizable as pawns we intentionally plant on important squares, with no initial intention of moving. In main-line 1 e4 e5 and 1 d4 d5 openings, we plant our pawns on e5 and d5 respectively, controlling crucial central squares. When Black trades off his d5-pawn by taking on c4 in any 1 d4 d5 opening, he is giving White a temporary structural advantage in the form of space and an extra central pawn. In openings like the QGA, Black intends to move his c-pawn up to c5 soon after exchanging on c4, neutralizing White’s slight space advantage. In the game we are about to look at, Black gave his opponent a superior pawn-structure and then did not follow up by striking back at the centre, which he could have done by pushing his e-pawn on move 14. His failure to do so simply left him saddled with an inferior pawn-structure, making the position easy for us to evaluate as better for White. When players give away key strengths in their position like this for nothing, things usually shift in favour of the opponent.

Malakhov – Nybäck

*European Clubs Cup, Rogaška Slatina 2011*

1 Nf3 d5 2 c4 c6 3 e3 Nf6 4 d4 Bf5 5 Nc3 e6 6 Nh4 Be4 7 f3 Bg6 8 Qb3 Qc7 9 Bd2 Be7 10 g3

After 10 Nxg6 hxg6 11 0-0-0 dxc4 12 Bxc4 b5 13 Be2 a6 Black intends to carry out ...c5 very soon and concretely equalize.

10...0-0 11 Nxe6 hxg6 12 Rc1 (D)
Black exchanges on c4, letting go of his d5 stronghold. In the Slav as a whole, Black puts his pawn firmly on d5 very early on, with no intention of moving it unless he can gain something specific or challenge the centre immediately afterwards. Ideally, giving up your central stronghold is only done with a specific idea in mind. Here Black should be executing a central pawn-break right after the exchange or else he will simply have the more passive pawn-structure. In the game, however, Black failed to get any counterplay after trading off his d5-pawn and was simply worse.

13 Bxc4 Nbd7 14 0-0

14 f4 c5 =.

After the text-move, we have a typical position from what looks like very natural play by both sides. White has the bishop-pair for seemingly minimal compensation. Is there any way Black can challenge that?

14...Rac8?!

Black plays slowly and fails to get his crucial pawn-break in. Now was the
time for Black to play 14...e5! 15 dxe5 (15 d5 Nc5 16 Qc2 b5 17 Be2 cxd5 18 Nxb5 Qb6 19 b4 Ne6 20 Qc6 Rfb8 =) 15...Nxe5 16 Be2 Qb6! (16...Rad8 17 Qc2 +=) 17 Qc2 Bc5! 18 Nd5 cxd5 19 Qxc5 Qxb2 20 Qc3 Qxc3 21 Bxc3 Rfe8 =. Then Black’s extra pawn definitely compensates for the bishop-pair.

Other moves are less effective: 14...Nb6 15 Bd3 +=, 14...g5? 15 Ne4 +/– or 14...b5?! 15 Bxe6 fxe6 16 Qxe6+ Rf7 17 Ne4 with a huge plus for White.

15 Ne4

15 a4 Qb6 16 Kg2 does not give Black sufficient compensation for the bishop-pair either.

15...Nxe4

Black decides to trade on e4 and activate his e7-bishop. Instead 15...e5? loses to 16 Ng5 +–; 15...Rfe8 16 Kg2 +=.

16 fxe4 Bg5 17 Kg2 (D)

If you look at Black’s first 17 moves, on the surface, none of them look
particularly bad, but in totality, his play failed strategically, and left White with the bishop-pair and a better pawn-structure without obtaining any counterplay as compensation.

17...c5 18 Be2 Rfd8 19 Rfd1 Qb8 20 Ba5 b6 21 Be1 +=; 17...Bh6 18 Be1 a5 19 a4 is better for White as well.

18 Ba5

White is clearly better and eventually won. 18 Be2 Be7 19 Rc2 +/- is also strong.

When the opponent has no counterplay and you have a big advantage, you can add pressure onto his position in a risk-free way in most cases. If there is no obvious winning combination for you, time can be saved on the clock by increasing the pressure with a simple move that has only positives and piles up on the opponent’s weaknesses.

When you have no active plan and no pawn-breaks, it is easy for the trend of the position to shift in the opponent’s favour, even if your pieces are all developed on good squares. This is a major reason why pawn-structure becomes so important: if structurally you have no way to make progress, you will not have an advantage, even with everything else in your favour. In fact, you may even be worse.

It often happens that a computer evaluation may simply shock you because you dramatically overestimated something. This happens to me most frequently when a strange pawn-structure with weak squares ends up being equal, or when a side is fundamentally very solid and not possible to break down with accurate play. When an evaluation really surprises me like this, I like to set up the position on a real board from the side I thought was doing poorly and calmly look at the position and think about why it is not as bad as I thought. If you just look at the board for a minute or two and think about why you misassessed it, you are likely to discover a lot of positional subtleties and improve your understanding of pawn-structures and your positional understanding. For example, many openings involve weakening
the d5-square from Black’s point of view, but lead to acceptable positions. If you set up a position on move 15 from the black side in which White has a solid grip on the d5-square but no advantage, you will realize that the opponent’s threats were actually not that strong, and your perception of the weakness overlooked certain strengths you have in your own position. Good chess strategy is often just like this: balancing strengths and weaknesses intelligently.
Advantages for Free

Suppose you have an advantage for free, like a Maroczy bind pawn-structure with a large spatial plus for no compensation and natural play to increase it. With correct play, Black can never break out or equalize, so he is worse for the entire foreseeable future if no mistakes are made.

It is very understandable why 1...c5, 1...e5, 1...e6 and 1...c6 are the four most common moves in master chess against 1 e4: they all prevent White from directly building an ideal pawn-centre with pawns on d4 and e4 and objectively equalize for Black with accurate play. One of the main drawbacks to the Pirc and Modern is that White obtains his ideal pawn-centre. An ideal pawn-centre with pawns on d4 and e4 is a tangible advantage, which is typically worth a little less than a quarter of a pawn in general.

There are many borderline cases though in which one side has an ideal pawn-centre, but the other side has a central pawn which is still doing a good job of keeping the central squares under control and preventing the ideal centre from doing anything in particular besides controlling squares and granting the superior side a very slight space advantage. This happens very often in the Ruy Lopez: White builds up an ideal pawn-centre with pawns on d4 and e4 and Black has pawns on e5 and d6 and tries to prevent White from breaking down e5 effectively or gaining any additional space across the ‘Maginot Line’ of the fourth rank. Other factors are then very important in determining the correct evaluation of the position. An important point is that in many Ruy Lopez positions, White must constantly watch his ideal pawn-centre to avoid losing d4 or e4 if he carelessly moves an important piece away from their defence.

In openings with less direct pressure on the centre, White gets a freer hand to expand. In a basic strategic sense, an ideal pawn-centre for White is best challenged by a pawn on d5 or e5 which creates immediate tension. The problem with the Scandinavian in general terms is that a tempo is worth a quarter of a pawn as well usually, and that tempo allows White to consolidate his slight lead in development and central advantage. For any player who
wants to get up to 2000 or higher, it is a good idea to have at least one solid
defence to 1 e4 that does not grant White an easy objective advantage such as
an unchallenged broad centre. Having one risky defence and one fully sound
defence to every main opening move is a very common strategy used by
professional players and gives a lot of possible range and versatility to your
opening play.

It used to be believed that having a queenside majority was an advantage in
itself, but this was based on a misconception. A queenside majority is a virtue
if you can use it to attack the opponent’s king, create a passed pawn or create
a pawn-weakness like an isolated pawn. In these cases, it is not the queenside
majority that is the advantage, but the weak opposing king, the strength of
your passed pawn, or the weakness of their pawn-structure. Sometimes a
kingside majority can be a very strong virtue, leading to a powerful pawn-
storm in the centre or on the kingside, but in practice, most of the time it is
very hard to push a kingside pawn-majority without creating weaknesses if
your king is on the kingside.

On the flip side, the minority attack is a common plan in many openings,
such as the QGD Exchange Variation in which White plays b4-b5 with the
intention of creating a weak pawn in Black’s camp. In the majority of
grandmaster games in this line, White obtains a small advantage with this
plan. Frequently a minority attack has the goal of splitting up the opponent’s
three pawns, leaving him with two isolated pawns. If a queenside majority
gets spliced up like that, it ends up being a liability more than a strength.

To get the ball rolling with respect to isolated queen’s pawn positions, it
makes sense to look at the most basic example of a very large advantage
obtained by simple play. We can skip through the opening moves to get to the
key position.

Antoshin – Novopashin

Vilnius 1960

1 d4 d5 2 c4 dxc4 3 Nf3 Nf6 4 e3 c5 5 Bxc4 e6 6 Qe2 cxd4?!

6...a6 is now known to be the best move.
7 exd4 Nc6 8 0-0 Be7 9 Rd1 0-0 10 Nc3 Nb4

This is a standard move, intending to blockade the d-pawn with the queen’s knight rather than the king’s knight.

11 Ne5 Bd7 12 a3 Nbd5 (D)

13 Rd3!

This position has been played five times, including a blitz game in 2006 between two relatively strong grandmasters. White’s play has been extremely simple: he developed his bishop to c4, his queen to e2, his rook to d1, and put his knights on their natural squares, eventually hopping the f3-knight into e5. All these moves should be considered by a 1600 player. Black’s moves looked typical too, at first glance. He has developed all his minor pieces, blockaded the d4-pawn by controlling the square in front of the pawn, and is about to complete the development of his major pieces. Nevertheless, White is extremely fast with Rd3-g3/h3 and Black is already positionally lost.

The main reason he is positionally lost is because he has absolutely no counterplay, while White is attacking Black’s king, which doesn’t have any defensive pieces nearby. By using the space behind the IQP, White was able
to swing his rook into an aggressive attacking position while Black had no active ideas. This is the absolutely ideal isolated queen’s pawn position for White occurring after what appears to be natural play by both sides after only twelve moves played.

13...Bc6 14 Rh3 Nxc3

Black exchanged on c3 to try to use his c6-bishop to defend his kingside via e4.

15 bxc3 Be4 16 g4!

White intends g5, which will cause serious harmony problems for Black’s defence since the e4-bishop is dependent on the f6-knight.

16...Rc8

After 16...Bg6 17 g5 +– White’s attack is winning because he is able to take on g6 and follow up with Qg4-h4, attacking down the h-file.

17 g5 Bf5 18 gxf6 Bxh3 19 fxe7 Qxe7 20 Qf3

White went on to win on move 39.

Let us examine another version of an isolated queen’s pawn.

1 d4 d5 2 c4 c6 3 Nf3 Nf6 4 e3 e6 5 Nbd2 c5

5...b6 is safer. The text-move has a good theoretical reputation, but I consider it risky and maybe even dubious, as Black can easily find himself at a strategic disadvantage if he is not careful, as shown by the following sample line.

6 cxd5 exd5 7 b3 cxd4 8 Nxd4

White takes with the knight to secure a better structure and not have an isolated d-pawn himself. The knight is also very well-placed on d4 and
cannot be chased away.

8...Bb4

Interestingly, Black simply obtains a worse pawn-structure for no benefit. He gets the main drawbacks of the isolated queen’s pawn, but no active play.

9 Bb5+

This move was played by Grandmaster Dizdarević.

9...Bd7

Now the simplest way to keep an advantage and a superior pawn-structure is:

10 0-0 Nc6 11 Bb2 0-0 12 N2f3 (D)

White plans Rc1 on the next move and has a very simple advantage in about as clear-cut a manner as one could have when playing against an isolated queen’s pawn when no obvious error has been made within the first 12 moves. The bishop on d7 looks rather clumsy. In almost no isolated queen’s pawn positions is Bd2 a good move for White when he has the IQP with reversed colours. The bishop then simply gets in the way and prevents the
queen from getting effective play. Additionally, Black’s light-squared bishop would be much better placed on f5 or g4, but tactically needs to defend c6, so is stuck on this suboptimal square. On top of all this, Black’s rooks will struggle to find any activity on the c- and e-files and the bishop on b4 will need to waste a tempo and move again very soon because it is doing nothing useful there. Here Black is terribly-placed to make use of the active aspects of a position an IQP position usually entails, while White has ideally blockaded the pawn and has well-placed bishops.

It is good to have a basic understanding of the simple $=}$ IQP positions and what features make up an ideal case for the IQP and against it. In a wide range of positions, these features are not actually very difficult to observe and grasp, which is why many strong players will be able to recognize ideal and, conversely, very poor, versions of the IQP quite quickly.

The following position is interesting: White intends to play the solid Kc2, stopping anything involving ...c3.

\[\text{Black to play}\]

\textit{Bromberger – Haba}
19...c3!

This move damages White’s pawn-structure and places his king in permanent danger. Black plays it just in time before White can prevent it with Kc2. Instead 19...Na5 20 Bd2 Nb3+ 21 Kb1 Bb7 22 Rhe1 Nxd2+ 23 Rxd2 c3 24 bxc3 Rxa3 25 Rb2 Ba6 26 Re3 leaves White with a solid position, one he is fully capable of defending.

20 bxc3 Na5!

Black’s compensation is enormous here: not only does the knight come in strongly to c4, but White’s king is very weak and struggles to find a safe place to go.

20...Rxa3 is an obvious move, but it actually does nothing. 21 Kb2 leaves White’s king completely secure, as well as his structure. After 21...Ra8 22 Ra1 Na5 23 Kc2 Bb7 24 Ng5 White is definitely not worse.

21 d5?

This makes the attack much easier for Black: his bishop floats naturally to f5 once the e4-pawn moves away. 21 Rdf1 is better, but still allows Black the advantage: 21...Nc4 22 Rxf8+ Kxf8 23 Rf1+ Ke8 24 Bf4 Rxa3 =+.

21...Nc4

21...exd5 22 exd5 d6 ++ is even stronger, heading to f5 immediately.

22 Bc5 d6 23 Bb4 exd5 24 exd5 Bf5

White now needs to search desperately for a way to protect his king or things will get ugly.

25 Ng5? (D)

25 g4! Bxg4 26 Rd4 was the only try, but Black is still much better after 26...Ne3 --/+
25...Rx a3! 26 Bxa3 Rb8 27 Bb4

The position was resignable since all ways to avoid mate lose too much material: 27 Rd3 Bxd3 28 Kd1 Nxa3 –+

27...Ra8

White cannot stop mate.

28 Rhe1 Ra1# (0-1)

Kislik – Kanovsky

Pardubice 2010

1 e4 c5 2 Nf3 e6 3 d4 cxd4 4 Nxd4 a6 5 Bd3 Qc7 6 0-0 Nf6 7 Qe2 d6 8 c4 (D)
Black to play

Few players in the elite play this variation with Black because White is granted a large space advantage for no compensation. This is an example of a straightforward plus for free.

8...Nbd7 9 f4 Be7

9...e5 10 Nf3 +=.

10 Nc3 0-0 11 Be3

11 Bc2 Re8 12 a4 +=.

11...Re8

11...Nc5 12 Bc2 e5! 13 fxe5 dxe5 14 Nb3 +=.

12 Rac1

White intends Qf3 or b4.

12...Bf8 13 b4

White’s advanced pawns make it very tough for Black to find a decent square
for either of his knights.

13...g6

13...b6 14 g4! is an example of a very strong flank thrust in the opening. Due to Black’s complete lack of counterplay, White is able to threaten the f6-knight directly with g5. 14...g6 15 g5 Nh5 16 Qf2 +/–.

14 Nb3!

Now c5 is a serious threat that has to be dealt with. Bd4 is another good idea White can keep in reserve.

14...b6 (D)

15 a3

15 e5! really would have pushed Black back against the wall: 15...dxe5 16 fxe5 Qxe5 17 Qf2 Qd6 18 Be4 Rb8 19 Bf4 e5 20Bg5 Bg7 21 Bd5 Qf8 22 Qh4 Nxd5 23 Nxd5 +/–. I considered sacrificing the pawn, but did not know if it was totally necessary since I already had a comfortable plus.

15...Bb7 16 h3!
I realized that the queen would be very comfortable on f2 when playing h3. My intended plan was simply Qf2, Nd2 and g4!?, which gains a lot of space and makes life difficult for Black’s knight on f6.

16...Bg7 17 Qf2 Rac8

17...Rec8 18 Rfd1 Qd8 19 Rc2 +.

18 Rfd1

This useful but slightly hesitant move did not spoil anything. 18 Nd2 Qb8 19 Be2 followed by Bf3 also looked very strong.

18...Red8 19 Rc2

19 g3 was also worth considering, but I did not want to commit to putting my bishop on the a8-h1 diagonal.

19...Ba8 20 Nd2!?

Playing 20 g4 directly also deserved serious attention.

20...Qb8 21 Nf1

My intention with this move was to play g4 followed by Ng3, bringing the knight to a threatening position on the kingside. 21 Rdc1! Rc7 22 Be2 Rdc8 23 a4 would have enabled White to make steady progress and squeeze Black.

21...Bc6! (D)
22 g4! b5! 23 cxb5 axb5?! 

23...Bxb5! 24 Nxb5 axb5 25 Rdc1 Rxc2 26 Qxc2 +=. 

24 Ng3 h6 

24...Qa8 25 Rdc1 Qxa3 26 Qd2 Qa6 27 Nxb5 Bxb5 28 Bxb5 Rxc2 29 Bxa6 Rxd2 30 Bxd2 gives White a very strong passed b-pawn and the bishop-pair. 

25 Rdc1 

White threatens to win with Nxb5, to which Black has no decent defence. 

25...Nf8 (D)
26 Bb6! Re8 27 Nxb5 Bxb5 28 Bxb5 N6d7 29 Bxd7 Nxd7 30 Bc7

This positional move was appealing.

30...Qa8?!

Black should have sacrificed the exchange to try to trap the rook on c7 if only to avoid a complete squeeze: 30...Rxc7! 31 Rxc7 Nc5 32 Rxf7 Kxf7 33 bxc5 Qb2! 34 Rd1 dxc5 35 Qxc5 Bf8 36 Qc4 Bxa3 37 Rf1 is obviously much better for White, but not easy to win in view of his exposed king.

31 Qe3 d5?!

31...Qa4! 32 Kg2 Bf8 33 e5 dxe5 34 fxe5 +/–.

32 e5

After this move showed up on the board, I sensed a quick win by simply re-routing my knight from g3 to d4.

32...Qa4

32...Qb7 33 Ne2 +/–.
33 Rc3 Kh7 34 Ne2 Kg8 35 Kg2 Qa6 36 Kf2

White clearly has time to do whatever he likes, and does not allow Black even the slightest glimmer of counterplay.

36...Qb7

Black is completely losing, but waits to see if I will reach the time-control before resigning. 36...Bf8 37 h4 Be7 38 Kg3 +–.

37 h4

37 Bd6 Rxc3 38 Rxc3 Rc8 39 Rxc8+ Qxc8 40 a4 +–.

37...Ra8 38 Ba5 Rec8

38...Qb5 39 Rc7 +–.

39 Rc7!

A simple and decisive ‘sliding’ move.

39...d4

39...Rxc7 40 Rxc7 Qb5 41 Nc3 +–.

40 Qxd4 1-0

Black finally gave up, with more material dropping off the board.
Conditional Equality

This should be a first principle in chess: if neither side has a compelling reason to be able to claim an advantage, then the position is equal. You need a legitimate basis to claim a real advantage. This highlights how logical the game of chess really is. Fundamentally everything is built on something that has to be explainable and real. In other words, conditional equality refers to a situation in which one side lacks a strong reason to have a real advantage, so the position should be equal, barring a major blunder or change in the position. The simplest example of conditional equality is when a position is symmetrical and both sides have no weaknesses.

Here is a very clear example of conditional equality. In a Hungarian League game in 2014, I faced an unfamiliar line when I had the white pieces: 1 e4 Nc6 2 d4 e5 3 dxe5 Nxe5 4 Nf3 d6! (D) was a move I had not seen before.

I assumed that because of the space advantage conferred by the pawn-structure of e4 versus d6, I could simply maintain my structure and develop and have an advantage. This assumption proved to be incorrect in the game,
which continued 5 Be3 c6 6 Nc3 Be7 7 Be2 Nf6 8 0-0 0-0. Here I realized that Black was intending to play ...b5 to challenge my space advantage and get counterplay against the e-pawn with the threat of ...b4, so I played 9 a4, seeing nothing else. Yet with 9...Nfg4!, my opponent prepared a very important pawn-break: 10 Bd4 Ng6 11 Ne1 Nh6 and after ...f5, I had no structural advantage whatsoever and the position was completely equal. The important thing to understand here is that the space advantage conferred by the pawns in the centre was my only basis for claiming an advantage. Once that was gone after ...f5, the position was guaranteed to be equal.

This short example was a valuable lesson for me about this pawn-structure and highlighted to me just how accurately White needs to play to obtain an advantage in this variation and type of position in general. After delving into the endgame after 5 Nxe5, I eventually concluded that this would have given me an advantage with accurate play. The static features I was playing for in the game could not be maintained, and Black was able to force in ...f5, neutralizing my space advantage.

Understanding solidity is very important in chess. It allows you to have a strong grasp of what to avoid from the opponent with White and what to aim for with Black under pressure. Put the burden of proof on White to prove he has something in the face of your solid position. I like the fact that chess is initially so balanced objectively and so hard to play, giving players chances to win with both colours and provoke errors in equal positions. Certain types of space advantages confer risk, while others do not.

Conviction is very useful in chess to provide direction and meaning to your analysis. As one example, I once argued with an international master about a position for thirty minutes. He insisted White was slightly better. I insisted Black was equal. Neither of us seemed to budge throughout the entire analysis in our views. The next day I asked him about the position and this time he insisted that White had nothing and I insisted that Black was slightly better.
This is an interesting example that may appear to be in White’s favour because he has the bishop-pair and Black has an isolated d-pawn. In the given position though, e4 is just as vulnerable as d6, Black’s queen has greater scope for activity, and White is unable to make very effective use of his unopposed bishop. Most importantly, White cannot keep the queens on the board in a sensible way.

24 Bd3 Qa8 25 Rxb8 Rxb8

Black intends ...Re8 or ...Nc5, and can even consider a move like ...d5, which would threaten to bring the bishop to b4.

26 Bb2

White threatens to consolidate with Bd4, which would actually allow him to make use of his bishop-pair on this relatively open board.

26...Qa2!
White struggles to consolidate or improve his position effectively now.

27 Re2

Having defended b2 from the side, White can play Qc1 on the next move, but Black retains enough activity to hold the balance.

27...h6

27...Nh5 was also worth considering, to contemplate jumping into f4.

28 Qc1

White threatens to take on f6 and forces Black to retreat. 28 Bd4 Qxd2 29 Nxd2 Be7 30 Nc4 Rb4 31 Re1 g6 =.

28...Qb3

28...Qa4 is a little stronger, due to the direct pressure on e4. After 29 Qe3 Re8 30 Qd4 Qxd4 31 Bxd4 Nc5 White has to give up his bishop-pair and Black equalizes easily: 32 Bxc5 dxc5 33 e5 Nd5 34 g3 =.

29 Bc4 Qb7 30 Qd1 Re8 (D)
31 Bxf6

31 e5! was clearly the only try, when White manages to keep his bishop-pair for a while, at least provoking more problems than the game continuation did. After 31...dxe5 32 Nxe5 Nxe5 33 Bxe5 Qd7 34 Qc2 Bd6 the endgame is perfectly holdable for Black, yet a little uncomfortable to play nonetheless because it is easy to miss something. 35 Bb2 Rxe2 36 Qxe2 Qf5 37 Bd3 and now 37...Qe6! would have neutralized White’s bishops.

31...Nxf6 32 e5 dxe5 33 Nxe5 Re7

With f7 defended and the bishop-pair gone, White does not have any more ways to play seriously for an advantage.

34 Qd4 Nd7 35 Nxf7

35 Rb2 Qc7 36 Bxf7+ Rxf7 37 Nxf7 Kxf7 38 Qd5+ Kg6 39 Qe4+ Kf6 40 Rc2 Bc5 =.

35...Rxf7 36 Rb2 Qc6 37 Rb5??

This was an uncharacteristic blunder for a player of Kariakin’s standard: the c4-bishop simply becomes overloaded. 37 g3 Ne5 38 Bxf7+ Nxf7 39 Rb6 Qc7 40 Rb5 Nd6 =.

37...Kh8 38 Rd5??

38 Bxf7 Qxb5 39 Qe4 Nf6 40 Qa8 Qb1+ 41 Kh2 Nh7 –+.

38...Nb6 0-1

As mentioned earlier, I watched a lecture by an international master that prompted me to write this book in 2014. When I saw how he was casually evaluating positions during his lecture in the following opening variation, I realized that I had seen almost nothing in chess literature that would guide a club player to logically evaluate positions like the ones that arose in the game. In short, Black had a fundamentally solid position with no major
weaknesses and had no reason to be worse if there was no tactical blow heading his way. When the lecturer loosely stated that White was better because of his space advantage, he misinformed the audience, which was mostly comprised of 2000 players. I shall show the opening moves of the game to make it clear exactly what I am referring to.

1 e4 c6 2 d4 d5 3 e5 Bf5 4 Nc3 e6 5 g4 Bg6 6 Nge2 c5 7 Be3 cxd4 8 Nxd4 Nc6 9 Bb5 Qc8 10 f4 Bb4 11 Qd2 Ne7 12 a3 Bxc3 13 Qxc3 (D)

We should not be casual about evaluating a position like this because it depends on concrete factors, not general positional ones. From the perspective of general positional factors, Black is completely solid and has no weaknesses. He can play either 13...Be4 or 13...h5. White will almost certainly give up his bishop-pair within the next few moves by Bxc6+, when it is not clear why White should have an advantage.

This position cannot be judged statically as better for White by claiming he has more space and that dictates everything. He has weakened the e4-square and is very far extended on the kingside. If White can be better here, it is only if dynamically he can make his attack work. If this had been explained in the lecture, it would have helped the viewers understand a crucial difference between static and dynamic advantages and not to evaluate positions in a
black-and-white manner loosely based on one aspect of the position.

I analysed the following endgame, which occurs after good engine moves by both sides in one of the critical lines of the Philidor Defence (1 e4 d6 2 d4 Nf6 3 Nc3 e5 4 dxe5 dxe5 5 Qxd8+ Kxd8 6 Bc4 Ke8):

![Chessboard](image)

Black to play

While looking at the position, I did not understand why Black should be in any danger, despite Stockfish giving me a score of +.40 at depth 35. I assumed Black could play ...a6 and later take on d5 and play ...Rc8, with no bad pieces and both the rooks effectively trained on open files. Lo and behold, after I input the move 23...a6, the engine score suddenly dropped to almost zero, as if it just had a revelation that White has no advantage. Fundamentally though, Black is completely solid and has no weaknesses and no bad pieces after this plan is executed, so I was not able to understand why he should be objectively worse. It does not happen often that I am able to overrule strong engine suggestions at high depth, so I was pleased that my positional understanding did not betray me here. This is a good example of appreciation of solidity. This once again illustrates that if there are no deep fundamental reasons for one side to have an advantage, there is no advantage.
23...a6!

With Black’s king so close to the d-pawn, it poses no serious long-term threat of queening. He just needs to develop his worst-placed piece. 23...cxd5?! 24 Nb5! is the only thing Black has to avoid, so he prepares to capture on d5 with a useful move first.

24 h3

White gives his king some breathing room and prevents any ideas involving ...Ng4.

24...cxd5 25 exd5 Rc8

Black threatens the powerful ...Rc4, so White needs to seek tactics. However, they only simplify the position.

26 Ne4 Rxc1 27 Rxc1 Nd3! 28 Nd6+ Kf8 29 Nxe8 Nxc1 30 Nxg7 Nd3 31 Ne6+ Ke8 32 Nxd8 Nxf4 =

Black takes d5 and draws.

The next position may also surprise you, but it is important to realize that Black has a solid position and counterplay due to the pawn-tension in the centre. White needs to seek a static advantage of some type to be able to claim anything here.
White to play

White has no obvious way to play with his pawns or make use of his pieces in the centre. The bishop on e4 looks useful, but it’s likely to be exchanged off by ...Bb7. The e3-bishop also seems to be useful but it doesn’t threaten to win anything because dxc5 is never really a good move. The white knights have nowhere much to go either, so White’s superiority is mostly just optical. In some lines Black can consider playing ...Rd8, followed by ...Nf8 and ...Nf5, assuming it won’t lose material for concrete reasons.

14 h3

This is a useful move that may prepare g4 in some cases. Other moves:

a) 14 dxc5?! Ng4 –/+ shows White’s central structure crumbling.

b) 14 Qc2 looks natural but walks into 14...d5! 15 Bd3 c4 16 Be2 Bb7 with good counterplay.

c) 14 Ng5 looks threatening but probably doesn’t really do anything. White struggles with the fact that he can’t make forward progress. 14...Rd8 15 Bd2 (15 e6?! Nf6 just makes things worse for White) 15...Qc7 and White has nothing. Black can follow up with ...Nf8 or ...Nb6.
d) 14 Bd2 is solid but doesn’t threaten anything either. 14...Bb7 15 Bxb7 Rxb7 16 h3 Nf5 =.

14...Rd8!? 

This appears to be a sound move improving a piece. There is no major drawback to it, and in some cases ...Nf8 will be useful to play. Instead after 14...f5? 15 Bc6 Black has an awful position.

15 Bd2 c4 16 Rb1 Rxb1 17 Bxb1 Bb7

Black achieves a comfortable and equal position. This exercise emphasized optical superiority, a lack of evolution in White’s position, the general solidity of Black’s position and a lack of knight outposts for White to exploit.

The following position is from 6 Be3 Najdorf analysis.

\[ \text{Black to play} \]

Due to White’s lack of concrete weaknesses and the fact that almost all of his pieces are not bad and control a lot of central squares, I think he should not be worse. Of course, due to the awkward knight on a4, concrete analysis is needed to back up that claim.
1...Rb7
This improves the rook, creates a threat, and also intends ...Qa7.

1...h6 2 Qg3 Kh7 also makes sense, playing solidly and asking White what exactly his idea or plan is. 3 c4! bxc3 (3...Re7 4 b3 Qb7 5 Qe3 Bc8 = makes it hard for both sides to find weaknesses in each other’s camps) 4 Nxc3 a4 (4...Rc7 =) 5 Qe3 a3 6 b3 Rc7 is only balanced. It is hard to see why White should have any real problems here.

2 c4!
This defends the b5-bishop and also makes it much easier for the a4-knight to come back into the game within a few moves.

2 Rxf6?! Rxb5 3 Kh1! (3 Nxb5? loses to 3...Qxb5 –+ because ...Nf3+ and ...Qxa4 are both threats) 3...Rb7 4 Rf2 f6 =+

2...Qa7!
This is the main critical try, targeting the undefended and pinned knight. 2...h6 3 Qe3! Kh7 4 b3 Re7 5 Nb2 += leaves Black without much counterplay in this small bind.

3 c5!
White tries to make the e5-knight undefended.

3...h6 4 Qg3
This keeps an eye on both knights.

4...Nfd7
4...Kh8 5 Nc6 Qa8 6 Nxe5 Rxb5 7 Qe3! (7 cxd6 Re8 8 Nxf7+ Bxf7 9 e5 Qa7+ 10 Kh2 leads to a wild position that is not worse for Black) 7...dxe5 8 Rxf6 Kg8 9 b3 Rbb8 10 Qg3 Kh7 11 Rf3 Rbd8 and Black holds the balance.

5 Nxe6!
5 Bc6 Rbb8 gives Black the initiative.

5...fxe6 6 Bxd7 Rxf1+ 7 Rxf1 Rxd7 (D)

8 Rf6!

It makes sense for White to attack Black’s weak pawns while he can. After 8 Rc1 Kh7 9 Kh1 Qa6! Black intends ...Nd3 and has a small edge.

8...Re7 9 Rxh6 dxc5 10 Kh2 c4 11 Rh5 Nd3

Now one extremely concrete line is 12 b3 c3! 13 Qxd3 Qc7+ 14 e5 c2 15 Qh7+ Kf7 16 Rg5 c1Q 17 Rxg7+ Ke8 18 Rg8+ Kd7 19 Qd3+ Kc6 20 Qf3+ Kb5 21 Qe2+ Kc6 with a spectacular perpetual check! This clearly isn’t forced or necessary, but nevertheless shows that White was doing fine.

Themes: Lack of Concrete Weaknesses, Centralized Pieces, Vulnerable King Position.
White to play

The tension here is extremely high. Black can consider ...Bh5 or taking on d4 or c4, but even if it were his move, it would not be so easy to challenge White’s solid position. White needs to be careful not to self-destruct, since it is easy to overextend or uncoordinate the pieces.

1 Qe2

After this move, White can consider the idea in many cases of putting the queen on e3, which may turn out to be its safest square. Other moves promise little: 1 h3 Bh5 2 g4?! Bg6 3 Bf1 h5 =+; 1 Qc2 Bh5 =; 1 Nf1?! dxc4! 2 Rxc4 Bh5 3 Rc1 cxd4 4 Qxd4 Nd5 5 Rxc8 Qxc8 =+.

1...Bh5!

1...cxd4 2 Bxd4 h6 (2...Nc5 3 Qe3 +=; 2...dxc4 3 Rxc4 Nd5 4 Rec1 +=) 3 h4 gives White a slight plus.

Not 1...f6? 2 h3 +/-.

2 Qe3

White still actually has no threat because he cannot resolve the central tension
in his favour.

2 Qd3 Bg6 3 Qf1 h6 =; 2 h4!? h6 3 cxd5 exd5 4 Bh3 Ne6 =.

2...dxc4 3 Nxc4

White threatens Nfd2.

3...Nd5 4 Qd3 cxd4!

4...Bg6 5 Qe2 is not as easy because White threatens Nd6 in this case.

5 Qxd4 Bxf3!

Retreating the bishop to h5 and then taking on f3 is paradoxical but concrete threats matter, with Nfd2-e4 and Ncd6 ideas looming; e.g., 5...Nc5 6 Nfd2 +=.

6 Bxf3 Nc5 7 Bd1 Nc3 8 Qxd8!

At least by trading queens, White is able to simplify in such a way that he gets rid of the burden on c3.

8 Bxc3 bxc3 9 Qxc3? (9 Qxd8 Rfxd8 transposes to the main line) 9...Nd3 −/+.

8...Rfxd8 9 Bxc3 bxc3 10 Re3 Rd3 11 Rxd3 Nxd3 12 Rxc3 Nxe5

This leads to a drawn ending.

The example that we just examined showcased a complicated position with a lot of pawn-tension. I can imagine players incorrectly evaluating the position as slightly better for White or slightly better for Black due to the apparent complexity. The important thing to realize here is that both sides have a very solid position, with no major weakness that can be punctured, such as the base of either pawn-chain. White was able to secure b3 comfortably in a number of variations.
When both sides have their pieces fully developed, both kings are safe, and there are no structural weaknesses, positions will tend to be equal. This is the basis behind conditional equality: without a deep and long-lasting static reason to claim an advantage, the position is equal.
Compensation and Complicated Cases

Assessing compensation well is a very important part of being a strong chess-player. In general, assessing compensation is not all that different from adding up normal types of positional advantages. This is not done in a numerical or robotic sense, but from the perspective of human judgement. If you have important types of positional compensation, they certainly count as compensation when material down. When there is a material imbalance, the initiative is especially important. Usually being very large amounts of material down can only be compensated for by a direct attack on the opponent’s king, a powerful passed pawn, paralysis, or a bizarre trapping or boxing-in of the opponent’s queen. Many people play too passively once they win material, allowing their opponents to gain a lot of compensation for the sacrificed material.

There are two fundamental types of positions with compensation: those with no threats (purely positional factors) and those with threats. In the section ‘Piece Values’ in Chapter 1, I gave an example of compensation when both sides have no direct threats and no specific weaknesses. A lot of the time when we sacrifice the exchange, the idea is to restrict the opponent and make his position hard to play. Besides this, the side with the extra exchange usually has a hard time making any use of it if his rooks do not have active squares.

Dynamic chess requires very strong evaluative skills, with us often needing to evaluate strange pawn-structures and unusual material balances midway through our calculations. A discussion of evaluating positions needs to involve candidate moves. There are a wide range of positions that one would not be able to evaluate correctly without spotting or focusing on the key ideas in the position. Structure of course plays a major role in the evaluation of positions, so players should mentally have evaluations of different pawn-structures down. The basic barebones pawn-structures are the most simple and easy to get right.

“Many chess books are ... based on the idea that you should not try out moves
at random, but first take a good look at the characteristics of the position, try to make a more general plan on that basis, and only then search for a concrete ‘result’ at the level of an actual move. This is nonsense. No chess-player thinks like this, no one has learned to play chess by thinking like this, and even trainers and authors of chess books don’t think like this.” – Move First, Think Later.

Considering candidate moves after thinking through a position logically is not strange at all. A common process is to take a good look at a position, consider a couple of logical moves (on the basis of the characteristics of the position you noticed), and compare the logic of the moves and how the calculations of those moves vary. When a 2100 student observed IM Sielecki, IM Bartholomew and me talking about positions, he said we almost always considered two or three moves right off the bat that were sensible moves that dealt with important aspects of the position. It does seem that we home in on the most important things in a position and then find moves related to that.

Some players might mistakenly describe many positions as += that I would refer to as =, because you need to play a couple more accurate moves to demonstrate the lack of a real advantage. I rely more on static fundamentals, plus I do not believe an ‘initiative’ is a real advantage. An advantage is an advantage if it leads to a static advantage. Claiming “I have the initiative, therefore I am better” is pretty meaningless if you can’t show any variation where you actually win material or obtain a static advantage. It’s just a guess. It is like saying, “I might be better because I have some threats that put the opponent off balance.” This is quite different from something that would allow the stronger side to maintain their advantage for a long time. A better structure, for instance, is not going away suddenly for no reason.

The problem is, amateurs start using this lingo and say things like, “I have an attack, therefore I am better.” This leads to an incorrect understanding of chess. What matters when attacking is what focal points you can target, your economy of force, and what weaknesses the opponent has. If your opponent has no weaknesses, chances are your attack will not work. There are other forms of commentary, like “White’s space advantage is very important in this sort of position” or “Black is in danger of not having enough material to mate” or “it’s difficult to break through this fortress”.
A strong and unchallenged pawn-centre has value, which is why White tries to achieve it in practically every major opening. Space is something that we almost always want to have, as well as the bishop-pair, a safer king, and a better pawn-structure, so we have to use these as cornerstones of how we evaluate positions.

Knowing the logic of an opening helps you evaluate it. Good general knowledge of many openings allows you to evaluate middlegame positions much more easily. Many strong players know certain positions are equal or that “White doesn’t have much, so I can confidently play this.” This is a common line of thought when playing Black when you are about to equalize in the opening.

Space is more nebulous and needs to be clearly defined, but certainly if you can obtain a material advantage, the bishop-pair or a better pawn-structure for free, there is no reason not to take it every time.

Capturing towards the centre is a very interesting topic. Computers have demonstrated that doubled pawns on the g-file (such as an h2-pawn moved to g3 after a capture) in general make a king safer. One interesting point is that when there are captures of a piece on b6, it is usually the best choice to recapture with ...axb6. When there are captures on c6 and Black has a choice of two captures, ...dxc6 is much more frequently played. This might sound strange and counterintuitive to a player new to chess. Why in one instance is it good to capture towards the centre and on the square next to it, why does capturing the other way make sense? It is related to how the pieces interact with the resulting position. Usually playing ...dxc6 opens up your queen and your c8-bishop, while very often ...bxc6 does not open up any good squares for your pieces. The same goes for ...cxb6 vs ...axb6 conceptually at an early stage in the game. ...cxb6 does not open up play for anything, while ...axb6 opens up an inactive rook on a8.

In many cases, exceptions to reasonable chess rules are based on the activity of the resulting sides. As we now know from rigorous empirical testing, the strongest doubled pawns are on the b- and g-files (usually coming from the a- or h-file). This is tied into the fact that the h-pawn is the least valuable pawn on the board. Not only does it control the fewest squares, but it’s the hardest to push and hardest to queen.
Strong players obviously know that a lot of their choices are not best but make them anyway. Why? Thinking that they intentionally play second-rate moves just to save time may be the wrong way to think about it, since that is only one of the possible scenarios where this occurs. They evaluate the position properly (probably as ‘=’ in a lot of positions) and then play a move they know is equal. By this line of logic and reasoning, they are sure that they played a move that’s not really worse than anything else, especially if the move is purposeful and sensible. Multi-purpose moves are a good example of this phenomenon. This is a superb example of why good evaluation is essential. Strong players usually know when they have an equal position and just need to play sensible moves to maintain the status quo.

A lot of the time in sharp positions, if you can evaluate the position properly, you will save a ton of time in making a decision. If you evaluate a position as equal and see a move which maintains equality and looks like a good move, you can usually make it relatively quickly if you have confidence in your evaluation.

An interesting line of questioning is: “Is it good to look at advantages as investing greater winning potential? So an advantage like the bishop-pair may not guarantee a win necessarily; it just makes it so much easier to do so? Is this too theoretical?” This is not overly theoretical, just too stereotyped. Chess is a concrete game; bishop-pair for free is typically a half-pawn advantage, which usually is not enough to win, especially with few pieces left on the board. A structural advantage can be quite different, and often trends in favour of the side with the better structure – the side with the worse structure can easily lose a pawn or mishandle his structure further.

Apply the Dorfman idea: if you are worse statically, look for ways to play dynamically or to change the nature of the position. Exploiting and winning with a dynamic advantage demands active and accurate play, because it will go away over time by its very nature if it is not a long-term advantage. If the attack does not win or lead to a static advantage right away, you may create weaknesses for yourself or targets for a counterattack. This is an important pitfall to be aware of. Note that if your dynamic advantage objectively fades, one cannot say that you had an objective advantage in that case.

Whenever you hear something really crazy about chess, you need to ask
yourself if it makes sense from a general perspective of basic logic about the game. It is a great way to quickly determine if something may be valid or if it’s more likely a wild, hyperbolic statement. It is not uncommon to go to a chess club and hear players state that the Sicilian Dragon wins for Black. In fact, I heard one famous grandmaster even state that in his younger days.

It is important to point out that isolated pawns are not always weaknesses like many amateurs believe. With an isolated d-pawn, usually you will have two half-open files immediately next to the pawn (the e- and c-files) and it is ideal to put rooks there, and try to achieve as much piece-activity as possible to compensate for the IQP. Having queens off the board generally makes it easier to put pressure on the isolated pawn because you get fewer attacking chances. Typically the side with the isolated central pawn wants to keep as many pieces on the board for maximum chances of activity. There is often a dynamic balance and an isolated pawn is not necessarily a bad thing, because of the activity you can often obtain on the open lines and with your active pieces.

Having a large number of isolated pawns (three or more) really does start to influence the evaluation of the position a lot, but having one or two isolated pawns is often not such a bad thing. Many players are taught to value having fewer pawn-islands than the opponent. It turns out that being aware of how many pawn-islands each side possesses has very minimal practical value, and there are very few logical rules you can attach to it. With isolated pawns though, having a large amount of them will almost certainly devalue your pawns overall. When people discuss isolated pawns, this important point is almost never mentioned.

With a black pawn on b5, playing a4 in principle improves White’s structure and brings an inactive rook into the game (assuming the rook is on a1). An interesting point about pawn-breaks is that they tend to involve potentially trading a flank pawn for a more centralized pawn, which in basic principle is a good trade for the side opening the position and getting more central control. A lot of players do not realize that playing a structure with 3 versus 2 is, all things equal, not as favourable as playing a 2 versus 1 structure when the one pawn left is an isolated pawn.

Earlier, I mentioned strongholds in the centre. In 1 d4 d5 openings, in many
cases, the d5-pawn serves as a stronghold that Black keeps there for a very long time unless he has a really specific reason to relinquish its presence. Many players forget that the d5 stronghold also plays an important role in preventing the c4- and e4-squares from being used by white pieces. In 1 e4 e5 openings, d4 and f4 are the squares that are nearly always inaccessible to White’s pieces when the e5 stronghold remains. I have seen many games in which a player casually lets go of an e5 stronghold and allows a white knight to sit comfortably on d4, while wondering what mistake he had made. Many players simply do not think about the importance of why they established their strongholds initially. Strongholds in the centre are important to understand, because very often one side can never be worse when he retains a stronghold in the centre of the board that is not challenged in any way.

Merely asking the question, “Who is able to improve their position more easily?” can sometimes cause us to realize that we do not need to rush, because the opponent can do very little while we carry out many useful operations.

In developing plans in the middlegame and deciding where your pieces go in an opening, it is enough to mentally paint a picture on a canvas. Some of the paint dots might not belong there, but in the end you have an overall painting. Having a rough idea of what you want to do with your pieces and an overall strategy of what to aim for is quite useful not only in individual games, but also for developing your positional understanding and opening flexibility.

I once showed a grandmaster a very simple += plan of playing Na3-c2 in a closed position in the French Defence and he had not seen it before and did not get the idea. He had a large space advantage and the point was just to consolidate his centre. A solid, unchallenged spatial plus in a closed position is worth a lot. If the opponent is really helpless, it can be enough to win the game in itself. In practice, if counterplay is very hard to come by, human players tend to make a lot of mistakes.

When evaluating the relevance of a space advantage, you must consider the opponent’s pawn-structure and if he has active play or potentially active play that you cannot stop. A space advantage that dissipates in a few moves is similar to having the bishop-pair when the opponent can forcibly trade it off. If you think you have a real tangible plus, you must be sure that it is of a
static nature, and not just a temporary one. The main point is that there are different categories of space advantages, and players do themselves a disservice by lumping them all together. The space advantage in Petrosian-Botvinnik earlier in this chapter is as favourable as they come in a pure and simple form.

Part of the reason for a good chess education is that chess is such a logical game that it helps you out tremendously when you have no other benchmark to guide you in a position. For instance, when you know nothing about an opening variation you have on the board in one of your games, you can only rely on the education you have developed for yourself. One of the most rewarding feelings in chess is finding out that you played all of the best moves in an opening line, without knowing any of them beforehand. This is a common result of a good chess education and applying logic in chess. Intuition and evaluative abilities that stem from that are very important.

The types of slightly better positions that White is aiming for in most major openings should be understood by every player. This is one of the reasons why studying main-line theory is a good thing. If you become familiar with how to refute passive sidelines, you will see a wide range of slightly superior positions and develop a better understanding of why they favour White.

An ideal pawn-centre (pawns on d4 and e4 that will not be liquidated or traded away) is a positional advantage, but does not necessarily confer an objective advantage; other factors in the position matter a lot in the overall evaluation. With all else equal, an ideal pawn-centre may just make your position preferable over your opponent’s without necessarily granting you any sort of objective edge or any position that you should realistically win. An unchallenged ideal pawn-centre (in which the opponent has no pressure on your centre, and a difficult time even getting much decent pressure on it) does tend to be a big enough advantage to grant one side an objective advantage unless there is a major compensating factor. One of the issues the defending side faces when the opponent has an unchallenged ideal pawn-centre on d4 and e4 is that a pawn-break in the centre is almost always necessary just to generate play of any kind. This is why White should only voluntarily push ahead with d5 or e5 if he has a very concrete reason; otherwise this advance might squander his advantage.
When you have a clearly better pawn-structure, very often maintaining the status quo with respect to the structure is all you have to do to maintain an advantage. In a lot of cases, you just need to improve your pieces to the maximum. On the flipside of that, there are many positions where your pieces are ideally placed, but you lack pawn-breaks or structural opportunities to demonstrate much.

All of these instances highlight how important the pawn-structure is in the evaluation of the position. One of the most common mistakes I see around the 2000 level is obtaining a clearly better pawn-structure and then changing the structure or nature of the position unnecessarily rather than just playing simple moves like bringing one’s pieces into the game. This is one of those instances where very strong players can often play moves quickly without much calculation and know that they are playing good moves due to already having a static plus and adding to the plus slightly by improving the pieces.

Having an objective advantage means you have something that you can objectively play on to attempt to win. The connection between having an advantage and weaknesses is substantial, because when one side is worse, there is always something bad about the position you could justifiably call a weakness. As players increase their understanding of weaknesses, they also understand advantages better, and vice versa. A solid understanding of these types of fundamentals helps players to learn more from their games.

One of the many reasons I like administering evaluation exercises is that there are many positions that clearly give White a small advantage (+=) from common openings that are obvious to most titled players. A wide range of these positions are not evaluated by players under 2200 the same way, and they would benefit tremendously from getting the clearer ones down. The ones that are easy to assess and explain represent a certain area of chess knowledge that almost anyone is capable of comprehending but that few people have really put much emphasis on teaching. From this angle, evaluation exercises can also help to develop a solid base for fundamental chess knowledge and understanding.

Obviously it is better to have some threats than no threats at all, but that does not mean that they will amount to anything or have any inherent objective value. A dynamic advantage must be capable of being converted into
something, or else you never had any real advantage in the first place. On the other hand, static advantages are real, and there is no reason to rush when you have one. In many cases, you will have to make a judgement call to determine if rushing to change the nature of the position really will increase your edge.

In superior positions, you have to look at risk differently because often just playing good or sensible moves will increase your advantage slowly if you have a real static edge. This sharply contrasts with equal positions, in which it may be very hard to generate anything that may offer you a real plus.

Correctly evaluating many basic IQP situations and positions with the bishop-pair does not involve finding any difficult moves or calculating anything, and that fundamentally makes them relatively easy most of the time. More dynamic positions are much more difficult. Additionally, in a lot of Benoni and KID positions, Black is cramped and has a worse structure for no compensation, and White just needs to stop Black from breaking out. Many positions of this type are significantly simpler than people imagine in terms of evaluating them.

Many players have the idea that they should create their own tactical and positional ideas. I have heard players talk about re-inventing the wheel positionally. Top players very seriously adhere to standard positional rules when they obtain a better position. You should very much play by-the-book when you get a clear static advantage in the obvious sense that you want to prevent your opponent from executing his best ideas while maintaining or increasing your advantage. In a similar sense, good metagame strategy is usually very simple and logical.

You should be open-minded about evaluations unless you have nearly absolute certainty. It is better to be open-minded and guess one of two likely evaluations than to be certain in your own mind about one evaluation and be wrong about it.

As mentioned earlier, a queenside majority used to be regarded as an innate positional advantage until about fifty years ago. In *Understanding Chess Middlegames*, Grandmaster Nunn explained very clearly that a queenside majority is no longer interpreted this way and there is much more nuance. A
queenside majority is primarily useful in creating a passed pawn more easily than the opponent, but against good defence, very rarely is it actually so easy to create a strong passed pawn if the opponent has their pieces reasonably placed. In many main-line openings, players with White are even happy to give Black a queenside majority in pursuit of superior central play and additional space. This occurs in the Exchange Variation of the Queen’s Gambit Declined, in which White scores very well in the main lines.

When both sides have not completed their development and one side has a much easier time getting his pieces out, the side with easier development may increase his advantage with no complexity at all by playing the absolutely most obvious developing moves. Many players overthink these situations and try to get flashy.

If you have the advantage, there is no general rule that trading pieces is a good thing, because it depends on what kind of advantage you have. If you have a space advantage, exchanging pieces in general reduces your space advantage. If you have a strong attack, it reduces your attacking resources. If you have a lead in development, it may just aid your opponent’s development and trade off your developed pieces. If you are a pawn up, it may lead to a drawn queen, rook or opposite-coloured bishop ending. You have to be very aware of what kind of advantage you have and what kind of position you are seeking. That being said, if you are three pawns up and see nothing wrong with exchanging pieces, you can freely do so every time because it brings you closer to promoting pawns in an endgame or winning easily due to having so much more material. If a position is clearly winning, the aim should be to convert it into victory in a way that allows the fewest possible chances for the opponent.

I reflected on what factors top players emphasized in their games. For example, I noticed what was important to Keres when he considered positions better for one side. Then I tried to apply his thinking and be as objective as I could myself. This was all before computers gave anywhere close to reliable evaluations. A major mistake many players make is failing to develop book knowledge first to understand engine evaluations and ideas. If you grasp why something is positionally risky and the engine scores it as .4 worse than a sound and simple move, understanding the mistake is simple.
You need structure in place for how to think about and evaluate positions. Essentially, you need to ask ‘why?’ often and come up with suitable answers on your own, due to thinking about the positions you have played and analysed.

When your opponents give you a large space advantage, you can often just develop your pieces quickly behind your extra space and then gradually expand once you are fully prepared to do so. If the space that you have is not going away soon, improving your position slowly can increase your static advantage effortlessly.

Compensation for material is something that is not well understood at lower levels partially because a lot of people do not even know what the point of compensation should be. Once you realize that the point of being material up is to attack the opponent’s king, win more of the opponent’s material, or queen a pawn, you can immediately have a better understanding of the purpose of sacrificing material or having compensation in general. A typical example of compensation is when a player successfully sacrifices the exchange on c3 for positional reasons and to create weaknesses in the opponent’s camp while the opponent struggles to find definite and clear play. In such a situation, the reason why the compensation for the exchange is meaningful is because the side with less material has neither a weak king nor material that can be plucked. Additionally, these sacrifices usually occur in a middlegame when pawn promotion is only a very distant possibility. A common type of pawn sacrifice is one that actually shields your own king, makes it extremely hard for your opponent to win more of your material, or prevents the opponent from creating or utilizing a strong passed pawn.

You would be surprised how much easier it is to evaluate your own compensation for material at the board when you think concretely about these three factors (king attack, exploiting weaknesses, and pawn promotion) and if the stronger side can actually make use of his extra material. This also helps explain why sometimes it is better to choose a position where you are only one pawn up rather than heading for one in which you are two pawns ahead. There are many instances, especially in endgames, where being two pawns up actually stretches out your position a lot (especially if you have many isolated pawns) and makes it nearly impossible to queen a pawn or win more
material. The first time you fail to win a seemingly totally won game (without making any obvious mistakes), it can seem like a huge shock, especially in a long game against a good opponent. You may look around the board and scratch your head, wondering where it went wrong, or why your material was not enough to win the game. Thinking about material the right way (and also wondering if the material really helped us achieve our aims) usually gives us the answer. It is very important to be sure what you are aiming for both when material up, and when fighting against the opponent’s extra material.

Numerous titled players have shown me games of theirs in which they had a half-pawn (+.50) space advantage according to the computer, but no specific plan, so the game ended in a draw. Being able to do something with your advantages is extremely important. If you have no idea if you can actually make progress, hold back judgement on assuming the stronger side has a significant advantage.

If you sacrifice the exchange, a big factor is whether the opponent’s rooks have good open files to use.

You should be willing to play defensively when you need to, and keep calm and ‘do nothing’ if the situation warrants it. If the opponent has weaknesses or you have a big lead in development, you should be willing to attack and take over the initiative, striving to play the most active possible moves. If you have a dynamic advantage, you should play very dynamically. If you have a static advantage, you should play statically.

There is a place and a time for ‘little’ moves like Ra1-b1 or a2-a3 (see the games of Grandmaster Zlatko Ilinčić, the king of one-square moves), but usually this occurs after one side has already developed all of their pieces and has a small space advantage.

When deciding whether to accept a draw against a higher-rated opponent, Rowson’s method of evaluation may help you: how would 2500 versus 2500 play fare here out of 10 games? If you think 7 out of 10 games would be won by your side, you should almost definitely play on, especially if you are confident about your next move.

One of the things that made sacrificing the exchange psychologically an easy
decision for me against weaker opponents is that the game was never symmetrical after that. Often after an exchange sacrifice I made, I had both the bishop-pair and a better structure. Compare that to a situation with a symmetrical structure, and one can easily understand why I usually chose the former.

An important concept in evaluating certain positions is stable squares. In general, this refers to a queen or minor pieces that are situated near the centre on squares from which they will not be able to be chased away by anything in the foreseeable future. Many situations with great stable central squares (even those that aren’t necessarily outposts) confer a simple advantage for the side utilizing those squares due to minor domination occurring on the board. Conversely, completely lacking stable squares is problematic in many cases, especially with a poorly-placed queen that needs to move so that other pieces can come into play. The strategy of playing for a stable square for the queen to move to is utilized surprisingly often in elite play, but rarely commented upon because the idea seems so obvious to them and is accompanied by statements like “the queen had no other place to go”.

The three easiest types of sacrifices for most strong players to make are the sacrifice of a rook’s pawn, the sacrifice of the exchange, or the ‘sacrifice’ of the queen for three minor pieces or a lot of clear compensation that can be seen right away, especially if the bishop-pair is also obtained.

Evaluation exercises usually do an excellent job of pointing out biases that a player has. Quite often a player might evaluate an equal position as bad for him, based on remembering a similar position he played that he lost or that was objectively bad for him. Many times these are false analogies, or the position really was not that bad. If you can identify certain equal positions that you have been unnecessarily fearing, it adds a lot to your chess understanding to realize why those positions are balanced, and gives you a better repertoire of positions you can play over the board. Getting rid of one’s ghosts is a very important part of being a more open-minded and stronger player.

I have always thought that the best way to deal with the psychological side of chess is to assess positions objectively and try to be as calm as possible when you play. Books like The Seven Deadly Chess Sins and Chess for Zebras by
Grandmaster Rowson are also helpful in overcoming common psychological issues.

In practice, we mainly sacrifice our queen to checkmate, to win with passed pawns, or to dominate the position. When players can use material flexibly and intelligently, they can find almost any type of sacrifice and use their material more creatively for seeking quality rather than just numerical values. This is a very important area for chess-players to develop in because generally the stronger the player, the more willing he is to sacrifice material for quality and compensation.

When one side has less space and is getting squeezed in a semi-closed position, one of the main issues is getting effective pawn-breaks. Sometimes when White has pawns on d4 and e4, Black has an extremely hard time generating any kind of break with ...c5, ...d5, ...e5 or ...f5, yet very often pushing one of those pawns forward allows ...c6, ...e6 or ...f6, which immediately gives the defending side counterplay. This is something to be aware of as a defender, because it may even be worth spending a full tempo to provoke a pawn push in order to get a pawn-break. This is the basis for the very modern opening line 1 d4 Nf6 2 c4 g6 3 Nc3 d5 4 Nf3 Bg7 5 Qb3 dxc4 6 Qxc4 0-0 7 e4 Be6 8 d5 Bc8, which allows Black to play ...c6 or ...e6 in comfort and generate counterplay. This is also a reason why the superior side should also try to prophylactically stop the opponent’s best chances at an effective pawn-break, and be aware of the potential for an effective break when making a decision to gain more space from a position that already has a space advantage.

It is simply hard to play positions where you are worse and have no obvious counterplay, and your opponent is making progress. In such situations, being slightly worse can easily snowball into being dramatically worse and then lost. If blunders are a dramatic issue for you, I would focus on being aware of your weaknesses when you are playing. When focusing on weaknesses, I would also include tactical weaknesses, which many players do not even think about at all. A piece on a vulnerable square in any sense can be considered a potential tactical weakness to be aware of.

A small material advantage very rarely causes the game to win itself by force, and to be successful, you need to make use of it in other ways, as mentioned
earlier:

1) Overpower your opponent and attack their king.

2) Win more of the opponent’s material.

3) Help you queen a pawn.

These are the three things you can do when material up and trying to win based purely on your material superiority. This simple way of thinking about the problem helps us understand why exchanging pawns when material up is generally not the best idea: this gives the opponent more potentially drawable or holdable pawnless positions to aim for, and gives you less potential to queen a pawn. Additionally, fewer pawns on the board means you have fewer attacking resources. When you are material up and considering making exchanges, it is very logical to ask yourself, “Does this exchange help me attack the opponent’s king, win material later, or potentially queen a pawn?” If the answer is no to all of them, then the exchange is almost certainly going to ease the opponent’s defence. Evaluating exchanges in these situations is actually not so difficult to understand when you frame it from this perspective. These questions are also helpful when evaluating whether to go for a piece exchange in an endgame when you have the advantage.

If your opponent has no active play at all, the most logical thing to do is just keep improving your position until it is possible to create direct tension or do something active. This runs contrary to the idea of “when you have the advantage, you must attack”, which is a misleading rule to learn in the first place. Players are likely to misinterpret this kind of statement to mean that you must attack the opponent’s king when you have the advantage. With an advantage, it may just be best to mildly increase the positional pressure on weaknesses, or conscientiously attempt to push or create a passed pawn. Beginning players in general have a tendency to focus solely on king attacks and not enough on weaknesses and positional factors, and such ‘rules’ can easily reinforce this kind of misfocus in their play and thinking.
12...f5

Black prepares to play ...fxe4 followed by ...Bf5. 12...Be6 13 Bd3 f5 14 b3 +=.

13 e5! dxe5

After 13...Be6 14 exd6 cxd6 15 0-0-0 followed by Be2, White has a better structure and a small edge.

14 Bc4+ Kh8 15 0-0-0!

This is an excellent pawn sacrifice, aimed at playing against the c8-bishop, which currently cannot come into the game. Since it cannot get any activity, the a8-rook is also stuck, and White has a free hand at improving his position. This pawn sacrifice looked like a simple one to make though, since it was the only idea to keep Black’s bishop from coming into the game directly.

15...Ng6 (D)
15...exf4 16 exf4 +/–.

White to play

16 Rd3

16 Ne2! is interesting. White secures f4 and tries to achieve total paralysis. Even though it may not be correct English, many ex-Soviet grandmasters refer to such a phenomenon as “piece no move”, when you are simply unable to move a piece. It is important to be aware of this concept, because it has a massive influence on the evaluation of positions if you simply cannot do anything. In that case, being aware of your worst-placed pieces will give you a clue how important the domination is. Then 16...a5 17 a4 exf4 18 exf4 Ba6 19 Bxa6 Rxa6 20 Rd7 Raa8 21 b3 c5 22 Rxc7 Rac8 23 Rxc8 Rxc8 24 Rd1 +/– allows White to dominate deep into the endgame, while after 16...e4 I like the simple waiting move 17 b3!? +=, which intends to improve over 17 Nd4 Bd7 by just not letting Black develop his bishop. He faces a difficult defence trying to get his pieces out, while White has a lot of natural moves to improve his position, such as Rd2 or Kb2 on the next move.

16...a5 17 Na4

17 b3 Ba6! (17...exf4? 18 Rxf6! hxg6 19 exf4 and Black will be mated) 18 Bxa6 Rxa6 19 Rd7 exf4 20 exf4 Kg8 21 Rg5 c5 22 Rxc7 h6 23 Rg2 Rf7 24
Rc8+ Rf8 25 Rxf8+ Kxf8 26 Nd5 followed by Kb2 is likely to give White an edge in the ending.

17 Ne2 e4 18 Ra3 is statically better for White and was perhaps the strongest course.

17...Ba6! 18 Bxa6 Rxa6 19 Rd7 exf4 20 exf4 Raa8 21 Rf1

21 Rxc7! Rac8 22 Rxc8 Rxc8 23 Rf1 Kg8 24 Nb6 Rb8 25 Nc4 a4 26 Nd6 +=.

21...Rac8 22 Nc5 Rfd8

and Black had equalized, although he lost the game in 44 moves.

It is fitting to give a basic example of massive amounts of compensation and a sacrifice that requires little calculation. Kasparov described this exchange sacrifice as one of the easiest to make in his career, and wondered why a grandmaster would ever allow it. This game is now extremely famous and well-known in the chess world for being a straightforward, clearly good version of an exchange sacrifice with no downsides at all.
Movsesian – Kasparov

Sarajevo 2000

13...Rxc3!

Black needs to play this sacrifice immediately or else it may not exist later. Damaging the pawn-structure around White’s king means that it will never find a safe haven, while White is unable to pose any serious threats to Black’s king. Consequently the play becomes entirely one-sided.

14 bxc3 Qc7

Black always entertains ideas like ...d5 or ...Na4, and White faces a difficult defence. 14...Be7 15 h4 d5 was another good way to fight for the initiative.

15 Ne2 Be7 16 g5 0-0 17 h4 Na4 18 Bc1?

Although this looks like a consolidating move, it allows Black far too easy a time with his attack. 18 Qg3! Ne5 (18...Nxc3+ 19 Nxc3 Qxc3 20 Qe1 Qc7 21 h5 Rc8 22 Qd2 gives White counterchances because of the idea of playing g6) 19 Bd4! (the knight in the centre must be challenged) 19...Nc4 20 f4 e5 21 fxe5 Nab2 22 h5! gives White serious chances to hold the balance.

18...Ne5! 19 h5 d5 20 Qh2 Bd6 21 Qh3?

This removes the queen from the defence and allows Kasparov to crash through. It is very important to appreciate how vital the queen can be in defending an open king like White has. He should have played 21 Bf4! Nxc3+ 22 Nxc3 Qxc3 23 Qd2 Qxd2 24 Bxd2 Nxf3 25 Bc1! dxe4 26 Bxe4 Nd2+ 27 Rxd2 Bxe4 =+.

21...Nxd3 22 cxd3 (D)
22...b4!
Black blasts everything open.

23 cxb4

23 e5! sets more practical problems, but 23...Bxe5 24 d4 Nxc3+! 25 Nxc3 bxc3 is also winning for Black.

23...Rc8?!

23...Bxb4 24 g6 Rc8 25 gxf7+ Kxf7 26 Nd4 Qe5 –+.

24 Ka1?

24 Rd2! Bxb4 25 Qh2 Qb6 26 Rb2! Nxb2 27 Bxb2 Bd6 –/+ is very good for Black, but the game will drag on.

24...dxe4

Taking on b4 was also good.

25 fxe4
25 f4 Bxb4 –+.

25...Bxe4 26 g6?!

26 Ba3! Bxh1 27 Rxh1 Bf4 –+.

26...Bxh1 27 Qxh1 Bxb4 28 gxf7+ Kf8 29 Qg2 Rb8 30 Bb2 Nxb2 31 Nd4
31 Rg1 Bc3 32 Rc1 Qe5 33 Rxc3 Na4 –+.

31...Nxd1 32 Nxe6+ Kxf7 0-1

The following example is appealing because of the slowness of White’s attack and the helplessness of Black’s pieces. I should point out that the player with the white pieces was not the former World Champion Robert J. Fischer, but a player who happens to have a similar name. This is analysis taken from that game.

White to play

R. Fischer – Levina (analysis)

Foxwoods 2001
1 Ng5!

White’s threats are coming very slowly here. He intends to play a rook-lift like Rae1-e4, from where it can go to g4 or h4 to attack Black’s barren king.

1...Qb4

Black intends to play ...Qg4 followed by ...Qh5, when the queens would come off, leaving Black simply a piece up.

1...Rab8 is best met by 2 Rac1!, intending Rxc6 followed by Rxe6, when Black will get mated by checks on h7 and f7. Instead 2 Rae1?! Rb4 3 Qxh7+ Kf8 4 f4 Rxf4 is still pretty good for White, but there is no immediate win.

2 h3!

White stops Black’s queen from helping out in the defence. Here we have a nice example of pure paralysis: despite an extra piece for Black and no immediate knockout blow for White, Black is helpless.

2...Qd2

Black intends ...Qe2 to try to bring his queen to h5.

3 Rae1! Rab8

Black tries to include the dormant rook in the defence.

4 Re3 Rb4!

Black intends ...Rf4, when everything would be defended. After 4...Nxe3 5 Qxh7+ Kf8 6 Nxe6+ Ke7 7 fxe3 Qxe3+ 8 Kh1 Kxe6 9 Qxf7+ Kxe5 10 Qe7+ Kd4 11 Rd1+ White picks up the queen and wins easily because Black’s various weak pawns will be no match for the queen: 11...Qd3 12 Qg7+ Kc5 13 Rxd3 Rxd3 14 Qxc7 +–.

5 Rf3 Nf4

5...Rf4 is met by 6 Ne4! +–, exploiting the pinned rook on f4.
The next game featured a materially unbalanced position that was not easy to evaluate during the game.

Interestingly, White does not have full compensation for the pawn here, although during the game he thought he did.

16 Bd3

This attempts to provoke a pawn-weakness and is clearly White’s best try.

16...g6?!

Black’s threat is now ...b6 and ...Nc5. But 16...h6! is a better move because it avoids ending up in any sort of bind. I refrained from this move because I wanted to make the fewest possible kingside pawn moves. What I failed to
realize is that it allows Black then to play ...f5 in comfort: 17 Qc1 f5 18 exf6 Rxf6 =+. If White tries to create a blockade in the centre with 19 Bd4?!, Black will sacrifice the exchange by 19...Rxf3 20 gxf3 and play 20...e5, giving himself a nice initiative and a big advantage.

17 Bh6 Re8 18 Bb5

White has a very easy position to play in a practical game. Black has to struggle to find a way out of this bind.

18...f6

It was not necessary to open myself up like this. 18...b6! is better, even though 19 Qe2 Bb7 20 Rfc1 Bc5 21 Qd2 Ba6 22 Bc6 Rc8 23 Bg5 Be7 24 Bh6 Rc7 25 Qf4 Qc8 26 Nd4 Rd8 27 Bb5 Bxb5 28 axb5 Bf8 29 Bxf8 Rxf8 30 Rc6 gives White full compensation. 18...Bf8 19 Be3 b6 is similar.

19 Rfe1 (D)

19 exf6 Bxf6 20 Rac1 Re7 21 Rfe1 Nf8 22 Ne5 Bxe5 23 Rxe5 Bd7 24 Bxd7 Rxd7 25 Bxf8 Qf6 26 Rce1 Rxf8 =.

Black to play
19...f5?

This is a serious mistake, leaving Black with no hope of counterplay in the foreseeable future. The move is also inconsistent, because the whole point of 18...f6 was to challenge White’s centre and now Black gives up on the idea. Even if taking on e5 did not look so great, it was the only sensible continuation based on the previous play.

19...fxe5! is correct. This is a nice example of a case where the defending side should give up material for good compensation rather than play with equal material while being completely dominated. 20 Nxe5 Nxe5! 21 Bxe8 Ng4 (I simply missed that this move attacked the h6-bishop) 22 Bxg6! Nhx6 23 Re5 Bd7 24 Bxh7+ Kh8 25 Rh5Bg5 26 Bd3 Rc8 27 Qe2 Qf6 =.

20 Rac1 Bf8?

20...Nc5! 21 Bxe8 Qxe8 22 b3 b6 was surely Black’s best try, aiming for solidity and to put the burden of proof on White to show that he can actually make use of his exchange advantage. With 23 Qc3 += White intends Qe3 and maintains an advantage.

21 Be3!? 

21 Bg5! Be7 22 Bxe7 Qxe7 23 Qc7 +–.

21...h6

Now Black’s only defensive idea is to play ...Re7 followed by moving the rook.

22 h4?

This actually throws away the win. After 22 g4! Re7 23 gxf5 gxf5 24 Kh1 White intends to put the rook on g1 and wins.

22...b6?

22...Re7! 23 Red1 Rh7! 24 g3 Nb6 25 Nd4 is still better for White, but would have allowed Black to escape and at least get his pieces developed.
23 Qc6! +/–

This led to a win for White in a few more moves. The main takeaways from this game are that in closed and semi-closed positions, you need to seek out and consider pawn-breaks like ...f5, and that one of the main forms of compensation when a pawn down is pure prevention of your opponent’s development and any counterplay.

The following pawn sacrifice may not occur to many players, but is very elegant and easy to understand once you look at it closely. It is a nice example of a blocking or interference tactic that is based on long-term positional factors.

![Chess Diagram]

_Black to play_

‘files’ – ‘threeply’

_ICC 2015_

Black missed his chance here, as he failed to play...

10...d3!!
When you consider White’s basic development scheme, sacrificing a pawn with ...d3 is a natural idea to consider. In analysis it makes good sense to look at it right away based on the ‘most obvious move’ principle: this move has the potential to change the evaluation of the position most dramatically, so we should determine how strong it is because then it may not be necessary even to look at other lines.

10...d3!! is a real development-buster that interferes with White’s natural development, making it very hard for him to bring his c1-bishop and a1-rook into play. Black has additional compensation due to the fact that he awkwardly doubles White’s pawns and may be able to occupy the d4-square highly effectively with a minor piece. It was the first move I considered in the position, because I felt that if Black had anything major here, it would be with this move. If it is not played immediately, then White will play d3, get his pieces out and pursue natural plans with f4.

In similar positions and structures in the Closed Sicilian, giving up the bishop-pair is often not a huge factor because White still has pawn-breaks to aim for in the closed position, while Black’s play is a little less obvious. Thus 10...Na5 11 d3 Nxb3 12 axb3 Bb7 =+ offers Black no more than a slight plus. And after 10...Bb7, as played in the game, White should not prioritize preserving his bishop with 11 a3?, as this gives Black a second chance to play 11...d3! 12 Qf3 (12 Nc3 Qh4 ++) 12...dxc2 13 Bxc2 Nd4 14 Qd3 Bc5 ++. White correctly answered 11 d3!, preventing Black from executing this pawn sacrifice. Then after 11...Na5 12 Bf4, he had nothing better than 12...Nxb3 13 axb3 Bc5 =+. Instead 12...Qf6 was played in the game, but this is much less compelling in view of simply 13 Bg3, when it is not clear what the queen is doing on f6.

11 cxd3

11 Nc3 Bb7 12 Qg4 Nd4 also looks great for Black.

11...Bd6 (D)
12 Nc3!

Structurally, 12 f4 is White’s main plan and it also prevents ...Qh4 from being effective. But Black is doing well after 12...Nd4 13 Nc3 Bb7 14 Ne2 (challenging the strong d4-knight is one of the only ways to try to complete basic development for White) 14...0-0! 15 Kh1 (after 15 Nxd4 Bc5 16 Kh1 Bxd4 17 a4 b4 –+ Black intends ...Rc8 followed by ...d5 or ...Rc5; White still has no reasonable way to develop his queenside, even seven moves after the sacrifice!) 15...Nxb3 16 Qxb3 Qh4 –/+.

12...Bb7 13 Ne2 f5! 14 exf5?!

Returning a pawn with the odd-looking 14 d4! gives White a better shot at completing his development. After 14...fxe4 15 d3 exd3 16 Qxd3 Qh4 17 f4 0-0 Black still has a large advantage and good attacking chances.

14...0-0 15 fxe6 Kh8 –+

Black threatens to win immediately by taking on h2, followed by checking on h4 with his queen and bringing the knight in from e5 to g4. This is a rather amazing line because Black gives up three pawns to prevent White from developing and completely blast open the centre.
The following example highlights the difficulty in assessing positions with compensation for sacrificed material.

White is a knight for two pawns down and has many threats, including Qb6, Rg5+, g4 and Rd6. The only way to assess the position properly is to determine the strength of White’s threats, his attack, and if Black can forge a defence. Assessing the focal points here is tricky, because Black has essentially no pawn-cover, so White does not necessarily need to focus on a single point. In view of the threats of Rg5+ and g4, the candidate moves 23...Nd7 and 23...Qe7 both come to mind. 23...Qe7 breaks the pin on the f-file and prevents Rg5+, while 23...Nd7 usefully develops and makes sure the knight is not undefended on b8 in case the black king needs to go back to its first rank.

It is not possible to assess the position accurately without some in-depth analysis. Nevertheless, my intuitive impression after 23...Nd7 is that Black is
not worse (unless there is a concrete line showing the win of a major amount of material), and has chances to be better after the natural plan of 23...Rf8 and ...Kh8, securing the king position.

23...Nd7

With c5 and f6 covered and no problems on the back rank, the burden of proof is now on White to show he has enough for the piece.

But let’s examine two other defensive tries in some detail:

a) 23...Rf8 24 g4 Kh8! (24...h6? 25 h4 +/–) 25 g5 Rb7 26 Qa1 Nd7 27 Rd6! (27 gxf6 allows 27...Rfb8, when Black may hold the balance with threats against White’s back rank) 27...Rc7 28 Kh1 (now 28 gxf6?? loses the f5-rook after 28...Qg6+) 28...Qe7! and Black holds on tight.

b) 23...Qe7 (D) is not an easy position to judge from Black’s perspective.

This is because White has many possibilities including 24 Qc2, 24 Rxc5, 24 Qb6, or even simply a useful move like 24 Kg2, and it is not clear which of them is the most serious. After 24 Rxc5 (24 Qb6 Rb7 25 Qxc5 Qxc5 26 Rxc5 Rf7 =) 24...Nd7! (24...Re8 25 Qb6 Rd7 26 Kg2 +) 25 Rc6 White threatens
26 Rcx6 Nxf6 27 Rg5+ Kf7 28 Qb3+, when blocking the check by 28...Qe6 would lose the queen to 29 Rg7+. So 25...Qe1+ 26 Kg2 Rb8 makes sense to bring the last piece into the game and prepare ...Rb1 to get some threats of Black’s own. After 27 Qc2, the immediate 27...Rb5? loses to 28 Rf4!, intending Rg4+; in this variation White’s king is completely safe. 27...Rb1!! is a beautiful example of reciprocal logic: by throwing in this move first to provoke Kh3, Black is able to harass the king with a check on h5 if White tries to avoid the exchange of rooks on the fifth rank: 28 Kh3! (28 g4 h6 =) 28...Rb5! (this is the best defence, intending to trade rooks on f5, followed by ...Qe5 holding everything together, while ...Qb1 can also be a defensive idea to consider; 28...Qf1+ looks like a more realistic defence a strong human player might choose, when 29 Bg2 Qc1 30 Qxc1 Rxc1 31 Bd5 Rb1 32 c4 += only gives White a slight edge in the ending) 29 a4 (29 Rf4? Qf1+ 30 Bg2 Rh5+ 31 Rh4 Qb5 –+) 29...Rxf5 30 Qxf5 Qe5 31 Qg4+ Qg5 =.

By ‘reciprocal logic’, I refer to situations where your initial (‘progressive’) idea does not work, so you alter it in a subtle way and try to improve on the original idea.

We now return to 23...Nd7 (D):

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White to play
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24 Kg2
Or: 24 g4 Qe6 =+; 24 Rd6 Re8 25 Kg2 Qe7 =; 24 Qd2 Rf8 25 Rh5 Ne5 26 Rdxe5 Bxe5 27 Qg5+ Kh8 28 Qxe5+ Qg7 will almost certainly end in a draw due to the limited material.

24...Qe7

24...Rf8 25 Qd2 Kh8 26 Rd6 Qe7 27 Qd5! Bg7 28 Re6 Qd8 29 Rh5 shows White constantly seeking out threats so as not to be worse due to having less material. 29...Nf6 30 Qxd8 Rxd8 31 Rxc5 Nd7 32 Rd5 Bxc3 33 Re7 Bb4 34 Rf7 Kg8 35 Bh5 Bf8 =.

25 Qd2 Ne5 26 Rdxe5 Bxe5 27 Rg5+ Kf6 28 Be4 Rd7 29 Rf5+ Kg7 30 Rg5+ Kf6

and White should force a draw. In this line, White’s far superior forces compensate for the material deficit. Black is slightly paralysed and unable to attack any particular weakness in White’s position. Nevertheless, as Black slowly gets his pieces out, White has no choice but to force a draw.

The following position was brought to my attention in the context of unclear and confusing positions that are hard to assess.
White to play

Jobava – B. Savchenko (analysis)

Minsk 2014

White has sacrificed the exchange: a rook for only a knight, and no pawns. He has not even gained the bishop-pair. You may wonder how he can have enough compensation. Given time, Black can play moves like ...Nd7 followed by moving his queen and castling queenside, leaving White struggling for compensation. White has a lead in development, a slightly better pawn-structure, and an opportunity to improve his structure by force. This is why White is not worse here and why I assess the position as balanced.

White can now make a favourable exchange:

11 Be5!

This is the only plan that allows White to put pressure on Black. 11 Kb1?! Nd7 12 Be2 b5 =+. 

11...Bxe5 12 dxe5! (D)

Black to play
Thus White is able to attack the very important e6-bishop. If this bishop is left unchallenged, White will have no opportunity to claim sufficient compensation for the exchange. Luckily after the recapture with the pawn on e5, White is able to play Nd4 or Ng5 and assault it directly. The strength of bishops like the one on e6 is worth emphasizing. Such interplay is a sorely neglected aspect of chess literature.

An identical doubling of the pawns on e5 occurs in one of the main lines of the Advance French, in which White intends to use the d4-square in many cases. In this position, one of White’s main plans is the direct Nd4 followed by f4-f5. Black must really be careful about this plan or else he can end up lost within a few moves. This capture is non-standard but not extremely difficult. It is easy to see how important the e6-bishop is in the evaluation of the position. In the concrete play that follows, Black’s task is harder because White’s attacking moves are simple and straightforward, while Black has a wide range of options.

12...Rg8

12...Nd7 13 Nd4 Nf8 14 f4 Bd7 15 e4 e6 16 exd5 exd5 and now 17 Ne4! is a great shot, exploiting Black’s king position: 17...dxe4 18 Nf5 Qb6 19 Nd6+ Kd8 20 e6 fxe6 21 Nf7+ Kc8 22 Nhx8 Qe3+ 23 Kb1 Qxf4 24 Be2 Kc7 =.

13 Qxh6

Here at least White has a pawn for the exchange, plus a lead in development and the possibility of playing e4 on the next move to open up the position further.

13...Qc7 14 e4 Nd7 15 exd5 cxd5 16 Nxd5 Bxd5 17 Rxd5

Now White is no longer down in development, but Black has the superior piece-activity. White is able to hold the balance with accurate play:

17...e6 18 Rd6 0-0-0 19 Qf4 Nb6 20 g3 Nd5 21 Rxd8+ Rxd8 22 Qc4 Qxc4 23 Bxc4 b5

This leads to a level ending in which neither side should lose material, but
both players will have trouble finding an effective plan.

In this example, White was the exchange down but was able to get enough direct threats to compensate fully for the material deficit. Realize that when you are a substantial amount of material down, you need to seek the maximum amount of compensation as quickly as possible or the opponent may consolidate.
To answer this question, it makes sense first to look at the actual arguments made by people who do not believe chess is logical. I shall start with one of the worst arguments first. A depressingly common belief is that you cannot be logical about anything at all. A direct quote I have heard runs, “You can deliberate about something for hours. What you finally do at the end of that process of deliberation – it doesn’t matter how long you think about it – could be the most deliberative decision of your life. What finally swings the balance (in the decision) is mysterious.” This argument is basically to say that humans never make logical choices. I could give about 100 examples of clearly logical deliberated decisions I have made right from chess, whether this is an opening choice or a choice of book to study. Very frequently just looking at a position for two minutes rather than one allows us to find a solution we had not seen after one minute. Clearly we make logical, deliberate decisions in chess which are hardly mysterious. While emotions play a role in most decision-making, logic must be at the core of the process.

Another common argument is that people see chess as a game full of imaginative solutions and sparks of genius, rather than coherent thought. While it helps to have a broad imagination and high level of open-mindedness, I cannot think of a single chess move that was legitimately the result of raw imagination. In the excellent book *Creative Chess* by psychologist and FIDE Master Amatzia Avni, he dissected the myth of the spark of genius, explaining how every major instance of an invention that was attributed to mysticism and a sudden bolt of ingenuity, actually came about through a systematic process of problem-solving, even if the mind sometimes does this subconsciously. Dr Avni writes, “As Drucker points out, a successful and innovative trial is usually the product of the careful application of systematic thought rather than any sudden brainwave. Simon too, opposes the tendency to surround the creativity phenomenon by the nimbus of mystery. According to him, there is no need to assume sparks of genius to account for inventions, discoveries, and other such works of humanity. They are all products of the human brain. The very same brain
which helps us dress in the morning, get to the office, and accomplish our daily tasks, as non-creative as they are.”

Just because that process is not always directly conscious in your mind does not mean it is not occurring. It certainly sounds fancy and puts strong players on a cloud to suggest that they think at the board in a fundamentally different way from intelligent developing amateurs playing the game, but that idea cannot be backed up by anything besides speculation. In reality, experience and board awareness are the key factors. I hesitate to use the word ‘experience’ because it is almost always used vaguely to imply that all experience counts. I am specifically referring to experience that taught you something specific and was irreplaceable in your development as a chess-player. For instance, certain losses of mine firmly embedded specific concepts in my mind and were valuable learning experiences for me. Perhaps a less analytical player might have learned nothing from the game and skipped right past its relevant learning material.

I can certainly understand how players who grew up studying chess in the pre-computer era (or when computers were so weak that you would have almost no chance of comprehending a position well by using one) might think that chess was not a logical game, at least from a practical perspective. After all, there was a whole breadth of positions that they could never realistically hope to understand without the help or explanation of a very strong human player. Things have changed now though, thanks to the increase in chess engine strength.

The legendary Viktor Korchnoi was known for saying, “Chess is a logical game. Weak chess-players are different because they make a move and think, ‘I’ll see what happens next.’ Chess is about making a move based on earlier plans and at the same time imagining the future connected to that move.” This nicely sums up how we logically link ideas throughout all phases of the game. Our plans and ideas definitely can change, even move-by-move as the logic of the position changes, but our moves are still closely connected to the logic of our previous moves.

Grandmaster Peter Heine Nielsen has said, “Part of what makes chess so logical is that in chess, the value of the pieces is reasonably fixed, and pieces can be understood in a logical rather than abstract way. In Shogi, other
factors are much more relevant.” This is an interesting way of putting it. Most chess games only feature a few major transformations, so the game inherently contains a logical thread from start to finish, especially in certain pawn-structures that do not change for many moves.

Quite a few doctors have passed on to me William Osler’s insightful quote, “Medicine is a science of uncertainty, and an art of probability.” In this day and age with computers able to back up our statements and claims, chess is a game of near-complete certainty. For problem-solvers and logically-minded people, this makes it very conceptually beautiful and rewarding to put effort into. Chess is a game of perfect information and completely analysable, so we can learn from and make sense of all of our decisions. Nevertheless, during a practical game, we have to make judgements and sometimes intuitively make moves based on feelings and likely probabilities. This does not take away from the basic nature of the game, but highlights that we need to pay attention to the human practical side of the game as well.

Garry Kasparov is often regarded as one of the players with the deepest and most difficult games to understand, not least because of his many intuitive sacrifices. Despite the complexity of his games, I studied four different books analysing his games in detail and was able to walk away from those games with clarity on the logic that motivated Kasparov’s decision-making. At the root of it, all of Kasparov’s most complicated wins can be broken down and understood in a completely logical way.

On the other hand, sometimes the logic of a position is very simple and allows us to play 20 perfect moves in a row if we simply grasp the main point of the position. This is one of many reasons to hone your chess logic and your logical skills in chess. This applies not only to strategic battles in the middlegame, but equally well to endgames and also to openings. It is necessary to understand the philosophy of a given opening so that you can make decisions that are based on the logic of the opening that you know from previous study. Developing a deep understanding of an opening makes it far easier to solve problems in the opening and find difficult solutions when you need to: your understanding of what to focus on as the essence of the position guides you.

In his 2015 book *Positional Decision-Making in Chess*, elite grandmaster
Boris Gelfand wrote, “Chess is a logical game and the tactical chances we get come from our play earlier in the game. That Black could have been punished for misplacing his pieces is natural.” This is how chess works: our previous mistakes always have explanations that make sense if we try hard enough to figure out the logic. Every lost game is due to neglecting or misunderstanding something important. The consistent observation of such mistakes goes a long way in developing our chess culture and understanding.

The fact that there is always a clear explanation for every single error you have ever made in a game is powerful evidence that chess is a rational game. When a position does not make sense to you, it is simply because you have no experience or knowledge in that type of position. Building experience and knowledge in different types of positions is one of the most valuable skills to work on improving as a result. It makes sense why nearly every elite player can handle all position-types competently at close to his rating level. When we play and analyse our games, it is important to develop experience and knowledge that helps in similar situations. This largely removes a shroud of mystery over the game. Studies are a good example of this. Frequently a solution is only found by remembering a very similar solution one saw in the past, while others who cannot draw on pattern recognition and with no knowledge of these kinds of studies may not solve the position at all. This is something I encountered regularly while doing studies with a few 2650 players.

Applying simple logic in complex positions is extremely important because it can cut out a tremendous amount of calculation and energy by penetrating right to the heart of a position. As an example, there are many exercises I have tested on players ranging from 1300 up to grandmaster strength. Master players tend to solve many of these exercises through positional judgement and logic rather than pattern recognition or calculation.

Let’s consider a very difficult example to try to see if we can really apply logic all the time:
White to play and draw

Here is a study that was used during the world solving championship of 2015 and stumped some of the best solvers in the world. One might assume that the position is illogical and has an irrational solution because some elite chess solvers struggled with it. This position is actually not as random as you might imagine. The way I arrived at the correct solution was by realizing that Black has two unique threats: taking on g2 and playing ...c2. There is actually only one move that stops both of those threats:

1 Be4!!

White gives up a bishop, but uses the tempo effectively to trade off a bunch of pawns.

1...Rxe4+ 2 Kd3

White hits the black rook with tempo and attempts to capture the two
remaining pawns as quickly as possible.

2...Ra4!

After 2...Rc4, 3 dxc3 draws.

3 Rxa4 Bxb5+ 4 Rc4+

This distracts the bishop. 4 Kxc3?? Bxa4 leaves the white king cut off because it cannot come to c2 to get in front of the a-pawn.

4...Bxc4+ 5 Kxc3 Kd7

After 5...a2 6 Kb2 White draws by giving up the d-pawn.

6 Kc2 Kc6

6...Ba2 7 Kc3, intending Kb4, is an important point.

7 Kb1

White gives up the d-pawn to achieve a simple theoretically drawn position in which Black can never make progress if White just keeps the king in the corner behind the a-pawn.

The logic behind the solution to this study is clear: by discerning Black’s threats, White was able to figure out the only ways to stop them that would allow favourable simplification.

As mentioned in the section on blitz chess in Chapter 5, strong players are able to play extremely good chess even with a short amount of time because of their high level of awareness of what is important in a position, which guides them to play strong moves. Their awareness is based on a logical grasp of essential features of the position. This grasp is built up mainly through playing, analysing, and having studied chess for many years. I can still recall how amazed I was watching world elite blitz players fool older chess engines around the year 2000 with interesting and deep ideas they came
up with very quickly. When I broke down the positions and analysed them, the way that strong players could play so logically and so quickly was impressive to me and still is to this day.

Once I looked at an engine in a complex middlegame and it said 0.00. A 2700 grandmaster walked by and said, “White should be winning if he can stop Black’s only idea of...” The exact features of the position are not important, but I was impressed by how he could immediately determine the correct evaluation based on his high level of understanding, and he even knew what conditionals the evaluation is based on (i.e. if one thing is different in the position, he sees why the evaluation is different). Interestingly, this isn’t related to anything besides chess understanding, which leads to practical application of logic. A lot of people would think that he was calculating everything, or seeing an unreal amount of tactics. Some think it is all pattern recognition. It was actually a very high-level grasp of the game and sensing the logic of the position very keenly.

In almost any position, very strong players have a good grasp of how the play might develop, even without calculating anything or without necessarily seeing anything. They generally get the concepts that both sides are going to be playing with in the near future. A huge part of this boils down to relevance. This is one reason why I have seen grandmasters look at positions and say things like, “If White’s king is safe enough here, he has a large advantage.” Reading into a comment like this, one sees the relevance he puts on king safety and king position for the side with the otherwise better position. Many would assume that an elite player’s planning and calculation are other-worldly when they see a game that is extremely consistent, direct, and apparently well-calculated from start to finish. In the vast majority of cases, it is not ‘planning’ because the moves are really not planned. In most cases, playing well at the board involves flexibly realizing how both sides might seek out good play. Often there are numerous ways the play can develop and you cannot predict how it is going to go exactly. Realizing, for instance, that you only have one (good) idea to play for can be tremendously useful at the board.

Another reason why chess is such a logical game is that we can create a hypothesis about any position and attempt to prove it right or wrong. We do
not need to rely on first principles and fundamental assumptions that we cannot prove (which we need to do in almost all other areas of life), so chess is amazingly logical.

Following the unofficial computer world chess championship has given me a lot of perspective on how logical the game is. By following the top games played by the best computers, I was able to gauge whether I could make sense of all of their moves, and whether my fundamental views about chess were confirmed or refuted by the games. Since my views were based on verifiable things and came from a reasonable place, fortunately, things turned out just as I suspected. Breaking down everything logically in chess is necessary to make sense of the game, especially when played by very strong players or elite computers. One useful task in developing your chess understanding is to look at elite games like these and explain each decision move by move and exactly how you would come up with it over the board. You will be pleasantly surprised by how much sense all the moves make. Players should also not be discouraged by the amount of shocking saving chances there are in chess, or how much resistance you can put up in worse positions. How anyone could watch the computer world championship and conclude anything other than chess being an extremely drawish game is quite baffling, especially seeing them draw so many games even with an engine score of +.5 or higher. The drawishness of chess should be obvious to anyone who has analysed deeply with engines, followed elite chess for years, or played correspondence chess. It may be discouraging to some that chess is such a balanced game, and that handling pawn-structures delicately and provoking errors are so important, but that strikes me as one of the most impressive things about the game.

In chess, players often will not know something for sure (especially when they see a position for the first time during a game), so they just have to believe and think many things ‘conditionally’. Until any further evidence or proof, it is what they will have to operate with. I tend to believe a lot of things loosely until I have seen them clearly proven. Believing things conditionally is important in being a flexible and objective thinker. We are forced to make judgements in chess, but we have a choice between whether they are loose or fixed judgements. Fixed judgements start to drift into dogmatism unless you have absolute proof of what you are claiming. A great
thing about chess is that, after games, it is possible to do objective analysis and correct your loose and conditional views with more concrete and objective answers.

One of the most attractive aspects of chess is that basic tenets of scientific thinking work well. Chess-players are very well-advised to seek out false assumptions and identify problems and potential solutions. Analysis is based on verifying and testing assumptions while seeking solutions to problems. This makes chess especially enjoyable for people who enjoy thinking critically and being intellectually engaged and challenged.

Strong players are very good at using retrograde analysis to help them get additional information about the evaluation of a position. Retrograde analysis is essentially the logic of working backwards to understand what is going on in the present. In some cases, you may simply realize that all of the moves leading up to a given position were good ones by both sides, which lends insight to the correct evaluation of the position. Or you may simply realize that one side must have gone wrong or chosen a strange plan for the given line, pawn-structure, or piece placement. It is important to keep enriching your knowledge so that you always have more and more clues to the truth in positions you are playing and analysing.

With respect to other games, very few professional chess-players care much about the developments in computer Go. The games are not very similar. Aesthetically, chess is much deeper and more visually-appealing because of the piece paths and range of strategic ideas. Chess is one of the most strategic games that exists. In fact, most of the variants of chess are more tactical and thus more prone to being calculated out in simple brute-force manner that no human can keep up with. A friend of mine was world champion in one chess variant, but made almost no money from it. It ended up being an enormous waste of time. At least with chess, you can teach children, teach it in schools, and write very interesting books and articles on it that a lot of people are interested in reading, largely because of how logical the game fundamentally is.

One of the top Go players stated that due to the size of the board, the game has a lot of artificial complexity (in the sense that it is only more complex than chess due to the total number of possibilities, but practically every other
aspect of the game is arguably not more complex). It’s a 19 x 19 board. If it were an 8 x 8 board, things would be different. It’s a fundamentally very simple game being played on an enormous board to give off the impression of unbelievable objective complexity. Similarly, you could take many chess variants and put them on a 19 x 19 board by adapting the game and create an insanely complex game. It would not have much appeal, aesthetic beauty, or logical coherence in that case though.

Computers can’t brute-force calculate chess either, but they can beat every human in the world in a match easily because of how good computers are in every single area of the game now. Closed positions, which used to be a computer’s weakest area, are now played very well because of the necessity of finding pawn-breaks and the fact that engines look for specific pawn-breaks in specific pawn-structures. The King’s Indian pawn-structure, for instance, used to be an engine’s weakest area. Now they excel and crush humans in these positions. I had only minimal influence in these major developments, but my strategic suggestions did make a big impact in other areas of engine development while working with the top engines. In short, there is a lot of very specific strategic understanding that chess engines now get. I stated a long time ago that once Go computers started to grasp the basic strategies used by the top Go players, human players would immediately lose their edge. Want to know why Go engines didn’t develop as quickly? Because about 1,000 times the resources went into developing chess engines, including some very skilled programmers who are also good chess-players.

Vasik Rajlich (arguably the person with the greatest impact in computer chess of all time) mentioned that Monte Carlo analysis would eventually allow Go engines to beat the top players, whereas it had surprisingly little effect in chess because low-depth analysis in chess is not so effective.

So while chess added more complex piece movements (real complexity) to the game over time, Go just made the board bigger (artificial complexity). I followed other games besides chess, but got bored. I always had an initial burst of excitement because I am a curious person, but I have always found I hit a definite point of diminishing returns where I realized I could spend x amount of time to get to a certain point. I did not bother with it because chess has the best elements of those games in better form. As an example, I played
some strong players at ‘Chinese chess’. I eventually stopped playing because I was having to spend so long looking out for all the cheapoes. I felt that given a certain amount of time to concentrate in any given position I could outcalculate them or outthink them just applying the same principles as in chess. I do not think people give much thought to why chess is such an attractive game but the explanation over the last few paragraphs covers it quite effectively. What I am referring to here is less appreciated than it should be.

One of the most satisfying aspects of chess is that when you misassess a position, it means you also got the logic of the position wrong. Everything in chess is tied to logic, which is tied to deeper understanding based on the previous moves. When you analyse your games and realize that everything has a logical basis, it gives you greater appreciation for logic in general, and hopefully greater appreciation for chess.

A common layman’s impression is that chess-players are no more rational about their choices and use of statistical analysis, than, say, economists, sociologists or psychologists. Strong chess-players are surprisingly logical and unbiased, because they have to be (in most fields, you actually do not). One of the reasons for this is that there is so much skin in the game: if your research is not correct, you will suffer directly from it. In chess, you cannot have any meaningful bias as a professional player, as you would get crushed on the board for it. The truth hits you right in the face in chess.

In many other fields, there are few consequences for believing completely incorrect things due to emotionality, bias, or simply ill-informed teaching. In chess, a much higher level of expertise is required than in nearly every other field (every really strong player you know has proven themselves to be in the top 0.01% of chess-players in the world). With readily accessible statistical analysis automatically done by the program itself while using ChessBase, players can make extremely well-informed decisions that are not comparable to the limitations in other fields. By being able to computer check all of our decisions, conclusions, and even strategic theories about the game, we are able to have an unbelievably high level of confidence in the inherent logic of the game and the inherent soundness of our verified conclusions. It is worthwhile to bear this in mind when criticizing the opening choices of top
chess-players and assuming they are acting capriciously or from an uninformed perspective. Chances are, for their field, they are significantly more informed and less biased than the experts in any other field you can think of. We are fortunate that chess is so logical and about as scientific as a science can get.
8: Engines in Chess

Why should I use engines?

Working effectively with an engine is a very important part of getting better in the modern era. Exposure to high-level thinking (from a good book by a strong player or a coach who clearly elucidates his thoughts) and high-level moves is amazing and propels many sub-2000 players a few hundred points forward over the course of, say, a year. Once you get acquainted with a higher level of chess, your entire game changes and you adapt.

In the 1980s and 1990s, top grandmasters tended to win easily against 2300s, and especially against 2100s. In almost every big open tournament nowadays, there are games in which the 2100 wipes out a grandmaster. Grandmasters had such a huge advantage then because amateurs could not easily learn openings or analyse them with engines. Players had to use their own knowledge and skill much more. Grandmasters had to collect magazines and books full of analysis or check them out at the library just to have access to a large quantity of quality information. Nowadays most 2100 players have databases, opening books and engines. Most of them have solidified their play dramatically and analysed their losses with engines, picking up a lot of useful patterns and ideas that players below master would never have known thirty years ago. These are major reasons to use engines to improve your play and understand positions.

Studying alone can lead to loss of objectivity if you do not carefully check your ideas. You should be able to prove all of the ideas you have in chess against engines if you believe them strongly. Engines are very useful especially for positions when you can simply not come up with any idea at all. Try playing the other side of the position against the computer for a few moves and see where it generates its play.

Studies show that the best results are given by playing someone one level above yours (which would be 200 Elo in chess). It would be like a jiu jitsu
white belt fighting against a black belt. If he fights one belt up, he will not only put in much more effort, but it will be a real fight with interesting things happening in all phases. Your endgame play will not develop at all from playing strong engines, and you won’t even develop much tactically because you will never have any tactics to find because the computer is not going to miss any.

Engines make it easier for players to patch up their weaknesses as a player, not only by finding moves and defensive ideas they never would have found, but also by identifying their weaknesses by showing which types of mistakes they make. Endgames are also analysed easily and accurately by strong computers, so you can improve your endgame play if you just make sure to analyse all the endgames you have played with computers and try to understand your endgame mistakes in simple terms.

I have been asked, “Do you think you could improve in chess by playing against a computer and comparing your move to its suggestions, trying to achieve a computeresque style?” As with many training ideas in chess, this idea may have some validity and some usefulness, but the question is how we should use our time most efficiently and effectively. I do not think this is an ideal use of time. We still think and calculate like humans and assess positions like humans too. You might remember some specific computer plans, but overall it is not really an applicable way to approach chess to try to mimic engine moves. Engines should be used fundamentally to help you understand positions and think about them properly as a human.

Players have also asked me whether I think it is a good idea for someone rated approximately 2000 strength to play positions out against the computer where they have an overwhelming positional advantage, and to do so repeatedly until they can win the position. One fundamental problem with this strategy for improving your play is that even a 2700 grandmaster with a large advantage (say, +1) will very rarely beat a strong engine. The matches between Komodo and Movsesian illustrate this quite well. Movsesian was the exchange up for nothing to start the games and still failed to win a single game. If a 2700 can’t do it, a 2000 player almost certainly won’t either. Playing computers is also generally boring and only useful for certain stretches of moves. We use computers either to get the best variations
(concrete knowledge) or to understand positions and moves. That’s the best way to use them. Training against opponents who are 200-300 Elo stronger is ideal, but playing someone 1200+ Elo better...? That seems like it will be very time-consuming and of minimal use. If it’s a completely won position (+2 or better), that might be one thing. But the issue basically all of my students have is just getting those winning positions. It is the same for me: once I get a big plus, I tend to play well and it rarely goes away for no reason. I just do not get them against IMs and GMs very often.

“Shouldn’t amateur players focus on finding solutions without an engine?” is another common question I have been asked. The problem is most of the time amateurs will not find solutions. Professional players internalize and understand ideas more readily. Many things are really obvious to strong players because of their high level of awareness and ability to grasp things quickly. In essence, that’s what ‘chess IQ’ is – IQ is defined by Mensa as “the ability to spot incongruencies with celerity”. In chess, it is essentially the ability to understand and spot things quickly.

Playing rich and complicated positions is a great way to improve, which is why certain openings like the Nimzo, Semi-Slav and Najdorf are recommended to developing players. Whereas ten years ago a player might have struggled to come up with any decent solution to theoretical issues, nowadays, due to the strength of engines, he can immediately get solutions to very complicated positions he misplayed. One should make use of this to garner the most knowledge and learning potential.

Use engines to help understand positions and generate ideas to use in human games. Their use should be to generate ideas and to find moves missed in your games. People tell me certain positions are unlosable with White. But if you play them as White against Komodo, you’ll see there are ways to fight for a win. Sometimes it is possible to hold positions against computers by just not weakening your structure.

Numerous grandmasters I know do no specific chess training, but just use an engine to analyse effectively for many hours a day. It is not a bad method if you apply logic in the process and try to understand engine scores, evaluations and positions. Gradually you develop a good feel for how it might evaluate positions and moves you are playing at the board in a game. It
is important then that you use the best engine possible that plays at the highest level and evaluates moves and positions the most accurately. Essentially, it is pointless to use an engine that is a few hundred points weaker than the best ones and gives significantly less accurate evaluations.

**Which engines should I use?**

At the end of 2017, Houdini, Stockfish and Komodo were all within 50 Elo points of each other. I tend to use Stockfish the most, as its evaluations align the most with my understanding of chess and how I see the game, although certain players may prefer Houdini or Komodo on a personal level. For a time, I worked with a grandmaster who preferred Houdini 3 because its evaluations and scores were easiest to understand. You will have to feel it out for yourself, but for me and most of the players I know, the development version of Stockfish is the fastest and most reliable.

That being said, it is useful to use multiple engines in your analysis and eventually develop a feeling for which engine to use in which sort of position. I like to use Komodo the most when there are strange material imbalances on the board due to the fact that Komodo’s queen values and piece values were very well-studied and are the most accurate. When I am looking for a solid draw in a slightly passive position, I use Stockfish because it tends to show the cleanest drawing lines and rarely gives a +.20 score that hovers there for many moves without making any progress.

Stockfish is the best engine for trying to equalize a line due to giving the lowest scores and seeing the most drawing resources, whereas Komodo is arguably the best engine for searching for an advantage in a line, or at least becoming optimistic about a variation due to its slightly higher scores in certain positions. Very tactical positions are the ones in which I would be most inclined to use the latest Houdini version, as it may slice right to the heart of the position and find the answer.
What kind of laptop should I buy for chess?

Numerous grandmasters have asked me for advice on buying a laptop for chess, so I shall mention a few simple things to consider. Note that anything I say on this topic will soon be out of date, so please note the main issues and types of considerations, rather than the specifics.

Every serious tournament player I know who travels to tournaments brings a laptop with him. Some of these events last ten days, with a lot of database searching and analysis before and after every game. For my own use, I bought a top-of-the-line laptop for chess during a Black Friday sale in 2014 for $1,400. For slightly less speed, I could have paid a couple of hundred dollars less. My focus in buying a laptop for chess was to get the best processor possible, a reasonable amount of RAM and a good solid-state drive (SSD) for the hard drive. The processor determines how fast your chess engine will calculate, the RAM determines how much of those calculations are stored, and the hard drive determines the speed that you can access tablebases or other stored data. Be careful that you do not get fooled into thinking that all processors branded, say, i7 are of similar speed. Some of them are very slow. What matters in this regard is the benchmark speed (the overclocking potential can matter too, but almost no one seriously overclocks laptops without overheating problems), which can easily be looked up on the Internet. When looking up processor benchmarks, just search for the exact kind of processor by name, followed by the word benchmark. For example, “i7-4910mq benchmark” is what I searched for before I bought my laptop that had this processor in it. Most modern Intel processors have two threads per core, so a typical i7 machine has four cores but eight threads. For chess, it is the number of actual cores that matter, not the (higher) thread count. A simple rule of thumb is that for chess, four cores are about as good as one core running three times as fast. Of course one can rely just on benchmarks, but they are rather confusing to the non-technical layman, and not always so accurate for chess. When comparing processor speeds (within a processor family), the speed that matters is the maximum speed that can be obtained using all cores, which is higher than the basic processor speed but lower than the maximum speed. Nevertheless, for people looking to purchase a new laptop, benchmarks will be reliable enough to weed out the very weak machines that will be of almost no use to a serious chess-player.
I wanted to have at least 16 GB of RAM. The RAM (Random Access Memory) is where the computer retains part or all of the calculations your chess engine does and stores it temporarily in the memory. In long time-limit engine games, having 16 GB of RAM is a significant improvement over having just a few gigabytes because less RAM means that less calculation data is stored and re-accessed quickly. I like to be able to devote at least 10-12 GB of RAM to a chess program. Lastly, I insisted on having at least a 250 GB SSD drive, because having the 6-man Syzygy endgame tablebases on your computer takes up approximately 150 Gigabytes. Having the tablebases installed for your engine gives it at least a solid 10 Elo points in additional strength, and much more accurate scores and evaluations with few pieces left on the board. It is also worth noting that SSD drives are much faster than older hard drives. Hence, if you are using ChessBase to search databases, an SSD drive may be more than five times faster in digging up the games than a traditional hard disk would be. A computer with a solid processor benchmark, more than 10 GB of RAM and a 250 GB SSD drive is not hard to buy or economically unreasonable. You can also add in more RAM or change your stock hard drive to a good SSD drive for a little more than $100. It is not necessary to spend $3,000 on a laptop for chess, but you should choose your specifications wisely.

Big memory is mostly of value to those who like to analyse a position for more than just a few minutes. Another point is that buying a power of 2 RAM, like 8, 16 or 32 GB, is ideal for Komodo but may be less good for other engines. Stockfish uses modulus arithmetic, allowing it to have any size hash table, but the GUI may impose restrictions of its own, such as limiting the size to powers of 2. This means that if, for example, you want 16 GB hash, you need to allow a few GB for everything else. So buying 32 GB would be a waste of money compared to buying, say 24 GB, which would be plenty for 16 GB hash. Komodo uses only 3 x powers of 2, so 32 GB is ideal for Komodo since it could use 24 GB hash and still have plenty left over.

Lastly, 64-bit is the most important requirement for chess. Any computer with at least 4 GB of RAM must be 64-bit anyway, so it is not very relevant for a new buyer, but if someone is wondering whether to upgrade an old computer, it’s much more worthwhile to upgrade if the old one is just 32-bit. For the minimalist who does not have much money, a tablet that runs
Windows is an affordable solution for running ChessBase for under $400.

This advice is relevant for all chess-players, not just professionals. Weaker players buy laptops for chess too and shouldn’t be unaware of things that they can understand by spending two minutes reading a paragraph. There is no reason for anyone to waste excessive money on (or make a poor decision about) a laptop that is not even good for chess if the main goal is to use it for chess. Every developing chess-player is going to be doing some chess work on his computer. You might as well do it right and get the best value for your time and money.

I recommend that every chess-player download and install the Syzygy endgame tablebases mentioned above because they are free and extremely useful. While analysing positions with few pieces on the board, your engine will hit a high depth in a much shorter amount of time with the tablebases installed. When there are just 8 or 9 total pieces left on the board, I frequently get depths over 50 without even waiting very long. This leads to incredibly accurate analysis, with very few mistakes, if any. If the score is relatively low (such as +1) with such a monstrous depth and millions of tablebase hits, it is almost always a draw. This is quite a distinct difference from how things work in the opening or middlegame, when +1 is almost always a very serious score, indicating strong winning chances for the superior side. With few pieces on the board, a strong engine should be able to find a win if it is there. This is just a general rule of thumb and exceptions may exist, but it is still useful to bear in mind. Many players just look at the number the engine computes, and do not think about the reason for the number. The reason is extremely important. If it is simply shuffling the pieces and cannot show a win or find anything productive to do, most likely the defensive side is simply material down (causing the +1 score) but holding the position.

Chess is a very data-heavy game, so it is perfectly understandable that having a good working machine can seriously influence your motivation to study it. Before chess engines were nearly as strong as they are now, good books gave me that kind of motivation. I would come home and eagerly hit the books hard and try to learn everything I could from every good piece of book analysis by a strong grandmaster. Books like Secrets of Grandmaster Chess struck me especially, seeing the wealth of ideas Grandmaster Nunn was able
to generate when seeking initiatives. I got a little bit of insight into how he analysed and thought about sharp positions with a lot of tension. Nowadays, chess engines and personal ChessBase curiosity work are the most interesting to me, and it is the most fun and efficient for me to do that on competent hardware. Acquiring good hardware also serves as a commitment device, motivating us to work harder on chess.

**What have computers confirmed and taught us?**

I am interested in theoretical truths, not just practical results. This makes chess especially fascinating to delve into. Computer testing has allowed us to prove and verify a wide range of theories and ideas in a way that is impossible in many other fields. Chess serves as a perfect science, with every positional and structural principle being testable with engines. If you have a new idea or an idea that you think everyone got wrong in the past with respect to basic chess strategy, weaknesses, pawn-structures, piece configurations and the like, you can propose the idea on the Fishtest forums. If the idea has any validity, it is likely that it will be checked and may test out positively if it is true more often than not.

The evaluations that top engines give are much more stable than in the past. A major reason they are so strong is because of new ideas, especially things that shape the search tree, and better testing by playing millions of games to determine if a change is likely good or not.

A carefully tuned existing term might get you a 1 Elo gain. An idea for a new eval/search/pruning term can get you a lot more. Perhaps AI in the future can discover these things. But mostly it is stuff like carefully defining exactly what is mobility for a certain piece and how best to measure it.

Computers have confirmed that positions with pawns on only one flank tend to be more drawish, so if one side is superior, they should aim to keep pawns on both flanks if possible. Major pieces are slightly less valuable in the early stages of the game because their long-range mobility is hindered by there being so many pieces, and developing the major pieces very early often
allows the opponent to develop their pieces by threatening ours. Symmetry increases drawishness. Fewer pawns increase drawishness; one has to be very careful with a large advantage not to allow an unwinnable pawnless endgame. We need to be aware of the most drawish types of positions, and how to aim for them as the weaker side, or avoid them as the stronger side.

Computers have confirmed, clarified, or taught us a lot about endgames and most of the time can give us clear answers when a computer is being used on good hardware with the 6-man tablebases.

Regarding pawn-structures, one important discovery is that the a-pawn and h-pawn are the least valuable pawns. This is important because if we have a choice, we will normally want to sacrifice or give up those pawns if we have to. Additionally, captures like axb3 or hxg3 that double our pawns may make more sense when you consider that after the capture, the pawn is no longer on the rook’s file and now controls more squares.

Computers have confirmed that knights are more effective than bishops with pawns on only one side of the board, but an interesting point a lot of players are not aware of is that in closed positions, the bishop-pair still has its normal value. This is because positions nearly always open up, when the bishops will be back to having more scope. Regarding the other pieces, an interesting point is that rooks become more valuable as more pieces come off, with the rook-pair being a relative disadvantage. Drawing a pawn down has been completely revolutionized thanks to deep computer analysis showing how a wide range of positions can be adequately defended. Openings featuring a distinctly strange move or that completely give up the centre to White are usually dubious. Positions are equal far more often than we previously imagined and even still imagine now. We have far more defensive resources than we imagine at the board.

It has been interesting to follow how engines evaluated space advantages in the past compared to now. Old engines would majorly overestimate space in closed positions. Nowadays, they are much better at giving correct scores and linking closed positions to direct pawn-breaks to open up the position. A far-advanced passed pawn can easily be worth two pawns. If it is protected, passed, and far-advanced, it can frequently be worth a piece.
Engines demonstrate the importance of badly-placed pieces in general. Rigorous computer testing has proven the ‘advantage of the queenside majority’ to be a myth; even though there are instances where it allows one side to create a strong outside passed pawn, this is just one special case.

Here are some differences I have noticed between humans and computers, which still remain constant with today’s top engines, and will probably remain this way for a while:

**In opening play:** I still encounter a number of positions in which the obvious human move gets a 0.00 score (on one of the top three engines) even at a depth of 35, while an odd-looking move the computer suggests gets a score of +.15. When I input the move that originally had a score of 0.00, suddenly the engine starts to recognize the value of the move and the score shoots up to +.25 or higher. There is no easy way to fix this, but humans who have spent a lot of time understanding openings and have a reasonably high level of positional understanding usually know the only places to look in many openings for advantages, while engines of course can only calculate deeply in search of a plus.

**In middlegame play:** humans are sometimes better at making quick judgements of attacks, but generally struggle to play very tense and complicated positions. I refer to one type of move as a ‘painfully slow move’. In a position that appears tense and full of tactics and hanging pieces, sometimes you can play a slow move that addresses none of the apparent threats on the board and simply looks way too slow to play. Human intuition partially prevents us from playing such moves because we focus on playing with speed and energy in such situations, but sometimes we miss deep threats due to their slowness. Painfully slow moves are hard to spot because we are primarily looking for forcing moves in those situations, and to force the issue and resolve the tension. Even strong players want the tension to be resolved. A typical example is not regaining a piece when it is there for the taking, but rather playing a calm move that plays for an attack instead. Often, there will be no direct mate or way to win back the material, but playing for the attack
material down is still the best choice. Computers obviously have no such biases, and very shocking wins and punishing moves are found readily and easily without many problems.

There are rare exceptions of positions in which engines get stuck at a relatively low depth due to an extreme amount of pawn-tension. Sometimes Stockfish does this at depth 27 and gets stuck there for 10 minutes, even on strong hardware. In essence, the top engines have few flaws in the middlegame, while humans often have simple biases preventing us from finding some of the best and most shocking moves. I also think that often moves dubbed as ‘computer moves’ in the middlegame that are clearly the strongest are not being fairly labelled. They are just moves that we are too biased or restricted to find for whatever reason. With the right kind of training or exposure to such moves, they would become far easier for human players to find and not seem that strange.

In endgame play: humans will head for positions with a half-pawn advantage for the opponent that they view as an easy draw. All of the engines still overvalue positions that are easy draws. One such position came up during the 2016 world championship match, in which both Stockfish and Komodo gave Carlsen more than a two-pawn advantage in a game as Black against Kariakin in which there was in fact no way to win. Blockades are still the main blind spot engines have in endgames. Thus, I do not trust high engine scores that get stuck at, say, +2, unless I can actually see what the plan is to make progress. Progress is another issue engines have, particularly in endgames.

Defensive resources are objectively much greater than many players in the past thought: the drawing margin in chess is bigger than was previously believed. Once they have grasped this point, players have more general confidence in defence relative to attack so they don’t get discouraged and work harder to find defensive resources. In particular, they are often confident in their drawing chances if they are one pawn down with no other disadvantage, or an exchange down with one positional trump to compensate. The value of a pawn advantage is understood much better now: if you cannot create a dangerous passed pawn, win more material or attack the king, an
extra pawn is not enough to win. Tablebases also showed that many positions are drawn that were previously considered won. For example, Q and a+b pawns vs Q is generally drawn. The basic problem is that the two extra pawns cannot be advanced without allowing perpetual check from the opposing queen, while the stronger side cannot force an exchange of queens if the defender positions his king appropriately.

In closed positions, pawn-breaks are of the utmost importance, and humans realize this immediately. This was one of the reasons why strong players were sometimes able to outplay computers in closed positions in the past. Even now, engines occasionally have an issue with pursuing an obvious ‘only pawn-break’ that every human will immediately aim for and is clearly best. This is one of the very few instances in which the best move or plan may be more obvious to a human than to the engine.

When should I trust engines?

The assessments of the top three engines (Komodo, Stockfish and Houdini) are very reliable in the following situations: with a small number of pieces on the board and tablebases installed, in highly tactical positions, when your engine reaches ridiculously high depths, and generally depths around 25 or higher. Simple positions with no apparent tactics and symmetry on the board given as equal by engines at decent depths are almost always valid.

There are caveats though. A typical situation when you should not interpret engine scores literally is when numerous mistakes are made late in an endgame, but the engine score stays at 0.00 because the computer still sees an incredible draw in all variations. The most striking example of this I can recall was when I was watching an international master’s game in which it was completely equal in an endgame with a rook, a minor piece and two pawns for both sides. The player in question blundered two pawns over the course of ten moves, and was then two healthy pawns down, even though incrediblly the computer said he could still draw by finding a very difficult way to give up his knight for one of the pawns, later allowing him to pick up
the last one. In such cases, according to the engine, no mistakes were made because the score stayed at 0.00 the whole time. It is important to analyse these situations from a human perspective, because dropping a pawn for nothing in an endgame is practically always a mistake that makes your position worse.

Realize when using engines that you have to understand what the score is based on to trust it.

In the 2017 computer world championship, the evaluations stabilized and did not change much in the middlegame. They were more than twice as stable as in the previous SuperFinal. It just meant that all of the scores had more meaning than in the past. Hence, all analysis done on the latest engines also has more meaning than it did in the past, because the lines are just most stable and likely to be correct.

Ten years ago maybe computers didn’t understand certain position-types. Nowadays this is almost never true, yet many confused players still act like it is. Engine testing and improving how computers play and analyse has made obvious progress in areas where the engines used to be weak.

Human search depth is low, so low-depth engine play corresponds to human play more. Some websites have built-in engine analysis, but one has to be careful because the engine analysis is really weak. In many cases the website features, say, depth 16 analysis on Stockfish, whereas on a decent computer I would want to hit at least depth 27-30 before trusting the lines.

I think of an engine score of +.15 as a kind of transition point, when engines tend to move either slightly up or slightly down within a few moves. When the score goes down slightly from there, there is practically always no edge, and when it goes up slightly, there is usually a nagging plus.

A perfect example of a computer move I would never play comes after 1 e4 e5 2 Nf3 Nc6 3 Bc4 Bc5 4 c3 Nf6 5 d3 d6 6 Bb3 (D).
Here at depth 31, Stockfish gives 6...a5 0.00 and 6...a6 +.17. I would imagine that many amateur players would see the 0.00 score, assume 6...a5 is best, not know why and carry on with their analysis. There are a few points that should be made here for clarity. Firstly, +.17 is not a particularly high score, and such evaluations have a strong tendency to drop down towards 0.00 as more moves are played unless the stronger side has a real strategic advantage of some sort. Secondly, it is very hard to understand the point of 6...a5, and it looks rather loose and even pointless. 6...a6 intends to tuck the bishop back on a7, as Kramnik and plenty of other world-class grandmasters have played. On the other hand, the move 6...a5 has never been played by a strong player, and I would be surprised if one of them did. It simply looks loose and has no obvious purpose. When looking at opening positions you want to play, it is important on a really basic level to understand the point behind your moves, and to ask yourself questions if some of the moves you plan to play look decidedly strange or hard to grasp.

It is hard to discuss when to trust an engine, or how to interpret its output, without giving a clear example. Here is an example most players I know have analysed at some time or another with the computer. 1 e4 d6 2 d4 Nf6 3 Nc3 e5 4 dxe5 dxe5 5 Qxd8+ Kxd8 is a good example of a position in which people may trust their engine scores excessively. It really does matter which engine you use, what the depth is, and what the trends are. To illustrate this, I
shall give you the evaluations from Stockfish 7 at various depths after Black takes back on d8 with the king: .50 (d24), .49 (d25), .36 (d26), .39 (d27), .33 (d28), .35 (d29), .32 (d30), .34 (d31), .36 (d32), .36 (d33).

As we can see, at depth 24, the engine gives a half-pawn advantage. Once it stabilizes around depth 30, it starts to give scores closer to +.35. Initially the trend started downwards and then it stabilized. It would be a mistake to assume that just because the trend went from +.50 to +.32, that the evaluation is heading right towards zero. One simply cannot conclude that from just a few numbers. From seeing how the depths developed after that, we can see that the scores do seem to give White a stable small plus. What is important from here is to establish a reasonable main line (say, 15 moves for both sides), and check it at a reasonable depth to make sure that there are no major improvements for either side. See how the engine evaluates the position and what kind of trend is apparent once more moves have been played, some exchanges have occurred, and the structure is more stabilized. This is an effective way to use computers to analyse complicated opening positions with seemingly unstable computer evaluations. When trends are legitimately moving towards zero, one has to be careful about trusting the scores too much. If the scores are starting to stabilize, generally one can place value in the scores if the depths are high enough.

Assessing attacks based on general solidity of the defence, concentration of force by both sides, and focal points helps humans quickly assess whether an attack will work. I have seen many positions that an engine quickly scored +.3 or +.4 which a strong player or I immediately declared was ‘nothing’. A quick scan of the general solidity, resources for both sides, and focal points allowed a rapid conclusion to be drawn, while the engine may have taken minutes on strong hardware and still concluded that it had something. Incidentally, this ability to scan the board is also why some titled players can tell an attack will not work in a quick glance, while a swarm of 1900 players at open tournaments stand around a board moving the pieces thinking there is a win. I have been the bearer of bad news many times to drop in and point that out during a haphazard analysis session by amateur players.

Think to yourself if an engine score of +.15 matters as White in an open position with tons of weaknesses and the initiative shifting back and forth.
Whose position is easier to play will matter a lot in a practical game in such situations.

Some +.30 starting scores drift right to equality, and some +.25 scores drift to +.50 within a few moves. The positional characteristics and type of advantage are most important – that’s why the judgements of strong human players about positions are still very important. Trends matter.

I played some correspondence chess after 2010. I was able to beat Houdini users fairly often because Houdini misevaluated and got many things wrong. A lot of optimistic 0.00 Houdini pawn sacrifices turned into a win for the other side when the compensation dried up. A lot of closed positions were winning for one side that was able to carry out an effective pawn-break that Houdini did not see. There were many other things Houdini got wrong, including far-advanced pawns, bishop-pair values, and especially queen values (Houdini severely overrated the value of the queen, but Komodo got it right). More recently (since approximately 2014), it has become significantly harder to beat engines because nearly all of these major issues were fixed and there are far fewer major engine weaknesses to target now. Additionally, nearly every sound main line has been worked out concretely to equality or a draw for Black now, so it is hard even to get a position where you can outplay a good correspondence player, let alone one with an advantage for you from the opening.

I sometimes see positions in which the engine changes its evaluation between .3 and .7 over numerous moves, with very few pieces left on the board. A lot of the time it doesn’t really make a difference what the evaluation is in that range unless there are serious winning tries. If the moves being played create threats and pose problems for the opponent, that is usually the maximum you can do in a practical game, so I tend not to dwell on these types of situations.

The following game is one of my very few wins against an engine in a somewhat long time-limit game (45 minutes for the game plus a 45-second increment added after each move). Despite winning the game, I did not play particularly well and only won due to the preposterous 36 Qxb6???. Nevertheless, this example highlights how engines made a lot of inaccuracies
in closed positions in the past. Nowadays they are much better at seeking direct pawn-breaks, and King’s Indian positions are very tough to win against the top engines, even when you get an attack on the kingside that looks promising.

Crafty – Kislik

Internet Chess Club 2009

1 d4 Nf6 2 c4 g6 3 Nc3 Bg7 4 e4 d6 5 Nf3 0-0 6 Be2 e5 7 0-0 Nc6 8 d5 Ne7 9 Nd2 a5 10 a3 Nd7 11 Rb1 f5 12 b4 Kh8 13 Qc2 (D)

13...Ng8

Objectively, 13...axb4 14 axb4 Nf6 15 f3 (or 15 b5 fxe4 16 Ndxe4 Nf5 with counterplay) 15...c6 is probably a better line.

14 f3 Ng6 15 Bd3

White chooses the main line, provoking me into closing the kingside. 15 exf5!? gxf5 16 Nb3 axb4 17 axb4 Nh5 18 Be3 Nf4 19 Bxf4 exf4 20 Rfd1 allows White to obtain a slight advantage due to his better structure.
15...f4 16 Nb5 b6

This is the only move that has been tried in high-level correspondence chess. 16...axb4 17 axb4 Ne8 18 Rd1 +=.

17 Bb2 h5

17...Ne8 is the overwhelming main line in correspondence games. I aimed to get in ...g5-g4 directly.

18 Nb3 a4

Clearly the intention behind this move is to keep everything closed on the queenside and to make it as hard as possible to open lines there.

19 Nd2

White chooses the wrong knight retreat, as now playing for c5 is extremely difficult. 19 Nc1! g5 20 Be2 g4 21 Nd3 Rg8 22 c5 +=.

19...g5 (D)

![Chess Diagram]

White to play

20 Nc3?
The computer clearly did not sense the danger to its king. 20 h3! is the right idea, simply to run away with the king if Black insists on playing 20...g4: 21 h.xg4 h.xg4 22 Kf2 Nh5 23 Rh1 Nf6 24 Nf1 +=.

20...g4 21 Nxa4 g3! 22 c5 Nh7?!

Now the threat of ...Qh4 gains in strength and White needs to seek out an effective way to keep the kingside locked up. However, this move misses the spectacular 22...bxc5! 23 bxc5! gxh2+! 24 Kxh2 Ng4+! 25 fxg4 Qh4+ 26 Kg1 hxg4 27 Nf3! gxf3 28 Rxf3 Bh6 –/+.

23 cxd6 cxd6

23...Qh4 is a worthy intermediate move. Then 24 h3 Ng5!? (24...cxd6 transposes to the next note) 25 dxc7 Nc5 26 Nxc5 Bxh3 27 Rf2! gxf2+ 28 Kf1 Bxg2+ 29 Kxg2 bxc5 leads to an insane draw.

24 Bb5?

24 h3! Qh4 25 Nc4 Ng5 26 Nxd6 Nf6 27 Nxc8 Rfxc8 28 Qd2 Rxa4 is objectively drawable for White with perfect play. Instead 24 Rfc1 Qh4 25 Nf1 Ng5 gives Black the initiative.

24...Rxa4? (D)

I remember thinking this was brilliant at the time, but now it appears to me that this is just an unnecessary sacrifice. 24...Qh4! is the obvious move, mounting a massive attack on h3. After 25 h3 Ng5 26 Nc4 Nf6 Black wins because of White’s inability to prevent an effective piece sacrifice on h3: 27 Naxb6 Bxh3 28 gxh3 Rad8 29 Qe2 Nfxe4!! 30 Bd7 (30 fxe4? f3 –+) 30...Nf2 31 Rxf2 Rxd7 –+. 
White to play

25 Qxa4?

At the board it would be impossible to calculate the difference between taking on a4 with the bishop or the queen, but intuitively moving the queen away from the defence of the kingside and the second rank just looks wrong. 25 Bxa4 Qh4 26 h3 Ndf6 27 Rbc1 Bg4!! 28 Nc4 Ng5!! is an amazing position: White only draws here, despite the fact that he has many different things he can capture. 29 Nxd6 Bxh3 30 gxh3 Nxe3+ 31 Kg2 Ng4 32 Nc4 (32 fxg4? Ng5 –+) 32...Rc8 33 Qe2 Rxc4 (White must now avoid a deadly check on e3) 34 Rh1 Ne3+ 35 Qxe3 fxe3 36 Rxe3 e2! 37 Rxe4 Rxc1 38 Rxc5+ Kg8 39 Bc3 Rxc3 40 Rh1 Bh6 41 Re1 Rxa3 42 Bc6 Ra2 43 Kxg3 Kf7 only leads to a drawn opposite-coloured bishop ending: 44 Kf2 Bf8 =.

25...Qh4 26 h3 Ndf6 27 Rfe1 Ng5?

It looks obvious now that simply taking on h3 would have been much stronger, and even winning: 27...Bxh3! 28 gxh3 Qxh3 29 Re2 Ng5 30 Rc1 Qh4 31 Bd7 Nfxe4! –+.

28 Bf1 (D)
28...Ng4!!

This was a fun move to play, intending to bring the knight to f2 and sacrifice on h3. I thought that I might be winning, but could not calculate the position very clearly. Against a human player, it is realistic to win a position like this in a few moves. Against a computer though, it is not surprising that White holds on.

29 Qc6 Nf2 30 Re2 Bxh3

Now comes the inevitable sacrifice.

31 gxh3 Ngxh3+ 32 Bxh3 Nxe3+ 33 Kf1 Ng5 34 Kg1 Nh3+ 35 Kf1 Ng5 (D)
36 Qxb6??

The computer avoids the draw and lets my pawns roll right through the position. 36 Kg1 repeats, with a draw. Unfortunately Black has to take it because he has no good way to get his kingside pawns in motion because they are slightly too slow.

36...Nxf3! 37 Nxf3 Qh1+ 38 Qg1

38 Ng1 f3 shows the tremendous power of Black’s armada of pawns storming through White’s position.

38...Qxf3+ 39 Ke1 Qg4

Black’s avalanche of pawns is now unstoppable.

40 Kd2

40 Kd1 f3 --.

40...f3 41 Re3 Bh6 42 Kd3

42 Kc2 h4 --.
42...h4 43 a4 h3

This game was included mostly because of the optical beauty of some of Black’s moves. I tried to queen all three passed pawns on the kingside at nearly the same time to leave the biggest impression.

44 Bc3

44 Kc3 h2 –+

44...h2 45 Qh1 Bxe3 46 Kxe3 Qf4+ 47 Kd3 g2 48 Bd2 Qg3 49 b5 f2+ 50 Kc2 (D)

Black to play

0-1

The power of these pawns was very memorable for me.

Sometimes 0.00 on a computer translates to 1-0 over the board, such as a disturbingly weak king for Black that is given 0.00 solely because it is saved by astonishing engine moves. The 0.00 that has one line to hold and ten to lose is usually very difficult to play in practice.
We should not be as trusting of the engine’s moves in very closed positions as we are in more open positions that can be calculated far more easily by engines. For instance, if the engine gives one move a score of +.8 in a locked position and has no plan to make progress, but a move with a score of +.5 aims for the most obvious pawn-break, I would usually go with the +.5 line because it is comprehensible for a human player to make sense of the evaluation. Remember that we are using engines to understand positions and how they should be evaluated.

The only times when I do not trust engine scores of above +1 are in completely locked positions, in positions in which the engine is overvaluing the queen (or some other material imbalance), or in endgames that the engine does not realize are fortresses. Be aware of cases in which a +1 engine score does not lead to a win and learn from it so that you can understand engine evaluations better in the future.

One problem that all engines have is a poor understanding of there being no way to make progress in a position, known as ‘no progress’. It is one of the last really tough concepts needed in computer chess. It is also a very important concept for humans to think about, especially when they are significantly ahead or behind. It is surprising how many positions are saved due to fortresses or advantages that cannot be converted.

One of the most satisfying things in chess is demonstrating a logical truth in a given position to the computer. Sometimes you realize a very simple point or detail but engines give evaluations that shock you. In many cases, even evaluations at high depth can be overturned by suggesting simple and logical moves. This is an additional reason why, despite the very strong engines we have now, it is important to use your own brain when you analyse with them. As one example, I once drew an analogy to a Carlsen game (the position on the board was exactly the same except for one tiny difference that did not impact the evaluation; I knew from the Carlsen game that White was objectively better), and immediately hit upon the best line that the computer did not see or evaluate correctly at depth 35. Additionally, sometimes you realize your opponent has a specific threat. You make a move and suddenly the computer says the position is equal (when you thought you were worse), but you do not understand why the opponent’s threat cannot be executed. It
often happens that such a threat can actually be executed and may grant the opponent an edge. The computer is not using simple human logic to make its decisions: it is operating with brute-force calculation and the ‘most obvious move’ is not something it can easily grasp, even conceptually. It is surprising how many positions will allow you to play the most obvious move in the position that overturns a computer evaluation or improves over the best line given.

Slightly more active pieces in a 100% drawn ending is a 100% drawn ending, even if an engine gives a +.4 score due to the slightly more active pieces. We need to be very careful about this when analysing with engines, especially when we scroll back earlier in our games and see that we headed into a drawn endgame from a slightly better middlegame. In such cases, we need to look for ways that we could have maintained our advantages better.

There is a major difference between different types of +.3 space advantages. They may depend a lot on White’s ability to carry out a distinct pawn-break. For instance, +.3 in the Ruy Lopez will often be linked with playing f4 quickly, which will very rarely create any weaknesses for White. In the KID, White may really have no pawn-break and no edge. It depends very specifically on the position and having a break or very clear play. If you do not have either a break or play, you cannot put much value in such a score.

When an engine gives 0.00, you should be much more inclined to trust it than when it shows +.25. If you think the engine should give a half-pawn edge and it shows 0.00, you have to demonstrate it or acknowledge there is nothing in the position. As engines get stronger and stronger, these 0.00 evaluations become less and less wrong. Usually when you think it should be a half-pawn edge like this, there are just a few tries for White and you can go through those tries within a few seconds. So most of the time you can convince yourself the computer is right within 30 seconds by trying out a few moves or ideas. It is not a mysterious thing. You just start making moves, get the correct answer, and move on. A lot of the time it is simply a waste to stare aimlessly at the engine for minutes at a time wondering about the score. Sometimes the answer will truly be difficult to find and it is better just to be proactive and challenge the computer to demonstrate its reasons.

Human judgement is often still worth more than computer analysis in cases
where simple logic or instant realizations home in on the key factor or factors dictating a position’s evaluation. Strong human judgement may instantly lead to the correct solution when there is only one pawn-break to aim for in a closed position, when a piece is trapped or extremely badly-placed, when a move like ...h6 in a King’s Indian Attack position dramatically weakens Black’s king position (in such cases, a human might reflexively avoid considering this type of computer move as best in his analysis), when a top engine move is particularly structurally weakening, or when there is only one move worth considering for practical chances.

Many players are too concerned with the exact engine score without understanding the nuances of the evaluations. This happens most frequently in positions where the computer claims one side has a small advantage. This is worth unpacking a little. One has to judge endgames differently with few pieces on the board. An engine score below +.5 at very high depth is nearly always a draw except in very rare cases. In typical middlegame positions, one should look at Stockfish and Komodo evaluations and go by the lower one in almost all cases, or by asking the simple question, “Can I beat a player 100 Elo weaker in this position without an outright blunder on his part?” If the answer is no, then the +.3 evaluation does not matter much.
Analysing Positions with Computers

There will always be positions you want to analyse deeply with an engine to find one absolute best move and line. There are a number of typical situations where this occurs. You may want to find many different plans and ideas in an important position. A good way to do creative brainstorming on any given critical position is to analyse with four lines showing on an engine. If the position is rich enough and not too advantageous for one side, you will often be surprised by just how many challenging ideas are present.

There are certain positions where you may want to leave the engine running a little while to try to find the best move. Positions which have an engine score above +1 tend to take engines longer to calculate to the same depths as more balanced ones. Engines will often sit in a position with a score of +2 or +3 for 10 or 15 minutes before reaching the next depth. Thus, for automated analysis, you may want to refrain from analysing too many positions in which the score is above +1.

If all lines say 0.00, then the trickiest one is normally the best. You should understand this when analysing your own games, so as to add in the tricky lines that you could have tried to increase your chances of winning the game.

I don’t care all that much about crazy random computer tactics. They are fun and you get to see fireworks, but in many cases cannot be expected to find them over the board. Simple positional errors are the most useful to see explained by another human being and something computers cannot help us with yet, at least in terms of showing an actual description. Positional commentary is the most useful, unusual, and difficult form of commentary.

One quirk of using engines is that sometimes they may give a large advantage and have it decrease to zero suddenly. One has to get a sense for developing what is a stable evaluation and what is not. In my experience, anything above depth 23 on Komodo 9 is usually fairly stable. Anything above depth 30 on Stockfish 6 (or later) is also a very stable depth. When analysing, be very sure to pay attention to the depth of the lines shown.
Engines sometimes suggest that one side completely weaken their king position, or even walk far across the board. I have seen instances (mostly on older engines – not on recent Komodo or Stockfish versions) of engines giving a score of around +5 that suddenly drops to 0.00 when an exposed king gets caught in a perpetual check.

Press the ‘X’ button in ChessBase (‘Analyse threat’) to understand what the threat is behind a move you do not understand.

You can test out positional plans with an engine. Suppose a player has a space advantage with White, and the engine suggests some random rook moves, or maybe a quiet knight move. The player wonders what happens if he adopts a plan involving the advance of his queenside pawns. And what happens if he advances his kingside pawns? A human player with such an idea in mind can manually enter all of the moves and see how the engine analyses them. For example, play b4 and a4 and then let it run a bit and see if the evaluation seriously drops.

There was a perfect game I saw recently on this theme – Sielecki-Yakovenko, which has a YouTube video about it online. White had a massive spatial plus and the bishop-pair... and he did about everything possible in his power to lose it, from the most basic += structure imaginable.

Most of the observers thought that GM Yakovenko had clearly outclassed IM Sielecki and played the entire game on a higher level with a deeper understanding, but Sielecki simply threw away a fantastic position. This was a game in which all of White’s main ideas could easily be analysed and checked with the computer. Every idea intending to trap the knight on h5 was easy to evaluate, as well as every idea with f4. Black also only had a few moves that could obtain much counterplay before move 20, such as 14...b5 and 15...cxd4.
After a lacklustre opening, White has a better structure and the potential to obtain the bishop-pair or increase his space advantage.

10 0-0 c5?

After this careless move, Black could have run into immediate trouble due to his worse structure and awkward bishop on b4. 10...d5! is the best move because it allows the b4-bishop to come to e7 so that he does not need to give up the bishop-pair: 11 cxd5 exd5 12 Bf5 Be7 13 f3 +=.

11 a3

Grabbing the bishop-pair is not a bad choice. White simply needs to play with a little bit of consistency and Black will remain worse for quite a long time. But there is a stronger move: 11 Ne4! Bxe4 12 Bxe4 Rc8 13 d5 Qe7 14 dxe6 fxe6 15 Rad1 +/– and White threatens the very awkward Nf4.

11...Bxc3 12 Nxc3
It is good to grasp positional basics to assess simple positions properly. Here Black does not have any compensation for White’s extra space and bishop-pair.

12...a6 13 b4

Although this is not a bad move, Black does get the possibility of obtaining some counterplay with ...Qc7 followed by ...d5.

13 Rad1 Qc7 14 Be2 is a simple and effective line for White, preventing Black from finding a decent square for either of his knights. After 14...d5 15 Bg3 Qc8 16 b3 White keeps a large advantage by keeping Black’s pieces completely at bay.

13...Qc7 14 h3

White tries to preserve his bishop, but misses Black’s idea. Better is 14 Rfd1! d5 15 Bg3 Qc6 16 cxd5 exd5 17 bxc5 bxc5 18 Rab1 +/–, intending f3.

14...Nh5 (D)

14...b5!? 15 dxc5 dxc5 16 cxb5 c4 17 Be2 axb5 18 Rfd1 +–.
15 Be2?

While trying to win material, White misses Black’s only active idea of fighting for the f4-square. 15 f4!? would be a dangerous move for Black to face over the board, because he must resort to drastic measures to avoid getting pushed off the board: 15...cxd4 16 exd4 d5 17 cxd5 Rac8 18 Rac1 Nxf4 19 Bg3 e5! and Black only ends up slightly worse after 20 dxe5 Nxd3 21 Qxd3 Nxe5 22 Qd4 +=. 15 Ne2 g5 16 Bg3 is also better for White because he avoids damage to his pawn-structure.

15...Ndf6?

15...cxd4! 16 exd4 Nf4 17 Bg3 Nxe2+ 18 Nxe2 Bd5 =.

16 Qd1

Although this is a sensible move, 16 f4! would have won a piece because ...g5 is never an option: 16...cxd4 17 exd4 d5 18 Qd2 dxc4 19 g4 +–.

16...g6?!

Or: 16...g5 17 Bxh5 gxh4 18 Bf3 +/–; 16...cxd4 17 Qxd4 +/–.

17 bxc5?!

Exchanging on c5 gives Black more defensive possibilities. 17 Rc1! Kg7 18 f4 +–.

17...dxc5

Black’s plan is to play 18...cxd4 19 exd4 Qf4, forcing White’s h4-bishop off the board and equalizing.

18 d5?!

18 f4! stops Black’s main plan, as well as restricting ...g5. There is very little that Black can do here to obtain counterplay; e.g., 18...Rae8 19 Rc1 Ba8 20 a4 +/–.
18 g4? g5! is Black’s main idea, when he even obtains an edge in view of White’s weakened king position.

**18...Rad8?**

This was a blunder, typical of a blitz game. After 18...exd5 19 Bxh5 Nxh5 20 Nxd5 Bxd5 21 Qxd5 += White firmly controls the centre, prevents Black from putting a rook on the d-file, and has a bishop that is superior to White’s knight.

**19 Bf3?**

White misses a chance to snag a full exchange by simply taking on h5: 19 Bxh5 +–.

19...Qe5? (D)

19...g5! 20 Bxh5 gxh4 21 Bf3 exd5 22 Nxd5 Nxd5 23 cxd5 Qe5 24 Rb1 +=.

[Chessboard image]

*White to play*

**20 Qb3?!**

White again missed an opportunity to take on h5: 20 Bxh5! Qxc3 21 Rc1 +/–.
20...g5 21 Bg3?

After this inaccuracy, White’s structure is quite bad. He needed to take on h5 and then play f4 so that his dark-squared bishop could retreat: 21 Bxh5 Nhx5 22 f4 Qg7! (22...Qxe3+? 23 Bf2 +–) 23 fxg5 hxg5 24 Be1 b5 25 Rc1 exd5 26 Nxd5 f5 =.

21...Nxg3 22 fxg3 exd5

22...h5 23 Qxb6 Qxc3 24 Qxb7 g4 is also positionally winning for Black.

23 cxd5?!

23 Qxb6 Qxe3+ 24 Kh2 Qxc3 25 Qxb7 Qxc4 –/+ is very strong for Black too.

23...Qxe3+ 24 Kh2 Nxd5

24...Bxd5! 25 Bxd5 Nxd5 26 Rf3 Qe6 –+.

25 Rac1 b5 26 Rfe1 c4 27 Qb2?!

27 Rxe3! cxb3 28 Nxd5 Bxd5 29 Bxd5 b2 30 Rb1 Rxd5 –/+.

27...Qd4

Black was completely winning and won the game on move 37. It is important not to see games like this and gain the impression Black was simply on a higher plane of chess understanding than his opponent. In this game Black actually played badly and gave White a very clear and crystallized version of a straightforward advantage in the form of the bishop-pair coupled with a space advantage. Later he had an awkward knight on h5 that could have ended up in dire straits after the simple f4 on various moves (or Bxh5 winning a full exchange on one move). White carried out his play very inconsistently and did not play on his basic trumps the way he should have, but instead bounced back and forth between disparate ideas and paid the price.
If you analyse something with the computer and do not understand why a large advantage is given for one side, play a few moves out against it and you should quickly get a sense of the difficulties in the position. This is mostly a time-saving device, but one which is also good to get you to engage and apply maximum effort in your training and analysis.

Let your engine get to a higher depth before you make moves quickly right after critical moves from an important position have been played.

When analysing your blitz games with an engine, notice when you paused during games and became unsure and see what the engine suggests, so that you can get a clear idea of how the position should have been played.

A good training method using grandmaster games and an engine is turning on the kibitzer and sliding the pane in such a way that you can only see the evaluation. When you see a dramatic change in the evaluation, you work out the solution, whether positional or tactical. Then simply check the line against your own. It is a fun way to train because the game is natural, current, and not a random hypothetical problem. A good example is how Anand’s blunder against Caruana in the 2016 Candidates tournament showed a big swing in evaluation. I worked it out without looking at the line. His 22...Ne4? blunder registered on the screen, then boom, I had the idea. This is so much more useful than an online tactic that was generated from a 1400’s game.

When an engine suggests a move that you would never consider and cannot understand the strength of on any level, you should get in the habit of looking for alternatives. If there is an alternative within one tenth of a pawn that makes perfect sense to you, it is the kind of recommendation you can follow and explain in your own game commentaries. If, on the other hand, there is no alternative within at least half a pawn of the mind-boggling computer move suggested, this fact should help you figure out why the computer move is good, and at least aid you in solving the problem by a process of elimination.

While using an engine, I usually have the engine only show one line because it calculates lines more quickly this way. I have the engine show a few lines when I need to generate ideas. I tend to let the engine hit depth 30 in important positions, but if the moves are forced, or at least appear forced,
letting the engine hit less than depth 30 can be perfectly fine.

When using engines, you can save time when there is an obvious recapture or when the second-best move is so clearly inferior to the best move, there is no need to wait for the engine’s evaluation. After all, what matters most is the evaluation of the position after some moves, so if those moves are already input, you can get a much deeper and more accurate output from the engine.

When you have a choice between an engine move with a score of +.5 that leads to a closed position with no clear plan or an engine move with a score of +.3 that leads to a more open position, I nearly always opt for the more open variation and play it out to a firm position in which the dust has settled so that I can evaluate it accurately. All too often, engines struggle to find a clear idea in a completely closed position they initially evaluated as a large plus. On the contrary, a +.3 position that appears to be opening up more and looks good to human eyes tends to be stronger than initial impressions.

Semi-closed positions only have a few pawn-breaks, so in many cases you should imagine which ones will be the best to aim for and try out ideas and analyse them with the engine to figure out which ones are good and achievable and which ones are not. In a lot of positions, you can test out all of the possible executions of pawn-breaks. This is useful and effective, yet minimal effort. The engine does the work; you just guide it to gain understanding.

A lot of players do not analyse games with engines effectively because they just feel helpless, like they cannot understand anything that happened in the game. So they do not even make an attempt thanks to their own strong bias. By the same token, studies show that people who believe their skills are based on innate ability rather than effort put in significantly less effort to specific tasks. Chess is heavily based on serious effort and realizing this will make you work harder at the game. This is another instance in which an evidence-based attitude will make you work harder. It is pretty cool how that works out: you believe effort matters most and in practice you see it does.

Having the engine analyse the top 4 or 5 moves can be an effective form of creative brainstorming to generate a wide range of ideas you could play or could have played. I like to do this in critical positions that I spent a long time
thinking about. In such cases, it is vital that we consider all of the most pertinent candidate moves.

Many players fail to grasp on a basic level the amount of errors made by players at all levels, and the amount of dissimilarity between top engine moves and the moves of players at different rating levels. Once you realize how many mistakes are being made in chess generally, it helps you realize there are many things that you can start improving and patching up right away. As your awareness and understanding of these errors increases, your appreciation and enjoyment of the game also goes up. Like many other fields, you will generally enjoy chess more and more as you get better and more of its secrets start to make sense to you. Also consider that in the year 1900 there were five players in the world over 2100 strength according to various different objective testing measurements. They all analysed without engines. Look how far it got them.

A good idea is to write down in a notebook specific pawn-structures that cause you problems and look up those structures in ChessBase to find relevant games to analyse.

We need to accept that we are just not going to find some computer-like solutions due to thinking about chess differently from computers. There is absolutely nothing wrong with admitting that. For our part, we can try to become more and more familiar with unusual tactical ideas, but it is important to be realistic about which ones you could play in a real game and which ones you very likely would not.

The main way I can judge computer play is by focusing on the logic of each of the moves, and the logic explaining why humans struggle to find some of those moves. Human experience definitely helps players focus on the most important thing in the position. This is exactly why grandmasters usually solve my exercises in under a minute. They know what to look for to find the solution. A lot of computer moves are far less shocking in complex attacking positions when you consider what the opponent was threatening.

Many seemingly senseless moves played in attacking positions dubbed as ‘computer moves’ make good sense logically when you think about each move, what it threatens, and what the opponent was threatening. Often a
strange-looking move deals with a threat that you had not considered, but makes perfect sense the instant you recognize that threat.

0.00 positions are very different in nature, especially in the middlegame. Some involve strange repetitions of moves, or perpetual checks in the future, and some are genuinely equal and playable middlegames. Keep that in mind when you see that engine score come up when there is a board full of pieces.

A tricky situation is when engine scores show approximately three quarters of a pawn advantage and there are 3 or 4 pieces for both sides left on the board. At that point, you start reaching positions in which one +.75 move might lead straight to a draw, whereas the second-best move at +.70 may just win, so you have to play out the moves and analyse as accurately and deeply as possible. In situations like that, a human aiding the engine is far stronger than just the engine. If the +.75 move throws away all of the stronger side’s winning chances (where genuine chances existed), it is simply a bad move.

It is important to point out that ChessBase does not do automated game analysis in the form of checking entire games. This is the sole thing I use the Fritz interface for (I do everything else, like managing databases, with ChessBase). It is the best interface for automatically getting one or multiple games analysed by the computer with full output of better moves you missed. I use Stockfish or Komodo as my engine, but Fritz as the interface when I do this, simply because there is no other option. Automated analysis is an excellent tool. For instance, if you play 20 blitz games in a given day, you could go to sleep that night and have the engine blundercheck all of those games with a threshold of 50 centipawns (half a pawn) to point out all of the blunders and missed major tactics in your blitz games. Then, when you wake up, you can spend 20 or 30 minutes reviewing your blunders. For the particularly instructive games, I would encourage you to create a new database with a name like ‘Instructive Blitz Errors’. A simple base like this would be very useful to quickly play through to review your major errors.

To perform automated game analysis with one game, the simplest method is to input your entire game into Fritz, and then click on the Analysis tab at the top. With that tab open, click on Blunder Check. This will open up a menu with the options you can choose for running your blunder check operation. You have a choice between Time and Depth for the analysis. I prefer to do
my analysis by depth, as this at least makes sure to have a benchmark for a certain level of depth to the moves. When analysing your blitz games with the latest version of Stockfish, for example, you could set it to depth 22. The threshold determines how many centipawns of inaccuracy you want the computer to search for. If you select a threshold of 0, the computer will point out every move it thinks was an error in the game. If you select a threshold of 50, it will point out only the errors that are at least half a pawn worse than the best move according to the engine.

Before you run your blunder check, make sure you are using all, or most, of your available CPUs. It is easy to forget and just run the analysis on one CPU, which will be significantly slower than using all or most of your processing power. In the engine pane, click where it says ‘1 CPU’ and set it to use as many CPUs as you would prefer (typically as many as you can without overheating or disturbing other processes on your computer). Finally, I check the boxes for ‘Check main line’ and for ‘Check variations’ so that the computer checks everything I input into Fritz. It is worth pointing out that blunder checks are especially effective if you have game analysis you also want checked. Since the analysis in a blunder check goes backwards from the end to the start of the game, the earlier stages of the game will be more deeply analysed (because some of the information about later positions is stored in the RAM) than if you simply ran the engine to the same depth without running a blunder check. When my analysis is done, I clean up the file by deleting all of the extraneous Fritz commentary that has no purpose being in my analysis.

Additionally, to check an entire database all at once, you can open up the database in Fritz. To do this, click on File → Open Database and select the database you want to check. To select all of the games, right click on any game and go to Select All. At the top, click on the Database tab. There on the left-hand side it will say Blunder Check. Click on it and select what options you want for your blunder check and the entire database will be analysed by the computer without you having to touch anything. As noted above, this is an excellent way to quickly catch all of the tactical errors you made in a night of playing blitz in a simple run-through when you wake up.
9: Analysing Your Games and Self-Improvement

Analysis of your games is the second most important thing you can do in chess improvement (the first is playing) and must be treated very seriously. A very important part of serious chess study is expressing our flexibility of thought and resisting the temptation to take short-cuts. You should definitely not take short-cuts when analysing your own games, which is why I have listed the main questions to ask yourself after a game and explained them in some depth.

You can develop your intuition in many ways. The best way is simply to learn and study ideas you are completely certain are correct and consciously try to internalize them. Analysing your own games and realizing on a conscious level why you made mistakes is a good way to improve your intuition.

Players need to develop a chess education and focus on competence above all else. This allows them to help themselves and improve their base of applicable knowledge and ideas during games. A routine of playing over recent grandmaster games and learning the maximum from them is imperative for all players. One has to be able to learn from games without any external help and starting from the beginning is a major stepping-stone on the way forward. I remember when I began playing through all of Fischer’s games how enlightened I felt by his play as White in the Ruy Lopez.

After spending a lot of time with chess coaches and strong players discussing the most relevant questions to ask in post-game analysis, I decided on the following:

1. Who won the opening battle and why?

2. What were the key moments of the game?
3. What large errors or blunders were made? And why?

4. What positional errors were made?

5. Could the pawn-structure have been profitably changed by either side?

6. Did I make any poor exchanges or miss any good ones?

It is very helpful to have a clearly defined list of useful post-game questions to focus on as reference for a routine post-mortem analysis. Rather than raw moves, this focuses on understanding. These questions are mostly conceptual and very ‘meta’ about things that most players normally do not consciously focus on, so that you understand exactly what occurred in your own games in a clear way that you can explain in words. This makes it far easier to apply what you understand in your future games.

I like dividing errors made in players’ games as either based on Positional Understanding, Calculation, Concrete Knowledge, Logic or Pattern Recognition. These are five key areas of chess strength, and it allows you to be clearest on your weaknesses.

The general structure when you are just thinking about chess is all over the place, especially after the game and the main focus is just on some big error or maybe some blunder at the end of game.

I used to have a list of 12 or 13 questions, but 6 is much more manageable and sensible. It is hard to remember 13 questions off the top of your head. A great thing about utilizing the three positional questions during games (mentioned in Chapter 1) and asking yourself these six questions after games is that the understanding and learning you can do on your own increases dramatically once you start getting into the habit of applying this advice. With conscious focus on them, it is not uncommon that after a seemingly irrelevant 15-minute online game you may start to realize some deeper points about chess strategy or what caused your wins or losses.

By asking these questions, you understand the opening battle, the critical
moments, the biggest errors, the positional mistakes, the pawn-structures that arose, and you think about how you could have improved upon your handling of piece-activity and the quality of your pieces. These questions should be thought about on the way home after the round, so that you fully understand logically what happened in the game you just played. Then at home you can check to see if all of your assumptions and conclusions were correct with deeper analysis, by checking the veracity of your conclusions with an engine.

I suggest that you simply write these questions down on a notepad to keep next to your chessboard or computer and try to answer them as soon as possible after your games. It is crystal clear according to the latest science of learning research that written confirmation improves commitment, even though this has of course been known for a long time. After a while it will probably be automatic to ask yourself these questions.

The six questions proposed above should be expanded upon in more depth so that one can understand why they are important. The reason why it is important to think about who won the opening battle is that it helps to consolidate and improve your understanding of what an advantage is, what to look for in a specific opening when seeking the initiative, what you want to focus on, and what your goals are in the variation. This helps you understand the grand idea behind what you are playing. Some of these things are very easy to forget about or not think about. For example, in several Nimzo-Indian games I have gone over with students, as White they had a couple of opportunities to play e3-e4 and build a massive centre at zero detriment, forgetting that the basic idea of the Nimzo-Indian is to control the e4-square. It happens: the opening seems to be over and both players start moving around a bit and simply forget the purpose of some of their earlier moves when they focus on the situation at hand.

Being aware of the key moments of the game helps your awareness of critical moments. That helps you focus your time usage. There are certain moments where I play moves somewhat quickly, when I don’t consider my decisions to be of critical importance. In certain openings like the Najdorf, it is hard to define a critical moment because so many different moves you make can change the evaluation of the position dramatically in so many different moments.
Players should write down their time spent during a game and mark the five moves they spent the most time on in order, and mark the critical moments in their games to judge whether they are happy with the time expenditure there and in the opening phase. Moves that you spend more than five minutes on should always be noted, so that you can think about if you are happy with spending that much time on those specific moves and decisions. Handling time strategically is very important, and to do that we need to identify the biggest mistakes we make in our time management. Threats justify time spent, or possibility of major advantage.

When you notice that you spend over 10 minutes per move regularly, the important thing is to try to remember exactly which candidate moves you looked at, because you may realize later in analysis that one or two of those candidates could be discarded very quickly.

Noticing the largest blunders or errors is obviously crucial to allow you to identify the biggest holes in your play and allow you to eradicate them. Many players tend to focus on this and not put so much emphasis on the other vital aspects of their games and lose out on a lot of great content and material they could have learned from.

Mark the moves that you did not consider or did not expect after your games. This can shed light into your candidate-move considerations and reveal information about what leads to oversights and large errors. You should definitely think about why you missed moves and ideas, especially if the idea you missed was a strong one. I noticed patterns in my own oversights.

Asking about your positional errors is important for awareness too. These are not necessarily such big errors, but are very useful for recognizing when you might be weakening yourself or your opponent might be weakening himself.

During a game, we make hundreds of judgements at least. These judgements can range from how you perceive your king safety or an attack to how you evaluate a minor piece or the position as a whole. After my games, I like to analyse as many of my in-game judgements as I can recall to verify whether I misunderstood things on the board. Often there are ten or more judgements I made during the game that are flat-out wrong. When you make hundreds of judgements during a tense forty-move game, getting only ten of them wrong
is actually quite an achievement. Few players realize how many mistakes are made in nearly every chess game. Consciously realizing how many misjudgements you make is a great way to grasp just how many mistakes even very strong players make in chess. Such a realization often makes unpleasant losses a fair amount less painful.

Look for flaws in many of your basic assumptions at the board. The way that we do this is to write down all of the thoughts and evaluations we had at the board and check the correctness of all of them. The flaws in your assumptions will nearly always be based on misevaluations. Correcting those misevaluations will improve your positional understanding, which is why it is so crucial to remember the key assumptions that you made at the board during your games. We need to analytically test our positional judgements to get rid of misapprehensions. This is a major reason why it is very important to write down as much as you can remember about the logic you used and the calculations you made at the board.

Over time, grasping good exchanges has become easier and easier for me, as I suspect it does for most players. I ask myself after every tournament game, “Did I make any poor exchanges or miss any good ones?” It is a pretty simple question and good to ask because you can answer it pretty quickly without using a computer or analysing anything. Thinking about your games through this unique lens adds a layer of depth to your understanding of what happened in the game. Incorrect exchanges usually relate to a failure to grasp an important concept influencing the evaluation of the position. Concepts are the easiest for us to apply to the greatest number of new situations, so focus on the conceptual reasons behind the mistakes you made because those are most easy to apply in your future games.

Considering changes in pawn-structure after a game is somewhat novel, but very important for one’s creativity, ability to change trends in a game, and overall understanding of pawn-structures and how you should dynamically interpret and play them. This question does not necessarily mean that one side made a structural mistake. It may just mean that there was an alternative way to change the structure or unbalance the position that could have led to a different type of game. Just being aware of that sort of idea can help in a broad range of situations, especially if you are trying to beat a weaker
opponent by setting the maximum number of problems for him. Being aware of the different (sound) structures you could play in a given position simply gives you more possibilities to choose from. Depending on the situation, you may want to choose a different structure against a certain kind of player or in a certain time setting or time scramble.

Since the emphasis is on efficiency in all forms of chess training, I view this as an excellent way to spend ten minutes after a game, even without an engine of any kind. In essence, it is simply structured thinking. I have seen plenty of long checklists to use to analyse your games with, but I don’t like them due to the complexity. I also do not like classifying types of errors, because every player I have ever worked with plays the opening inaccurately, makes positional errors, misses tactical possibilities and misses important opportunities to make structurally advantageous decisions. It can be worthwhile to point out one area in some cases, but for the most part all areas should be looked at very seriously. As an example, most players over 2300 who do not have a well-formed opening repertoire end up in opening trouble a lot against well-prepared players. Clearly it makes sense in their shoes to put extra effort into focusing on openings.

If there is a clear area of improvement for a player to focus on within the game, most likely it will be quite obvious. If a player is making awful and weakening pawn moves regularly, that will certainly jump out at you. But it is a huge mistake for players to isolate that and claim that was the sole cause of their loss or losses. Many players blame one bad move as the reason for a loss. This prevents them from learning from all of the other types of errors they made in those games. In essence, it is a lazy excuse for not analysing your games properly to say that just one move cost you the game. It is almost never like that.

Avoiding being too emotional after making mistakes is important. Note how often you have let the emotional trend of a game affect you.

A student of mine from Singapore comments in his analysis whenever one side has a passive position. I find this to be surprisingly helpful. We often forget about it, but thinking about it immediately makes the evaluation of some positions obvious. And it helps me see which positions he thinks are passive, because he is also wrong sometimes.
If you notice that you have thrown away a lot of winning positions, you should analyse your games carefully and think about why you mishandle your advantages. In the analysis, you can show as many winning ideas as you want if showing more than one is helpful. Make a database of dominant positions you screwed up. Review this database every now and then if you feel it is a very serious problem.

I keep notes on almost every important subject that matters to me, to have at least something written out and properly brainstormed. Re-articulating what you learnt is a very important part of the learning process. It really cements it at that moment as well as being useful for later. Notes with questions are especially important in chess, because all too often we simply do not understand an awful lot of things about the position in much depth, ranging from likely piece-paths, to handling the structure and where to put the king.

It is important to create a kind of hungry attitude where you start to really focus on your work. When I find myself having 5 to 10 minutes free, such as in a café, I will often do things like run through my six questions about my games and think about them. Sometimes great ideas or simple solutions will pop into your head. Sometimes that will happen later in the day. That in itself isn’t going to have a huge effect, but I noticed it upped my mood significantly, making me more eager to keep going throughout the day when I have more significant time. It creates this sense that I really want to make the most of the day and every minute counts.

It is important to clarify that relatively simple tactical errors are often made by grandmasters too, but usually they occur in time-pressure and due to something surprising in the position, or missing a move in a variation a couple of moves down the line. Nevertheless, this is a constant area for every player to work on. There is no simple piece of advice for handling time-pressure better. Strong players are often able to play moves quickly in complex positions because they conclude that the move they are about to play does not significantly change the evaluation of the position. For instance, if a strong player considers the position equal, and he sees a move he likes and is very confident the position is equal after playing it, he can usually do so quickly rather than plunge into a 20-minute think.

The best strategy I can propose for handling your time better is to keep track
of your move times during games and analyse this time usage afterwards. When many tournament games are played with only 90 minutes and a 30-second increment, it is extremely hard to justify thinking for more than 20 minutes in any position. I tend to prepare to make a move soon after I have been thinking for 12 minutes in any tournament game. Around that point I normally sense diminishing returns and loss of energy simply in trying to spend much more time calculating. If you discuss your time usage in this vein with a coach or stronger player, you may discover that, say, only 2 out of 5 of your longest thinks were really justified. In a similar sense, considering most of the best candidate moves is not easy to do either, yet if you make a list of the most important positions in your games to consider all of the possibilities, you can later analyse those positions in depth and consider a wide range of options you missed. The only way to make significant progress in these areas is by working through them and learning from your errors.

Usually after a game you will be thinking about the game in your head, but the thoughts are chaotic or jumbled. The list of questions I gave earlier will help you structure them a little. Brainstorming some solutions to these questions may reveal a lot for you and deepen your understanding of the game you just played. These things help improve your awareness dramatically. One of the great advantages very strong players have over weaker ones is their awareness of things on the board. This is usually why the best players in the world are extremely good at blitz: even with a very short amount of time, they are aware of many tiny little nuances and even delicate structural details. I remember when Grandmaster Alexander Morozevich used to play blitz games online for hours on the Internet Chess Club when he was ranked in the top 5 in the world. I was amazed when I watched him because he often made really subtle positional moves or he would carefully change position-types or play something that looked really risky, but he sensed quite well if he was really taking a risk or ‘just in time’ with his play. I remember at the time (about 2006), engines were not able to follow the speed of his decision-making in some games. I remember analysing some of his blitz games and seeing the engine agree with his moves only after a significant amount of time calculating. Stronger players evaluate positions very well and sense important features of the position. That is how they can play blitz extremely well without having time to calculate very much.
Organization of one’s material is a very important thing as well. I strongly advise chess-players to keep a database of all their tournament games, with analysis saved on each of the games. If you look at the similarities between the best games you have won in your career, it will reveal a lot about peak performance and what you should strive to do. I would not be surprised if simple and straightforward play is a common theme that shows up.

You can even learn a lot from your blitz games, although hardly anyone does. World elite blitz players have told me that they focus on concrete moves first in their fast games. This makes sense, because positions are very often concrete and seeing threats and specific ideas is very important with low time. For players who see things slowly, this is certainly something they can consider working on and applying. Gradually, one’s awareness of concrete relevant moves and tactical possibilities must improve with consistent work. Having a very tightly worked-out opening repertoire is also very useful for blitz, even if you do not actively seek out an advantage in most of the games.

When you lose to a specific plan or idea, it is very convenient to play the same exact idea with reversed colours. Most players lack this flexibility. If you lose a specific game in a pawn-structure you do not know, rather than fret about it or avoid the structure, search all games in that structure in ChessBase. Plans that specifically made me suffer for a long time are especially memorable. Such suffering plans are often surprising, and occur from positions very close to equality after one side chooses the wrong move or plan. This occurred a lot in my games as I started to play against grandmasters.

The following game is very interesting due to its complexity. I learned a lot while analysing it.

**Kislik – Sardy**

*Hungarian League 2014/15*

1 d4 e6 2 c4 b6
The English Defence allows White to build up a large centre unopposed, but is not very easy to refute due to the nebulousness of Black’s play. In the game, I reached a position that was awkward to play, even though I knew it was better for me. In essence, Black achieved what he wanted: confusion.

3 e4

This is the most testing line when White is granted the possibility of completely filling up the centre with pawns.

3...Bb7

After 3...Bb4+ I would have tried 4 Bd2 Bxd2+ 5 Nxd2 Ne7 6 Ne2, intending to play g3 andBg2 with a space advantage.

4 Bd3 Bb4+ (D)

5 Kf1

This move may look a little surprising because I can no longer castle, but it has several points. First, the king defends g2, which can be important if Black tries to blast open the long diagonal. Second, I avoid exchanging pieces
because I have a large space advantage. Thirdly, Black’s b4-bishop will need to move again very soon, so the time wasted may not matter much for White. White also has ideas of playing h4 and Rh3 in a number of cases to get his h1-rook into play.

A major alternative is 5 Bd2 Bxd2+ 6 Nxd2 d6 7 Ne2 Nf6 (the flexible 7...Ne7 is more common in practice, though after 8 f4 0-0 9 0-0 White’s space advantage is significant) 8 0-0 0-0, and now:

a) 9 a3!? is a smooth waiting move, intending to counter 9...Nc6 with the useful flank thrust 10 b4! +=, while 9...Re8 10 Nc3 Nc6 11 Nf3 += also favours White.

b) After 9 Nc3 White can consider playing f4 in the near future: 9...Nbd7 (9...Nc6 10 Nf3 e5 11 d5 Ne7 12 Nh4 +=) 10 f4 (10 a3 c5 11 d5 Ne5 12 Be2 += also gives White a large space advantage; he can slowly kick Black’s knight out of e5 and gain more and more space) 10...e5 11 fxe5 dxe5 12 d5 +=.

5...Be7! 6 Nc3 d6

Black intends to put his knight on d7 and later seek out active play with ...e5 or ...c5. Since he intended to put the bishop on f6 in the game, ...c5 was almost always the intended plan.

7 Nf3

I figured that this would not be a bad move, and that my pieces would look perfectly fine in the centre, so my spatial plus should grant me at least some advantage.

7 g3 appealed to me, but I was not sure how to counter Black’s pawn-breaks in this case. Looking at it now, it appears easier to play than the game continuation: 7...Bf6 8 Nge2 (8 Nf3 c5 9 d5 Bxc3 10 bxc3 Nf6 11 Kg2 0-0 12 Bf4 +=) 8...Ne7 9 Kg2 0-0 10 Bc2 Nd7 11 Rb1 +=.

7...Nd7 (D)
White to play

8 b3

I wanted to consolidate my position with simple moves like Bb2, Qd2 and Re1 and see which plan Black would choose to fight against White’s big centre.

However, 8 Qe2! is the simplest and strongest move, putting the queen on the best square and making it difficult for Black to come up with a plan. 8...Bf6 9 Bc2 Ne7 10 h4 gives White a firm grip on the position.

8...Bf6

Black intends to play ...Ne7 and ...c5. Alternatively:

a) 8...Ngf6 9 h4 0-0 10 Bc2 e5 11 Kg1 a6 12 Rh3 +=.

b) 8...c5 9 d5 Bf6 10 Bd2 Ne7 (10...Ne5 11 Nxe5 Bxe5 12 Rc1 Nf6 13 f4 Bd4 14 Qf3 +=) 11 h4 0-0 12 Bc2 Ne5 13 Qe2 Nxf3 14 Qxf3 b5!? (14...Bd4 15 Re1 e5 16 h5 f6 17 g4 Bc8 18 Nb5 +=) and then:

b1) 15 h5 b4 16 h6 Bxc3 17 hxg7 Bxd2 18 gxf8Q+ Qxf8 19 Rd1 Bc3 20 dxe6 Bd4 21 Rd3 (threatening to win immediately with Qh3 followed by
Rf3) 21...Qg7 22 Qxf7+ Qxf7 23 exf7+ Kf8 24 Rg3 Be5 25 Rg4 +=.

b2) 15 Qd3 Bd4 16 e5 Nf5 17 Re1! puts Black’s position under serious stress and still retains White’s large space advantage.

We now return to 8...Bf6 (D):

![Chess Diagram]

White to play

9 Bb2

I figured that this was the best square for the bishop in any case. 9 Bc2 is good too: 9...Qb8 (9...a6 10 Qe1 e5 11 d5 +=) 10 Bb2 c5 11 d5 Ne5 12 h4 Nxf3 13 Qxf3 Be5 (13...Ne7 14 g4 Bd4 15 Rd1 e5 16 Bc1 +=) 14 Re1 h5 15 Bc1 +=.

9...Ne7

Or 9...c5!, and now:

a) 10 d5 Ne5 11 Nxe5 Bxe5 12 Qd2 Nf6 13 g3 0-0 14 Kg2 a6 15 f3 Re8 16 Rhe1 Nd7 17 Na4 and here 17...Bd4 is an annoying ‘sliding’ move that intends ...e5 or ...Qf6, with a very solid position.

b) 10 Bc2! is a good move to overrule the engine, as White has a structural
advantage and should be content with ...cxd4 in almost all cases unless Black can directly break free with a liberating move. 10...cxd4 11 Nxd4 Ne7 12 Ndb5 Nc8 13 h4! (after 13 Nxd6+ Nxd6 14 Qxd6 Be5 15 Qd2 Qf6 Black intends ...Rd8 with excellent counterplay) 13...0-0 14 Rh3 +=.

10 Qd2

This continues development and prepares to bring the queen’s rook to e1 in some cases. 10 Bc2 0-0 11 h4 c5 12 d5 Ne5 13 Ne1 Qd7 (13...Nd7 14 dxe6 Ne5 15 Nb5 fxe6 16 Qxd6 +=) 14 h5 +=.

10...0-0

Although castling is reasonable, Black does not gain anything by delaying the ...c5 break.

10...c5 11 d5 0-0 12 h4 Ng6 (12...Ne5 13 Nxe5 Bxe5 14 h5! h6 15 g4 Nc8 16 Kg2 Qf6 17 Raf1 +=) 13 Be2 Nde5 14 Nxe5 Bxe5 15 h5 Nf4 16 Bf3 Qf6 17 Re1 Rae8 (17...Bd4 18 Re3!! +/- intends g3, now that the f3-bishop is defended) 18 Re3 exd5 19 exd5 Bc8 20 Ne4 Qh6 21 Bxe5 Rxe5 22 Nc3 +=.

11 Re1

11 h4! c5 12 d5 Ng6 13 Bc2 Nde5 14 Nxe5 Nxe5 15 h5 +=.

11...c5? (D)

This should have been the losing mistake. Had Black simply prepared it with 11...Ng6!, it would have been possible to play on the next move: 12 g3 c5 13 d5 Nge5 14 Nxe5 Bxe5 15 Kg2 a6!? (15...Qf6 16 f4 Bd4 17 Rhf1 Rae8 =) 16 f3 Qf6 17 Rhf1 Bd4 18 Nd1 Bxb2 19 Nxb2 b5 =.
12 Nb5??

I completely misassessed this move, thinking I was better. Actually, White is worse now.

12 e5! starts a forcing sequence that amounts to the sacrifice of a pawn:
12...cxd4 13 exf6 dxc3 14 Bxc3 Nxf6 15 Bxf6 gxf6 16 Qh6 and White has a completely winning position because he can play h4 followed by Rh3 to mate Black’s king: 16...Ng6 17 h4 Re8 18 h5 Nf8 19 Rh3 +– or 16...Nf5 17 Bxf5 exf5 18 h4 Re8 19 Rh3 +–.

12...cxd4

With this simple move, Black is already better.

13 Nfxd4

13 Nxd6 e5 14 Nxb7 Qc7 15 h4 Nc6 16 Ba3 Be7 17 Bxe7 Nxe7 18 c5! Qxb7 19 cxb6 Qxb6 20 Bc4 h6 is only slightly better for Black. Nevertheless, the assessment of the position after the text-move did not look obvious in human terms. Tremendous energy is required to prove Black’s advantage.
13...Nc5 14 Bb1

The retreat to b1 looked a little better than c2 to me because it keeps the b2-bishop defended. 14 Bc2 a6 15 Nc3 Nc6 16 Nxc6 Bxc6 17 a4 b5! is also good for Black.

14...a6

14...Ng6! 15 h4 a6 16 Nc3 Nxd4 17 Rd1 Ng6 18 Nde2 b5 leaves Black better.

15 Nc3 (D)

![Chess Diagram](image)

*Black to play*

White has no choice but to go back. It is worth pointing out that White does not have a good version of a Maroczy Bind pawn-structure because his king on f1 is actually quite awkward and he cannot stop Black from carrying out ...b5 under favourable conditions.

15...Qc7?!

This is inaccurate for a number of reasons. One of them is that the queen turns out to be very well-placed on f6 if he can get it there. Alternatives:
a) 15...Nc6 16 Nxc6 Bxc6 17 h4 b5 18 b4! (18 Qc2 g6 =+) 18...Nd7 19 Qxd6 Ne5 sacrifices material for very interesting compensation. 20 Nxb5! Bxb5 (20...Nxc4 21 Qxc6 axb5 22 Bxf6 Qxf6 23 Qxb5 Qc3 24 g3 Nd2+ 25 Kg2 Qf3+ 26 Kh3 draws) 21 Bxe5 Bxc4+ 22 Kg1 Bxe5 23 Qxe5 Qd2 24 Re3 Bxa2 25 Bxa2 Qxa2 26 Rg3 f6 27 Qc7 Rf7 =.

b) 15...Ng6! 16 Rd1 b5 17 cxb5 axb5 18 Ndxb5 Qb6! 19 Kg1 d5! is a very dramatic way for Black to break free. 20 exd5 exd5 21 Nd4 Ne4 22 Qe3 Rfe8 =+

16 h4

I was not worried here at all because Black has a difficult choice to make and many moves to choose from, such as 16...Rad8, 16...Rfe8, 16...e5 and 16...Bxd4.

16...e5?! (D)

This is certainly the progressive idea, intending to play ...b5 and finally break out. Other moves:

a) 16...Rad8!? 17 h5 h6 18 Rh3 Be5 19 Kg1 Bc8 =.

b) 16...Rfe8 17 h5 h6 18 Rh3 e5 19 Nf5 Nxf5 20 exf5 b5 21 Rg3 Bh4 22 Rg4 Bg5 23 f6!! Bxd2 24 Rxg7+ Kh8 25 Rh7+ is a fantastic draw.

c) 16...Qd8 is a funny move suggested as best by Stockfish at depth 31, which only emphasizes that 15...Qc7?! was not the strongest move.
17 Nf3?

I considered 17 Nde2 and 17 Nc2 as well, and considered 17...b5! to be the critical move in both cases. This is a very interesting position to use as a positional exercise, because I wanted to play 17 Nc2 and Ne3, but did not believe such a slow sequence could be good. Here is the analysis:

a) 17 Nde2 b5! (17...h5 18 b4 Nd7 19 Rc1 +=) 18 b4 Nd7 19 cxb5 Nb6 is an interesting, but not fully sufficient, way for Black to sacrifice a number of pawns for counterplay: 20 Qd3 axb5 21 Nxb5 Qc4! (21...Qb8 22 Nbc3 +=) 22 Nxd6 Qxd3 23 Bxd3 Bc6 24 Nc1 Na4 25 Ba1 Rfd8 26 Nc4 Bb5 27 Nb2! enables White to hold everything together and maintain his material advantage.

b) I sensed that 17 Nc2! was the correct move, but I just somehow felt that putting the knight on f3 gave me a more dangerous attack. At the board I didn’t think about recapturing on c4 with the knight and returning to e3 because it looked too slow to be a serious attempt. 17...b5 18 Ne3! and now:

b1) 18...bxc4 19 Nxc4! (after 19 Ng4, 19...Nd7 = is one equalizing line for Black that I saw at the board, causing me to assume that it would be pointless to continue this way; 19...cxb3 is also fine) 19...Rad8 (19...Rfd8 20 Ne3 +=)
20 Ba3 d5 (20...Rfe8 21 Qc2 shuts out all of Black’s counterplay) 21 exd5 Nxd5 22 Qc2 g6 23 Nxd5 Bxd5 24 Ne3 Be7 25 Rc1 +/–.

b2) 18...b4 19 Ncd5 Nxd5 20 Nxd5 Bxd5 21 exd5 a5 22 h5 a4 23 Rh3 +=.

17...b5! 18 g4!

Here I went after the bishop, but my opponent was up to the task and played confidently. 18 cxb5 axb5 19 b4 Na4 20 Nxa4 bxa4 =+.

18...g6! 19 Nd5! Nxd5 20 cxd5 a5!

Black stopped me from sidelining the knight by playing b4. Now I tried to stir up some play on the kingside:

21 Kg2?! (D)

21 h5!? Qd7 22 Rg1 is preferable.

The point of the text-move was to sacrifice the h4-pawn with 22 Nh2, but when the position showed up on the board, I suddenly became worried that my compensation was insufficient.
21...Qd7

21...Bc8! wins material, although it is likely that White has enough compensation: 22 Nh2 Bxh4 23 Qh6 Bd8 24 f4 f6 25 Rhf1! Qg7 (25...Qe7 26 g5! is White’s main idea, giving him sufficient counterplay by breaking down Black’s position in the centre) 26 Qxg7+ Kxg7 27 g5 Re8 (the e5-pawn needs support) 28 Rc1 b4 =. White has good play for the pawn and can effectively challenge e5.

22 Kg3?

My intention with this move was to play h5 and get some pressure against Black’s king, but I should have continued with my plan: 22 Nh2! Bxh4! 23 Qh6 Bd8! (23...g5 24 Qf6! Ne6! 25 Nf3 Nf4+ 26 Kf1 +=) 24 f4 f6 25 Rhf1! gives White a vicious attack for a pawn. He plans g5 to break down Black’s solid grip on e5. 25...Bc7 26 g5 f5 27 exf5 Bxd5+ 28 Kh3! Rxf5! 29 Ng4 Raf8 30 Bxf5 Qxf5 31 Kh4! Bd8 32 fxe5 Qxf1 looks like it may be winning for Black due to White’s poor king position, but White can challenge Black’s king as well: 33 Qg7+!! Kxg7 34 e6+ Qf6 35 gxf6+ Bxf6+ 36 Nxf6 Rxf6 37 e7 Bc6 38 e8Q Bxe8 39 Bxf6+ Kxf6 40 Rxe8 Kf5 leads to a drawn ending.

22...h5! 23 Nh2 Bc8

23...b4 24 gxh5 Bc8 25 Kg2 Qh3+ 26 Kg1 Qxh4 += may have been the strongest option.

24 f3 (D)

I was hoping that my opponent would play a few slow moves now to let me back into the game, although I knew my position was quite bad. 24 Kg2 hxg4 25 Nf1 b4 26 h5 a4 –/+. 
Black to play

24...Bd8?

24...b4! 25 Bc1 Qe7 26 Nf1 hXg4 27 fxg4 a4 28 Qe3 axb3 29 axb3 Bg7 –+.

25 Bc2?

25 Qh6 is best, hindering ...f5 – I simply missed this obvious point. After 25...Bf6 26 Kg2 White intends f4 and has enough play.

25...Qe7?!

25...b4! 26 Qh6 a4 27 Re2 Bf6 28 Kg2 axb3 29 axb3 Bg7 30 Qe3 Kh7 –/+.

26 Nf1?

With a direct threat on h4 to deal with, White has to make a critical choice regarding how to defend.

After 26 Kg2!, 26...Qxh4 27 Nf1 Qg5 28 Qxg5 Bxg5 29 gxh5 Bd7 30 Bc1 Bf4 31 Bxf4 exf4 = is equal, and while 26...b4 27 gxh5 a4 may be Black’s best practical try, White has an extra pawn and does not appear to have any objective problems.
26...hxg4 27 fxg4 f5!

Black seeks to expose the white king completely. It was now or never and he made the right choice to go after my naked king on g3.

28 exf5 gxf5 (D)

White to play

29 gxf5?

It was hard to calculate how things would play out, but I thought that opening the g-file would expose Black’s king and give me reasonable chances of obtaining counterplay. 29 Qh6 Ra7 30 Kg2 fxg4 31 Ng3 Qf6 32 Qxf6 Rxf6 33 Bc1 Raf7 34 Rhf1 Rf3 –/+.

29...Bxf5 30 Bxf5 Rxf5 31 Qh6! Ra7?

Black missed an ideal chance to get the queens off and win without any complexity: 31...Rf6! 32 Qg5+ Kh8 33 Qh5+ Qh7 34 Qxh7+ Kxh7 35 Re3 (35 Nd2 Rg6+ 36 Kf3 Nd3 –+) 35...Ra7 –+.

32 Rg1! Qh7 33 Kh3+ Kh8??

At the board I had a blackout, assuming this move was not possible. Then
suddenly when it was played, I could not believe my eyes and forgot what I had looked at.

33...Rg7 34 Qxg7+ Qxg7 35 Rxg7+ Kxg7 36 Ng3 Rf8 37 Rg1 Nd3 gives Black a slight initiative.

34 Rg6??

With just seconds left on my clock, I played this atrocious blunder. 34 Rxe5!! was not even difficult, but my mind shut it out for some reason. 34...Rf3+ (34...Qxh6 35 Re8++ Kh7 36 Rh8#; 34...dxe5 35 Bxe5+ Rxe5 36 Qf8+ Qg8 37 Qxg8#) 35 Kh2 Rf2+ 36 Kh1 dxe5 37 Bxe5+ Rg7 38 Bxg7+ Kg8 39 Bd4+ ––.

34...Nd3

and Black won.

In this game, White won the opening battle if we arbitrarily cut off the opening phase at move 10. White had a better pawn-structure and a massive centre that conferred on him a comfortable space advantage. Within a few moves though, White allowed Black a crucial pawn-break. Key moments were the 5th move for White, move 12 for both colours, moves 15 and 16 for Black, move 17 for White, move 21 for White, move 26 for White, moves 31 and 33 for Black, and move 34 for White. These were all sensitive positions in which choosing the wrong move could have very negative consequences. The main positional errors in the game were 16...e5?! and 17 Nf3?. Most of the other errors were of a concrete tactical nature.

In terms of other pawn-structures that could have been played, Black could have done without ...e5 on move 16, and could have aimed more explicitly for ...b5 on move 15. White missed a key moment to play e5 on move 12. Besides that, White’s structure gave him a large space advantage and there was nothing in particular wrong with the pawn-structure from his perspective. Although White later weakened his king, having the pawns on g4 and h4 did not dramatically weaken White’s position and he could have held everything together.
The following game was a real wake-up call for me, in view of the poor opening play and the way my position collapsed so quickly.

**I. Rajlich – Kislik**

*Budapest 2009*

1 d4 Nf6 2 c4 g6 3 g3 c6 4 Nc3 d5 5 Qb3

White opts for one of the most solid and tricky lines against the ...c6 and ...d5 Fianchetto Grünfeld. Early on, Black is forced to make a concrete decision regarding his pawn-structure in the centre.

5...Bg7 6 Bg2 0-0 7 Nf3 dxc4

The capture on c4 is committal because Black needs to have a clear idea about how to handle the resulting pawn-structure if he wants to play this way. In the game, admittedly, I did not. This is why the decision here was rather shallow. 7...Qb6 8 0-0 Rd8 9 Na4 Qxb3 10 axb3 Na6 11 Bf4 Be6 12 Rfc1 Rac8 =.

8 Qxc4 (D)
8...a5?!  
This move is very superficial and primitive, and weakens Black’s queenside structure quite a bit, while not actually managing to get in any direct pawn-break like ...c5 or ...e5. Since those breaks are difficult to come by, I should have simply put the bishop on f5 and played for ...Ne4: 8...Bf5! 9 0-0 Nbd7 10 Re1 Ne4 is a well-known position that has been played many times. A standard plan for Black is to play ...Qb6 or ...Qa5 and develop with ...Rad8. 11 Qb3 Qa5 12 Bf4 Nb6 13 e3 Be6 =.

9 0-0 b5 10 Qb3?!  
This inaccuracy could have allowed me to neutralize White’s play by trading knights on e4. 10 Qd3 b4 11 Na4 Bf5 12 Qd1 Nbd7 13 Bg5 Be4 14 Rc1 Qc7 15 Qd2 Rfe8 16 Rfd1 +.=.

10...Ba6?!  
I was hoping to be able to execute the threat of ...b4 by targeting e2. But 10...Bf5! is better: after 11 Qd1 Ne4 12 Ne5 Bxe5 13 dxe5 Nxc3 14 bxc3 Qc7 15 Qd4 Be6 Black plans to play ...Nd7 and is not worse.

11 a3!  
This simple move stops all of Black’s activity by preventing ...b4. I had assumed that I was going to be able to get in ...b4 no matter what, but I was wrong.

11...Qb6 (D)  
My best bet was to play ...a4, followed by trying to use the d5-square effectively. 11...Nbd7 12 Ne5 a4 13 Qa2 Nxe5 14 dxe5 Ng4 15 e6 is better for White, but not as bad as the game was for Black.
White to play

12 Na4

12 Be3! Nbd7 13 Ne5 Rac8 14 Ne4 Qb7 15 Nxd7 Nxd7 16 Rfd1 Qa7 17 Qc2 +/– leaves Black in a tight bind.

12...Qc7

12...Qa7 13 Nc5 a4 14 Qc2 Nbd7 15 Nxd7 Nxd7 16 Be3 is also an effective bind for White, who can follow up with Rac1 and sometimes even h4-h5.

13 Nc5

White gladly occupies this excellent outpost square.

13...Nbd7 14 Nxa6

Now White has the bishop-pair and a better structure to boot.

14...Rx6 15 Bf4 Qa7 16 Ne5

I underestimated the power of this move, which intends to destroy Black’s structure with dxe5 and e6 if Black takes it. 16 a4 was also a good move to chip away at Black’s queenside pawn-structure: 16...bxa4 17 Qxa4 c5 18 Be5
h5 19 Qc4 Ne4 20 e3 +=.

16...Nxe5 17 dxe5! (D)

[Diagram]

\(\text{Black to play}\)

17...Ng4?

Here I missed a good opportunity to sacrifice a pawn to get quite reasonable saving chances: 17...a4 18 Qa2 Nd5! 19 Bxd5 cxd5 20 Qxd5 e6 21 Qe4 Qa8 22 Qe3 is certainly still better for White due to the extra pawn, but is by no means easy to win, because the doubled e5-pawn means it is always hard for White to create a meaningful passed pawn. 22...Rc6 23 Rac1 Rc4! 24 Rfd1 Rd8 25 Rd3! +=.

18 e6 f5 19 Rad1 Nf6?

Again, giving up a pawn was the lesser of two evils: 19...a4 20 Qb4 c5 21 Qxb5 Qb6 22 Qxb6 Rxb6 23 Rd7 Re8 24 Rc7 Nf6 25 Rxc5 +-.

20 Rd7!

Black had no chance the rest of the game, but I shall include the moves to show the ease with which the position is won.
20...Nxd7 21 exd7+ Kh8 22 Rd1 Qb6 23 Bxc6

The d-pawn is just way too strong.

23...Rd8

23...Qd8 24 Bxb5 Rb6 25 Qc4 e5 26 Be3 +–.

24 Bxb5 Bf6 25 Qc4 Ra7

25...Raa8 26 Bc7 Qb7 27 Qc6 Qxc6 28 Bxc6 +–.

26 Be3 Qb7 27 Bxa7 Qxa7 28 Qf7 Qb8 29 a4 Qb6 30 Rc1 1-0

In this game, White won the opening battle because she had a clear and simple concept granting her slightly more space and easier development that forced me to react concretely to neutralize it. Black was not able to generate enough counterplay. I missed a couple of opportunities that would have allowed me to equalize, but they were based on rather obscure moves that were aimed at controlling squares effectively. I was thinking more in terms of direct pawn-breaks, which is why I completely missed ...Bf5 and ...Ne4 conceptually.

Critical moments occurred in the opening from moves 8 to 10 because Black needed to come up with a specific plan or idea. When the bishop went to a6, Black no longer had ideas of moving the f6-knight to e4 and Black’s knights were stuck being ineffective and redundant throughout the rest of the game. Move 17 was a key moment for Black because White was changing the nature of the position in her favour. My entire plan with ...b5 and ...a5 was positionally incorrect because it did not allow me any kind of clear follow-up. Even pushing the pawn to b4 only allows the white knight to occupy a4. Early in the game, I could have maintained the solid Slav pawn-structure by playing ...Qb6 on move 7. Later I had an opportunity on move 17 to play ...a4 and give up a pawn for solid positional compensation, but completely overlooked the value of it.

This short and painful game forced me to analyse this variation deeply, look for more opening plans, and seek more tenacious ways to defend.
The following game was tense and difficult, but I learned a lot from it. Black won the opening battle because White missed his chances on moves 7 and 13 to set some difficult problems for Black. On move 7, White even could have obtained an objective edge. After White missed his chances, he was merely on the defending side of an equal position.

Kislik – Hera

Budapest 2014

1 d4 d5 2 c4 dxc4 3 e3 Nf6 4 Bxc4 e6 5 Nf3 a6 6 0-0 b5

This line is slightly rare. Almost everyone plays 6...c5 in this position.

7 Be2

I had a feeling that this move was perhaps a little too passive because it does not directly challenge Black’s plan of ...Bb7, ...Nbd7 and ...c5. 7 Bd3! c5 8 a4 b4 9 e4! is the way to go in this opening.

7...Bb7 8 a4

At the least, I wanted to obtain access to the c4-square for a knight.

8...b4 9 Nbd2 Nbd7 10 b3 c5 11 Bb2 Be7 12 Rc1 (D)

12 Ne5 is a serious try for an edge as well.
Black to play

12...0-0

12...Rc8! 13 dxc5 Nxc5 14 Rc4 Ncd7 is a simpler equalizer that does not allow White to damage Black’s structure in any way.

13 Rc2

This is not a very principled try, so White should look elsewhere to fight for an edge:

a) 13 dxc5!? Nxc5 14 Bxf6 gxf6 15 Nd4 followed by Bf3 was worth trying.

b) 13 Qc2 Rc8 14 Nc4 (14 Qb1 cxd4 15 Bxd4 is simply an improvement over the game) 14...Be4! (14...Qc7 15 Nfe5 deserves serious analysis) 15 Qd2 (15 Bd3 Bxf3 16 gxf3 cxd4 17 Bxd4 g6 =) 15...a5 =.

13...Rc8 14 Qb1

14 Qa1 is more in the spirit of keeping long-term pressure on the a1-h8 diagonal. 14...cxd4 15 Rxc8 Qxc8 16 Bxd4 Bc5 17 Bb2 Qa8 18 Rc1 Be7 19 Bd4 Rc8 =.

14...cxd4 15 Rxc8
15 Bxd4 Rxc2 16 Qxc2 Qa8 17 Qb2 (17 Qc7 was suggested by IM Szeberenyi: 17...Nd5! 18 Qg3 Bf6 19 Bc4 a5 with counterplay) 17...Rc8 18 Rc1 Rxc1+ 19 Qxc1 Qd8 =.

15...Qxc8 16 Rc1 Qa8 17 Bxd4 (D)

17 e4

This was a committal but a very sound one. Other moves:

a) 18 Nc4?! Bf6 19 Nfe5 Nxe5 20 Nxe5 Rd8 21 Bd3 g6 22 Qb2 Nc3 23 Bf1 a5 24 f4 Rxd4 25 exd4 Qa7 gives Black the initiative.

b) 18 Bd3 h6 19 Bh7+ Kh8 20 Be4 Bf6 21 Bxd5 Bxd5 22 Rc7! e5! 23 Ba1
Rd8 24 Qc2 Be6 looks a tiny bit better for Black because he has a solid position and the bishop-pair.

c) In retrospect, 18 Qb2 looked like the best option to fight for something, forcing Black to commit immediately. After 18...Bf6 19 Ne4! Bxd4 20 Qxd4! White intends Nfd2, when Black has to defend carefully. It is easy to miss White’s moves in this variation because they rest upon tactical ideas like the d7-knight hanging. 20...Rd8 21 Ne5 Nxe5 22 Qxe5 (this trades off Black’s defensive minor pieces in an interesting fashion; White threatens Bh5!? or Bf3 followed by h4-h5) 22...Nxe3! 23 Ng5 (23 Nf6+ gxf6 24 Qxe3 Bxg2 25 Rc4 Bd5 26 Rg4+ Kf8 27 Qc5+ Ke8 28 Qc7 Kf8 =) 23...Nd5 24 Bh5 Rf8 25 Bxf7+ Rxf7 26 Qxe6 Qf8 27 Nxf7 Qxf7 28 Rc8+ Bxc8 29 Qxc8+ Qf8 30 Qe6+ Qf7 =.

18...Nf4 19 Bf1! (D)

This looked like the obvious human move – it’s intuitive because it protects the kingside (the g2-square can be a focal point for an attack or pressure) and in some cases prepares g3 (chasing away the extremely annoying knight), Bg2 (consolidating) or even Bh3 – I don’t see any other work for this bishop anyway. Instead 19 Bc4?! Rd8 += leaves the c4-bishop biting granite on e6 and supporting no plan.

![Chess Diagram](image-url)
19...Nf6

Black puts awkward pressure on the e4-pawn. 19...Rd8 is totally fine as well: 20 a5 Nf6 21 Be3 Ng6 22 Rc4 Rc8 23 Qc2 Rxc4 24 Qxc4 Nd7 25 Qc7 Nf6 =.

Ideas like 19...Bf6 20 Rc7 Rd8 21 Qc1 e5 22 Be3 Ne6 23 Rc2 Nd4 scared me a little at the board, but White can just repeat calmly with 24 Rc7!. The knight on d4 looks impressive, but it actually does not threaten anything. 24...Nxf3+? would only give White a dominant position after 25 gxf3 and Bh3. So Black has nothing better than going back with 24...Ne6 =.

20 Re1

Although this looks passive, it defends competently and there is no apparent way for Black to punish it. Still, 20 g3! Ng6 21 Bd3 is by far the simplest way for White to defend his e4-pawn and hold the balance.

20...Rd8

20...a5 would have made it a little harder for White to defend, but he can do so by 21 g3 Ng6 22 Qd3 Rd8 23 Qe3 Ng4 24 Qe2 Nf6 =.

21 g3

I figured that by chasing the knight away from f4 and playing solidly, I would manage to keep Black’s minor pieces at bay and hold the balance. 21 Bb6! Rd7 (21...Rc8 22 Ne5 Ng6 23 Nec4 is also completely solid for White) 22 Qc2 gives White a comfortable position.

21...Ng6 22 Bg2

22 a5! Rc8 23 Bd3 Bc5 24 Bxc5 Rxc5 25 Nc4 Qd8 26 Qc2 Ne7 27 Nfe5 Ng6 =.

22...a5 23 h4?!

This move is objectively dubious, but at least it has a clear point: if Black aims to play ...Ng4 now, White can reply h5 (or Nc4 first and then h5).
23 Bb6! Rc8 24 Bd4! was also something that I had considered. 24...Bc5 25 Bxf6 gxf6 26 Nc4 Ba6 27 Bf1! (27 Rc1? h5! –/+ is strong for Black) 27...f5 is the only real way to challenge White’s structure, but White holds his own with dynamic fighting chess: 28 Nce5 Bb7 29 exf5 Bxf3 30 fxg6 hxg6 31 Bh3! (it turns out that Black’s king is actually not as safe as you might expect) 31...Bd5 32 Nxe5 Qa7 33 Re1 Bd6 (Black intends ...Rc3 to target the b3-pawn) 34 Bg2 Bxg2 35 Kxg2 Rc3 36 Rd1 Qc5 37 Rd2 Kg7 38 Qe4! (White shows that he can actually leave the knight on g6 for an eternity because of how weak Black’s king is) 38...Rxb3 39 Qg4 Qc6+ 40 Kh3 fxg6 41 Qxe6 Qf3 42 Rxd6 Qh5+ 43 Kg2 Qf3+ and an unbelievable perpetual check is the result.

We now return to 23 h4?! (D):

![Chess Diagram]

Black to play

23...h5?!

Although this stopped my most direct ideas, on h5 the pawn is potentially weak in a number of variations. Other possibilities:

a) 23...e5?! seemed the most natural try, but White actually has a ton of compensation with amazing tactics involving h5. I did not see any of these tactics over the board, but simply assumed that they might exist if Black lets
his coordination get scrambled. After 24 Bb6 Rc8 25 Nc4! Bxe4 26 Qd1! White has ideas like h5 and Rxe4, and Black needs to be careful. 26...Bd5 (26...Bc5 27 Rxe4! Qxe4 28 Bxc5 Rxc5 29 Nf xe5 is definitely not worse for White) 27 h5!? Nxe5 28 Ncxe5 Bf6 (Black cannot take on e5 because after 28...Nxe5? 29 Rxe5 all three of his minor pieces are undefended) 29 Nf7 Ng4!! (a strong desperado move that also has attacking ambitions: Black tries to exploit the weakness of the a8-h1 diagonal) 30 gx f4 Nxf4 31 Nd6 (31 N7e5 Nxe2 32 Kx e2 Rxc3 33 Kg1 Bxf3 34 Nxe3 Qxf3 35 Qxf3 Rxf3 36 Re3! leads to an equal ending) 31...Rf8 (this gives Black the threat of ...Nxe4) 32 Re8! Rxe8 33 Nxe8 Qxe8 34 Be3! Bxf3 35 Bf3 is not worse for White due to the strength of his bishops.

b) 23...h6! strengthens the threat of ...e5 and makes it difficult for White to find any constructive move. It is amazing that such a calm move is so strong here, but this is an excellent illustration of a painfully slow move. 24 Qc2 (after 24 Bb6 Rc8 –/+ Black intends ...Bc5 and wins the fight for the c3-square) 24...Nf8 25 e5 Nd5 and now:

b1) 26 Bf1 Nc3 27 Re3 Bc5! 28 Bxc5 Rc8 –/+ is an aesthetically beautiful sequence that allows Black to trade off White’s best defensive piece in the middle of the board and gain further ground.

b2) 26 Qd3 Nc3 27 Qe3 Ng6 is superb for Black, who intends ...Bf8 followed by ...Ne7-f5. Then 28 h5? is the obvious way to challenge the knight, but Black breaks through in a beautiful manner: 28...Nd5 29 Qd3 Ng4!! 30 gx f4 Nxf4 31 Qe3 Nxe2 32 Kx e2 Bg5! –+ and the bishops slice through White’s position and pick up a ton of material.

24 Qc2

24 Bxf6!? Bxf6 25 Nc4 would have been a good sequence to play had I appreciated how solid White’s position was, even allowing for the black bishop to come to d4 or c3. In the game, I tried to put the burden on Black to prove his advantage. 25...Ne7 (after 25...Bc3 26 Re3 Ba6 27 Bf1 White’s position holds) 26 Nf e5 Nc6 27 Nxc6 Bxc6 28 Rd1 Bd4 29 Rd2 Bc3 30 Rd3! (30 Rd6 Rxd6 31 Nxd6 Qd8 gives Black pressure in the endgame) 30...Bb7 31 Rd6! is a comical sequence of ‘sliding’ moves. Both sides have to watch their weaknesses to make sure they do not lose material. White must keep an
eye on e4, and Black a5. After 31...Rxd6 32 Nxd6 Bc6 33 Qd3 White holds his position together.

24...Rc8 (D)

White to play

25 Qb1?!

This was a failing in my calculation, because both the reason for this move being inaccurate and the sequence of best moves after 25 Nc4! were not so difficult to understand:

a) 25...Nxe4 26 Nfe5! Nxe5 27 Bxe5 f5 28 Qd1!QA7 29 Ne3 Ba8 30 Qxh5 Bc5 31 Qg6 Qf7 leads to a balanced ending.

b) 25...Bxe4! 26 Qe2! would have been an impressive sequence to consider due to its slowness. White gives up a pawn with tempo and Black still has the move. Nevertheless, he threatens both Bxf6 and Nb6, and Black has to react to those ideas immediately. 26...Rxc4! is the only move that deals with both White’s threats. Then after 27 bxc4 e5! 28 Bb6 b3 29 Qd1 b2 30 Qb3 Nd7 31 Rxe4 Qxe4 32 Qxb2 Qxc4 33 Bxa5 e4 34 Nd4 e3 35 fxe3 Qxa4 36 Bc7! Nf6 37 Bf3 Qc4 38 Qc2 Qb4 39 Kf2 White defends his awkward pawn-structure and holds the position.
25...Rd8?

This must be regarded as a mistake, as Black could have won the fight for the c3-square with 25...Bc5!. After 26 Bxc5 Rxc5 27 Qd3 Rc3! 28 Qd4 Ng4 –/+ Black threatens ...e5 and leaves White with an extremely awkward defence.

26 Qc2 Rd7 27 Bb2?

I tried to remain solid with this move that does nothing, but it was not the right way to retain solidity. Instead:

a) 27 Bb6 Bd8! (27...Qa6? 28 Nc4 +/–) 28 Bd4 Ng4! =+ leaves White with an awkward defence and no natural way to meet ...e5.

b) 27 Bf1! Ng4 28 Bb5 finally activates the bishop, and is White’s most proactive defensive solution. After 28...Rd8 29 Bb6 Rc8 30 Nc4 Bf6 31 Qd3 Bc3 32 Re2 White has established his pieces in solid and firm positions.

27...Ng4 28 Nh2! N4e5 29 Bf1 Qd8! 30 Nc4! Nxc4 31 Qxc4 Rd2 (D)

White to play

32 Re2!

32 Bc1 allows Black to increase his advantage too easily and naturally by
improving his bishops and provoking weaknesses: 32...Rd4 33 Qc2 Ne5 34 Re3 Bf6 35 Bb5 Qa8 36 f3 Rd8 –/+.

32...Rd1 33 Nf3 Qa8?

Black misses a chance to put White under much greater pressure: 33...Qd3! 34 Qxd3 Rxd3, and now:

a) 35 Kg2 Bf6 36 Bxf6 gxf6 37 Re3! Rxe3 38 fxe3 Bxe4 39 Kf2 Ne5 40 Nxe5 fxe5 (threatening to win immediately with ...Bd5) 41 Be2 Bd5 42 Bd1 e4 is an easy win for Black if he plays for zugzwang after improving his position to the maximum: 43 Ke2 Kg7 44 Kf2 Kg6 45 Bc2 f5 46 Ke1 e5 47 Kf2 Bf7 48 Bd1 Kf6 49 Ke2 Be8!! 50 Kf2 f4 51 gxf4 exf4 52 exf4 Kf5 53 Ke3 Bf7! –+. This is a position of mutual zugzwang: with Black to move, the position is drawn, and with White to move, Black wins. White’s pieces are overloaded.

b) 35 Nd2! Ba6 36 Nc4! Bxc4 37 Rc2! Bxb3 38 Bxd3 Bxc2 39 Bxc2 Nf8 40 Be5 Nd7 41 Bc7 Nc5 42 Bxa5 b3 43 Bd1 b2 44 Bc2 Nxa4 45 Kf1 Bf6 –/+.

34 Qc2 Rd8 35 Nd2

35 Re1 Bf6 36 Bxf6 gxf6 37 Qe2 Rc8 38 Nh2 Ne5 =.

35...Qa7 36 Nc4 Bc5 (D)

36...Qc5 37 Re1 Bf6 38 Bxf6 gxf6 39 Rd1 Rxd1 40 Qxd1 Ne5 41 Qd6 Nf3+ =.
White to play

37 Bg2?

The bishop was actually well-placed on f1, holding c4 comfortably in case of ...Ba6 in any lines. Both 37 Kh2 and 37 Re1 Qb8 (37...Ba6 38 Kg2 Rd7 39 Bc1 Rd8 40 Bg5 Rc8 41 Rd1 Qa8 42 f3 Bb6 =) 38 Kg2 Qc7 39 Qc1 Bd4 40 f3 Bxb2 41 Qxb2 look very solid.

37...Ba6 38 Bf3 Bd4

38...Bxc4 39 Qxc4 Bxf2+! 40 Kg2 Bxg3 41 Kxg3 Qg1+ 42 Bg2 Rd1! (threatening ...Nxe4 and stepping up the attack; the immediate 42...Nxe4? is met by 43 Qc7!, eyeing the undefended d8-rook and covering the h2-square so that Kxh2 is now a threat) 43 e5 Ne7! 44 Qe4 Nf5+ 45 Kh3 Rd8 46 Rc2 Qd1 47 Qe2 Qxe2 48 Rxe2 Rd3+ 49 Kh2 Nxe4 50 Bc6 Rxb3 51 Be4 Nf5 52 Bxf5 exf5 53 e6 fxe6 54 Rg2 Kf8 55 Bxg7+ Ke8 puts White in a very difficult spot, as it is very tough to prevent Black’s pawns from advancing.

39 Rd2

39 Bxh5 Bxb2 40 Qxb2 Bxc4 41 bxc4 Nf8! –/+ leaves a difficult defence ahead of White. The protected passed b4-pawn is very strong and the black queen and knight coordinate extremely well.
39...Bxc4 40 bxc4 Ne5 41 Bxh5 b3?

Black did not need to resort to such drastic measures, but apparently he thought that this creative pawn-thrust would win by force. 41...Nc6! 42 Bd1 Rd7 43 Kf1 Bxb2 44 Qxb2 Rd4 45 Rxd4 Nxd4 –/+

42 Qd1!

42 Qxb3? Bxf2+ 43 Rxf2 Rd2 –+

42...Bxf2+ 43 Kg2 Rxd2 44 Qxd2 (D)

Black to play

44...Nxc4??

I was almost certain that this was a bad move, but with just a few minutes left on my clock, I replied with a terrible move of my own, and lost instantly.

44...Bxg3 45 Kxg3 Qg1+ 46 Kh3 Qf1+ 47 Kh2 Nxc4 48 Qd7! Nxb2 49 Qe8+ Kh7 50 Bxf7 Qe2+ 51 Kg3 Qe3+ 52 Kh2 Qxe4 53 Qg8+ Kh6 54 Qh8+ Qh7 55 Qe8 Qc2+ 56 Kg3 Qd3+ 57 Kh2 Qe2+ 58 Kg3 Qe5+ 59 Kg2 and White holds together his position.

45 Qc3??
After 45 Qd8+ Kh7 46 Qf8! White threatens mate in one and Bxf7, followed by Qg8+, and after 46...Nxb2, 47 Bxf7 wins on the spot. However, 46 Qf8! was not one of the first moves that popped into my mind after the check, because I was looking into moves like 46 Qg5? instead to attack g7 from the front. Obviously the attack from the front does not work and 46 Qf8! is a simple double attack that wins on the spot, but my optical biases led me astray in severe time-trouble. The move 46 Qf8! must be considered as a serious candidate move though, because it threatens mate in one move. The fact that I missed it was a major learning experience for me.

45...Nxb2 46 Qxb2

46 Qxb3 Bd4 –+

46...Qe3 47 Bf3 Qe1 48 Kh3 Qf1+ 49 Bg2 Qd3 50 Qxf2 Qc2

The pawn queens, and Black wins.

In this game, White had to make critical decisions on moves 7, 18, 23, 27 and 45, while for Black they came on moves 23, 25, 41 and 44. 27 Bb2? was a large error, missing that White did not necessarily even need to move the bishop. 33...Qa8? was also a large mistake, missing how dominant it would have been simply to bring the queen into d3. 41...b3? threw away Black’s enormous advantage in search of a knockout blow and major blunders occurred with 44...Nxc4?? and 45 Qc3??, when we both overlooked a simple winning move in our calculations with almost no time left. 23 h4?! and 23...h5?! can both be regarded as positional errors, while 25...Rd8?, 27 Bb2? and 33...Qa8? are more subtle examples of simply putting the pieces on bad squares when good squares could have been fought for and occupied.

With respect to pawn-structure changes, White could have played 7 Bd3 to aim for e4-e5. Additionally, 13 dxc5 followed by Bxf6 would have damaged Black’s structure. 18 e4 was a committal move, but nevertheless should have been solid enough. However, a simple alternative like 18 Qb2 may have made life much easier. White missed an option to play a5 on move 22. The pawn-pushes by both sides on move 23 were dubious, but besides that, the structure was essentially fixed almost the entire game, with Black trying to probe weaknesses in White’s position through various manoeuvres.
The following game was a very rich and complicated struggle with a lot of different possibilities at various stages thanks to the typically complex Ruy Lopez structure we had on the board. White won the opening battle because Black did not manage to get in any kind of pawn-break like ...d5 and was still slightly worse at move 14. Black made a well-known error on move 5, which White failed to exploit. After an inaccuracy in the middlegame by White, Black was able to carry out ...f5 and obtain good counterplay.

Tesik – Kislik

Budapest 2011

1 e4 e5 2 Nf3 Nc6 3 Bb5 Nf6 4 d3 Bc5 5 c3 d6?!

This is a definite inaccuracy, allowing White to gain an edge in the centre. I needed to castle: 5...0-0! and then 6 0-0 d6 7 a4 a6 is equal, while 6 Bxc6 bxc6 7 Nxe5 d5! 8 d4 Bb6 is a critical equalizing line that I always seem to forget about. Black gives up a pawn but gets the bishop-pair and massive compensation.

6 Nbd2?!

White misses his chance and we are back to square one in a theoretically-known position. He should have played 6 d4! exd4 7 cxd4 Bb4+ 8 Bd2 +=.

6...0-0 7 0-0 a6 8 Ba4 (D)
In this typical Ruy Lopez position, White is intending to play h3, followed by Re1 and then Nf1-g3. White also has ideas of playing b4, so I decided to move my bishop away from c5 in advance.

8...Ba7

This is the overwhelming main line. There was nothing wrong with playing 8...b5 as well. Then 9 Bc2 a5 10 a4 b4 11 Nb3 Bb6 12 Bg5 h6 13 Bh4 g5 14 Bg3 Bg4 15 h3 Bh5 is a fresh and dynamic way for Black to play, extending himself on both sides of the board but not necessarily weakening himself in any tangible way. However, I was not sure whether I wanted to commit to ...b5. Only on the next move did I change my mind.

9 h3 b5 10 Bb3

10 Bc2 is also sensible, but allows ...d5 too easily: 10...h6 11 Re1 Be6 12 Nf1 d5 13 exd5 Qxd5 =.

10...Rb8

I played this as a prophylactic move to restrict White’s a4 advance and it turned out to be reasonable, although it looks a little artificial. Still, it does
improve my worst-placed piece to a small degree and prevents White’s most natural plan.

10...h6 is extremely subtle, but quite sensible, considering what happened later in the game with White’s various chances to play Bg5!. Then 11 Re1 a5 12 a4 b4 13 Bc4 Be6 = just seems to hold the balance comfortably. 10...a5 11 a4 b4 = is also equal.

11 Re1 Na5

11...Ne7! may be more compact, intending to keep the knight on g6 rather than on a5 or c6.

12 Bc2 c5 13 Nf1 Qc7?!

This move is dubious because of Black’s weak control over d5 after Bg5. After 13...h6! 14 Ng3 Be6 15 Nh4 Nc6 16 Qf3 Kh7 17 Nhf5 a5 18 Nh5! Nhx5 19 Qxh5 Bxf5 20 Qxf5+ Kg8 21 Qh5 Qf6 22 Re3 White keeps just a slight pull.

14 Ng3?!

This is the wrong square because the knight should be fighting for the d5-square. 14 Bg5! Ne8 15 Ne3 Nc6 16 Nd5 Qb7 17 a4 +=.

14...Nc6

14...Be6 is also a logical move, intending to make it hard for White to play Bb3 in the near future.

15 Nh4 (D)

15 Bg5!? Ne8 16 Be3 Be6 17 Ng5 Bb6! 18 Bb3 Qe7 seems to be just about OK for Black because either exchange on e6 improves Black’s structure. Then 19 Bd5! Nd8 is equal.
15...Kh8! 16 Nh5 Ng8!

This struck me as necessary, since I viewed ...g6 as an inevitable move sooner or later and this helps cover the h6-square. It is also the most solid move. As long as White does not win material or gain any stable outpost squares for his knights, he has no advantage.

17 Qf3

17 Bb3 Be6 18 Be3 a5 19 Qg4 g6 20 Bxe6 fxe6 21 Nh4 c4! =.

17...g6 18 Nh6 Qe7?!

The correct 18...Nce7! was one of the other moves I considered, but at the board I felt safer with my queen watching all of the potential action on the kingside. Then 19 Nxn8 Nxg8 20 a4 b4 is equal.

19 Ng4?

Retreating here is a big mistake because ...f5 can come with tempo and because White needed to fight for the d5-square directly by taking on g8 and playing Nf1-e3 followed by Bb3, viz. 19 Nxn8 Rxg8 20 Nf1! Be6 21 Ne3
Rgf8 22 Bb3 Qh4 23 Bd2 +=.

19...Be6?

It is hard to understand how I could have chosen not to exploit White’s poorly-placed queen by 19...Bb7 or 19...f5! 20 exf5 gxf5 21 Nh6 f4 22 Nxg8 Kxg8 –/+.

20 Ne3 f6 21 Bb3! (D)

![Chess Diagram]

Black to play

21...c4?

Today I could not imagine playing this move, which weakens my pawn-structure, removes some of Black’s dynamism and gives up the bishop-pair. 21...Qf7! is obviously much better, not giving any ground or weakening anything: 22 Bxe6 Qxe6 23 a4 b4 24 Nc4 Rbd8 25 Be3 Nge7 =. In this game, unlike my opponent I failed to remain patient and play profitable one-square moves and maintain the tension.

22 dxc4 Bxe3 23 Bxe3 bxc4 24 Ba4 Na5

24...Nd8 25 Qe2 Nf7 26 Rab1 Qc7 27 Bc2 +=.
25 Qe2 Qc7 26 Red1!

This slow readjusting move is best because the rook may be ideally placed on a1 if White plays b4 and it is answered with ...cxb3.

26...Nb7 (D)

26...Ne7! 27 f4 Nac6 28 Bxc6 Qxc6 29 Rd2 Rbd8 30 Rad1 +=.

White to play

27 Nf1?

Deactivating the knight in this critical position had a major effect on the evaluation of the position. White’s main idea should have been to make sure ...f5 is consistently restricted. By playing 27 b4!, White prevents ...Nc5 and hinders ...f5 too, leading to a more or less decisive positional advantage: 27...cxb3 (27...Ne7 28 f4! Rf7 29 Bc2 +/-; 27...f5 28 exf5 gxf5 29 f4! +/-) 28 Bxb3 Bxb3 29 axb3 Qxc3 30 b4! +/-.

27...Nc5?

This lets White’s pieces come into the game too easily and allows White to make a favourable exchange. The immediate 27...f5! keeps the f1-knight
passive: 28 f4 (28 b4?! f4 29 Bd2 Nf6 –/+ ) 28...Nc5! 29 exf5 gxf5 =+.

**28 Bxc5! Qxc5 29 Ne3**

After 29 Rd2 Rb6 30 Rad1 a5 31 Ne3 Ne7 Black holds the balance.

**29...Ne7?!**

Black had no reason to delay pushing ahead with his main break on the kingside: 29...f5! 30 exf5 gxf5 31 b3 Nf6 32 Nxc4 Rfd8 =.

**30 Rd2?!**

30 b3! f5 31 Nxc4 Bxc4 32 Qxc4 Qxc4 33 bxc4 fxe4 34 Bb3 +=.

**30...f5 (D)**

![Chess Diagram](image)

*White to play*

**31 Rad1!**

Although this is not objectively the best move, it set the most practical problems for me and may be regarded as White’s only real practical winning attempt. 31 b3 fxe4 32 Rad1 cxb3 33 Bxb3 is a safer solution, leading to an immediate draw: 33...Bxb3 34 axb3 Rxb3 35 Rxd6 Rxc3 36 Rxa6 Nc6 =.


31...Rbd8?! 

Black can use the b8-rook more aggressively by playing 31...f4! first and seeing where White’s knight goes. 32 Nc2! (32 Ng4 Nc8! threatens ...Qa5 and gives Black the initiative; it is not easy to be confident about the strength of ...Nc8 over the board) 32...Rxb2 33 Rxd6 Rf6 (33...Bc8 34 a3 Bb7 =) 34 Qd2 Kg7 35 Rxa6 Bd7! =.

32 exf5 gxf5 

I barely considered 32...Nxf5, although it trades a passive piece for an active one. In retrospect, that may have made the defence simpler, although after 33 b4 cxb3 34 Nxf5 Rxf5 35 axb3 Qxc3 36 Qxa6 Qc5 37 Rxd6 Rxd6 38 Qxd6 Qxf2+ 39 Kh1 White can also press on with a slightly better structure.

33 Bc2 (D) 

33 b3 is a sensible positional idea, but allows too much counterplay after 33...e4! 34 Qh5 Qe5! =.

33 Qh5! Ng6 34 Qg5 would have been a very bold manoeuvre, threatening Bc2 to target the f5-pawn. After 34...Qc7! (covering the e7-square to prepare ...Nf4 without allowing Qe7) 35 Bc2 Nf4 36 Kh1 Rf7 37 Qh4 d5 38 b3! += White chips away at Black’s centre and seizes the advantage. In the game, White did not try to weaken my kingside pawns until later.
33...Rg8?

After this major mistake, my whole structure crumbled on the kingside. 33...e4! prepares ...Ng6 followed by ...Qe5, and then 34 b3 Ng6 35 Qh5 Qe5 36 bxc4 Qxc3 37 Qh6 Qe5 is equal.

34 Qh5! Qc6

Even the better try 34...Rg6! 35 Nxf5 Nxf5 36 Bxf5 Bxf5 37 Qxf5 Qc6 38 Rd5 Rdg8 39 Kf1 +– leaves Black’s position in a shambles.

35 Qh4! Rg7 36 Qf6! f4 37 Ng4

Now Black’s position is hopeless, and little more needs to be said.

37...Bxg4

After 37...d5 38 Nxe5 Qc8 39 Re1 +– Black has to resign anyway.

38 hgx4 Qc8

38...d5 39 Qxc6 Nxc6 40 Rxd5 is also hopeless for Black.
39 Rxd6 Rf8 40 Qxf8+ Qxf8 41 Rd8 Kg8

41...Qxd8 42 Rxd8+ Rg8 43 Rd7 +–.

42 Rxf8+ Kxf8 43 Rd8+ Kf7 44 f3 1-0

White faced critical moments on moves 14 and 19, which determined whether he would win the fight for the d5-square. White faced a few critical decisions around move 30 as well in which he could have challenged the c4-pawn, but was rarely risking much. Due to the fact that White had few critical decisions to make, this was a rather easy game for him to play because most of his moves were simple and did not require much calculation. A lot of players do not realize that it is perfectly reasonable for one player to have only a few critical moments in a game, while his opponent may have significantly more. Black faced critical decisions on moves 5, 13, 19, 21, 31, 32 and 33, for instance. In terms of large errors, 19 Ng4? was a big mistake, allowing Black to improve his structure with tempo and move from defending a worse position to attacking in a better position with a superior structure. 33...Rg8? was a blunder, underestimating how weak f5 and h7 are after 34 Qh5!.

5...0-0!, 6 d4!, 8...b5 intending ...a5, 19...f5, 27 b4!, 29...f5!, 30 b3, 31 b3, 31...f4!, 32...Nxf5?! 33 b3 and 33...e4! all would have led to different pawn-structures from those that occurred in the game. It is worth reflecting on all of these potential structural changes, as the game could have taken a different, and not unfavourable, course in any of these instances.

I started to make major progress beyond 2000 in my chess when my play became more serious with Black, my defensive play became tighter, and I was able to set more serious problems for my opponents in the opening with both colours.

In ChessBase you can mark important positions with ‘medals’. For clarity, all critical moments should be marked with a simple medal, and the top five positions per game marked with the time used, such as “I spent 8 minutes here”. This would be a very effective way to send an annotated game to a
coach to get some meaningful feedback on time expenditure.

Keep a calendar on the wall behind a place where you sit regularly (probably a place your computer is in front of) and after a tournament game, write down the moves of your opponent that you overlooked, and write them into the date on the calendar of the day you played the game. Even just glancing for a second is enough to remind you and help you think more about moves you overlook and why. For someone like me who was playing 20 games a month, my calendar was chock full of moves written on the days. But when I glanced at it, I remembered exactly why I was missing moves.

Creating a narrative of a game in your head immediately after it is over is almost always a bad idea because there is a strong tendency to overfocus on one move (especially a bad move after a loss), rather than the thinking behind the move, the structural play, and the metagame thought applied in the game. There is a wealth of ideas to learn from your games, so it is important to be thorough and make sure you learn about the useful ideas and general principles you missed during the game. Your chess understanding is a constant work in progress. By realizing that narratives typically lead to poor generalizations and ignore the trends and psychological pressure that was present during games, we can focus more holistically on understanding our games.

Any time I want, I can just open up a game of mine, create a viewchess link and send the game around to a bunch of players I know (usually 2300-2500) and get some feedback. This is an extremely useful feature that makes chess study more dynamic and interactive for me.

Since chess computers are so good now, it’s not hard to store all of your games in a database, and have all of them annotated with accurate computer analysis, with explanations of your mistakes that you wrote yourself. As you get better understanding the game and working with engines, the explanations get better and better. It is mostly a matter of immersion and familiarity with the types of logic and ideas that are good. Once you get into it, improvement starts to come quickly. Diminishing returns do not begin to become felt until approximately master level.

If you play a strong player whose views you trust, analyse the game with him
after it’s over and ask a wide range of questions about positions and how he evaluated them. Against a relatively weak opponent, be careful in post-mortems not to interpret their views too literally. All post-mortems with weak opposition are important to re-check later with a stronger player or engine to make sure you do not reinforce misconceptions about certain positions that came up during the game and more general chess concepts.

Reviewing your games every so often is not actually that time-consuming. Imagine that you go over 70 games with a coach in an entire year. You can play over every single game that you analysed together in a couple of hours. You can slide through the main errors you made (even in 70 games) with the arrow keys in about 45 minutes. The reason why you can do this so quickly is because if you have analysed the game seriously, you already understand what is in the annotations anyway. I used to review all of my analysed games from the past twelve months at the end of the year and reflect on my play and how I wanted to move forward. Having everything neatly organized and analysed allows everything to be in the form of mobile progress. You keep moving forward and internalize the mistakes you made and the moves you missed.

A game is a broad constellation of many ideas that should be understood as deeply as possible and looked at from as many helpful and insightful angles as possible. The mental stimulation from chess is really intense and rewarding. There are few things as satisfying as the eureka moment of suddenly understanding something deep in chess.

Strong players have a tendency to rule out certain moves that do not do anything constructive (in their minds), and this is usually not commented on too much in literature. This is especially common when moves look active but do not have a real effective idea or threat behind them. I tend to sense if my move is actually useful without needing to ask. Useless moves jump out at you after you have played a significant amount of them and realized that afterwards. It is another big experience thing: getting better at not playing moves that superficially look good but do not do anything effective. They jump out at you in the sense that it makes them easier to reject in your move search.

Keeping a database of critical positions from your own games is effective for
improvement. You’ve played the positions and are likely to have an emotional connection to them based on your result in the game and how the play proceeded. By reviewing them and conceptualizing about the positions, this creates solid understanding that is really not going anywhere and is something you can always return to. It is not like superficially reviewing a master game, which is not bad to do, but is not as effective or personal as going over your own positions.

It is a very interesting task to check all of your games in a given opening variation. It really helps you summarise your thoughts and conclusions about the variation as a whole. Some of those conclusions may not have been obvious to you before looking at all of the games together. See if you can notice patterns of mistakes you made and also understand subtle ideas about the variation in particular after so much study of a specific position-type.

Many players analyse their games with an engine, look for just the top computer moves and brush them off like they were obvious. Some of them are indeed not difficult to find, but in many cases you need to work with the engine a little to figure out the point of the move. You should be using the engine to understand the game and generate ideas. The theme of idea generation is a big one that I emphasize with players around master level. Even when working with grandmasters, I can help them discover many new ideas and ask a lot of questions they had not thought about.

Generating good ideas, getting evaluations approximately right and making practical decisions are all important aspects of chess strength. Part of the reason why I ask myself so many questions after a game is to generate the right kind of ideas, and to develop a practical feeling and understanding for playing pawn-structures.

I was looking over the games by the top 8-year-old in the world and I noticed that he nearly always played the most active move in every position. It could certainly be useful to analyse (or even play) your games from the perspective of considering the most active move in every position.

In chess, an important reason for being aware of your conscious thought is that many thoughts spring up out of our control, but we can then direct some of those thoughts. Playing chess brings you very close to your conscious
mind, and is one of the reasons why it serves as an excellent area of study for neuroscientists and psychologists. Chess is rather amazing at demonstrating how you can learn to focus better, concentrate more, improve your conscious recall and direct your thoughts. Outside of being a completely logical game in which all of the best moves can be rationally explained, the amount of logical thought applied to the game provides a staggering amount of useful material for other fields.

Intellectual types who are curious about everything and want to learn and know as much as possible tend to analyse their games well and learn a lot from them. That tendency propels growth a lot. I was always curious about every position I played and wanted to get to the truth of the matter, so I analysed every single position I played, even years ago when engines were weaker. I tried to build up some understanding of how engines worked and analyse my games competently on my own. Without a coach and doing everything by self-learning, I had to teach myself a lot about openings and general chess strategy. I learned a lot from games collections as well and seeing how elite players think about the positions they play. After, say, 10 games collections I had a pretty good feeling for how strong players think at the board and what they tend to focus on and think about in a position. That certainly helps with your perspective when you are at the board trying to generate candidate moves and evaluate a position.

Improve and come back stronger every time against stronger opposition. Try not to attach yourself to the result or think it equates to your innate ability or intelligence. No one was a master player right when they started playing. World Champion Magnus Carlsen was rated under 1000 for quite a while when he started playing.

There is also nothing wrong with analysing your games independently without an engine. You certainly should do so, and record your thoughts about key positions. But it is frankly bizarre when I see 1500 players who refuse to use an engine in order to “figure things out themselves”. The main negative issue is that in a lot of cases they spend two hours analysing, draw false conclusions about positions, reinforce those false conclusions, and never even bother to check if they were right. Why not just write down your ideas and check them carefully in 20% of the time spent? Don’t overreach yourself
and draw conclusions you cannot support. If you have gone completely astray in a wide range of positions in your analysis, you will want to know right away and stop yourself.

If you have the means, play as many long time-limit tournament games as you can, analyse the games seriously with words and explanations for the mistakes, and save all of the analysis. Verbal explanations will help you convert your mistakes into understanding, future awareness and realizations you can apply at the board.

Although it is extremely important to analyse your losses and your mistakes seriously, do not cloud your views on chess or your own play with too much negativity or you will eventually halt your progress. Focus on taking small positive steps because small steps add up over time, and even small victories are still progress.

In time-trouble, I recommend paying special care to your king position to make sure you are not missing any key focal points your opponent may be able to target. In many games of mine in dominant positions, I allowed an unnecessary amount of counterplay against my king in time-pressure.

One game can make a big difference in perception between a good tournament and a bad one. Try to avoid being too results-oriented when looking back on a tournament and deciding on a plan forward, focusing more on the quality of play and what conclusions you can draw from it.

In any game, there are nearly always piece exchanges, tactical ideas, or pawn-structure transformations that were not considered. Your best chance to set real problems might be to change the structure with a move only slightly weaker than the ‘best’ move according to the engine. One of the joys of analysing complicated strategic middlegames is seeing the computer point out extremely shocking, but comprehensible, positional plans or ideas.

Errors in practical endings are common, but understandable. Many of these endgames are played with very little time left in positions in which calculation is vital. Time-trouble errors should be grouped into one of two categories: failure to find a suitable candidate move or inability to calculate the consequences of your candidate moves.
Ridicule and harsh criticism do not work well in chess improvement. Every important decision in a game should be scrutinized, but this should never snowball into negative assumptions about your own ability or potential, so avoid being too hard on yourself for making mistakes. Simply identify the problems that occurred and do your best to solve them in future games.

Psychologically, it is important to realize that sometimes you do not know what you are doing and it is OK that you do not. Deep analysis of your own games should be humbling in this regard. Analysing my games in depth always helps me appreciate the complexity of the game and appreciate just how many mistakes and misapprehensions were a part of my thinking in the game. Stay aware of why you are succeeding and why you are failing. Self-reflecting on these concerns is very useful as a habit, for improving your overall approach to the game, and for long-term development. If your awareness is strong, you will find yourself adapting to your opponent significantly more effectively.

After a long tournament, it is important to self-reflect on the simple question, “What did this tournament teach you?” It may sound obvious, but a lot of players forget to think about it. It is useful to write down your thoughts on what you learned from an event in a Word document or notebook. Before your next tournament, you should briefly read through what you wrote and reflect on it some more to try to apply your newly-optimized metagame strategy.

In an effort to understand their own weaknesses (or rationalize their failures), many players oversimplify their problems. For example, a common belief many players have is that they are simply missing some of their opponents’ counterplay, and this is keeping them from making 100 or 200 Elo leaps forward. In every case I have investigated like this, there were many mistakes in all areas. Most players in general are pretty close to their playing strength in positional understanding, opening play and calculation. This is logical, because those who are particularly weak in any of those areas tend to be picked out pretty easily. On the other hand, overlooking counterplay is not simply a one-pronged problem. Missing counterplay can be related to bad logic, bad positional understanding, bad calculation, or missing a simple geometric pattern. Thus, if someone regularly misses their opponents’ ideas,
it is almost certain that they need to improve in a lot of different fundamental areas.

Every player needs to practice learning from their own games. You need to build up enough positional understanding to benefit from your losses due to simple structural problems or positions that have no counterplay. Many players understand their blitz blunders but rarely their blitz positional errors. With enough positional understanding developed, you can even learn a lot due to instant realizations from blitz games that were lost due to positional reasons.

One thing I like to do about a week after a tournament is go through a training database of positions in which I managed to throw away a half-point or a full point. In one event, I missed twelve different continuations, so there was plenty of content that stuck quite easily. With the Training tab in ChessBase, this can often be quite a quick and effortless task allowing me to guess the move without seeing the solution. Study your games deeply and enjoy all of the instructive content you now have available to you to help out your chess.
10: Metagame Opening Strategy
Metagame Thought

Metagame strategy in chess refers to a long-term approach to the game based on maximizing your long-term results. This means that your opening choices are based on giving you the best results over hundreds of games and not just one game. Metagame strategy in chess is almost always applied exclusively in the opening phase, so that will be the starting point of our discussion on metagame strategy. This is because you can plan out what you will play in the opening beforehand, but you can very rarely plan out how you will play the other phases of the game. Metagame strategy refers to the deeper inner workings of strategy that involve thinking about what your opponent is thinking. In other words, this means that your opening selection is based on what your opponent knows about you and factors in what he is most likely to do.

The metagame can be thought of as the game that takes place below the surface. Metagame thinking is one level higher than the traditional notion of focusing on the obvious and what you can see right in front of you in the foreseeable future. Metagame strategy typically involves ideas you would not find at the board, but sometimes realize are obvious to you after the game. To play with effective metagame strategy in chess, you already need to have an understanding of typical position-types that favour you, to have the highest chance of getting those types of positions. Metagame thought applied to the opening is a process whereby the range of positions you can reasonably foresee gives you the maximum advantage. Someone not applying metagame thought may enter positions where the range is, say, half positions that are good for him, and half that are not good for him. Sometimes we casually walk into bad positions by accident due to a failure to plan out our opening strategy properly, so this is an important subtlety to be aware of.

Your openings should be built upon a deep strategy consistent with your entire approach to chess. Thus, if you are a practical and aggressive attacking player, your openings should mirror this and thereby play to your strengths. Applying logic in the opening often means asking yourself simple questions that get down to basic conceptual points that might seem obvious after the
fact, but that you may have never thought about due to never asking the questions. When we get too immersed in memorizing opening variations, we can easily lose sight of the bigger picture and not fully understand what is going on. The point here is that we need to slow down and think about everything within our openings in a meta way.

Starting at expert level, you should be able to figure important things out in a meta way by applying logic. As Black, you think about what White wants in a meta way in terms of position-types and then try as hard as possible to avoid them, or to muddy the waters along White’s clearest path to achieving that. As White, we apply the same concept: for instance, a player with Black may be aiming to simplify the position as much as possible, causing us to realize that we should try to keep as many pieces on the board as possible to maximize our chances of obtaining an advantage.

Now that the official FIDE tournament time-limit is 90-30 (90 minutes for the game, with 30 seconds added to your clock after every move) and faster than before, solving difficult problems in the opening every game through their own logic is not something that people can realistically do any more because there is not enough time for it. Players need to be more practical and have both their repertoires and their opening knowledge more consolidated and simplified.

Playing solidly against higher-rated players is the most frustrating for the vast majority of them (there are cases of strong players who are relatively weak tactically, but that is a minority). They have to create complexity and take big risks to win and that will bring your best chance to win yourself. When I play against young players who have strong grandmasters as their coaches, I have noticed that practically every single one tries to apply this idea. Nearly every coach seems to have collectively decided on the correctness of this approach.

Good Metagame Strategy

Good metagame opening strategy is deeper than just picking an opening you like ‘just because’. If that opening choice will not improve your long-term
results the most, it has a clear flaw to it that needs to be addressed. As an example, I coached a 1900 player who loved to play the Dutch Defence for emotional reasons, but was simply unable to get out of the opening and get his pieces developed by move 15 in almost any of his games against players 200 points higher-rated. When he switched to a more classical opening that allowed him to survive the opening more easily, his results immediately improved.

When I was 2200, an international master told me that I applied poor metagame strategy with White because I lost control of the position too much. At the time, I barely understood his point, but I see it very clearly now. I should have been able to enter safe positions that offer me good chances for an advantage with White, with little chances of losing control within the first twelve moves. In many openings, White is able to gain space and put his pieces on good squares without risking anything. Part of controlling the position is understanding the aims of your opening well and being familiar with the pawn-structures you are playing.

Applying good metagame thinking when an opponent unleashes a rare or strange line against you at the board is not easy. You need to look at their idea with fresh eyes and think about the logic behind it: should it fundamentally be punishable because it weakens their position dramatically or makes them fall far behind in development? If they wasted a couple of tempi or dramatically damaged their pawn-structure, that is one thing. A mistake I made in the past was trying to punish my opponents for simply playing solid moves in the opening. If their pawn-structure has no weaknesses, material is equal, and they have solid central control and are not far behind in development, chances are that we have few grounds to try to refute their idea. Evaluate their idea objectively based on its raw exploitability and positional or dynamic flaws. You may just find that their rare idea is perfectly sound.

Making assessments of your opponents is a big part of good metagame strategy. When assessing a player before a game and creating a profile about them, it helps to assess them as either aggressive or conservative and theoretical or practical, to get a clearer idea on how and what you want to prepare. If someone is aggressive and theoretical, an opening like the Petroff
may seriously cause them issues. Additionally, if someone is conservative and practical, it can make sense to play something risky such as the Benko Gambit or the Modern Defence, because they will probably not try to challenge it with the best line.

There are many examples of good metagame opening strategy. A classic example is playing Black against a very solid player who rarely loses with White. Starting around 2250 level, these players are not that uncommon nowadays. In one instance, I played 1...b6 against a 1 d4 player who had only one response to this line and which was clearly suboptimal. By choosing this dubious line for one game against this grandmaster, I surprised him and gained a psychological edge. I also gained an advantage on the clock since I knew the opening moves, and I even equalized and obtained winning chances with Black on the board due to reaching an unbalanced position that was hard for him to play. Exploiting the weak points in an opponent’s repertoire is a major part of good metagame strategy.

If a 2500 player is handling the black pieces and recognizes his 2300 opponent may simply head for a position directly from the opening with three minor pieces left on the board for both sides in a symmetrical pawn-structure, the 2500 player knows that in the long run, he will consistently lose rating points, normally performing even more than one hundred Elo points below expectation. For this reason, he will want to choose a different type of equal position from the opening if he can, in which his superior skill should lead to preferable results. In many cases, this simply involves giving the opponent an imbalanced structure in the form of, say, an isolated pawn, or a weakened pawn-structure at the cost of something like the bishop-pair or the exchange. This is one reason why a much stronger player is likely to opt to sacrifice the exchange for a pawn and some weaknesses in the opponent’s camp over a very simplified equal position if these are the only options.

Peter Lizak is an international master whose opening philosophy is just to avoid the opponent’s strongest preparation. This is a perfectly reasonable way to handle your opponents if you have information on them. I noticed that one of my 2300 opponents had a 2500 performance in the Dragon and scored 80% with Black in it, so I played 1 d4 against him and crushed him in the Benoni. That was an example of good metagame strategy and avoiding the
This game was appealing because, with just three exceptions, on each turn White moved forward, and even the three retreating moves were played with the intention of advancing on the next move. White played the game with a modest metagame strategy that was risk-free for the most part. Black did not succeed in equalizing and ended up losing quickly.

1 d4 d5 2 c4 c6 3 Nc3 Nf6 4 Nf3 e6 5 Bg5 h6 6 Bxf6 Qxf6 7 e3

This is a basic main line of the Moscow Variation of the Semi-Slav. White usually plays e3 with the intention of playing a couple of developing moves before playing e4. 7 e4 does not work right away because after 7...dxe4 and ...Bb4+, White’s king is too exposed.

7...g6 8 Be2 Bg7 9 0-0 Nd7 10 e4 (D)
This was my modest and basic intention: to put my pieces in the centre and counter ...dxc4 Bxc4 and ...e5 by d5, keeping firm control over the d5-square, when Black has a tough time getting obvious counterplay.

10...dxc4 11 Bxc4 0-0

To avoid the plan of Re1-e3 chosen in the game, some players prefer the immediate 11...e5 before castling, intending to follow up with ...Nb6 and ...Bg4.

12 Re1

12 e5 is objectively stronger, but at this time I had not worked that out yet. Then White has to be watchful for Black’s various strikes against the centre. The way the game continued here, my play was quite simple and without risk.

12...e5 13 d5 Nb6

13...Rd8 14 Qc2 Nb6 is also fine for Black.

14 Bb3 Bg4 15 Re3

This is the most popular move, intending to recapture on f3 with the rook if Black ever takes there.

15...Rad8 16 h3 (D)

16 Qe2 cxd5 17 Nxd5 Nxd5 18 Bxd5 Qe7 looks very solid for Black, so I wanted to try an equivalent line that is similar but more likely to provoke an error. The text-move is just trickier.
Retreating the bishop may look solid, but it is simply too slow and not connected to any specific plan. Black does not manage to generate any counterplay for the rest of the game.

16...cxd5! was Black’s big chance to simplify and hold his position together. After 17 exd5 (17 hgx4 d4 was misevaluated by both players) 17...Bxf3 18 Rxf3 Qe7 19 Rc1 Nc8! Black keeps the balance. The fact that Black can equalize here is not very surprising: he has played a basic main line that is popular in high-level chess and played reasonable and direct moves on every move up to this position. White, for his part, played sensible moves in the centre and has good central control and no reason to be objectively worse at any point either.

17 Qe2 Rfe8 18 Rd1

White improves his worst-placed piece by bringing his rook to the obvious d1-square. This move looks quite natural, yet such simple moves need to be well understood by players under 1600. A bizarre amount of amateur games feature one side leaving an able-bodied rook in the corner when it could be in the heart of the play.
18...Bf8

Even after the better 18...Qe7! 19 a3 it is very hard for Black to find a move.

19 Nh2

This looked very challenging at the board, intending to put the rook on f3 and the knight on g4. It was not exactly clear at the board how Black intended to defend both f6 and f7.

19 Nd2 Qg7 20 Nc4 Bc5 21 Rf3 is a similar plan to the one played in the game, but with the knight on the queenside. This is perhaps even slightly stronger objectively. Nevertheless, the game move provoked an immediate large error and is difficult to criticize.

19...Qg7?

Black missed his one chance to close the position to a small degree by taking on d5 first: 19...cxd5! 20 exd5 Qg7 21 Nb5 e4 22 Nxa7 Bd7 23 Rxe4 Rxe4 24 Qxe4 Bd6 25 Qe3 Na8! 26 Nf3 is definitely better for White, but enables Black to live to see another day. With his bishops solidly posted on d6 and d7, he has decent practical chances of drawing.

20 Rf3 (D)
20...c5

This made the win much easier for me, but it was not hard for me to understand why my opponent thought taking on d5 was bad either: seeing 20...cxd5 21 Nxd5 Nxd5 22 Bxd5 Be6 23 Ng4, it looks as though White wins quickly in that line too. 23...Kh8 24 Bxe6 Rxd1+ 25 Qxd1 fxe6 26 Qa4 is very bad for Black due to his various weaknesses.

21 Nb5!

Due to the double attack against a7 and c7 (22 Nc7 Re7 23 d6 is threatened), White wins material and obtains a winning position by force.

21...a6 22 Nc7 Bd6

22...Re7 23 d6 Red7 24 Ng4 +–.

23 Nxe8 Rxe8 24 Bc2

White has a decisive advantage. The simplest way to convert this advantage is by increasing it naturally by playing a4-a5 and Rb3, when Black’s queenside is frozen.

24...Rf8

Black desperately goes for ...f5 because there is no other way to confuse the issue a little. 24...Na8 25 a4 Nc7 26 Qd2 +–.

25 a4! Kh8

25...Na8 26 Rb3 +–.

26 a5 Na8 27 Rb3 f5 28 Nf3

The knight calmly comes back into the game and intends to come to c4.

28...Qc7
28...f4 29 Nd2 Bb8 30 Nc4 +–.

29 Nh4!

f5 and g6 are pretty clumsy here, so I immediately tried to exploit those weaknesses.

29...Rf6 30 exf5

30 f4 exf4 31 Re1 fxe4 32 Qxe4 would also have been a fun way to win, but I saw no need to make it unnecessarily complex and play for beauty.

30...gxf5 31 Qh5

With f5 crumbling, the game is about to end.

31...Qf7

After 31...e4 32 Qe8+ Kh7 33 g4 Black can resign because the support for e4 is cracked.

32 Qxf7 Rxf7 (D)
33 Bxf5!

This smooth simplifying tactic allows White’s rooks to prove their dominance and push the d-pawn forward.

33...Rxf5

33...Bxf5 34 Rf3 +–.

34 Nxf5 Bxf5 35 Rf3 Bc8 36 Rf6 Be7 37 Rf7 Bd6 38 Rf6

I repeated moves just to make sure I reached the time-control at move 40. 38 f4 also wins.

38...Be7 39 Rxh6+ Kg7 40 d6 Bg5

After 40...Kxh6 41 dxe7 Nc7 42 Rd8 White queens the e-pawn and wins.

41 Rh5 1-0

With the direct threats to both bishops, Black resigned.

With experience, I have become more practical and less focused on specific preparation. Thus, if I have a simple way to get an advantage, I almost always go for it. That being said, if there is a clear refutation of a line, I do always try to play the most critical punishment of a variation, because I seek to be principled. What matters to me in these cases is how big the difference in strength is between a simple and practical option and the theoretically best one. If the difference appears negligible to me, then I almost always choose the simpler option.

Simplicity is very useful when you have multiple paths to an edge. Practical players will almost always prefer the simplest option if it keeps all the advantages of the general variation and the position intact. The main point is to avoid wasting time and energy and to be as organized and principled as possible, both at the board and in analysis.
When you are preparing against a rare sideline that you will encounter once a year at most, you should focus on achieving your goals in the simplest manner possible. Simplicity is crucial because the simplest solutions are the easiest to remember and find at the board. No one wants to get caught in some nasty opening preparation, so if we can equalize easily against rare lines with Black, we should be happy to stick to those solid options. Often we get led astray following grandmaster games or engine suggestions and forget about practicality and simplicity.

Simplicity matters a lot in human games, both with respect to opening play (at least being aware of the simplest possible path to an advantage) and with respect to winning basic endgames. Over-the-board we tend to have nothing concrete in mind besides the simplest and easiest possible ideas to recall. In memory, simplicity beats complex nuance. This is important for teachers in all fields to grasp, but applies quite well to learning and remembering chess openings. It is also useful to be aware of the fact that the more ways you can attack something to try to remember it, the better you are going to recall it later.

When I analyse inferior Black openings, I like to be aware of the simplest possible method for an advantage. When I was studying various Benoni lines with Bf4 and Qa4+, I started to wonder if I couldn’t just play more simply to restrict Black from breaking out with ...b5 (more or less the only idea). When I analysed it, I realized that this was significantly simpler and required much less memorization. At the board when a hungry 2450 IM played the Benoni against me, I would have loved to have known I could have stuck to simplicity. For some reason, White repertoire books in the Benoni always gave the crazy Qa4+ lines and failed to mention that you can just play simple positional chess, restricting Black and maintain a pull. If the only possible option for an edge is a complicated and difficult line, I will surely play it and focus on it. But if the computer gives one +.40 and one +.30 line at high depth (and the score doesn’t drop with more moves so I can say it is a real advantage), I will go with the easier line for a human to handle most of the time unless I have a reason to override that choice.
Bad Metagame Strategy

A properly constructed metagame opening strategy is a complete and composite attitude towards playing the opening that effectively deals with all of the components of opening choice that affect long-term results. Strong players often refer to poor metagame strategy they see in the games of lower-rated players. This comes in a very wide variety of forms. A simple example of poor metagame strategy is playing a clearly dubious variation as Black as your only opening and wheeling it out against a 2500 player, but not worrying about the consequences because it generally works against 2100 players. While 2100 players will generally play the opening more weakly and handle their small advantages less effectively than stronger ones, the 2500 player in question may just prepare against your Black repertoire, see a clear hole, get a large advantage playing a forced and prepared line without any effort, and maintain the large advantage built up due to good play and their inherent strength.

Another example of poor metagame strategy is playing dubious lines for short periods of time and then hopping to new dubious lines to play temporarily. In most cases, this amounts to a lot of wasted study time, minimal chess culture and understanding developed, and at the end of the day still no stable repertoire. Additionally, if the lines you are playing are genuinely dubious, there will be few strong players in those lines to follow and few classic games to learn from that will help you understand the position-type and opening more deeply. A 2650 grandmaster once told me, “You cannot keep running away from classical positions forever.” For those who want to become very strong players, there certainly is little to gain and a lot to lose by avoiding positions that occur often in classical elite modern chess and classic games.

An example of bad metagame strategy would be playing a strict, grinding player with an 80% score in a certain position-type, then entering that exact position-type, getting no counterplay, and losing without a fight. A master playing the Sicilian Dragon against a tactical 1800 player who has a strong coach (or otherwise very good opening preparation for some reason) is almost certainly a bad idea and randomizes the result. This is possibly the simplest example of a bad metagame approach. When superior to a player in
all areas of the game, it makes little sense to allow the game to be potentially decided right out of the gates in the opening by a concrete line.

Do not play sharp variations if you do not know the theory. Players who do this with any regularity are exhibiting bad metagame strategy. An occasional bluff can be worth it, but not knowing the theory in sharp variations you get on the board should not be a recurring theme in your play.

Playing a ‘nothing’ line with White involves having no principled idea. This might mean that the player with White makes no attempt to construct a pawn-centre, gain the bishop-pair, play for space, or weaken the opponent’s pawn-structure or king.

An excellent example of bad metagame strategy is when you have a simple way to equalize or a much more complicated choice that involves grabbing a pawn for a dangerous initiative, and you choose the latter option. Often we will analyse a variation and see that the computer’s top choice and/or the top choice in grandmaster chess is a complicated and unclear line, whereas a move with a slightly worse score according to the engine equalizes easily and achieves our goals without any problems. In such cases, we waste a lot of time and energy if we don’t adopt the simpler solution.

An example of poor metagame strategy I observed was the following game. Rapport, the stronger player, ended up in a very bad position from the opening against an opponent he would normally expect to outplay in most common middlegame position-types. By giving White such an easy and comfortable advantage from the opening, he was fighting from behind the entire time and never caught up, even after numerous inaccuracies by White.

Ju Wenjun – Rapport

Caleta 2015

This game illustrates the dangers of playing an opening like the Chigorin with any regularity at a high enough level where the threshold for inaccuracy is very low.

1 d4 d5 2 c4 Nc6 3 Nf3
White opts for the most commonly-played line.

3...Bg4 4 Bf4

White plays the fourth most common move, which is actually still good enough to cause Black some slight problems. White simply intends to complete development with e3 and Nc3 and make the knight on c6 appear to be misplaced. 4 Nc3 is the main line and scores fairly well for White.

4...Bxf3

4...e6! 5 Nc3 dxc4 6 e3 Bd6 7 Bg3 gives White only a slight plus.

5 gxf3 e6 6 e3

White has the bishop-pair and a compact structure. The doubled f-pawns do not hurt White’s position at all because Black’s knights do not have any good squares to use.

6...Nge7

6...Nf6 7 Nc3 Bd6 8 Bg3 is also comfortably better for White.

7 Nc3 a6

7...Qd7 8 a3 leaves Black struggling to find a plan.

8 Qb3 (D)
8...Ra7?!  

Here we are on move 8 in an important round of a major tournament, with a player over 2700 with Black slipping into a positionally lost situation very early on in the game due to extremely clumsy piece placement. 8...dxc4 9 Bxc4 Na5 10 Qa4+ Nac6 11 Be2 +=.  

9 Rc1  

Black still has no pawn-breaks such as ...c5 or ...e5 and no counterplay in sight. In view of White’s bishop-pair and the ease with which she improves her position, White has a very large advantage. 9 cxd5 Nxd5 10 Nxd5 exd5 11 0-0-0 is also very good for White.  

9...g6 10 cxd5  

Taking was necessary sooner or later to open up the c-file.  

10...Nxd5  

10...exd5 11 h4 h5 12 Na4 b6 13 Bg5 +/-.

11 Bg3
White may not have played the strongest option (i.e. 11 Nxd5! exd5 12 h4 h5 13 Bg5 Be7 14 Rc5 +/-), but it is still very hard for Black to come up with a coherent plan.

11...Nxc3 12 bxc3 Bd6

12...Bg7! 13 Bd3 0-0 14 Kf1 Na5 15 Qb4 +=.

13 c4

Black struggles to come up with any sort of pawn-break. The knight on c6 commits Black to playing for ...e5 in this pawn-structure, but there is no good way to execute that without losing material.

13...Qg5

13...0-0 14 c5 Be7 15 Bg2 gives White a large advantage, but is much less dangerous for Black than the game continuation.

14 Bg2 Qa5+ 15 Ke2! (D)

![Chess Diagram]

Black to play

The white king is actually completely safe in the centre and Black has nothing useful to do with his pieces.
15...h5

15...Ne7 16 c5 Bxg3 17 hgx3 +/-.

16 f4 0-0

16...Ne7! 17 Bh4 Nf5 18 Bf6 0-0 19 Rhd1 +/-.

17 Bh4?!

17 c5 Be7 18 f5! would have been a winning shot, intending to go after the c7-pawn by playing Rc4-a4, removing the queen’s defence of the pawn.

17...Qf5

17...Be7! 18 Bxe7 Nxe7 19 a4 +/-.

18 h3 Be7 19 Bg3 h4 20 Bh2

Despite the fact that White’s bishop on h2 may look bad, it performs a very useful role of preventing Black from getting any activity at all.

20...Qa5

20...a5 21 Rhd1 +/-.

21 Rhd1 Bd6?! (D)

21...Nd8 22 Kf1 +/-.
22 d5

Playing 22 c5 first before playing d5 was even stronger.

22...exd5

22...Ne7 23 c5 Bxc5 24 dxe6 +–.

23 cxd5

23 c5! Be7 24 a4 +– is stronger, but White was intending the very clear e4-e5 to follow, which optically looks very dangerous and easy to play.

23...Nb8

23...Ne7! 24 e4 b6 25 Rc4 +/–.

24 e4 Re8

Entering the endgame by 24...Qb5+ would not have helped: 25 Qxb5 axb5 26 e5 +–.

25 e5 b6
25...Ba3! 26 Rc3 Qb5+ 27 Qxb5 axb5 28 Rxc7 Bd6 29 Rc2 +–.

26 Kf1 Bc5 27 Kg1

With White’s king totally safe and her bishops slicing through the opponent’s position, things are going to end very soon. The rook on a7 is a very sorry sight.

27...Qb5 (D)

27...Qb4 28 Qc2 +–.

28 Qc2

White keeps the queens on, emphasizing Black’s complete paralysis and the power of White’s centre.

28...Nd7 29 Re1 Bb4 30 Re3 Bc5

Black dances around with his bishop because he has no constructive plan or pawn-break to carry out. 30...Nf8 31 f5 +–.

31 Re4
31 Rb1 Qa5 32 Re4 +–.

31...Bf8

31...Ba3 32 Rb1 +–.

32 Rc4 Nc5

32...Kg7 33 d6 +–.

33 f5!

With this break, Black’s defence completely crumbles, and the end is near.

33...Bg7 34 fxg6 c6 35 dxc6 Bxe5 36 gxf7+ Rxf7 37 Bd5 Bxh2+ 38 Kxh2 Ne6 39 Qg6+ Kf8 40 Qh6+ 1-0
Planning an Opening Repertoire

Elite grandmasters want to be flexible and avoid being predictable. It is a competitive necessity to do so and not be too narrow of a player.

Most players have never thought about their openings or metagame opening strategy in much depth. A lot of players realize they do not know a lot about how to handle the basic opening positions that arise in the main lines of their repertoire when they are actually tested. There is a common myth I hear of the “1500 who is an opening expert”. So I ask this ‘1500 expert’ to show me the plans for both sides in a basic position he plays in the Ruy Lopez and there is an awkward silence. That’s usually how it is. A lot of players like showing off analysis with some bizarre lines they memorized, but these things rarely materialize on the board.

Good opening play is based on fundamentally good understanding. The two are definitely linked. People get surprised in the opening constantly, and understanding the general position-type or structure is very important in those cases. If your opening study does not deal with improving your grasp of general position-types and structures you are getting regularly, it is misguided.

Chess has changed due to computers and the availability of opening materials, so one needs to adopt a different metagame strategy. The value of good opening play has gone up now that the time-limit has shortened. One simply has less time to solve the theoretical problems that face a player.

If you have two equivalent ideas to choose from in the opening but one of them executes a key pawn-break or strategic idea, I tend to lean towards that. It also usually puts more psychological pressure on the opponent. If you want to execute a pawn-break of ...b5 and can play it immediately, it is usually best just to do it. Most of us have suffered the consequences of not carrying out pawn-breaks we needed to play, eventually never playing them at all.

If you are under 1600, you may want to think about putting together a small
and compact opening repertoire that makes sense and is consistent. One reason for this is that if you have a stable opening repertoire when you start out, you may not need to change it or work on it very much until you reach 2000. There is a lot of value in starting out playing good, sound chess from the start. A problem I had when I started out was constantly repairing bad variations I played, which made me waste excessive amounts of time on opening problems that could have easily been avoided by good planning and advice from a coach.

Lines that force you to find the most accurate moves on every move with White are not all that practical, so we should weigh how realistic it is that we will find all of those moves when we make a personal choice to aim for a specific variation. If Black has easy and obvious moves to play on every move, but we must be extremely accurate as White, it is worth thinking deeply about whether obtaining a tiny objective plus is worth it if you are not able to make good use of it in practice. Of course, it rarely happens that we are forced to walk a tightrope for eight moves in a row right out of the opening to pull out a plus, but we should still certainly think about how easy or hard positions are to play for both sides before entering them in our home preparation and opening analysis. This is what metagame thought in the opening is all about: will this be a good long-term decision for me?

General opening thinking and logic is useful to develop, so having lessons or doing training with a strong player who explains his thought-process in the openings can be very useful as long as you at least understand his train of thought.

We are approximately 45 Elo stronger with White and 45 Elo weaker with Black due to the importance of having White. Players in general do not have good preparation against very non-standard opening set-ups. The general issue with playing weird things is that usually there are straightforward refutations. When the refutations are more obscure, the idea might become a useful weapon.

As a developing player, you generally want to avoid playing random openings for no specific reason; you should always be able to explain your strategic goals in any given line you play. Far too many players adopt openings without any strategic ideas to play for; their opening play lacks any
real plan or concept, and they fail to develop good opening logic. I was fortunate that I mimicked players like Kasparov, Fischer and Kramnik in the opening when I started playing, so I was always pursuing correct positional ideas and clear plans based on principled play.

Certain position-types that arise from the opening are more tolerant of inaccuracies than others. Such positions tend to be ideal to play against stronger players when you are a developing player, as this avoids pointless blowout games in which you learn close to nothing besides avoiding one basic tactic or crushing idea you missed. Most of the time, the reason a position is intolerant to inaccuracies is because correct play is based on bizarre tactics or the position is simply dubious or bad to begin with. In serious tournament games, nearly every strong player I know tries to avoid having to play difficult computer moves frequently. I would keep such play for experimental or online play, unless you have a really specific reason to play that way in a tournament game. Still, I personally feel it is a waste when I play a strong player in a blitz game and lose quickly due to playing a bad variation or not finding a computer precision early on to keep me hanging on. It is also less stressful to have only 20% of your opening positions be critical, rather than 90% of them. Even for blitz, intolerant position-types are hardly palatable if you want to take a really professional and meticulous approach.

Another point worth bearing in mind is that when people perceive complexity, they also play worse than usual. That is a weird psychological point, but verifiable. As a coach who tests people on positions every day, I can attest to the difficulty players have coming to terms with positions that appear complex, even when they are not. Thus, it is not so hard to understand why a stronger opponent will seek to keep as much play as possible in the position from the opening. If anyone ever wondered why they cannot just force draws against professional players and gain hundreds of rating points overnight, this is a clear and logical explanation. As a note to readers under 2000, these statements are less rigid for you because your opponents will still tend to make a fair amount of errors in quite simplified positions.

Less skilled players play well in two main situations: when a position is inherently simple and when they are forced to play ‘only’ moves and grasp the logic of the position well, often because it is not so hard to understand.
Sometimes a player 300 Elo weaker can find the ‘only’ moves when attacking your king with direct threats, so it is important to keep this in mind. We want to gear our choices towards avoiding the opponent’s strengths and exploiting his weaknesses, even with our opening choice.

Having a half-pawn (.50) or better advantage after 20 moves scores a high winning percentage in games between 2400+ players. Additionally, in world-championship games from the last 100 years, White won 188 and Black won 88, with the rest being draws. At the highest level, using your one-tempo advantage effectively is crucial and something they are good at doing. Once you fall behind in chess, you cannot just suddenly recover unless the opponent makes a mistake. If the opponent keeps playing well, you will remain worse. At 2400+ level in chess, there has been a recent trend away from dubious lines. Almost everyone seeks to play more solidly than in the past, to avoid giving away free advantages as far as possible. Game management was a key component of the Soviet School of chess and metagame strategy ties right into that.

Being predictable is not always a bad thing if your repertoire is rock solid. For instance, if your Black 1 e4 repertoire is based on the Berlin Defence and was primarily constructed from the ideas and moves played in recent elite games, it is extremely unlikely that anyone is going to put a severe dent in your position early in the game if you know and understand your lines reasonably well. For a long time, Grandmaster Peter Svidler was predictably playing the Grünfeld Defence game after game. People tried to refute his Grünfeld lines at every tournament he went to and everyone failed because of the soundness of his repertoire and the extremely high level of understanding and play he demonstrated after the opening. This is a good example of being stable and predictable in a positive sense that leads to high-quality opening play. Besides not knowing your openings well to begin with (which is a problem whether you are predictable or not), being predictable is mostly an issue when you play dubious variations or when you need to aim for maximum winning chances in games that you have to win. In such cases, you should either have alternative lines in mind, or be on the lookout for them.

As a player under 1400, the most practical opening strategy is to try to bypass the opening phase by getting your basic development completed in a sensible
way to achieve playable positions you can learn from. After all, the most uninstructive games are usually ones you lose in the opening without getting your pieces out. In the earliest phases of your chess development, simple systems that help you get to move 7 or 8 with a healthy position with both colours can certainly be recommended. A focus in the early middlegame should be made on improving your worst-placed piece as frequently as possible. As one example of a common error, many players below intermediate level simply leave their looks in the corner doing nothing for long periods of time in the middlegame, rather than at least centralized and in play. Focusing on healthy, good moves should be your initial aim.

As an intermediate player with a higher level of playing ability and skill seeking the greatest possible potential for improvement, playing the richest positions imaginable in the opening and middlegame is an excellent decision. Garry Kasparov described the Ruy Lopez as the richest defence to 1 e4 and the Nimzo-Indian as the richest defence to 1 d4. Playing these openings as a developing player, studying the classic games in these variations to get ideas and improve your understanding, and checking recent grandmaster games in these lines as reference points after your own games is a great way to play the opening soundly and improve. Thus, your opening aims may differ based on your exact level of play.

Amateurs should not be encouraged to play distinctly bad lines that will only work in blitz games or against weak opponents. One such line is 1 e4 g6 2 d4 Nf6 3 e5 Nh5. What happens if they get good enough to face good players who will punish their lines? Losing one or two important tournament games in the opening without a fight will make you realize the time wasted by playing bad lines. When I was 2000, I played serious tournament games so rarely (due to lack of opportunities) that it was especially frustrating to go down in a Black game without any chance. After every game like this I wished I had played a better or sounder variation.

Openings are important for amateur players, but the term ‘openings’ should be understood properly. Opening play should not be based on random memorization, but on understanding, a familiarity with the structures and ideas in the resulting positions you will obtain, and a feel for where the pieces should go based on the strategic quirks of the line. Give yourself some
memory hooks to aid in the recall process. Clearly understood logic and a visual mental sequence help a lot in recalling complicated variations and grasping difficult ideas.

In the opening, especially at lower levels, I would focus the most on learning the maximum amount of ideas and plans. Try to understand what is going on and what both sides are trying to do rather than necessarily putting too much focus on specific moves. You may want to write down questions as they come to you. Sometimes entire variations only hold together because of one non-obvious move, idea or concept.

Studying openings properly means that you are improving your chess logic on a fundamental level, your positional understanding, your pattern recognition (where pieces typically go), your concrete knowledge, and even your calculation (when you figure out the calculation backing up why tactical opening moves work). From this very brief explanation, it is easy to understand that studying openings properly actually involves a holistic approach to chess that does not neglect anything.

Having good openings at an early stage in your development has many benefits: you do not lose game after game playing refuted lines, or waste time analysing dubious systems that you cannot come up with a solution to, and you start off with a well-thought-out and consistent repertoire that needs no tweaking; the lines can be played for a lifetime, with increased familiarity game after game. The usefulness of effective opening study is also clear because developing a better grasp of proper opening play and starting to play the first 10 to 15 moves well every game is hard to do without learning to be a better player in general and grasping the game on a slightly higher level than before. With no guidance in my development, I can recall losing numerous bad games and wasting countless hours trying to come up with good solutions to sidelines like the Torre, London System and the Trompowsky. With a competent coach to teach me a line consistent with my repertoire, these problems would have been solved instantly and without any stress, Elo points lost, or time wasted.

It does not make sense to spend 20 hours studying a main line which may only give you an equal position when you can spend one hour on a sideline and use it to score well against players over 2400. With White you can often
play safe, risk-free lines and obtain an advantage if the opponent gets his pieces on awkward squares. An example that comes to mind is any Ruy Lopez line where the black knight sits on a5 for a long time. In these lines, White can often just play simple moves, do nothing special and get a comfortable plus. The bishop on b4 does not make a whole lot of sense in the 4 exd5 Winawer, so Black is forced to play accurately to make any sense of the play. Most of the time they won’t hit upon the correct idea if they do not know some specific theory. One GM played ...Be7-f6 against me for instance and I got a clear edge with very simple developing moves. So even with an open centre, sometimes you don’t have to play so energetically if there is a possibility for a static plus (bishop-pair or better structure). Black needs to be precise. He can’t equalize just by playing some natural moves. That last point is very important in practical play, as that is usually what will show up on the board. For instance, Carlsen is an expert in choosing lines that are difficult to handle over the board. Nakamura is also quite good in this respect.

A lot of players enter += variations as Black and we can exploit this. This is at the heart of metagame strategy. We do not want to be ‘exploitable’ at all, and we want to exploit the bad aspects of our opponents’ play, particularly in the opening.

Many people undervalue just how hard it is to play against a solid type of repertoire, regardless of engine evaluations. If you have to play very well with Black just to draw, it puts tremendous pressure on the opponent. Some grandmasters approach the opening with the intention of creating the most difficult possible position for the opponent, while another approach is to try to give the opponent no activity. Both attitudes are serious philosophies to play the opening with. In the current FIDE time-limit, there is definitely something to be said for playing slightly risky lines that may give your opponent a +.40 evaluation with perfect play, but will require your opponent to spend masses of time to get there.

There are numerous equally good defences to 1 e4 and 1 d4. In most heavy main-line classical openings, if you play out the theory from high-level correspondence games, you will get a draw. It is best not to focus on seeking perfect preparation, but to be practical and learn as much as possible. I tend to forget my lines, and need to review them every three or four months. Playing
blitz games online and then checking the variations later with my saved notes also helps keep specific lines fresh in mind and deepens my understanding of them.

Although rote memorization of variations is something that I highly frown upon in general (focusing much more on understanding the point behind each move), for players under age 12 who want to play competitively and aim for serious results in world junior championship events, it makes perfect sense to have a very compact opening repertoire in which they generally have the first ten or twelve moves memorized in the main lines they play. As mentioned earlier in the book, children under age 9 have significant difficulty with abstract reasoning, but not much difficulty at all with concrete information. For this reason, memorizing lines whose logic they may not understand in the way an adult might is actually completely fine, as long as the lines are kept thin, and they can remember them. If a very young competitive player can grasp how to obtain counterplay in, say, all the main lines White can try in the Grünfeld, he can handle this opening competently with Black and get active play at the board every game.

Because we know that chess is a skill-based game and that it is not possible to win a game without a mistake from the opponent, stronger players seek to create positions in which their skill difference will matter the most and which will provoke the most mistakes from their opponents. This is the simplest logical explanation for why every 2650 player I have worked with seeks to avoid fundamentally simple positions from the opening against their weaker opponents. Simple positions provoke fewer mistakes on average because there is less to calculate, less to keep in mind, and fewer ways to be outplayed.

More and more frequently, 2200 players are capable of seeking forced draws or holding simplified positions from the opening against much stronger players. This is referred to as ‘killing the game’ because it sucks all of the play and potential for showing your superior skill out of a position by heading for a previously analysed position with few pieces on the board, safe kings for both sides, and not much to strive for. These are the types of positions in which strong players lose the most rating points nowadays, and no one has come up with a particularly effective way to counter this strategy,
especially with Black. Statistical analysis from large chess databases backs up this view. Keeping more tension and complexity in positions creates more problems and provoke more errors from the opponent, even if the objective assessment is still equality. This is a fundamental aspect of the way that World Champion Magnus Carlsen plays chess: in balanced positions, he keeps as much tension on the board as possible, avoids dead positions in practically every opening, and manages to set difficult problems for his opponents in almost any position-type.

Grandmasters look for opening variations that maintain maximum piece tension and keep the most pieces on the board when playing weaker opponents. If you are the better player, you should make your opponent play three phases of the game (opening, middlegame and endgame) rather than one (the endgame).

By the same logic, if you are a pawn down for no compensation, trading queens and simplifying the position is nearly always in the opponent’s favour, because their extra pawn tends to be easier to convert, and there is less potential for major errors. Therefore changing the trend and unbalancing the position whenever possible (without detriment to your position) is recommended when you are clearly worse.

It is good to be aware of the main structures you will be playing in your openings so that you do not get confused at the board when considering which one to opt for when you have a choice. This is connected to metagame thinking in general. A superb metagame strategy would cut out as many surprises as possible in the early phase of the game. Many grandmasters already know which structures they intend to play in nearly all of their main openings. It is surprising how many middlegame decisions are actually made during opening preparation. Thinking about the structures you are likely to get enriches your general understanding of the variations in your repertoire.

The oft-repeated advice that the weaker player should gamble and play for tricks against a stronger one fails to grasp how drawish chess is and what generally solid play is. If you have tried to beat a couple of solid players as Black and failed due to them not giving you an inch, you will immediately understand this. More confusing to me is why someone would want to waste a great opportunity against a strong player, when they could have learned a
great lesson from a long hard-fought game instead. Old books which portray dazzling wins as due solely to the victor’s brilliance rather than a mistake by the loser can give you completely the wrong idea about chess. For many amateurs, this negatively affects their play.

You often come across the idea of ‘playing for two results’; that is, trying for a win while minimizing any risk of losing. You keep the opponent under pressure and force him to make a lot of decisions. Perhaps you don’t have much advantage but are risking nothing. One grandmaster I know likes to ask the question “Whom do the equal positions favour?” when analysing openings. In many cases, equal positions are easier to play for one side in practice.

Believing in your opening ideas and persevering is extremely important. I used to play a variation of the Richter-Rauzer Sicilian for Black because I believed it was principled and made a lot of sense to me. Chesspublishing.com even wrote an article about the variation and called it the Kislik Variation of the Sicilian. I originally started to play the variation because I saw Grandmaster Jobava using it. When I asked him personally about the opening, he only said “You will find out what is wrong with it later on”, which was puzzling to me at the time but later turned out to be true. I eventually uncovered two problem lines in the variation, but before that I was able to play a lot of excellent games with it. Many players have superb results in pet lines due to their specialized knowledge in the opening, understanding of the pawn-structures that arise, and overall confidence when playing the position-type. This is all very important to develop in your openings. It is good to have at least one main opening with White and against both 1 e4 and 1 d4 of which you develop an intimate knowledge and experience base.

Most of your opponents will create complexity in the position on their own, so in most cases you do not need to press extremely hard for unbalanced positions with both colours. Play your own brand of chess and head down principled lines that force the opponent to play well. Sometimes as White, people just centralize their pieces and have a safe and easy game, but most opponents try for more. If you are unable to beat weaker players in equal middlegames with plenty of pieces on the board, then that will be the problem to address rather than your openings.
What is likely to stunt a player’s growth more than not playing openings sharply enough is in fact losing games in the opening without a fight in variations that are very difficult to play, handle or remember. Setting unnecessarily difficult problems for yourself from an early stage can cause major headaches. If you find that playing very sharp openings causes you to lose games due to critical errors very early on, it is logical to play opening positions that are less sensitive, more solid and allow you to get fuller, richer games from which you can learn more. For some players, slightly dubious or rare lines give them great results. For others, they simply get caught playing difficult positions. Many players do not consciously realize which camp they are in exactly, so it is useful to think about.

In elite preparation, if a player does not find a weak point in his opponent’s repertoire, it can be difficult to decide where to go. He might either aim for the sort of position he thinks he plays most strongly or enjoys the most, or he might look for unusual ideas that have some poison to them. For example, if the main line of a variation ends in a draw, but White has the option along the way to sacrifice a piece in a very unclear way for two pawns in which the opponent’s king is somewhat weak and the engine gives a very tiny advantage of -.20 for Black at high depth, it could be a decent option to try for one game to surprise the opponent. After all, ideal opening preparation is either about punishing a variation or punishing a specific opponent’s knowledge. Since it is rare for specific variations at the highest level to be completely refuted, outside of bad sidelines, the most usual case for top players is to attempt to find a gap in the opponent’s knowledge and set difficult problems for him there. Magnus Carlsen has essentially always abided by this strategy.

When seeking gaps in the opponent’s opening knowledge, the least likely case is to catch your opponent in a sharp line, because those tend to be checked first. That said, it can be a fair strategy to ‘test’ your opponent’s knowledge in a drawn line. Anand managed to beat Carlsen in one world-championship game exactly like this. As a side note, below GM level especially, players make enough mistakes in the opening that one can simply enter main lines, follow up by playing principled continuations and get the advantage with White quite often. One should not fear the opponent’s preparation, especially if you have a competent method of studying openings.
and establishing what the best lines are.

Recently a strong IM I know achieved his final GM norm. His opponents played dubious lines in nearly every game. He simply played the known best moves, got edges with both colours, and converted many of his advantages well. The results highlighted the importance of good opening preparation around that level. It also highlighted the pointlessness of playing dubious lines. He did not do anything special. Sometimes you do not have to.

Strong players realize how hard it is to get an edge with White, and to equalize with Black. That puts a special emphasis on their part to play sound and good lines to avoid wasting White games and losing Black games without a fight. Make opening choices based on raw objectivity and legitimate game statistics rather than reputation and hearsay.

You should make a file of lines you faced over the board, only including the moves your opponents played and where you should have improved. Then you can cut off the line. This gives you a very small file, but it is very useful: it proves a real skeleton of what your repertoire looks like and exactly what you should know and should have known at the board.

**The Burden of Proof**

The burden of proof may be defined as ‘your responsibility to prove or provide evidence for a claim you have made’. In the opening, players with White generally believe that their opening systems provide an advantage and they have a burden of proof to demonstrate that. Make them show that on the board. When your opponents are playing Black, usually they will believe their openings equalize or give Black sufficient counterplay. Likewise make them demonstrate that. This concept works in other stages of the game as well, specifically while defending a worse position when the opponent has no clear way to win and lashing out does not appear to be a constructive defensive solution. Put the burden of proof on the opponent and make things as difficult as possible for them in the conversion of their advantage. Do not take their word for it.
I would not be worried about having White in most openings these days. You can always put the burden of proof on your opponent to demonstrate a clear idea to neutralize whatever you are playing. Even in the Semi-Slav, which is considered one of the most solid openings in all of chess at elite level, you can find lines within 6 Bd3, 6 Qc2 or 5 Bg5 that are quite palatable and force Black to be accurate. Some of them are interesting for their rarity or the strangeness of the problems set. Others appeal because White plays powerful-looking and principled moves, as this tends to provoke the most errors. Many of Carlsen’s opponents simply psyche themselves out. They do this when they sense pressure, whether meaningful or not.

Some equal positions favour White and some equal positions favour Black. For instance, Exchange Caro-Kann positions where Black has an easy queenside minority attack tend to favour Black slightly despite a 0.00 score. The burden of proof is entirely on White to prove he’s holding equality, so we must always be conscious of the burden of proof. Black can do anything and keep it equal whereas White has to be on the lookout at all times. An important part of opening analysis is using human perspective and logic to find lines to play that are ‘favourable equal’ positions for you or that are comfortable despite being a tad worse according to computer analysis. After all, most engine scores of +.15 do not mean much. Either White has something, or he does not.

A very important aspect of the burden of proof is the concept of progress. Many opening systems are based on the idea that it is difficult for the opponent to make progress or break down an essentially very solid barrier or structure Black erects. Many players believe that doing nothing is always bad, but the burden of proof often applies the idea that if we maintain the status quo, our opponent cannot punish us. Hence, doing nothing in a position is OK if the other side also cannot do anything meaningful, or when alternatives to doing nothing are simply worse.

**Should I follow theory?**

Magnus Carlsen’s opening preparation was fantastic during the 2014 world-
championship match. As Black he never played lines that have simple, known advantages for White, and as White avoided lines that have simple, known solutions for Black. For a player so far ahead of the field in elite chess, no other opening strategy would make sense.

If a line is theoretically good, we often do not want to follow it with White if we wish to play for a win and we expect our opponent to know the theory. If a line is theoretically bad, we should just follow it with White and refute the variation. One thing that I want to emphasize is that below 2200 it usually does make sense to play the main lines because they generally lead you to the most principled variations with the clearest strategic aims that will likely cause you to develop the most and learn the most. The main point when you may want to deviate from playing main lines is when you start facing opponents who can demonstrate equality in 15- or 20-move variations in main lines, so that you may want to focus on trying to surprise players like this and on setting difficult problems for them.

There is a lot of learning potential in knowing the refutation of a dubious line. Follow theory in the case of refuting bad lines, and study those lines to get a clear vision on how to punish bad play in the best way possible. You gain strategic understanding when you learn why a rare opening is bad. Often this relates to king safety or a bad pawn-structure and you see exactly how to exploit those.

As one example of the usefulness of knowing theoretical refutations of main lines, studying the piece-sacrifice lines in the English Defence with White expose you to a very deep rook sacrifice in the main line (examined a little later), and if you understand how to play that position a rook down, finding similar sacrifices becomes much easier. Additionally, finding typical moves is easier to do with an awareness of the most common typical lines.

Forcing chess and long theoretical lines always favour the weaker player, because a weaker player is more prone to error in general, but will make fewer errors if he is forced to play ‘only’ moves or repeat opening moves that are proven to be good by computer analysis. A strong player cannot outplay objective computer analysis. This is the obvious reason why Carlsen wanted to avoid long theoretical lines against Anand in the World Championship: being over 50 Elo stronger than his opponent, he wanted to keep as much
play in the position as possible. This is the same strategy nearly every grandmaster applies against weaker opponents, which is why it was bizarre that some people criticized this approach by Carlsen in his matches. I can only imagine people making such complaints do not understand how high-level opening decision-making works.

Following established main-line theory in any opening always benefits the weaker player, assuming both players have a competence level high enough to know the full main line. Main lines of sound openings become main lines in the first place because players establish what they consider to be the best line and players with Black work out the variation to a holdable endgame or a draw and then repeat it constantly. There are many very sharp main lines that fizzle out to equality with concrete play, and are easy to analyse out with engines to a draw. Considering this fact, it is easy to understand why Carlsen tries to keep the most possible play in the position: this allows him the greatest chances of outplaying his opponents and showing his superior strength. His games bear out this fact. Carlsen studies openings very seriously and has full-time opening aides, but due to his appreciation of metagame strategy, understands full well that it is in his best interests to try to set the maximum number of problems for his opponents rather than head for main lines that end in dead draws and will consistently lose him rating points.

Being aware of established main lines often reveals deep attacking ideas, complicated piece sacrifices, and good moves in general that are typical of a given pawn-structure or position-type. Having a good knowledge of typical main-line positions and why they are better for one side or equal gives you a strong basis for comparing very similar positions and assessing them well. It is not uncommon to get a position on the board that is identical to a well-studied position in which you know the best move and the correct evaluation of the position, except that there is one minor difference. This is one of the many reasons why it is useful to build up a solid basis of knowledge in all areas. Additionally, nearly every strong player nowadays has a certain level of universality to his play. It is not like any 2700 player plays isolated queen’s pawn positions at a 2300 level. That would be easy to exploit and lead to immediate Elo loss for such an elite player.

Memorizing grandmaster games in openings you play is an ineffective
learning exercise. The focus is better if it’s on understanding. Try to guess the moves and understand why they were played. If all you have done is memorize variations, then all it takes is one move you don’t expect and a lack of understanding will be an immediate problem.

Most players I have spoken with find the memorization aspect of opening study clearly the most boring. Additionally, much of the time engines will show the moves you are memorizing are not even the best. Sometimes there are multiple equivalent-strength moves and in other cases, the move either you or theory established as best actually was not. In many of these cases, you realize that the memorization was largely in vain, when understanding should have been at the forefront. The focus of the study should have been on typical patterns and ideas, position-types to aim for and avoid, and unusual exceptions.

The whole idea of memorizing openings is usually counterproductive at lower levels. People who memorized book analysis from 10 years ago have to forget the majority of what they learned. A lot of those lines have been overturned or refuted. I mostly remember openings due to their logic and strategic ideas. I used to have a problem with forgetting opening lines, but I always realized when I forgot the line that I never understood it in the first place. That is a major reason why fundamentally we need to understand our openings, their aims, and the intentions behind our moves.

Intense focus on one’s openings is not necessarily so bad if it encourages deep creative searching, improvement in all phases of the game and better practical results. What you want to avoid is wasting time and memorizing things you do not understand, because this leads to no creativity, minimal improvement in other areas of your play, and you may not even remember what you looked at.

In Gelfand’s 2015 book on positional decision-making, he wrote, “One of the myths of Morozevich has always been that he is very creative and plays with a lot of improvisation. Obviously he is very creative at the board, but we should not forget that this creativity in the opening is based on a lot of home analysis. The public have a tendency not to understand that about the conception of the most innovative ideas; they do not see how much preparation it requires between tournaments to be creative. Luckily this does
not in any way diminish his achievements in this area; being creative at home is very difficult as well, as anyone who has ever tried can testify.” This misconception applies to how Carlsen handles the opening phase as well. A lot of the most creative ideas in the opening are ones that look bad at first (even according to engines), but with more depth appear to be interesting and complicated. Other relatively common forms of creative opening choices that do not necessarily change the theory of the opening so much are ones in which a subtle trap is set if the opponent plays the most obvious move, or ones in which you have a subtle threat that does not appear dangerous at first glance. Human judgement is important in all of these cases, even with the current strength of engines.

The one caveat to point out here is that chess is a very deep and rich game, and players even at grandmaster level sometimes play variations in which they are not familiar with the first 15 or 20 moves in the main line of a variation. This can happen because there are many different variations that have main lines, even within one opening like the Grünfeld Defence. There are arguably 15 different variations that are main lines within the Grünfeld, and it is quite possible for a strong player not to know one of them, even if he plays this opening with Black. While preparing Grandmaster Nybäck against Peter Svidler in Khanty-Mansiisk, I suggested that he play the rare Kruppa Variation of the Grünfeld against Svidler, who was the world’s leading Grünfeld expert at the time. We managed to catch him out, and Nybäck won a spectacular game. Later again, one of my students surprised Svidler with the Kislik Variation of the Ruy Lopez as Black, but Svidler did not play the strongest line because he had not studied it seriously. Svidler later patched up his preparation in both of these lines, and the lines no longer worked against him. Players under 2000 need not fear theory because they can confidently follow main lines with the belief that their opponents will nearly always not know the main line past a certain point. At the highest level though, the stronger player will want to avoid the most concrete and worked-out lines to give himself the best chances of outplaying his opponent with his superior skill.

Everyone should be familiar with the basic opening theory in the most common variations they play. None of this information is secret or difficult to obtain any more, and can be found by anyone laying in bed with a laptop.
sliding through an opening book in ChessBase with their fingers. Let’s explore an opening variation that involves a seemingly mysterious rook sacrifice by White in the absolute main line.

1 d4 e6 2 c4 b6 3 e4 Bb7 4 Bd3 f5? 5 exf5!

This has been known to be the refutation of this variation for many years.

5...Bxg2 6 Qh5+ g6 7 fxg6 Bg7 8 gxh7+ Kf8 9 Ne2 Nf6 10 Qh4 Bxh1

By looking in a database, I can see that numerous grandmasters have played this position with Black, despite the fact that this variation is an open-and-shut case as winning for White.

11 Bg5 (D)

White only has two pawns for the rook, but is winning. It is worth giving a sample line, because this is fundamental to the opening and makes many opening principles clear, such as tempi, development, and awkward king position in the opening.

11...Kf7?! 12 Nd2
All of White’s pieces quickly join in on the attack. The attack is allowed to be slow-moving because Black cannot do anything or break out in any way. Long-term compensation of this sort used to be very hard for me to understand when I started playing, but gradually made more and more sense as I became comfortable with accepting the fact that I did not need to regain my sacrificed material right away. One plan for White is to play 0-0-0, Nf4, Re1 and Bf5.

Now we should look at what happens if Black tries to develop calmly, maintaining his material:

12...Nc6 13 0-0-0 Nb4 14 Bb1 Bb7

Passive play clearly does not work, but nothing does.

15 Rg1

White threatens Nf4 followed by Nh5. Black is completely paralysed and unable to do anything.

15...Qf8 16 Nf4 Re8 17 Qh5+ Ke7

17...Nxh5 allows instant mate by 18 Bg6#.

18 Ng6+ Kd8 19 Nxf8 +–

**Opening Variety**

Experimenting with vastly different opening lines and systems early in your development essentially forces you to develop firm feelings in many different position-types, which improves your understanding of the game as a whole and allows you to shape a personal identity for yourself in chess most easily based on opening choices. Experience in a wide range of position-types and lines also makes it so that you can adapt your choices according to your opponents’ weaknesses most effectively. I am glad I experimented so much in my chess development, because now I can play anything that looks or
seems interesting at any time.

Choosing how many different opening lines you want to play requires thinking through the decision logically. The most important factor for any developing player is avoiding uninstructionally lost games. For instance, if you are rated 2000 and you play four different defences to 1 e4, the odds of losing in the opening are quite high if you get surprised by a dangerous and critical line. Although structural variety is generally a good thing, it is important to avoid wasting games lost in the opening that give you very little room to develop from. Much more practical is to play two separate defences against 1 e4, but not more. Three separate opening systems would be very cumbersome and a tremendous amount to learn, but playing one solid defence and one slightly riskier line makes a lot of sense strategically. Having two defences with Black against both 1 e4 and 1 d4 will be enough. It hurts players if they constantly switch openings due to one negative result. If you play two clearly sound openings with Black, it makes little sense to drop them both completely just for variety out of the blue. I have met many players who quit playing their main-line openings because they bought a new book on a different opening. Then in a few months, they would switch to a different opening, not developing a detailed understanding of any of these openings in the long run.

If you do not play any classical openings with Black, you should consider adding at least one against all of White’s major tries. For instance, if you play the Alekhine against 1 e4, it would make a lot of sense to be able to play a solid classical line as well, such as the Ruy Lopez. The drawback to playing only Alekhine positions against 1 e4 is that they cover a very narrow range of overall chess structures and very few high-level games follow this path. If you develop a good feeling for main lines of an opening like the Sicilian or 1...e5, it will be much easier to relate to study material, grandmaster games, and classical structures in general. I always recall what a 2650 grandmaster told me in 2008 when I was experimenting with strange and risky sidelines. He said, “You can’t run away from classical positions forever.” At the time, I did not quite understand his point, but now I agree with him. If you want to become a grandmaster, you should have a good understanding of how to play standard classical positions that have been approved by top grandmasters for the last 30 years at least. I eventually had to give up playing dubious lines
and eventually ended up with more solid and classical openings.

Getting dynamic, complicated and diverse positions is important for players that want to develop their chess skills and progress as much as possible. This is one of numerous reasons that many strong players discourage people from playing narrow, one-dimensional lines that are just one-trick ponies. A 2200 may find it difficult to handle all types of positions, so he has to start out by expanding his repertoire slowly. The easiest way to do this is to start by adopting lines most similar to what you already play by method of comparison when you have two or more options. Players should try to be flexible nowadays and be able to handle all position-types – that’s partially why good evaluative skills are more important now than ever. Almost every top GM plays a very wide range of positions regularly.

It is useful to have two different ways you can play (especially with Black) against any given player’s repertoire. This is important for a number of reasons. One is to avoid dull positions. One is to avoid being simply caught out by experience in positions you do not know well. Another is for variety, but the most important is for exploitability. Sometimes a player uses a good variation in one opening and a distinctly bad one in another. If you can refute a specific line your opponent plays, having the possibility to do so may net you a free point. This happened for me often when I played the Semi-Slav and Grünfeld with Black. Quite often in those sharp lines, my opponents as White would have a somewhat weak handling of one of those openings and I could pick and choose which defence I wanted to play on any given day.

When considering what role you want an opening to play in your repertoire, you have to decide if it is a valuable opening to play occasionally or just for one game. For instance, to paraphrase Grandmaster Gretarsson, the problem with the French Defence is that you cannot really use it as a side weapon, because the positions are so rich with positional ideas that you have to be familiar with them as Black. Therefore it is hard to play them just ‘once in a while’. The French is really a full-time opening if you’re going to play it, unless you occasionally use it only if they play 3 Nc3, heading for perhaps a specific equalizer in the Steinitz.

One of the main things we should avoid doing is giving up good openings entirely for emotional reasons due to a bad result. Try as hard as possible to
be objective and avoid openings ‘blaming’. By giving up the opening, we also let go of all of the experience we have accumulated in that opening, which we probably will not be able to apply in other openings. With White, I like being able to play two different ways against any opponent’s repertoire. For instance, if you play 1 e4 and your opponent is a very good Najdorf player, it would be nice to be able to play a main line of the Najdorf as well as a sideline like 3 Bb5+, depending on the situation, how you feel, or what you prepared. You get more out of following and studying grandmaster games if you understand more structures and endgames that you have played. It develops a chess education and good culture by knowing many different position-types and how to play them. Universality was less important 25 years ago, but now people need to be able to handle more position-types. Defensive technique has gone up and opening preparation is just at a much higher level. Almost every elite player is hard to prepare against due to the variety of openings he plays. That being said, we need to utilize variety intelligently and in a manageable way.

You can usually expect temporarily worse results playing unfamiliar positions in new openings, but it is not necessarily the case. If you play new openings, it may be that at the present time, you understand chess better and also work on openings better than at any time in the past. So you may just find that playing new openings motivates you to study more seriously and challenge the opponent more directly in the opening with fresh ideas.

**What am I trying to do in the opening with White?**

White often wants to achieve an advantage with as little risk as possible. In other cases, it makes sense to play for a win at all costs by striving to make the position as unbalanced as possible. These are the two main approaches: playing for a direct win or playing for a small advantage, but there is overlap as well.

The white pieces do not provide an objective advantage, but give White the power to control the tone of the game. I like to put the burden of proof on my opponent to equalize. My belief is that people should play for the maximum
advantage possible with White. If someone plays the Dutch, for example, you should try to punish it. While developing, go for the absolute maximum, at least with White. With White there is always more leeway in your preparation. You can play random lines with White and not be worse. With Black one has to be a lot more careful. This again relates back to the fact that a tempo is worth approximately a quarter of a pawn in chess and should not be underestimated.

One of the few realistic ways that a very strong player may have better scores with Black than White is due to psychological reasons, namely because their opponents overpress and take their white pieces ‘too seriously’. In other words, when the trend goes negative and Black gets an acceptable position, White presses very hard with no objective reason to do so. It is important to become self-aware about your own tendencies with respect to overpressing and how you handle Black and White.

There are countless variations that computers give 0.00 that involve Black needing to make a difficult decision about where to put his king or queen. In lines I’ve identified of this type, players under 2400 nearly always nonchalantly walk into the position and make a mistake with the problem piece. This is one of the best ways to fight for an edge in variations that have no objective pull or seem to be analysed out too much. Occasionally you can also get real chances for an edge by forcing the opponent to make a difficult choice with a minor piece. The more innocuous the position looks, the greater the chance that the defending side won’t realize that the position is critical and give it the proper amount of care. Some lines of the London System are like this, with one or two of Black’s pieces being just slightly hard to handle or find a good square for. This is a philosophy not well appreciated below 2300 or 2400 due to its unusually subtle or positional nature. A lot of players have never really thought of playing for an advantage like this because they focus too much on engine scores and not enough on strategy.

If you play a principled repertoire as White, you can play the same way against all of your opponents, pressing for the largest advantage possible. One of the issues with playing dubious gambits with White is that many players report not learning so much from them after playing many games with them. At a certain point, specifically against stronger opposition, they
just try to squeak out a draw at best and grind a slightly worse position with White. A superior option is simply to play a main line that allows White to sacrifice material relatively early on. A good example is the Alekhine-Chatard Attack in the French Defence.

In many variations of your White repertoire, it is important to find objectively drawn lines that are incredibly hard for the opponent actually to hold over the board. Certain positions are 0.00 but offer White a wide range of moves, while Black has to be careful just to survive. Identifying such positions in the opening and entering them from the more favourable side is a great way to collect some nice wins and set awkward problems for your opponents. Even one 0.00 computer move can net you multiple wins in practice. Thoughtful analysts seek the weirdest and most difficult 0.00 positions for their opponents, who they know will not solve the difficult problems they face at the board.

A common trend nowadays among 2300+ players with White is to seek a sideline or deviation point early in the opening between moves 6 and 10, and look for engine moves that make Black have to play surprisingly accurately for many moves. This is a strategy that is difficult to cope with, because even if the lines chosen are not objectively strong, they are potent in practice because facing them requires solving awkward problems at the board. On top of this, by being the first player to play a line of this sort, you may even get a variation named after yourself. This is a new way of setting problems for your opponents that did not exist before computers. Some examples of new lines being tried include 6 b3 and 6 Nc3 ideas in the main-line Catalan.

Some players take ultra-aggressive dubious-looking variations and simply analyse them out so that they end up not worse as White against best play. In such instances, they figure that if they do not end up worse, it is very likely that they will emerge better if they are able to set decent problems for their opponents and remember their analysis. This is a very common opening strategy in grandmaster chess. It is important for amateurs (who have not worked out the variation in any similar way) not to play the variation and use the logic that, “It’s good enough for this grandmaster, so it’s good enough for me!” Understand that you probably have not worked out a concrete way to avoid being worse as White, while he has, so you need to be extremely
careful if you do not understand what is really going on in the variation. Try to see deeper into the rationale behind the opening choice rather than deciding to hack wildly in the opening ‘just because’.

I used to like to model my 1 e4 repertoire after an e4 player whose style I admired, such as Michael Adams. If you also like him, you can search for only his recent White 1 e4 games in a database and see how he handles his main lines.

Forced drawing lines with White are good to play against anyone stronger than you if gaining points in a given game is your intention. Very few higher-rated players like the game to end prematurely without a fight, plus it is their obligation not to lose Elo and try to win the game. As a defence to this strategy, almost every strong grandmaster tries to have lines in his repertoire that keep a lot of play in the position without allowing stale draws. In many cases, this will involve playing a rare or second- or third-best move around moves ten to fifteen. Chess is definitely not so simple that you can just effortlessly draw against stronger players to collect rating points, but the ‘threat’ of doing so may work in your favour.

Lastly, before assuming White is ever better in any main-line opening, briefly check the correspondence games in the critical lines. You may get an instant refutation to what you thought busted an opening.

**What am I trying to do in the opening with Black?**

Or more concretely: what is Black’s idea in this opening?

Black wants either to equalize cleanly from the opening or set problems for his opponent. That is, equalize directly, equalize in an unbalanced position, or play something slightly dubious that may provoke the opponent to play dubiously.

Borrowing ideas from the opponent can be useful in the opening. I have incorporated a lot of challenging ideas into my play that my opponents played against me. This tends to happen more for me with the black pieces,
when my opponents unveil new and interesting ways to pose problems and provoke White to make a major mistake. In one game of mine, I played White in what I thought was a main-line Ruy Lopez that favoured White against a FIDE master named Norbert Lorand. He uncorked an incredible ...Qf6! move against me that offered up a piece that was very natural to take and startled me. His move changed the theory in the variation at the time. I told one international master about this new idea and he immediately played it against two grandmasters and obtained stellar results.

A common strategic aim with Black is to avoid symmetrical positions, as they allow weaker players some of their best chances to draw against better players without needing to play any particularly difficult moves or ideas. As long as you understand the position and have counterplay, there is no need to be nervous with Black, even if you know you are objectively slightly worse.

In your Black repertoire, if you need to win against lower-rated players, many strong players try to find some slightly dubious plan that’s +.4 (say, at depth 30 on Komodo and Stockfish) but at least with positive ideas, rather than sitting and doing nothing in a lifeless position that the computer gives as +.25.

If you are cramped and have less space, do not consider your position equal in your analysis until you have a line clearly demonstrating how you get out of the cramped position. If the engine shows +.05 but you have less space and no obvious pawn-break, you have to play out the line even to understand why you are equal.

If you are looking for ideas in a slightly dubious line (e.g., the Benoni), take the top ten high-level games and analyse the first 20 moves with an engine, to see how Black could have improved. Looking over typical early middlegames will highlight ways to hunt for counterplay.

With Black, it is OK to allow the opponent an objective edge in an opening if it is extremely unlikely that he will find it. For instance, if it’s one or two obscure computer moves that lead to an edge and everything else is good for you to play. I also advocate that every player have two different ways they can play against any given player’s opening repertoire. Hence, if you play someone who uses only the Nimzo and Queen’s Indian, that would mean at
least two different Nimzo lines in your repertoire or one Nimzo line and one line with 3 Nf3. However, this point is most important with Black due to the risks of losing in the opening. For example, against 1 d4 your two openings could be the Bogo-Indian with ...c5 and the QGD. Maybe an opponent has a particularly annoying reply to one of your openings, and you realize that the other one will suit the given opponent much better. Three full opening systems is usually too much to learn and understand well, so two provides a happy medium for variety. It is also good to have a couple of ways of handling and interpreting both of them. For instance, if you play the Grünfeld with Black, it would be ideal to be able to meet Be3 lines with ...Qa5 and ...cxd4 sometimes, and in other cases with ...Nd7!?. In many cases, having a second option is exactly what we need to set problems for the opponent when a line we did not expect suddenly appears on the board.

Gaining full equality usually involves solving a problem or finding a concrete way to get your pieces out; otherwise you are not equal yet. For example, when I worked with IM Agopov and we looked over his games together, the computer showed 0.00 in many positions, but he still had to play 2 or 3 accurate moves to actually equalize. You are equal when it’s 100% clear White’s initiative is over, your pieces are out and your problems are solved.

I like the idea of playing any opening aggressively if you can. You can do it with even a wide variety of variations that seem passive, such as the ...Bb7 Queen’s Indian, which has been reinvigorated with ...Qe8 lines. I love openings that have a bad reputation for Black (for no good reason) and that my opponents think are dubious. Usually they try to refute them outright and have less respect for my position than it deserves.

The following game is a very good example of an objectively slightly inferior move chosen in the opening that set unusual problems for White. This game also serves as a nice example of the type of line you might want to choose when playing for a win with Black against a lower-rated player.

Vallejo Pons – Vachier-Lagrave

European Team Ch, Reykjavik 2015
1 e4 c5 2 Nf3 d6 3 d4 cxd4 4 Nxd4 Nf6 5 Nc3 a6 6 Be3 Ng4 7 Bc1 Nf6 8 Be3 Ng4 9 Bg5 h6 10 Bh4 g5 11 Bg3 Bh7 12 h4 Nc6 13 Nxc6 bxc6 14 Bc4 Qa5 15 Qf3 (D)

Black to play

15...Ne5

This is a very challenging pawn sacrifice, setting unusual problems for White that he was not able to cope with accurately during the game. This is a perfect example of good metagame strategy because Black’s overall risk is minimal. Objectively, 15...Be6! is the best move and clearly equalizes.

16 Bxe5 Qxe5 17 Bxf7+

17 hgx5 is arguably a better try. 17...Qxg5 18 Bxf7+ Kd8 19 Rh5 Qg4 20 Qxg4 Bxg4 21 Ra5 Kc7 gives Black reasonable compensation in the form of the bishop-pair and active piece-play, but still less compensation than was obtained in the game. However, Black may have had 17...d5!? in mind. Then 18 gxh6 Rhx6 19 Rzxh6 Bxh6 20 Bb3 a5 21 g3 Ba6 22 Qg4 (threatening Qg8+) 22...e6 23 Qg8+ Bf8 24 0-0-0 Qh5 appears roughly equal. Black can castle and has sufficient play for the pawn due to his firm d5-pawn, bishop-pair and potential pressure against the f2-pawn.
17...Kd8 18 hxg5 Rb8 19 Bb3 Rf8 20 Qe3

20 Qd3 hxg5 21 Qe3 g4 =.

20...Qxg5 21 Qxg5 hxg5 22 f3

22 Rh5 Bd4 23 f3 g4 24 Rd1 is White’s most active defence.

22...g4 23 Ke2 a5 (D)

24 Na4?

This knight turned out to be terribly placed on a4 in the game. Also bad is 24 a4? gxf3+ 25 gxf3 Ba6+ –/+ (the key point is that the otherwise natural 26 Ke3? fails due to 26...Bd4+!!). White should have brought his worst-placed piece into play by 24 Rad1! gxf3+ 25 gxf3 c5 26 Rh7 Ba6+ 27 Ke3 (27 Kd2 Be5 28 Nd5 Rb7 29 f4 Bxf4+ 30 Nxf4 Rxf4 31 Ke3 Rg4 32 e5 Rbb4 =) 27...Bd4+ 28 Rxd4 cxd4+ 29 Kxd4 a4 30 Nxa4 Rxf3 31 Rh8+ Kc7 32 Rxb8 Kxb8 33 Nc3 e5+ 34 Kd5 Kc7 35 Ke6 Kc6 =.

24...Ba6+ 25 c4 Rb4 26 Rac1 gxf3+ 27 gxf3 Bd4

Black intends ...c5 and ...Bb7.
28 Rc2

28 Nc3 Be5 29 Na4 c5 30 Rh5 Bd4 =+. 

28...c5 29 Rh2 

White seeks to counter ...Rg8. His best path was 29 Rd2! Bb7! (29...Bxc4+?! 30 Bxc4 Rxc4 31 Nb6 Rb4 32 Nd5 Rb7 33 Rh7 gives White counterplay) 30 Nc3 Bc6 31 Nd5 Bxd5 32 exd5 Be5 33 Bc2 Bf4 34 Rd3 Rxc4 =+. 

29...Rg8?! 

29...Bb7 (threatening ...Bc6 and ...a4) 30 Nc3 Bc6 31 Nd5 Bxd5 32 cxd5 a4 33 Bc4 Bxb2 34 Rh4 Be5 –/+.

30 Rc1?! 

30 Nc3! Bb7! (30...Bxc4+ 31 Bxc4 Rxc4 32 Kd3 Rb4 33 Rcg2! allows White to trade rooks and hold the balance) 31 Rc1 Rg3 32 Rf1 Bc8 33 Nd5 Rb7 34 Rfh1 Be6 =+. 

30...Bc8 31 Nc3 Be6 (D)
32 Kd3?

Now White loses material without sufficient compensation. 32 Rd1 Rg3 33 Rd2 Bxc4+ 34 Bxc4 Rxc4 35 Rc2 Rb4 =+.

32...Rg3 33 Ke2?!

33 Rf1 Bh3 34 Rd1 Rxf3+ 35 Kc2 Be6 –+.

33...Bxc4+ 34 Kd2

34 Bxc4? Rxb2+ costs White the h2-rook.

34...Rxf3 35 Bxc4

35 Rch1 Bxb3 36 axb3 Rxb3 –+.

35...Rxb2+ 0-1

I have met a player who plays the Dutch Defence 80% of the time, aiming for weirdness rather than developing a good understanding of classical chess and the main lines. It means that he is less versatile as a player, less able to adapt, and less able to learn from high-level chess and classical games. There are quite a few downsides to playing only a very narrow repertoire of positionally suspect lines.

If you are analysing your Black openings, around moves 8-13 for example, you should press the X button after each of your moves, and be sure what threats or ideas lie behind them and write these ideas in as text. You may sometimes realize you have a concrete idea behind one of your moves, and refuting that idea may only be possible for a computer. For this reason, I try to check all of the obvious human moves, or all of the obvious moves for my side that were threats on the previous move and do not appear to be outright bad. By being aware of what you are threatening, you will have a better grasp of where your quick wins will come from with Black. Sometimes your opponents will completely miss your threats.
To improve your play as Black and generate new ideas in lines that are troubling you, play a few games from the white side against a strong engine and see how it beats you. Then use those ideas against your opponents the next time you play Black. You will see just how many winning chances there are in almost every opening by doing this.

Sometimes bizarre moves by the opponent will be unpunishable, especially when we are Black in the opening. In such cases, it is important to assess the position calmly and be reasonable enough to play neutral, patient good moves.

The following game leaves a strange impression. White misplayed the opening and was left defending for the rest of the game. Black, for his part, was too casual and played calm moves that allowed the opponent time to consolidate his position. This is an interesting case where a feeling for development and time was important even in a simplified endgame. Even if Black did not notice the strength of the various knight hops into d3, it was nevertheless worth asking himself, “How can I ever obtain the advantage in such a position? What am I playing for?” It may well have been that Black was psychologically content with a draw and decided not to try anything that moved his pieces into the opponent’s half of the board.

**Heinzel – Lalić**

*Tabor 2015*

1 Nf3 c5 2 c4 Nc6 3 d4 cxd4 4 Nxd4 Nf6 5 Nc3 e6 6 Nc2?

White has many acceptable moves here, including 6 a3 and 6 g3. Retreating the knight to c2 is simply passive and gives Black the initiative.

6 Nxc6 bxc6 7 e4 Bb4 8 Bd3 e5 9 0-0 0-0 10 Be3 d6 is another possible line, played, for instance, in 2015 by Ding Liren with White and earlier by Kramnik.

6...d5 *(D)*
7 e3

7 cxd5 exd5 8 Be3 Bd6 allows Black to put his bishop on e5 and gives him a slight edge.

7...Be7

The bishop should have been deployed more actively: 7...Bd6! 8 cxd5 exd5 9 Nb5 Be5 =+.

8 Be2

8 cxd5 exd5 9 Be2 0-0 10 0-0 Bd6 11 b3 Be5 12 Bb2 Ne4 gives Black the initiative.

8...0-0 9 0-0

9 cxd5 Nxd5 10 Nxd5 Qxd5 11 Qxd5 exd5 =+.

9...dxc4 10 Qxd8 Rxd8 11 Bxc4 b6

11...a6 12 Be2 e5 =+.
12 Rd1

12 f3 Bb7 13 e4 Ne5 and ...Nd3 will grab the bishop-pair and give Black an edge.

12...Rxd1+

12...Bb7 is even stronger, making it very hard for White to complete basic development. If White replies 13 Bd2, Black can play 13...Ne5 and scoop up the bishop-pair.

13 Nxd1 Bb7 14 Bd2 Rd8 15 Be1 Ne4 16 Nc3

16 f3! Nc5 17 Bc3 Bg5 =+.  

16...Ne5 17 Be2 (D)

[Diagram]

Black to play

17...Nc5

17...Nd3! 18 Nxe4 Bxe4 19 Bxd3 Rxd3 20 Rc1 h5 =+ gives Black the bishop-pair and serious chances to press in the ending.

18 Nb5?!
18 Rd1! Ned3 19 b4 Nxe1 20 Rxd8+ Bxd8 21 Nxe1 Ne4 22 Nxe4 Bxe4 23 Bc4 is a bit better for Black due to the bishop-pair, but White is solid enough to avoid losing any material and draw.

18...a6

18...Ned3! 19 b4 Nxe1 20 Nxe1 Ne4 21 a3 a6 22 Nd4 Rc8 gives Black a large advantage, as White can hardly move.

19 Nbd4 g6

19...Rc8 20 Rd1 Na4 21 b3 Nc3 22 Bxc3 Rxc3 =+.

20 Rd1 Kf8

20...Rc8! 21 b3 (21 b4? Na4 –/+; 21 f4 Ned7 =+) 21...Ne4 =+ and the bishop-pair belongs to Black after ...Nc3.

20...Be4?! 21 b4 Ncd3 =.

½-½

After 21 b3 it is indeed hard to find a specific weakness in White’s position.
Opening Questions to Ask

1. What is the consensus among top players on the current line?

2. What does a very brief check of the correspondence games lead us to believe about this variation?

3. What do the top engines (Stockfish, Komodo and Houdini) have to say about the position? Are there any points where the computer makes mistakes with its evaluations?

4. Does White need to play any difficult moves to retain chances for an edge?

5. Does Black need to play any difficult moves or concepts to draw?

6. Is the main line playable for White? Are there chances for White? Does White have the option of killing the game?

7. Is the main line playable for Black? Are there chances for Black? If Black is a very strong player, does he have the option of deliberately heading for a slightly worse position in order to hold the position with accurate defence (in the case of a simplified slightly worse position) or can he go for a murky worse position where he trusts that you may go wrong?

8. Are any of my pieces or my opponent’s pieces difficult to develop to good squares?

9. How are the equal positions in this line in a practical game?

Answering these questions would be very informative about any opening, especially if a person wanted to play for a draw with White or win with Black. Use these questions as a reference when evaluating your repertoire. You might be surprised by the obviousness of these questions, but most players (even strong ones) do not ask themselves these questions and as a
result prevent themselves from developing a better understanding of the openings they play.

On point 3, try looking at things from a practical perspective and not just focus on engine scores. If there are clearly strong aspects of your position, become comfortable with sometimes overruling the engine’s evaluation and playing a move or variation, even if you are not able to refute the engine’s moves. For example, if as Black you have a strong passed pawn on d4 that is not securely blockaded but the engine gives a score of +.4 at a high depth, in many cases I have had no problem playing the inferior side against a weaker opponent with a lot of pieces on the board. It simply meant I had an unbalanced position with chances to outplay someone I should beat often.

Realizing whom the equal positions are easier for may immediately make you prefer playing one side in the opening. You sometimes have to show multiple lines on the engine in objectively equal positions and look through all of the 0.00 variations. Some of the 0.00 positions may be unpleasant for White over the board and some of them may be unpleasant for Black over the board, so you actually need to look at them and assess them from a human perspective when deciding what is best to play.

On point 8, it may be helpful to ask yourself, “Who has an easier time developing their pieces?” Many players have never asked themselves this question before, so starting to do so would certainly help to get a better feeling for development. In general, the side with an easier time developing his pieces will be White since he starts off with the first move and a tempo has a meaningful amount of value in chess. Yet there are plenty of opening lines in which it is actually easier for Black to develop his pieces in a harmonious and natural way. A simple awareness of those types of situations can go a long way in assisting your decision-making. If you get surprised in the opening and have a choice between two similar ideas or continuations, in many cases you will want to make a choice based on which line is easier to play and allows your pieces to come out more freely. This is a simple application of logic that assists in utilizing the method of comparison.

Still on point 8, if that is the only major issue to concern yourself with in a line, you may come up with a lot of good ideas for solving the problem of your worst piece long before you have delved into time-consuming
theoretical analysis trying to solve the problem concretely.

To logically figure out if an opening is sound, check the variation with an engine, examine the high-level human games and scan the high-level correspondence games. If no strong human wants to touch the line regularly (especially with Black), chances are that the line is not so good. If detailed checking confirms that there is no refutation of the variation, chances are that the line will hold.

One should also be aware of question 8 from the opponent’s point of view too. If your opponent has to solve the problem of a bad piece at the board, then playing an objectively equal variation may actually put the burden of proof on him to show he has full equality and solve a non-obvious problem.

On point 9, if you can manage to find positions and structures in which White can never be better and achieve some positions like this in your Black repertoire, you will achieve great results. This is why it is so vital to realize how the 0.00 engine positions in your opening lines actually are in practice. The same goes for White: frequently 0.00 positions according to the computer require impossible moves for Black or just are unpleasant positions to play and require a level of precision that you will probably not face at the board as you play easy and good moves.

Some opening variations simply have a logical feel to them. For instance, imagine that White plays for some sort of strategic advantage with precise moves, and Black forces White to go for an attack or take over the initiative. Many opening lines with principled play like this by both sides end in equality or a forced draw. Human judgement is very important here, because 0.00 and +.10 are very different to a computer (a computer will always prefer the +.10 variation), but to a human the drawing line may be significantly harder to play. There is a tendency in modern elite chess to play variations that make it difficult for the opponent to find the best moves. That makes sense after all, since we only win games if the opponent makes mistakes. If you can obtain an advantage with White by playing theoretical moves directly, do so. If you cannot and only have a choice between various approximately equal continuations, then your best bet is to make a judgement call and choose the line that you think makes the position most difficult to play for the opponent, or easier to play for you so that you will make fewer
mistakes than your opponent. If your opponent plays an equalizing line, and you have no ways to make the position difficult for him, then simply try to play the line that looks the most coherent.

The two main factors determining whether you should play a second-rate line are its ease of playability for the opponent and the chance that he will know how to face it. If you have a dubious line that no one knows about and will almost never find a good solution to, it is ideal as a practical weapon.

On a related note, appreciating pure paralysis on the board is something that many players learn from experience after getting positionally squeezed by stronger players. Having very few available or possible moves that do not lose material can be a full-pawn disadvantage or more. These types of positions in particular allow for the stronger side to play slowly and gradually build up. A special appreciation for paralysis may not really be necessary below 2000, but at the very least you should work on improving your handling and appreciation of your worst-placed pieces.

What if a variation in my repertoire looks like a dead end?

When you struggle tremendously in a given variation, a good idea is to analyse all of the relevant games you have played in this variation and save your analysis. Next, look over these games together all at once so you can get a clear perspective on how you handled the variation and what went wrong. By checking them all at once, you may realize that you handled the position slightly differently each time, but one of the ways you played appeals to you by far the most now on later inspection. Since we rarely remember our games in such detail by mental recall, this is the easiest way to use comparison to draw conclusions. You may find that your play was equally unappealing in all of the games, when your first step is to look at both engine recommendations and human and correspondence games to see if there were good alternatives before you ended up in trouble. It often happens that just being thorough about this is enough to discover many things that you missed while looking over the variation superficially in the past. If you are playing a genuinely sound line, it is rare that you will need to scrap it entirely. More
realistically, you may just want to add an alternative and more testing line to your repertoire to complement the line you are struggling with.

If you think you have reached a dead end, you should look for ways to set problems for your opponent; areas where engines got it wrong for some reason, the better side of equal positions, forcing opponents to show a draw (burden of proof), playing an unusual pawn-structure, playing with fewer weaknesses, or simply liking the position or position-type so much that you want to play it. In solid main-line openings or when you think you have reached a dead end in your analysis, if you have a new idea that is not easily refuted, it is worth playing. Modern chess is very much about just having ideas. For example, in the Najdorf or even the Noteboom/Abrahams, the main lines are rock-solid and deeply worked out, but there are definitely some less studied sidelines that are worth playing, if only for a game or two.

A lot of the time if I find no objective advantage in an opening, I just look at the line from start to finish on the board and think about the practicality and danger in each of the positions. If it looks difficult for Black in practice, I have confidence in playing the white side of that opening.

If a professional player has an opponent totally neutralize a line with no reasonable deviations to set real problems, it is usually time to switch lines. That being said, if a variation you play as White leads to no advantage at all, it can be perfectly fine to play it against stronger opposition, who will have no reason to want to enter a line that probably ends in a draw. Thus, a dead-end variation is fundamentally only a problem as White against opponents you are stronger than.

As a practical player it seems daunting to need to remember 30 moves or more in a complex position. Yet in analysis, there is a major difference between a line that is academic (and simply proves that it’s drawn) and one that is realistic to obtain regularly in a practical game. Some players have told me in the past not to analyse so deeply in certain variations because you may miss something else earlier. The reason why this is a flawed argument is because if you can get a definite conclusion on a line, there is no reason not to do it. The process of forming controversial opening beliefs and testing and refuting them has been a fundamental part of the viewpoints of cutting-edge analysts from all walks of life for at least the last 70 years, going back before
Fischer’s time. What would be significantly stranger would be to cut off your analysis in a complex and interesting position where something game-changing may be about to occur.

With White, variations that look like a dead-end are easier to handle than a variation with Black which is essentially refuted. With White, we merely need to have a good deviation point or alternative that appeals to us or has challenging ideas or threats. Additionally, if we can find positions to play that are a bit weird, difficult for our opponents to play, or not fully simplified equalization types, we can usually enter them regardless of the objective evaluation of the position. Our goal is to set problems for our opponents and there are many ways to do this.
I strongly encourage every player to experiment with opening systems in their development as they try to hit upon one that they like the most. I have experienced playing almost every Ruy Lopez variation with Black. I even played the Norwegian Variation (3...a6 4 Ba4 b5 5 Bb3 Na5), as mentioned in Chapter 1. I tried a couple of variations with the idea of exchanging quickly in the centre. One in particular caught my eye and eventually became named the Kislik Variation. I developed the main ideas behind it, and my students were the first players to bring it to the forefront internationally (much like the ...a6 Slav became popular thanks to the students of Chebanenko).

1 e4 e5 2 Nf3 Nc6 3 Bb5 a6 4 Ba4 Nf6 5 0-0 Be7 6 Re1 b5 7 Bb3 d6 8 c3 0-0 9 h3 Bb7 10 d4 Re8 11 Nbd2 exd4 (D) introduces the Kislik Variation, which I played in 2013 and 2014.

The essence of the idea with Black was simple: after exchanging on d4, Black could play ...Nd7, so that his bishop can exert pressure on d4 from f6 and his rook will hit e4 from e8. After playing ...Na5, the b7-bishop also eyes the e4-pawn and Black can continue challenging the centre with ...c5. The
opening immediately appealed to me because I could think of no other variation in the Ruy Lopez in which Black directly attacks the d4- and e4-pawns with his pieces.

To my surprise when I started playing this variation, I was the first titled player to play it. Immediately afterwards, IM Kjartansson played it three times, including against Grandmaster Svidler. I had showed the variation and its ideas to IM Kjartansson and GM Stefansson as I was serving as their seconds. Shortly after Kjartansson played it, Stefansson played it and won against a 2450 player. After that, IM Narayanan, whom I was seconding as well, picked it up and played it twice against strong grandmasters. Shortly after this, Peter Svidler decided to play it himself. Finally, in a world championship game live stream, Peter Svidler referred to it as the Kislik Variation, and it has been recommended in at least two books.

I had more adventures in the Ruy Lopez. The most notable experimentation was after 1 e4 e5 2 Nf3 Nc6 3 Bb5 a6 4 Ba4 Nf6 5 0-0 Be7 6 Re1 b5 7 Bb3 d6 8 c3 0-0 9 h3 Na5 10 Bc2 c5 11 d4 Qc7 12 Nbd2 cxd4 13 cxd4 Nc6 14 Nb3 a5 15 Be3 a4 16 Nbd2 Bd7 17 Rc1 Qb7 18 Nf1 Rfc8 19 Ng3 (D).

Here I came up with a novelty by applying an idea that GM Richard Rapport played against me: 19...Ne8!. In this variation, in a tournament game,
Rapport played ...Ne8 against me a few moves later. The move really stood out to me because I thought it was just an attempt to throw me off by playing a dubious move. Later I realized that the knight on e8 defends d6 perfectly and gives Black the option of either playing ...Bd8, ...Bf6 or even ...Bg5 if exchanges in the centre occur. By applying a brilliant idea he played against me in a new situation, I was able to save a variation that had been regarded as slightly better for White for over 20 years.

It may help readers to hear informed comments on a variety of different openings. Some variations like the Sicilian Dragon are extremely concrete and based on creating and dealing with direct threats on essentially every move after the opening. In such openings, we expect a blow-for-blow battle, with a keen eye on all of the threats we’re dishing out and the ones coming our way. In other openings though, we may not expect things to suddenly get very concrete, and this can cause us to fail to adjust properly, and become shocked by the new-found concreteness on the board. Simply being aware that a game has shifted into a concrete phase can help you dramatically over the board.

An important question to be aware of when making any decision is, “Compared to what?” For instance, if someone tells you the King’s Indian Defence is a poor opening to play with Black against an opponent 200 Elo weaker than you, we need to know compared to what. The criticism is moot unless clearly better suggestions can be made. Vague criticisms have no value in chess without a clear alternative.

As far as whether logic would dictate whether Black should be able to get equality in an opening assuming he did not make any mistakes, I would say the vast majority of the time this view has been shown to be true. Exceptions are openings like the Dragon, but generally having the first move is not enough for White to force an advantage in the overwhelming majority of sound openings.

In the 1990s, many people played the Bogo-Indian Defence with Black in the following fashion: they would put their bishop on b4, capture on d2 at some point, and try to play ...d6 and ...e5, even if this meant giving up the bishop-pair. This was a systematic approach to the opening, but demonstrated a certain lack of chess understanding. It is necessary to think about why a move
might be bad positionally, and how basic principles would suggest a move is bad. With this particular old way of playing the Bogo-Indian, Black usually gave up the bishop-pair for little or no compensation and still had less central control than White. While Black’s method of handling the opening was simple, there was no actual reason why this strategy should have worked or was sound. Most players playing it were following a trend, but did not have coherent reasons for playing it. Nowadays the Bogo-Indian has been revitalized with new ideas, since players figured out that playing ...d6 and ...e5 in the Bogo against everything does not lead to good positions. While this is an important strategic idea to bear in mind in the Bogo-Indian, we must use our plans and ideas flexibly as they fit the exact position on the board.

From a metagame perspective, any opening that incurs White essentially zero risk while putting pressure on the opponent and forcing him to handle an awkward pawn-structure or complete development in an unnatural way is ideal for White. The Catalan and lines like 1 Nf3 Nf6 2 c4 e6 3 g3 d5 4 Bg2 dxc4 5 Qa4+ are excellent examples of this. I lost numerous games with Black against grandmasters in both openings, in which they had pressure on me right from the start and played straight down a main line, assuming I would make mistakes in an awkward or strange position. In many cases they were right and I went astray early on.

Anurag – V. Spasov

Albena 2013

1 e4 c5 2 Nf3 Nc6 3 Bb5 Nf6 4 Nc3 g6 5 e5 Ng4 6 Bxc6 dxc6

Black threatens ...Bg7 followed by surrounding the e5-pawn.

7 h3

7 0-0 Bg7 8 Re1 is another plan worth considering. It may not be necessary to provoke the knight to move to h6.
7...Nh6 8 g4

White intends d3 followed by Be3. Instead after 8 Ne4 b6 9 a4 a5 Black fixes things on the queenside and renders it hard for White to make any real progress; e.g., 10 d3 (10 0-0 Bg7 11 Re1 0-0 12 d4 cxd4 13 Bf4 Qd5 14 Qxd4 Qxd4 15 Nxd4 Nf5 =) 10...Bg7 11 0-0 0-0 12 Re1 Nf5! 13 c3 Ra7 (planning the obvious ...Rd7) 14 g4 Nh6 15 Bf4 Rd7 16 Re3 f5! 17 exf6 exf6 =.

8...Bg7 9 d3 0-0

Black typically intends ...f6 followed by ...Nf7.

10 Qe2 (D)

\[
\text{Black to play}
\]

10...Qb6?!

Clearly this is a questionable square for the queen, and it is not obvious what Black is even planning as a follow-up. Perhaps 11...f6 12 e6 Rd8 is Black’s idea.

10...f5!? is preferable; e.g., 11 g5 Nf7 12 h4 f4 13 e6 Nd6 14 h5 Nf5 15 hxg6
hxg6 16 Bd2 Nd4 17 Qe4 Nxf3+ 18 Qxf3 Bxe6 19 0-0-0 Bd5 20 Ne4 Qd7 with counterplay.

11 Kf1?!

White misses a good opportunity to play against the queen on b6: 11 Nd2! Qc7 and now 12 Nb3! (12 f4 f6 =) focuses on playing with a better pawn-structure: 12...f6 (12...b6? 13 Bf4 +/–) 13 Bf4! fxe5 14 Bg3! +=. After this smooth bishop manoeuvre, Black is left defending an unpalatable central pawn-structure with doubled and isolated e-pawns and little in the way of counterplay. If White is able to capture the c5-pawn and plant a knight on e4, Black faces an unpleasant defence.

11...f5!?

As previously mentioned, 11...f6 12 e6 Rd8 is also an option, aiming to weaken fewer squares.

12 g5

Pushing the pawn with 12 e6! is significantly more dangerous, as it is not obvious how Black can get that pawn out of there. Nevertheless, after 12...Rf6 13 Ng5 Qc7 14 Rg1 b6 Black has counterplay.

12...Nf7 13 Na4?

White goes for a natural positional idea, but now a whole bunch of tactical ideas work in Black’s favour, all because of the rooks on a1 and h1 being undefended. He should have played 13 b3! Be6 14 Bd2 Qc7 15 Re1 b6 16 Kg1 Nd8 17 h4 Bf7 =.

13...Qa5 14 b3 b5! 15 Bd2

15 Nxc5?? Qc3 +-.

15...Qd8 16 Nc3

16 Nxc5 Qd5 17 d4 Nxe5 is a good example of White’s pawn-structure collapsing.
16...b4! 17 Na4 (D)

Black to play

17...Nxe5! 18 Re1?

18 Nxe5 Qd5 points out that both of White’s rooks are tactically weak, though this was nevertheless White’s best option.

18...Nxf3

18...Qd5 19 Kg2 f4 20 Qe4 Nxf3 21 Qxd5+ cxd5 22 Kxf3 e5 23 Nxc5 a5 –+

19 Qxf3 e5

Black is already winning here. This serves as a good example of how things can go horribly wrong for White. I am including the rest of the moves because there were a couple more instructive moments.

20 Be3 Be6 21 Qe2 (D)

21 Qd1 Bd5 22 Rg1 Qb8 23 Bxc5 Rd8 is also winning for Black.
21...Bd5

I like this example because it is the type of position where you could calculate aimlessly for a long time looking for a win and not find the best move, but with simple logic, you might hit on the correct idea within 10 or 20 seconds. Alternatively:

a) 21...f4 22 Bxc5 f3 23 Qd2 Rf4 24 h4 Bf5 –/+ clearly is not very good for White, but at least allows him to forge a defence.

b) 21...c4!! is an excellent example of reciprocal logic. 22 dxc4 (22 Bc5 Qd5 –+; 22 bxc4 f4 23 Bd2 Qa5 –+) 22...f4 23 Bc5? f3 24 Qe3 Rf4 25 h4 Qd7 –+.

22 Rh2

22 Rg1 e4 23 Bxc5 Qc7 24 Bxb4 exd3 25 cxd3 Rfd8 –/+ is a more stubborn defence.

22...e4 23 Bf4

23 Bxc5 Qb8 24 Kg1 Be5 25 f4!? Bxf4 –+.

23...Bd4 24 h4 Re8 25 Rh3
25 h5 Re6 26 hxg6 hxg6 27 Qd2 Qe7 –+

25...Qd7

Black now threatens 26...exd3 27 Qxd3 Bg2+, winning the rook on e1.

26 Qd2 exd3 27 Rxe8+ Rxe8 28 cxd3 Qe6 29 Rg3

29 Re3 Bxe3 30 fxe3 Qe7 31 Qb2 Be6 –+

29...Qe7

This was the move played in the game, after which Black won on move 40. 29...Bxb3! 30 axb3 Qxb3 –+ would have won immediately.

To get an idea about the concrete theory or what is going on in the openings they play, almost all professional players look up the recent high-level grandmaster games that are relevant to them. The following game was fascinating to me, because it featured typical positional errors for the pawn-structure in a line I had played numerous times with both colours.

**Efimenko – Cornette**

*Doha 2014*

1 e4 c5 2 Nf3 Nc6 3 Bb5 g6 4 0-0 Bg7 5 Nc3 Nf6

Although this and 5...e5 are the main moves, the best line is actually 5...d6! 6 e5 dxe5 7 Bxc6+ bxc6 8 Re1 Qc7! =.

6 e5 Ng4 7 Bxc6 dxc6 *(D)*
White to play

8 Re1

On e1, the rook defends the e5-pawn, but it is generally best placed on d1, as you can see in the variation 8 Qe2! 0-0 9 h3 (9 d3 Nh6 10 Bxh6 Bxh6 11 h3 is also an interesting try for an advantage, as it is hard for Black’s bishops to obtain activity while White’s knights have an easier time finding play) 9...Nh6 10 Ne4 Nf5 11 c3 b6 12 Rd1, and now:

a) 12...f6 is analogous to Black’s play in the game. After 13 d4 cxd4 14 cxd4 Be6 15 Nc3 Qd7 16 b3 += White intends Ba3 and Rac1 with a positional grip in spite of Black’s bishop-pair.

b) 12...Qc7 13 g4! Nh6 14 d4 cxd4 15 Bf4! dxc3 16 Nxc3 and now the radical 16...f5! (16...Nxc4 17 hxg4 Bxg4 18 Qe3 +=; 16...Qb7 17 Qe3 Nxc4 18 hxg4 Bxg4 19 Rd2 +=) is the most challenging move, exploiting the tactical vulnerability of the f4-bishop. 17 exf6 Qxf4 18 fxg7 Kxg7 19 Qxe7+ Nf7 20 Rd3 Ba6 21 Qe3 Qxe3 22 Rxe3 leads to an endgame in which White has an active rook and an active knight in the centre, coupled with a kingside pawn-majority. However, White only has a very small advantage, but the pattern of play here is instructive to follow: 22...Rfe8 23 Rae1 Rxe3 24 Rxe3 Rb8 (Black plans to play ...Rb7 given the chance) 25 Nd4 c5 26 Ne6+ Kg8 27 f4 +=. Black has a long defence ahead.
8...0-0 9 d3 Nh6 10 Ne4 b6 11 Bf4 (D)

11 a4!? a5 is not so clear.

11...f6?

This initiates an incorrect pawn exchange, leaving White with the better bishop and access to the d6-square for his knight, which removes Black’s only trump of the bishop-pair. 11...Nf5! 12 c3 Ba6 13 d4 cxd4 14 cxd4 h5 15 h3 Bb7 16 Rc1 c5 17 dxc5 Qxd1 18 Rcx1 Rfd8! 19 Rxd8+ Rxd8 20 cxb6 axb6 21 b3 b5 gives Black full compensation and enables him to defend the position.

12 exf6 exf6 13 d4! c4

13...cxd4 14 Nxd4 Bd7 15 Qd3 Nf7 16 Rad1 c5 17 Nb5 +=.

14 Nd6 g5 15 Bg3 Nf5

15...Nf7 16 Nxc8 Rxc8 17 c3 is a simpler sort of advantage for White; he can continue with Qc2 and perhaps b3.

16 Nxc8
White had a tough choice between winning a pawn or taking the bishop-pair. Taking the pawn was probably still the best objectively (viz. 16 Nxc4!? Qd5 17 Ne3 Nxe3 18 fxe3 Re8 19 Nd2 Bf5 20 b4 Bg6 21 c4 +=), although taking the bishop-pair immediately provoked errors during the game.

16...Rxc8 17 c3 Qd5

17...Qd7 18 Nd2 c5 19 dxc5 Rxc5 20 Qe2 +=.

18 Nd2!

White intends Qe2 or b3, which both would improve White’s structure. Instead, 18 Qe2 h5! 19 h3 b5 leaves Black very solid.

18...c5

18...Rce8! 19 Re2 c5 is a slightly improved version of the idea played in the game: 20 dxc5 Qxc5 21 Rxe8 Rxe8 22 Qh5 Rd8 23 Nf1 Bf8 24 Re1 +=.

19 dxc5 Qxc5?!

19...Rxc5 20 Ne4 Rb5 21 Qe2 Nxg3 22 Nxc3 +=.

20 Ne4 Qc6 (D)

20...Qb5!? 21 Qf3 Rcd8 22 a4 Qd7 23 Rad1 Qc8 24 Nd6 Nxd6 25 Rxd6 Rxd6 26 Bxd6 Rd8 27 Qd5+ Kh8 28 Qf7 +/–.
White to play

21 Qg4! Nh6 22 Qf3 Nf7

22...Rfe8 23 Nd6 Qxf3 24 gxf3 Rxe1+ 25 Rxe1 Rd8 26 Re6 is a slightly more resilient defence, but looks quite tough as well.

23 Rad1 Rfe8 24 h4

White threatens to take on g5 and then play Qf5.

24...Re6 25 Re3 Bh6?

Better options: 25...h6! 26 Rd4 +/–; 25...gxh4 26 Bxh4 +/–.

26 Qg4

26 Qf5! gxh4 27 Bd6! Rce8 28 Nxf6+ Rxf6 29 Rxe8+ Qxe8 30 Qxf6 +–.

26...Rce8 27 Rde1 Kh8 28 Qf5

Now Nxf6 is a threat.

28...Rf8?
28...R8e7! 29 hgx5 fxg5 30 Kf1 +–.

29 Nxg5!

This simple tactic wins a pawn in view of the threat of mate in one on h7.

29...Nxg5 30 Rxe6 Nxe6 31 Rxe6 Qd7 32 Bd6 1-0

Black resigned since if he plays 32...Rf7, White can simply reply 33 Qe4 and threaten the c4-pawn as well as a check on Black’s back rank.

Many developing players under 2000 read opening books on distinctly dubious openings, knowing full well that the book is close to useless and they are barely learning anything from it. If you pick up a book suggesting an opening variation for Black that is not played by any elite players because it is regarded as clearly better for White due to simple means, you should instantly be sceptical of the book, especially if it claims all of the lines are equal for Black. Using a little bit of logic or common sense, it is extremely unlikely that the lines given in these books are accurate and refute high-level theory.

When a player picks up a book on, say, the ...Qa5 Scandinavian, he is unlikely to learn what the positional drawbacks are to the opening, such as that White gets a better structure and a space advantage for free, while Black wastes time with the queen right in the opening, often moving it four times within the first ten moves. Anyone playing this opening with Black needs to grasp the importance of wasted tempi in the opening and why White’s structure grants him a space advantage.

A book advocating a dubious system for Black is unlikely to highlight its drawbacks, which means that a player under 1600 reading such a book probably won’t learn the reasons why the opening is not looked at seriously by strong players. This prevents him from obtaining basic chess knowledge and developing an understanding of opening play. The player gains the impression he can play dubious chess with no consequences – or does not even realize it is dubious, because the author did not explain it and the
reader’s understanding is not high enough to tell what is wrong with the moves. It gives him a sense of relativism, as if any opening is OK. Chess is not like that at all. A lot of these types of opening books are distinctly bad books; I have seen books that cherry pick games to make the Přibyl Defence look like it is excellent for Black. I have spoken with Přibyl himself and he acknowledges that White has various lines that lead to an edge of a non-diminishing and stable +.4 for White on top engines.

In the Ruy Lopez, White plays with a concrete strategic aim of playing for an ideal pawn-centre with d4 and e4. The strategic burden is placed on Black right from the beginning. In some other openings, White has no strategic aims to play for so specifically.

There are always going to be new and exciting Ruy games worth studying and learning from. The amount of good study material is close to endless there. Small inaccuracies usually do not lead to an immediate loss, so it makes it easier to play that kind of a repertoire as you move up towards grandmaster level. That is certainly something I experienced. A big problem when playing the King’s Indian, Dutch and Benoni against much stronger players, is that you will tend to lose a lot of games without learning anything from them besides where you went astray at one point in the opening. This happened to me when I was 2300 and the King’s Indian was the only opening I was able to play. I stunted my own growth due to inflexibility, poor opening play, and the fact that the opening in general is not very forgiving when you make mistakes in critical variations early on.

Playing the richest main lines seems to generally give players the best overall chess culture over a large sample size of games. I do not think it is any mystery why the Ruy Lopez and Nimzo-Indian were advocated as essential openings to play by so many grandmasters for so many years. The Nimzo-Indian is the only opening in chess currently played by almost every player in the top 50 in the world. When I meet grandmasters who have never played a Ruy Lopez position in their entire career, I often feel that they are lacking some understanding of a major structure and position-type in chess. For players below this level, it is debatable though. I studied from a lot of classic books and got a ton of understanding of Ruy Lopez positions and lines just from studying John Nunn’s games and Garry Kasparov’s games.
The Queen’s Gambit Declined (QGD) is relatively easy to play, and its basic positions and ideas are readily understood by novices or developing players below master level. A solid line of the QGD you could consider playing is the Tartakower Variation. However, you don’t have to be wedded to just one opening; that would be inflexible anyway. Perhaps you might want to play one sharp opening and one solid opening with which you feel you can obtain a solid position against anyone.

If elite players play something approximately 1 in 10 games with Black, people get confused into thinking that the player in question truly believes in the opening, and is not just using it for a particular purpose in a specific situation. If those elite players fully believed in it – i.e. that it has no drawbacks and offers imbalance and winning chances – they’d play it more often. Remember that a lot of older opening advice was from the pre-computer era, when one could play much worse lines and a narrower repertoire with less chance of punishment.

Many young players, as well as players in general below 2100, think that when Black plays ‘passive’ lines like the Pirc Defence and lets White push them around, they are ‘supposed to win’, and they try too hard for breakthroughs, sacrifices, and direct attacks as though they have been handed a half-pawn advantage and have to do something to convert it into a win. Usually the advantage is actually far less, and White needs accuracy and a high level of positional understanding to really prove anything, especially without overextending his position.

Certain openings like the Pirc Defence force Black to make a difficult critical decision with his central pawn-structure. In openings like the Ruy Lopez, Black bypasses this because the pawn on e5 supported by the d6-pawn creates a clear central structure to begin with.

Once you get good at defending against the opponent’s only aggressive idea (of which there is just one in a number of different openings), you can collect a ton of points. It often happens in the Budapest Defence that White obtains a structural edge from the opening and it simply does not go away for 20 or 30 moves. Black often has a few ideas to try to use to break out, but if you can limit them, you can easily maintain the grip.
Almost no one plays the Benoni regularly in grandmaster chess. Those who play it, do so solely as a surprise weapon. Strong players are frighteningly objective nowadays. They are not as emotional about their in-game decisions and opening choices as players were in the past.

Many ‘hedgehog’ positions analysed by Kasparov in the 1970s are regarded as off-limits by top players nowadays because they involve defending a worse position with no counterplay for 30 moves in the middlegame.

The Hedgehog is not popular or sound any more at high level. It is understood that White gets space for which Black gets little in exchange. Hoping for counterplay is not a real reason to play anything as a full-time main opening. The Benko dropped out of the elite scene for the same reason.

A ‘computer’ line is a line that essentially no human would have thought of playing in the pre-computer era. It is basically any line that breaks a simple rule positionally-speaking, but the computer manages to hold somehow, or simplify enough so that the edge is not really considerable. Strong players know it is generally a bad idea to go for these position-types (static elements), yet the computer seems to find a concrete (dynamic) solution that overrides the static considerations. An interesting example of this is the rise of the bizarre line 1 d4 Nf6 2 c4 e6 3 Nc3 Bb4 4 Qc2 b6 5 e4 c5, which became extremely popular in 2015, but was hardly ever played for Black before this.

I remember in the King’s Indian the best move in certain variations was playing a knight to c8, and if the move didn’t exist, the entire line would be bad. When I saw examples like that, I became pretty discouraged about the ease of play in the opening altogether. You need to have a great amount of energy in every single game to find ‘only’ moves in sensitive positions that are not forgiving of inaccuracies. Of course, as I may have mentioned before, below 2000 you can get away with basically everything, but I would still look at the opening phase as if you have ambitions to be higher up.

How should I make an opening file from scratch?
Making an opening file from scratch is actually a lot simpler than you might think. You need to have a reliable starting point though. Because the highest quality games are high-level correspondence games, in any new variation I am analysing, I go through my opening book of 2100+ correspondence games and simply play out the established main line from correspondence games. I made this correspondence ‘book’ (i.e. ChessBase ‘tree’) myself by going to the International Correspondence Chess Federation website and downloading the new games every month so as to have a complete and updated database. The best part is that it is up-to-date and completely free. I spoke to numerous grandmasters in the top 50 in the world who wanted a copy of this correspondence database and had never thought of doing this themselves.

The next step once you have established a basic main line is to add in important moves that were played in high-level human games, at least establishing what the best human players play in the variation. This divergence from the correspondence games can give you a good idea about whether your main line is suspicious or simply quite reasonable. Next I like to go through the variations and see if there are some obvious human moves I am curious about. If so, I add them into the ChessBase file I am making. Once all of this is done, I check the variations with an engine. A feature in ChessBase is ‘Let’s Check’, which is on the side or underneath the engine pane and stores analysis done by ChessBase users. Sometimes it can be very useful by immediately giving you very deep analysis done by another user. I recommend judging what is in Let’s Check based on the depth and engine used to decide if what you see there is reasonable and worth trusting. For instance, if you see analysis done by Fritz 10 at depth 25, I would recommend looking for higher-quality analysis. But if the analysis says it was done by Houdini 6.03 at depth 35, you can be quite confident that the quality is high.

Everything here is about operating systematically and working from first principles rather than through convention or by analogy. Reasoning by analogy means you are doing something that is like something else that has been done or it is like what other people are doing. It is mentally easier to reason by analogy. First principles means boiling things down to their most fundamental aspects. In the case of making an opening file, we find the best-
quality source, then make the analysis more human, check it all with an engine, and finally add in explanations as you see fit, explaining the ideas behind the moves. Performing this kind of task repeatedly will build a lot of understanding.

One of the issues with searching in a database instead of using an opening book is that database searches normally involve a lot of waiting time, while an opening book gives you instant answers. Building and regularly updating a correspondence book every month is extremely vital for all serious chess-players. A great aspect of using a correspondence book is that in every opening position, you can instantly see the performance rating and score that each side had. In certain cases, this is very revealing. For instance, if Black scores above 50% in a specific line, that may indicate an interesting avenue to head down with Black.

Some players are afraid to play the most principled variations due to the fear that they will not understand the positions well enough. This is actually a great invitation to ask a stronger player about the variation in question or put in some effort to try to understand it yourself with the help of a database and an engine. After all, there is usually little reason to fear accurate computer preparation by your opponents. I can recall at least three instances in which grandmasters I was preparing reached positions over the board in Sämisch King’s Indian lines which engines shallowly evaluated as 0.00 at low depth or on slightly older engines, but which were definitely better for White. The emphasis in this then becomes not so much computer analysis, but doing your computer analysis with a high level of competence. A lot of people imagine that everyone analyses equally well with engines, so they fear computer preparation. But many players, for example, check a variation at depth 23, see 0.00 on an engine, and consider it equal. There are plenty of examples of positions like this in which the score will eventually go up to +.50, once it has had more time to search.

Making opening files is about building a bare-bones line, fleshing it out with obvious tries, taking a look at the latest grandmaster games and checking it all with the engine to make sure the main conclusions are sound. Independent research is an important skill for a chess-player to develop, just like analysing is. Build main lines based on the most commonly-played moves or the moves
with the best performance. Gradually add more and more explanations to your opening files. When you play blitz games, add in interesting ideas you discover about openings to the given opening line. Often you will be curious about a specific idea or move that hasn’t been played before.

One of my students who is 2100 can make professional-quality opening files just by working effectively with engines, checking his updated correspondence book, filling out lines in his files properly, and updating them periodically, sometimes even with updated engines to make sure. I think the fastest way to play through a file you have made is just to use the arrow keys on your keyboard. When preparing for league games with only a few minutes available, I usually slide through my correspondence book or one of my files with the arrow keys quickly and try to absorb as many ideas and as much information as possible.

When analysing openings, you can mark certain positions with a medal. I think this is a useful thing to do so that you do not forget to check the variations later. When sending positions and games around to other players, one should mark them with medals so that they know what to focus on. When grandmasters send me positions to analyse or explain verbally, they note the most important positions this way.

When analysing opening lines with an engine running, it can be very useful to scroll slowly backwards through the moves with the arrow keys when you are confident that you have established a variation that shows best play by both sides. For instance, if you are convinced that White is better, it can make sense to leave the engine running in the final position of the variation when it is Black’s move, and slowly tap the left arrow key twice every so often to move back two ply to see if the engine can find any improvements when working backwards. What you may realize is that by scrolling back to, say, move 10 like this, the actual analysis the engine gives on move 10 will be much better this way, because it will have already saved in the RAM some information about future positions that have already been calculated. Hence, if you want to establish a line of best play, it makes the most sense to construct a basic best line first and work backwards to see if you can find any improvements in the line. Then you can gradually flesh out the file more by checking the most obvious moves, moves the engine suggests, and what was
played in critical human and correspondence games.

**When should I stop analysing a line?**

In short, you should stop analysing a line when you have checked all of the relevant sources and attempts for an advantage, as well as interesting ways for both White and Black to play that are likely to occur on the board. Outside of played games, this might just be a few simple human moves to check that occur to you, so it should not be a lot of extra work outside of what is already known. If a line has a good reputation in high-level chess and in correspondence games for Black, the reason why it has this reputation is because top players believe it is a good way to equalize and draw. Before concluding White is better in any line of this sort, check your main line with up-to-date databases of correspondence and grandmaster games. To support a claim that White is better, your analysis should prove an edge in all of the lines played; a known equalizer should not exist against your main line. Additionally, always check your main lines with whatever is the strongest engine in the world (for several years the free engine Stockfish has been near or at the top of the rating list, so there is no reason not to use it). A two-second engine check of any of your lines should never refute any of them if you have done your work properly at a bare minimum level of competence. After you have checked these basic sources and verified at least the soundness of your main line, you can stop analysing the variation, confident that your main line and your conclusions are probably not far from the truth.

I have saved a lot of lines for Black by just checking everything reasonable. If you have already put together a decent file, checking for brief deviations does not take very long. Sometimes you can just turn on the engine with three lines showing, slide through the moves with the right arrow key, see if there is anything sensible that you missed without a clear refutation and play it out until you have reached a firm conclusion. In a lot of cases, lines that you thought were better for White turn out to be objectively fine for Black. When I am done analysing a line, I quickly make sure both Stockfish and Komodo do not refute my main line or my main conclusion.
One of the most widely disputed questions in modern chess is “What should we analyse?” This is a tricky question without an easy answer but I will at least give some relevant ideas with respect to preparing an opening with Black. Most strong players understand there is a lot of value in deeply analysing the theoretical endgames they obtain in their games, as well as the complex tactical positions they misplay. What is much more tricky is what occurs off the board. As a professional analyst, at times I am accused of analysing too little and at times I am accused of analysing too much. Although not a perfect analogy, I agree with the general premise of the argument that “the analysis should be as simple as possible, but not simpler.”

My point is that we shouldn’t cut off our analysis too quickly or hastily when we are trying to find ways to equalize with Black in our opening preparation. I have heard far too many players say “White is better” and casually stop analysing a line because of a brief engine score of, say, +.35. If one wants to be this dismissive, one should be sure about the depth of this evaluation and the fundamental positional or tactical reasons for having a better position (players rarely are too sure on this last part).

My proposal is simple: we should create one sample main line for almost all sensible Black tries and analyse it out as best we can, assuming a line isn’t so obviously better for White that it is not worth looking at. That is essentially what I did: I created some bare-bones main lines and then computer-checked everything to look for improvements. One grandmaster chastised me for this and explained that when the analysis reaches a point where White has a number of promising or equivalent alternatives (presumably around move 15 or 20), we should stop the analysis and give an assessment. I disagree, and think that a player using that method of analysing would not find some of the equalizing ideas that I uncovered in lines such as the Qf3 Taimanov. To do so, it was necessary for me to look deeply at a wide range of lines and work backwards. As mentioned earlier, engines see much more when they work backwards from the end of a long line.

When you do very complicated opening analysis, it is best to be very thorough with your analysis one time through, checking every source and all of the information out there very carefully. Once everything has been confirmed as approximately correct by computer analysis, there is usually no
reason to over-analyse what has already been properly worked out. What is most important is that the analysis has been done well at least one time and all of the work has been saved. This helps prevent analysis paralysis.

**How should I organize my openings?**

Organizing your chess files is very important because you will want to find them quickly and effortlessly later on. If you have only ten minutes to prepare for an opponent, any time wasted locating your key analysis files could be costly. If you have too many game files, you may not be able to find what you need. If you have too few game files, they may simply become too clunky and hard to find anything in. It makes the most sense to have a lot of compact game files neatly organized in a few databases. I used to organize my openings based on the name of the specific opening, such as the Pirc Defence or the Sicilian Defence. Gradually I realized that it was quite time-consuming to find files, especially if there was an overlap between opening systems. Eventually I decided on a simple plan: to have two large databases of opening files: the first one is called ‘1 e4’ and the other one is called ‘1 d4 and Others’. This way I have all of my 1 e4 openings in the same database and when I want to search in ChessBase for any 1 e4 file of mine, I can search for the position and the file will usually come up right away. The same goes for my 1 d4 file, which has a lot of overlap with openings that start with 1 c4 or 1 Nf3, which is why it was logical to put them all together in the same database. By splitting up your files this way, you will become very familiar with the ECO code system quite quickly and be able to find files and similar openings very easily with experience.

Besides having databases that are easy to navigate, within those databases, you should have game files covering key variations that are important for you. I like to separate files based on critical unique subvariations. As an example, in the Trompowsky after 1 d4 Nf6 2 Bg5, I have separate files covering 2...d5 3 Bxf6 exf6 and 2...d5 3 Bxf6 gxf6 because they are fundamentally different plans and each of the files is about two pages long. By doing this, I manage to have two fairly extensive files that cover fundamentally different plans in the same opening. Since the ideas are not
very closely connected and there is a fair amount of analysis in each file, it makes sense to split them up this way. With respect to an opening like the Ruy Lopez, there are many sidelines and variations, so it would be impossible to navigate through a single game file if you put everything in one place. Instead, it makes the most sense to split up unique variations into their own files, usually with each file ranging from 1 to 10 pages long. In the Graf Variation of the Ruy Lopez for instance, I have one file covering the move 12 d5, another covering the critical line 12 Nbd2 and two other files covering less common lines. By doing this, I avoid clutter and make it very easy to prepare the Graf Variation from both the white side and the black side by being able to see clearly where everything is located. With well-organized databases and game files that are easy to play through and follow, it is easiest to find and remember exactly what you play in every important line.

What are the first steps I should take in learning a new opening?

In the opening phase of the game, you have to understand:

a) what constitutes an advantage in the line you are playing;

b) what you are actually trying to do in the opening (what are your threats); and

c) what the opponent is trying to do.

Most coaches do not really get into explaining these things, and opening play largely becomes memorizing lines that do not make a whole lot of coherent sense to the player. The point is really not to memorize, but to understand. This involves asking a lot of questions and seeking out answers to those questions if you genuinely do not understand something.

What you want to do is conceptually understand your openings rather than memorize long lines. The essence is to understand the middlegame and endgame in a given variation by becoming well-acquainted with the resulting pawn-structures and typical endgames that have occurred in good-quality games. When I study an opening, I am mostly looking at the resulting
position-type and pawn-structure, and trying to understand the plans for both sides.

I recommend doing the following with new openings:

1. Play through the main games by elite players quickly and see what plans they chose.

2. Slide through the main lines in a correspondence book with the arrow keys (very fast and takes barely any time at all).

3. Make a file with some lines (the simplest way to start your file is just with the main line from correspondence, which surely cannot be bad), and add in comments.

4. Make this a routine and improve your positional and structural understanding so you get what the plans are in specific structures.

As you do it regularly, the whole process becomes internalized and really is not that hard.

In ChessBase, there is a ‘Training’ tab. If you click on it, you can see the board with the next move covered up. This is a good method for learning and absorbing your opening lines without seeing them on the side in the notation. This is good for spaced repetition in learning your openings. If you keep neatly-organized files, it is a very useful way to stay current with your analysis in a relatively short amount of time.

When learning a new opening, you should play through the top ten highest-rated games in the given opening to get an idea for how high-class chess plays out in the variation. I like to write a one-paragraph summary on each of those ten games both to increase my analytical ability, but also to increase my grasp of the opening. If you feel you are not really strong enough to comprehend these games well, it is a good idea to ask a stronger player about what you don’t understand, or to consider going over some of the tougher games during a lesson with a strong player.
When seeking to understand your openings, you should try everything. If your two pawn-breaks are ...c5 and ...e5 (with a white central pawn on d4) you can analyse what happens if you directly play for both of those pawn-breaks to gain a better understanding of which one you want to achieve.

For beginners learning openings, a helpful tip is first to become aware of the traps so that you know what to avoid and what your opponent might fall into.

Look at the initial games in an opening line, and see how the line gradually developed and learn from those progressions: how White first sought out an edge, how Black tried to counter it, etc. Hardly anyone does that, even though it is very effective and useful work that gives you a lot of understanding of the opening line, position-type in general, and pawn-structure being played. It’s as simple as playing through the initial games in a given opening variation in ChessBase, just sliding through the moves and getting a rough impression of what went on in those initial games. I like to search for the first five White wins by strong players in any given opening line to see how it started off. The whole process barely takes any time.

Historical games put a memorable face to the name and actively build understanding. When you are learning a new opening, I recommend studying five of the most important historical games in the variation, five recent wins by White, and five recent wins by Black. I recommend making notes while going through these games to try to understand what the main strategic point was in all of those games.

When I started out in chess, I had no idea how to approach openings. Due to my lack of knowledge or where to look, I merely copied the opening repertoires of Kasparov and Fischer as best as I could. It was only later in my chess development that I learned that a number of the lines they played were not very practical and forced me to play extremely accurate high-level chess that I was not capable of doing.

There is a special incentive to actively study and make sense of all of the relevant lines of any opening you play if you realize you will face it in your next tournament game. You may even learn the most about an opening after having a very complicated middlegame in the given line and deeply analysing all of the complications.
Playing an opening should be about understanding all of the moves and what each side is trying to do, not about memorizing. I don’t really memorize anything in any lines I play. I just understand what the point of each move is, then I’m able to find the theoretical moves most of the time on that basis, assuming it’s not some specifically weird computer move, in which case I would make a note to remember it solely for its weirdness. That is rare though.

I try to grasp all the threats behind my moves in every opening I play so as to understand how I might win quickly in my openings. Besides this practical aspect, recognizing all of my threats also helps me understand the openings and structures I am playing, and the strategic goals and concepts I am aiming for. I once beat Mamedyarov with a subtle threat in the opening that he missed. It was just an ICC game, but it was still quite nice to beat such a strong player. I used to play questionable openings with Black, press the X button all the time while analysing them to find threats, and search for all sorts of subtle threats behind my moves to try to catch people out in the opening.

Many people want to know how widely and deeply they should know their openings. This is a tricky question, because a fundamental part of opening study includes looking over games played by the best players in these lines, and being aware of the best wins in the variation. This type of work can give you ideas about how to win games and what to potentially look for that might be a game-changing kind of advantage or detail. I always check the main lines in correspondence and the most recent relevant games in a variation if I am very confident it will occur in my next game. If time allows for it, opening study in a concrete line ideally occurs in the most serious depth before a game or shortly after the game, when you are intently focused on a line that you know directly impacts your rating. You should also make files on the variations you play, and update them regularly whenever a new idea comes to mind or a new game in the line is played that requires updating. If you have a good grasp of how games are won in the variation in question, and have made opening files with verbal annotations and explanations, chances are that you will not play it too poorly.

In many openings, there are basically only two or three plans for handling a
specific pawn-structure. It often happens that at the board, a player will only be aware of one of those plans. Studying some of the high-level games in that pawn-structure or opening can reveal more acceptable plans, so I do this as much as possible, especially when I think that I may be missing some important plans. Additionally, in certain openings, there is one problem piece (such as a bishop on c8) and it can be interesting to sift through games and check the piece path of this bishop to see how Black solved this problem. A few minutes of sifting through games conscientiously in this sort of manner and focus can often give you a whole range of new ideas for handling structures you already play.

For players under 1800, a handful of basic plans is usually enough to play a typical opening’s pawn-structure well around move 10. Knowing the basic pawn-break in a specific opening is enough to guide the next 5 or 6 moves in a wide range of positions. Many amateurs get caught up in trying to mimic professional players, but they make a mistake in not trying to start from the bottom first with the obvious, fundamental questions like “where is most of the play coming from?” and “what should both sides be doing?” Players under 1800 should focus on getting the fundamentals of their openings down, while usually players over 2000 have a high enough level of play that they may not need to think about those things so consciously. All players should strive to be thorough in their opening analysis and understanding, but weaker players will suffer more from not doing so, because they are more likely to miss simple things.

I always kept a notepad on my desk with variations and openings I needed to study and improve my knowledge of, to be absolutely sure I did not forget about anything important. When I wanted to learn the Grünfeld Defence, my first task was to play through all of Peter Svidler’s Grünfeld games as Black because he was the best Grünfeld expert in the world at the time. This may sound like an extreme task, but Kramnik used to play through hundreds of games a day when he was looking for opening ideas. To speed up the process, one can merge all of Svidler’s games in the 5 Bd2 Grünfeld into one game file. At the end of 2016, this would have given us the 12 Svidler games played at a classical time-limit in 5 Bd2 merged into one file. What I usually found was that Svidler achieved dynamic and interesting positions in nearly every game. As a result, there was almost no independent opening work for
me to do to have opening knowledge in the line on par with a player of my level almost immediately after studying Svidler’s games in the variation. Making an opening file on the 5 Bd2 Grünfeld then became very simple and easy because my mind was already full of good ideas and often there was little reason to deviate from Svidler’s play. This is just one example of the type of short-term study I did when I was trying to become an international master. When there are good, relevant games by an expert in a line you play that can be studied relatively quickly, you are simply missing out by not doing so. Once you get into the routine of doing this, it becomes easy and it even feels strange not do so.

Make a list of openings to check on a notepad during a night of playing blitz, and later go back and check those lines where you were lacking. Later you will want to check through quickly all of them at once so that all of the opening work is completed as efficiently as possible.

In very tactical openings, in many cases you will need to figure out the opening logic move by move on your own with the help of an engine. When an opening is almost pure tactics, book authors may have little to offer you in the way of explanations, especially if they missed the best lines.

You should look up the statistics in the openings you play. This is fascinating and can reveal more than you might expect. For example, up to April 2017, White scored above 60% in the main line of the 1 d4 Nf6 2 c4 g6 3 f3 d5 Anti-Grünfeld. Checking the statistics gives us some impressions of the practical difficulty of playing an opening, especially if there is an unusually high score for either colour. In 2012, there was a Ruy Lopez variation and also a 6 Bg5 Najdorf variation which were scoring above 60% for Black for a time and were setting all sorts of bizarre problems for White.

Seeing how 2600 players outplay much weaker opposition in lines that bother you is a great way to learn how to play for a win in that variation. Even just seeing them enter a pawn-structure or play a plan you have never seen before can be a very useful piece of information for you to apply in future games.

I recommend pressing the ‘X’ key (‘Analyse threat’) quite often in ChessBase when looking through your openings. This shows what the computer thinks would be the best move if it were your turn to move again.
This helps give useful information to a player who otherwise might have no idea what the point of a move was. I always try to understand generally what is going on in a position, and being aware of the threats for both sides is quite helpful for me. I recommend being aware of basic main lines, while always saving your tournament games and looking up the opening afterwards to see where you deviated first from high-level games. After every tournament game, this should become a routine, such that opening knowledge constantly builds up over time.

You need to make it clear what your priorities are: Which specific lines are you the weakest in? Which line might you face in which you could lose in 15 moves? Patch up the most critical issues first, and then work backwards to less vital things that are less likely to cost you points right away. If you have ChessBase, just try to see what plans were played in elite games in lines you play, rather than trying to memorize anything. If you do not know much about a given variation, having seen two or three different ways of handling the position by a strong player helps a lot at the board.

When learning a new opening, you should try to become acquainted with the typical ‘+=’ positions Black should be trying to avoid. You should also acquaint yourself with the positions seen as equal that players with White generally want to avoid because they are seen as dead ends. This involves playing over a number of past or historical games in the variation in question. This process:

a) increases your chess knowledge;

b) improves your ability to evaluate positions (by gaining a greater appreciation of the positions in your variation which are better for White or equal);

c) improves your ability to learn from games (which is always a work in progress);

d) often allows you to apply these ideas in different situations by analogy; and

e) allows you to learn and understand an opening and position-type much
more quickly than any other method.

If you make this a routine, you will gradually get better and better at it and find it not so difficult any more to build up a broad base of knowledge about a lot of openings and position-types quickly.

Once your opening repertoire has stabilized and your opening analysis is reliable, your usual routine should be to look at the new games in openings you play, but not necessarily to memorize the theory in those games as much as to understand the plans and the direction of the play from both sides.

I tend to get excited during tournaments and prepare a lot. This usually leads to a lot of good searches and discoveries, which is very good for our chess and keeping things fresh. It is important to save what you have discovered, and to have a small, clear file illustrating exactly what you play. I have put together my full 1 d4 repertoire based only on my played 1 d4 games and where I should have improved in the opening. Putting your White (and Black, respectively) games into a file like this is very useful, makes it easy to prepare from, and makes it very clear what you play.

We’ll end this chapter with an example where a high-rated player went wrong when he failed to play the right thematic idea in a position-type that he should have understood better:
In essence, this is a Sicilian reversed, where the move d4 screams to be played. It is essentially a perfect instance of a ...d5 break (with reversed colours) that sets serious problems for the opponent.

16 e4?

This move allows Black to make sense of his clumsy f5-knight’s previous play and equalize fully. In fact, Black now took over the initiative within a few moves.

16 d4! looks obvious: White opens up the d-file, harasses the very awkward queen on d7 and tries to put pressure on the c7-pawn. 16...exd4 (after 16...e4 17 d5 exf3 18 dxc6 Qxc6 19 Bxf3 Qxb5 20 Bxb7 Rad8 21 g3 Rxd1+ 22 Rxd1 += White has a clear edge and is almost positionally winning; here the bishop clearly dominates the knight) 17 Nfxd4 Ncxd4 18 Nxd4 Nd6 19 Nf3 (19 a4 is also a good move) 19...Rac8 (this move is very passive, but necessary to defend c7) 20 Bxg7 Kxg7 21 Ne5 Qe8 22 Nd3 +=. White has a clear edge and ideas like Nf4 followed by h4 orBg4.
16...Nfd4 17 Nbxd4 exd4 18 Be1 Rac8 19 b4?!

This merely creates weaknesses and gives Black good play for his c6-knight. 19 Nd2 Ne5 20 h3 g5 21 Nc4 appears to hold the balance for White.

19...axb4 =+

Black has an edge. If 20 Bxb4 then simply 20...Rfe8 is better for Black. 20 axb4 Na7 and ...Nb5 gives Black a superb knight that cannot be easily driven away. After many mistakes by both sides, the 12-year-old boy with Black beat the 2600+ GM who had White.
11: Losing Consistency

Consistency and logical coherence are important in chess. Many chess-players are very happy with their play if they produce games which are consistently played with clear ideas. Sometimes we become committed to ideas from our previous play, or a pawn-structure we play suggests certain plans and ideas that are consistent structurally. In this chapter, I shall show some examples that may not seem so strange from the perspective of individual moves, but logically make little sense based on the previous play.

Losing consistency is when you make a move and you can’t go back because you’ve already embarked on a path, but you try go back anyway. One of the most common cases where this occurs is when you set up all of your play for one intended pawn-break. Then if you eventually do not play this pawn-break, all of your play will look strategically senseless and inconsistent as a whole. More generally, when you embark on a plan and suddenly bail out of it and play something else that is worse and makes little sense in retrospect, you have played inconsistently. Even if you are scared of what will happen if you continue with your initial idea, if you are committed to it, then you have to play it. Once you have reached the point of no return, the task is to seek the best way to execute your plan.

Essentially, if the idea is not carried out, our position will lack coherence or consistency, and some of our moves will have misplaced our pieces and simply worsened our position. Note that this is not to say that you should plough ahead with an idea if the opponent has clearly prevented it.

The idea of gravitating towards specific moves which are the only ones that make sense is a skill most strong players have, but that has received little attention in chess literature. Players tend to figure it out on their own. It is closely connected to the ‘most obvious move’ principle, where in analysis we start by looking at moves that might radically change the evaluation of the position. A linear analysis often leads players astray in their calculations, and can lead them to lose consistency with respect to their previous play due to
focusing too much on concreteness and forgetting about more generally important things.

In the following example, Black weakened himself on the kingside to obtain attacking chances, but then inexplicably changed plans.

By pushing the pawns to f5 and g5, Black has committed to a kingside attack. There is no other reasonable plan to consider and the weaknesses created by pushing the pawns so far forward in front of the king are permanent. Here Black has to continue with ...f4 to maintain any type of consistency. The plan afterwards would be to prepare ...g4 and attack on the kingside. In the game, Black captured on e4, which made no sense of his previous play and allowed White to exploit the weaknesses in Black’s camp that were created by ...g5 and ...f5.

14...fxe4?
With 14...f4! Black intends ...Qf6, with ideas like ...b6 and ...Ba6. One of the main points here is that playing ...f4 keeps the position closed, complicated, and not easy to play or navigate for White. In the game, White’s play was obvious, powerful, and dominated the black king immediately. After 15 h3! (15 Bg4 h6 intends ...Bxg4 and ...Nf6) 15...b6 Black will follow up with ...Ba6 and ...Nf6 and a long battle is still ahead, even though White has the advantage.

Black should certainly avoid 14...Bxc3? 15 Bxc3 fxe4 16 b4 +–. White’s unopposed dark-squared bishop on the long diagonal is extremely powerful and White even breaks open the queenside forcefully. Black has no chance of defending here.

15 Nxe4 h6 16 f4! (D)

When you have a kingside majority of three pawns versus two like this and a pawn is sticking out as a hook like on g5, it is possible to open up the position and give the opponent an isolated pawn, as White does here. This also exposes how weak Black’s king is.

16...Bf5?!
After 16...Qe7 17 Nc3 Bd4+ 18 Kh1 Bf5 19 fxg5 hxg5 20 Rf3 +– White threatens Rg3.

17 Ng3 gxf4 18 Rxf4 Bg6

After 18...Bh7 19 Rxf8+ Bxf8 20 Qb3 +– and Rf1 White also overpowers Black’s exposed king.

19 Rxf8+

19 Rg4 is also very strong.

19...Bxf8 20 Bh5! Qf6?!

20...Bh7 21 Qg4+ Kh8 22 Rf1 +–.

21 Qg4 Kh7 22 Rf1 Bxh5 23 Qxh5 Qg6 24 Qxg6+ Kxg6 25 Rxf8 1-0

From an inferior, yet typical, Benoni middlegame, Black managed to get completely crushed on the kingside by playing inconsistently and opening up the position, which only served to highlight his own weaknesses.

The next example is not easy to explain from the perspective of the players. Black pushed his a-pawn to a5 and then hesitated in pushing it to a4, even though it was his only good plan. White, for his part, embarked on a plan to gain space on the kingside with f4, and then mysteriously refrained from playing f5.
White is clearly intending a pawn advance, and both players must make some important structural decisions over their next few moves.

11...a5! 12 f4

White aims for an attack, but Black’s king position is completely solid and there is no objective reason it should lead to anything.

After 12 c4!? White has various appealing moves in mind, including playing the simple a3, Bc2 or Rfd1. Another tempting idea is to play exd5 exd5 Rac1, when Black will have a tough time deciding what to do with his c6-pawn. One way to respond is 12...a4 13 Bc2 Qb6 14 exd5 cxd5 =.

12...g6?!

12...Nd7!? 13 Qg4 Bf6 14 e5 Be7 15 f5 f6! is the most direct equalizer, but not easy to see. 12...a4 13 Kh1 a3 also looks fine for Black.

13 Rad1 (D)
13 Kh1! a4 14 exd5 cxd5 15 a3! Ne8 16 b4 Bf6 17 Be5! is a nice ‘sliding’ move, securing White a small advantage in large part due to his protected passed pawn.

13...Nd7?!  

Black himself loses some consistency here. If the intention was to play ...a4, he had no reason to hesitate: 13...a4! 14 exd5 Nxd5 15 Nc4 Qc7 =.

14 c4?!  

White incorrectly combined plans here. If he wanted to play c4, he should have done so on move 12. If he wanted to play for f5, he should have done so now. Changing plans upon realizing your main idea does not work can be a sign of calm objectivity and maturity, but in this case it is merely an example of wasting time and failing to carry out either of White’s best plans consistently. With 14 f5! White threatens fxe6 and exd5, followed by bringing the queen to e6. Then with 14...Bc5+ 15 Kh1 exf5 16 exf5 Qe7 Black at least strives to get the queens off, though 17 Qg4 Ne5 18 Bxe5 Qxe5 19 Qh4 Bxf5 20 Nf3 += leaves White a little better.

14...a4
Black has now fully equalized by bringing his worst-placed piece, his a8-rook, into play.

15 f5 (D)

We have reached a critical position. It may look like White is attacking, but he is actually the one defending.

15...axb3!

This move, intending ...Ra2, is the strongest, and forces White to find some accurate moves to hang on.

The game instead featured 15...exf5 16 exf5 Bf6! 17 Bxf6 Nxf6 18 Qf2 axb3 19 axb3 Ra2? (19...Ng4! 20 Qg3 Qb6+ 21 Kh1 Bxf5 22 Bxf5 Ne3 23 Bb1 Nxd1 24 Rxd1 Rfe8 =), when 20 Bb1! would have led to an edge for White once the rook is pushed back.

16 fxg6

Not 16 axb3? Ra2 =+ but 16 fxe6 bxa2 17 Ba1! is also equal (avoiding 17 exd7? Qb6+ 18 Kh1 Qxb2 19 dxc8Q Rfxc8 =+).
16...hxg6 17 axb3 Ra2 18 Nf3

Not 18 Ba1? Qb6+ 19 Kh1 d4 —+, when Black intends ...Bb4.

18...Ba3 19 Rd2 Rxb2 20 Rxb2 Qb6+ 21 Kh1 Bxb2 22 Qxb2 Nc5

22...Qe3 23 Bb1 dxc4 24 bxc4 e5 25 Nxe5 Nxe5 26 Qxe5 Be6 =.

23 Qf2!

We see that White is the one forced to play accurately. This precise defensive move is the only way to hold the balance.

23...Qxb3! 24 Bc2 Qc3

24...Qxc4 25 Ne5 is White’s idea.

25 exd5 exd5 26 Bxg6!

This desperado is important, winning back a pawn and forcing Black to play with three isolated pawns.

26...fxg6 27 Qxc5 Qxc4 28 Qxc4 dxc4 29 Rc1 Be6 30 Ne5

White wins back a pawn, leading to a drawn ending.

In the next example, I saw that White wanted to put his knight on b5, but by playing my own knight to c6, I only provoked him to do so and thus improve his position.
Black to play

D. Fernandez – Kislik

Budapest 2014

14...Nc6?

Now the knight has no good squares to go to because the c3-pawn covers b4 and d4 and the e5-square is off-limits as well. Right after playing this move, I realized my coordination was terrible. White is intending to play Nb5 anyway, why should I just encourage it to go there? On top of that, the a6-rook had only one decent place to go: the c6-square, after the white knight comes to b5. I was essentially planning to aim for a compact and secure set-up like that, but what I chose was very clumsy, uncoordinated, and lacking in consistency. My queenside simply became weak and there was nothing useful for both my c6-knight and a6-rook to do afterwards.

The more consistent 14...Nbd7! gives Black room to manoeuvre. He prepares the natural push ...e5, while keeping ...Nb6-c4 in reserve at any moment. From a quick glance, it looks obvious that the knight is much better placed on b6 than on c6, where it has nowhere good to go. 15 Nb5 Be7 16 c4 (16 Bf4 Rc6 = illustrates the point above about the rook fitting nicely on c6; 16 Ba3 Bxa3 17 Nxa3 Qe7 18 Qb3 Nb6 with counterplay) 16...dxc4 17 Nb2 c3 18
Nxc3 Rb6 19 Be3 Bc5 20 Nc4 Bxe3 21 Nxe3 Rxb1 22 Qxb1 Ba6 =.

15 Nb5 Be7 16 Bf4 Bb7?

This is a questionable move because after White’s reply, the threat of Nc7 is very difficult to counter. 16...Ra8 17 Bc7 Qd7 18 c4 Bb7 19 cxd5 Nxd5 20 Nf4 Ncb4 21 e4 Nf6 22 Qe2 Bc6 23 Rbc1 Rfc8 24 Rfd1 Qe8 25 Rc3 +=.

17 Qb3 Qd7 18 Nc7 Ra7 (D)

White to play

19 Qb6?

This should have let me off the hook. 19 Be3! wins: 19...d4 20 Nb5 +- or 19...Ba6 20 Bxa7 +-.

19...Rc8?

This was the worst possible way to deal with the threat of Ne5. I considered 19...Bc8?! but thought that it was losing during the game. Not finding anything better, I opted for a much worse move. Some analysis:

a) 19...Bc8?! and now:
20 Ne5! Qxc7 21 Nxc6 Qxb6 22 Nxe7+ Kf8 23 Nxc8! Qa6 24 Nxa7 Qxa7 25 c4 Qa6

25...h5 26 Rb3 +–.

26 Rfc1

This led to me resigning on move 34. The queen was completely dominated by the two rooks, ably supported by the bishop-pair.

In the next example, White did not opt for his only good plan, but later decided he had to when it was too late.
White to play

Jobava – Nakamura

FIDE Grand Prix, Khanty-Mansiisk 2015

After doubling rooks on the c-file and being ready to hop forward with Ne5, White suddenly decided not to embark on his only productive plan. Later he played it a few tempi down.

23 Rg1?

Despite the fact that this move may not look so bad, there is actually no constructive idea behind it. White’s previous play had clearly prepared Ne5. Since that was the plan, it was best to do so immediately; otherwise he risks not having enough compensation for his pawn deficit. With 23 Ne5! White threatens the natural Qd7. Then:

a) 23...Bxg5 24 hxg5 allows White to play Qd7 on the next move.

b) 23...Bxe5 24 fxe5 c5 25 Nh3 allows the knight to come to f4 to good effect.

c) 23...c5! 24 dxc5 b5! is a fantastic case of breaking out in the only way
possible for Black. The white queen does not have a good square to go to. 25 Qd4? loses to 25...Nh5 --+, while 25 Qb4 Bxe5 26 fxe5 Nc6 =+ leaves Black just a little better. Despite this disappointing outcome, the consistent path was White’s best option.

23...Nf7?

Black, for his part, opts for a much more passive move than his obviously intended 23...Nh5!. After 24 Ne5 Qd6 25 Qa3 Qxa3! 26 bxa3 Rc8 27 Rb1 b5 28 Rbc1 c6 White does not have quite enough compensation for the pawn.

Nakamura realized his mistake almost immediately after making it, as you can tell from his next few moves.

24 Qa3?

White fails to come up with a plan and allows Black to revert back to his initial idea. 24 Nh3! prepares Ne5. Then 24...c6 25 Ne5 Bxe5 26 dxe5 c5 27 Qb3 Nh6 28 Bxe7 Rxe7 29 Rxc6 Nf5 = is equal.

24...Kh7 25 Nh3 Nd6! (D)
Black corrects his error on the 23rd move and brings his knight back over to f5.

**26 Ne5 Ndf5 27 b4**

27 Rgc1 a5 28 Qa4 c5 29 dxc5 bxc5 30 Rxc5 Qd6 also leaves Black with a large advantage, but was still White’s best option.

**27...Qd6 28 Qc3 c6**

Black is now a pawn up for minimal compensation and has pawn-breaks at his disposal that allow him to open the game further.

**29 Nf3?**

This is a mistake because it does not deal with Black’s threat of ...a5. 29 Rb1 Rc8 30 Ng1 Nxh4 31 Bxh4 Bxh4 32 Ngf3 Bf6 33 Qe1 Kg8 –/+.

**29...a5! 30 bxa5**

30 a3! axb4 31 axb4 Rfa8 32 Qd2 Ra4 –+.

**30...Rxa5 31 Qd2 Ra3 32 Rgc1 Rfa8 33 Nf2 c5!**

This move helps to open up the position and expose White’s weaknesses on a2 and e3.

**34 dxc5 bxc5 35 Rxc5 Rxa2 36 R5c2 Rxc2 37 Qxc2**

37 Rxc2 Ng3+ 38 Ke1 Ra1+ 39 Nd1 Qa3 –+.

**37...Ng3+ 38 Ke1 (D)**
38...Qb4+

After exquisite play, Nakamura trades off into an endgame that he subsequently converts without giving White any chances.

39 Qd2 Qxd2+ 40 Nxd2 Nf5

Now e3 and h4 cannot both be defended.

41 e4

41 Nd1 Nhx4 42 Bxf6 gxf6 43 Rc7+ Kh6 –+.

41...Bxg5

Black obtains a protected passed pawn on h5 and has very strong knights, while White can hardly move anything.

42 hxg5 Nd4 43 Nh3 Ra3 44 f5

44 exd5 exd5 45 Ng1 Rxd3 –+.

44...exf5?!
44...dxe4! 45 fxg6+ Kxg6 46 Kf2 exd3 —+

45 exd5 Nge2 46 Rc8 Rxd3 47 Nc4 Rxh3

47...Nc3! —+ is simplest, winning a pawn immediately.

48 Ne5 Nf3+ 49 Nxf3 Nf4 50 Kf2 Nxd5

We have reached a very complicated endgame that should be winning for Black, though he only did so on move 80 after allowing White back into the game. The most challenging way for White to defend is now 51 Rb8! Nf4 52 Ne5 Nd3+ 53 Kg2 Nxe5 54 Kxh3 Nf3 55 Kg3 Nxg5 56 Kf4 Ne6+ 57 Ke5 Nc5 58 Kf4 h4 59 Kg5 Ne4+ 60 Kxh4 g5+ 61 Kh3 g4+ 62 Kg2 Kg6 —+.

In the next example, White was completely prepared to push his c-pawn, the pawn furthest away from the black king.

White to play

Carlsen – Nakamura

London 2015
I would be the first person to tell you that it is typically unfair to criticize the play of anyone with a few seconds left on their clock. In this instance though, the ending play is simply bizarre. It looked like the World Champion would push ahead with the simple and consistent 69 c6 and end the game immediately because neither of his pawns can be latched onto.

69 f6??

Now the advancing pawn is much closer to the black king and Black’s a-pawn is able to move out of harm’s way, even threatening to move further forward. Even despite time-trouble, this is a perplexing mistake. When I saw 69 f6?? show up on the board, I assumed that White was playing for beauty, although I had trouble guessing what he overlooked. Presumably he just did not realize that Black would have drawn after 71...Kg6! in the game continuation.

69 c6! wins as follows: 69...Nxc6+ (69...Nb5 70 Bxa6 highlights the fact that the e2-knight is undefended) 70 Bxc6+ Kf8 (70...Kf7 71 Bd5+ Kf8 72 Bc4 +–) 71 Be4 a5 72 Bd3 (White simply walks over to the a-pawn and takes it) 72...Ng1 73 Kd4 Nf3+ 74 Kc5 +–.

69...a5!

Black intends ...a4.

70 a4

70 c6 Nb5 71 Ba6 Ned4 =.

70...Kf7 71 Bd5+ (D)
Now the game finished as follows: 71...Kf8?? 72 Ke4 (White intends Ke3, when he would pick up a knight by playing Bc4) 72...Nc2 73 c6 Nc3+ 74 Ke5 Nxa4 75 Bb3 Nb6 76 Bxc2 a4 77 c7 Kf7 78 Bxa4 1-0.

Instead, the king needed to move up to keep contact with the f6-pawn:

71...Kg6! 72 c6 Nxc6+ 73 Bxc6 Kf7 74 Bb5 Nc3

This ending is an easy draw because Black is able to latch onto both the a4-pawn and the f6-pawn. If the white king ever runs over to the queenside, Black just plays ...Nxa4 Bxa4 and wins the f-pawn with his king.

75 Bc4+ Kf8 76 Bb3 Ne2 77 Ke4 Nc3+ 78 Kd4 Ne2+ 79 Ke5

79 Kc5 Nc3 80 Kb6 Nxa4+ 81 Bxa4 Kf7 =.

79...Nc3 80 Ke6 Ne4 81 Bc2 Nc3 82 Kf5 Kf7

This only leads to a draw despite the extra pawn and the correct bishop for pushing the a-pawn.
In the next example, the central pawn-structure and the black rook on c8 hint to us that the only consistent plan for Black is to try to push the c6-pawn to c5. Astonishingly, Black never carried it out at any point in the game, even though all of his previous play had prepared him for it.

![Chessboard Diagram](image)

Black to play

Grishchuk – Jobava

FIDE Grand Prix, Tbilisi 2015

Black lost this game because he neglected his king position and wasted a lot of time with his pieces, while not paying attention to his standard pawn-break in this structure.

14...Bh6?!

This was only a little inaccurate because of the time expended on recapturing.

With 14...Bg7! Black plans to castle and play ...c5. 15 Bd1 (this gets the bishop out of the way, defends c2, and intends to play c3 followed by g4) 15...c5 16 Nxc5 Nxc5 17 dxc5 Rxc5 18 Qa3 Qc7 19 c3 0-0 (it may look risky to castle here because White can win a pawn by force, but Black obtains a lot of counterplay for it) 20 g4 hxg4 21 hxg4 Ne7 22 Be3 Rc6 23 Bxa7 Nc8 24
Bd4 f6 25 exf6 Bxf6 26 Bxf6 Rxf6 27 Qa4 Rf4 28 Qc2 e5 gives Black excellent compensation for the pawn.

**15 Bxh6!**

White happily trades off his bad bishop, leaving all of his remaining pieces excellently placed.

**15...Rxh6?**

This is a very serious mistake in view of the time wasted by ...Kf8-g7 followed by ...Rh8. During that time, White is able to bring his b3-knight to d6.

After 15...Nxh6! 16 c4 0-0 17 Rac1 Nf5 18 Qd2 Qe7 Black is quite solid though definitely not equal, in view of White’s space advantage and superior pieces. Black can play either ...Rfd8 or ...f6 in the near future and his position will not be easy to break down.

**16 c4 (D)**

![Chess Diagram]

*Black to play*

**16...dxc4**
Black should have kept his pawn on d5 for as long as possible so that White’s knight would not be able to come into d6. That said, 16...Kf8 17 a6 b6 18 cxd5 cxd5 (18...exd5 19 e6 +/−) 19 Rec1 Nb8 20 Be2 +/− also looks terrible for Black in view of the extreme passivity of his pieces and the awkwardness of the rook on h6.

17 Qxc4 Kf8 18 Rac1

White threatens d5.

18...Ne7 19 Qc3 Kg7 20 Nd2 Rh8 21 Nc4 Rb8

After 21...a6 22 Be4 Nf8 23 Nd6 Rc7 24 Qb3 +− White intends Re3. It is unlikely that Black will last long.

22 Be4 a6 23 Red1 Nc8

23...Nd5 24 Bxd5 exd5 25 Nd6 +− is also a clear win for White. Black’s most resilient path is 23...Nf8! 24 h4 Nf5 25 g3 +/−. White intends Rd3 followed by Re1, when he can keep directing more firepower at Black’s kingside.

24 d5 cxd5 25 Bxd5 +−

and White won on move 40.

In the next diagram, Black has a worse position and few active plans. But White’s next move changed all that:
Although it may not be obvious at first glance, White now played a very poor move, which helps explain how the strategic initiative was quickly taken over by Black.

7 Bf4?

This move hurts White’s harmony, puts the bishop on a generally poor square, has no specific idea behind it, and only invites Black to prepare ...e5. It is clear that White will never win a battle for e5. It’s also not clear what winning such a battle would achieve positionally.

If White puts his bishop on a3, he controls the c5-square and makes it difficult for Black to find anything constructive to do while White plays on the queenside. Thus 7 Ba3! is natural, with the bishop exerting pressure over key squares like c5 and e7 and assisting in the general plan of Nbd2, Be2, 0-0 and c5. Most importantly, all of White’s pieces find natural squares and his position is not hard to play. After 7...Nf6 8 Nbd2 0-0 9 Be2 Nfd7 10 0-0 b6 11 Rb1 Bb7 12 Re1 c5 13 bxc6 Nxc6 14 c5 White has some initiative.
7...Nf6

7...Nd7 is also good.

8 h3

This also wastes precious time.

8...0-0 9 Nbd2 Nfd7

Black is now ready to play ...e5.

10 e5 c6! 11 Rb1 Nc5 (D)

So having played his bishop to f4, White felt the need to hem it in with e5 to avoid ...e5 by Black, and allowed Black to put a knight on c5 and dominate the queenside: a shocking turn of events since this was supposed to be where White had more space and manoeuvring room.

Meanwhile Black casually improves his pieces and keeps gaining ground with every move while the f4-bishop watches from Ellis Island.

12 Be2 cxb5 13 Rxb5 Nba6
13...Ra5!? =+

14 0-0 Bd7 15 Rb1

15 Rxc5 is a practical attempt to get counterplay, but it is not very good: 15...Nxc5 16 Nxd4 Qa5 gives Black an even bigger advantage than in the game.

15...Bc6!?

Black methodically improves his position. 15...Ne6 16 Bg3 Nac5 =+ is another approach. The queenside was supposed to belong to White, but Black completely dominates it now.

16 Qc1?

White should have anticipated ...Ne6 coming and moved the bishop back right away.

16...Ne6

It’s amusing how Black completely ignores the wayward f4-bishop.

17 Bg3 Qa5 18 Qb2 Bh6 19 Rfd1 (D)
19...Qc3!

Anchoring the queen on c3 leaves White completely stuck and unable to move anything.

20 a3

20 Rdc1? tries to chase the queen away but fails: after 20...Qxb2 21 Rxb2 a3 22 Rbb1 Bxf3 →+ Black wins easily.

20...Nac5 21 Nf1

21 Ne1 Nb3! is winning for Black as well.

21...Nb3

21...Rfb8! →+ prepares to break open the position with ...b5 and is even stronger than the game move.

22 Bh4 Rfe8 23 N1d2 Nf4 →/+ 

and White lost without a fight and resigned on move 34.

The next example is very surprising. White, an experienced grandmaster known for his positional proficiency, outrated his opponent by over 400 rating points and merely had to find simple and consistent moves to improve his position. Instead he managed to completely congest his own position and nearly allowed Black to equalize fully two separate times due to his inconsistent play.
White to play

Lalić – Pizzuto

Sant’Anna 2015

White has a better structure and superior development. As long as he plays consistently, he should be able to put Black under serious pressure. Since Black has no counterplay here, White just needs to play sound and healthy moves that keep Black passively placed.

13 Rc1

13 Qf3 is a good tactical move, targeting c6 and b5. 13...Bd7 14 a4 a6 15 Rfc1 +/-.

13...Bd7 14 Bb1 Nd5

Black has few ideas besides trying to trade off some pieces and alleviate his cramp.

15 Qc2

15 Bxe7 Qxe7 16 Ne4 e5 looks like something I would play with White, although it does not seem as straightforward as it should be. After 17 Nc5
exd4 18 Qxd4 Be6 19 Nxe6 Qxe6 20 Qe4 Qxe4 21 Bxe4 Rac8 22 Rfd1 +/– it is very likely White will trade into a pawn-up rook ending with good winning chances.

15...f5

Black is forced to weaken his structure a little, although it is not so easy for White to exploit it directly.

16 Bg3

White opts to avoid exchanging bishops to keep additional pressure on Black and force the e7-bishop to move again because it is currently in a passive position.

16...Rc8 17 Qe2

17 a3 is slightly stronger because it allows White to play Ba2.

17...a6

17...Qa5!? 18 Nxd5 cxd5 19 Bd3 a6 20 Be5 +=.

18 Rfd1 (D)
Black to play

White improves his worst-placed piece and may continue with a3 and Ba2.

18...Qe8 19 Be5

This is certainly not a bad square for the bishop, especially if ...f4 ever seemed to be a problem. White was aiming to carry out e4 on the next move. Instead, 19 a3 a5 20 Ba2 was a natural way to improve the position.

19...Qf7

19...Nb6! at least gets in the ...c5 break: 20 Bd3 c5 21 dxc5 Rxc5 22 Bd4 +–.

20 e4

White plays one of his main breaks, but 20 a3! Nf6 (20...Nb6 21 Ba2 +/–) 21 e4 +/– seems more effective.

20...Nb6 21 a3 f4! 22 Rd3?

Although it looks natural to try to stop ...f3 completely, it was stronger just to allow it and instead prevent the knight from coming into c4: 22 Ba2! f3 23 gxf3 Bg5! (23...Qxf3 24 Rd3 Qxe2 25 Nxe2 +/–) 24 Rc2 Bf4 25 Bxf4 Qxf4 26 Rd3 Qg5+ 27 Kh1 Rf4 28 Rc1 +–.

22...Nc4

22...c5 23 Ba2! (23 dxc5?! Nc4 leaves Black better after 24 Bxg7?! Kxg7! 25 Rxd7 Ne5 followed by ...f3 or 24 Bd6 Bxd6 25 cxd6 Ne5 += intending ...f3) 23...c4 24 Rf3 g5 25 h4 Qg6 26 hxg5 hxg5 27 Rh3 g4 28 Rh2 f3 =.

23 Ba2 (D)
Comparing the position to a few moves ago, things have not gone badly at all for Black. He has managed to change the nature of the position and now grabs the bishop-pair. There was no real need for White to allow any or all of these favourable chances for Black.

23...Nxe5?!

23...c5! 24 Bxc4 bxc4 25 Rdd1 f3! 26 Qxf3 Qxf3 27 gxf3 Bg5 gives Black enough counterplay to equalize.

24 dxe5 Rcd8?

Black allows a crucial tactical shot. He should also avoid 24...Bc5? 25 Qg4 +/–, but by throwing in the move 24...f3!! Black gives up a pawn for good counterplay and avoids giving up his bishop-pair: 25 Rxf3 (25 gxf3? Rc7 –/+ allows Black to follow up with ...c5 and ...Qh5) 25...Qe8 26 Rd1 Kh7 27 Rxf8 Bxf8 28 Qg4 +=.

25 Rxd7! f3?

Although this move is bad, it did force White to solve a definite problem on move 29.
25...Rxd7 26 Qg4! was the idea White had in mind: Black cannot defend e6. Then 26...Kh7 27 Bxe6 h5! is Black’s best shot, as it might realistically provoke an error. After 28 Qf5+ (28 Qh3 Rd3 29 Bxf7 is also good for White) 28...Qxf5 29 Bxf5+ Rxf5 30 exf5 +/– White threatens Kf1 followed by Ne4.

26 Qd3! fxg2 27 Rc2

White is a full piece up, so the win cannot be that hard, right?

27...c5 28 Rxd8 Rxd8 29 Qg3? (D)

This move definitely loses some control. Black only has a few simple tricks with which to seek counterplay: he can target f2, try to get in ...b4, or threaten to bring his rook down to d1. With the simple retreat to e2, White would have neutralized them all: 29 Qe2 c4 30 b3 +–.

Black to play

29...c4!

Now 30 b3?! would be met by 30...Rd3 =, but White can still keep a plus:

30 Re2
30 Bb1 Bg5 31 Qg4 also retains an advantage.

30...Bc5

30...Rd3 31 Qg4 h5 32 Qxg2 +/-.

31 Bb1?

This move merely serves to create a tactical weakness on b1. 31 Qg4! Rf8 32 Qxg2 still keeps a large advantage.

31...Qh5?

Black missed a great chance to exploit the weakness of White’s first rank to get in ...a5 and ...b4: 31...a5! 32 Kxg2 b4 33 axb4 axb4 34 Na4 Ba7 35 b3 c3 36 Ra2 Rf8 37 Bd3 Bd4 =.

32 Kxg2 a5 33 Rc2

33 Ba2! Rd4 34 Rc2 +/-.

33...Rd3?

Chasing after the queen in this position only serves to help White consolidate and win. Black should try 33...b4! 34 axb4 axb4 35 Ne2! (35 Na4 Ba7 gives Black very good counterplay) 35...Rd1 (Black goes after the b1-bishop) 36 Nf4 Qxe5 37 Rxc4 Rxb1 38 Qg6 Qxf4 39 Rxc5 Qf8 40 Qxe6+ Kh7 41 Rf5 Qd8 42 Rd5 Qf8 43 h4 +=.

34 f3 Bd4 35 Qg4!

White forces Black’s queen back and prepares to chase the d3-rook away as well. White now wins easily.

35...Qf7 36 Rf2!

With White keeping his extra piece, the position is hopeless for Black.

36...h5 37 Qg5 Be3 38 f4! Rd7 39 Rf3 Rd2+ 40 Kh3 Bc5 41 Nxb5 Rxb2 42
So at the end of the day, White won the game, but this was quite a rollercoaster ride. There was no need to allow Black so much counterplay throughout most of the game, especially seeing how large White’s advantage was in a number of positions if he had simply made simple and natural moves.

The position that follows is very sharp and unbalanced, and started as a 3 f3 Grünfeld.

Up to this point, White has brought out his pieces rapidly, and his bishop on h6 restricts Black and intends Bg7. Meanwhile, Black has carried out a suspicious queen sortie with ...Qb6 and given White a nice spatial grip. In essence, Black is fundamentally playing for tricks, and unless he can get something going with ...Bg1, White should emerge with a comfortable
advantage. This kind of inconsistent and dodgy play with Black is very unlikely to be good. White is just one or two moves away from finishing development, while Black has problems on the kingside dark squares and with his king position. This is a good example demonstrating how our intuition about questionable positional moves and opening logic can assist us in evaluating positions correctly.

13 Qd2!

Now that the f2-square is covered, White’s immediate threats include Bg7, Nxe5 and Bd3.

13 Qc2 (as played in the game) looks very useful because it also prevents ...Qb3 after Na4. However, Black is able to survive thanks to miraculous tactical play: 13...Nd7! 14 Na4 Qa7 15 Nxc5 Nxc5 16 Bg7 Ncxe4!! (this involves the sacrifice of a full rook) 17 c5! (17 Bxh8? is met by the very powerful 17...Qe3+ 18 Be2 Bf5 19 Bxe5 Ng5 –/+ ) 17...Rg8 18 Bb5+ Bd7 19 Bxd7+ Kxd7 20 Bxe5 Rae8 21 0-0-0 Qxc5 22 Qxc5 Ne2+! (this intermediate move saves Black, and of course would have been very difficult to find when playing 16...Ncxe4, but the whole line is so instructive that it is worth showing) 23 Kb1 Nxc5 24 d6 f6 25 dxc7+ Kc8 26 Bxf6 Rgf8 =. The dust has settled and Black will win back the c7-pawn and have equal material. It is understandable that Black should need to display such an amazing level of resourcefulness to neutralize 13 Qc2 after seeing the awkward starting position of this example.

13...Nd7! (D)

13...f6? fails to 14 Na4 +–, while 13...Bg1? 14 0-0-0! is a very strong exchange sacrifice, highlighting the weakness of Black’s king and his dark squares. After 14...Bxh2 15 Nhx2 +– White threatens Qg5.
14 Na4!

14 Bd3 intends 0-0-0 with a major advantage, but Black has the breathtaking reply 14...g5!!, which attacks the h6-bishop with his queen and forces White to capture the pawn by 15 Bxg5. Then 15...a4! prevents White’s threat of Na4 and has ...Rg8 and ...f6 in mind. The goal for Black is to drive White’s dark-squared bishop off the c1-h6 diagonal so that he can play the powerful positional move ...Be3, while 16 d6 c6 17 h4 f6 18 Bh6 Rg8 is equal.

14...Qb3 15 Qd3!

This is a very strong move, preventing Black from capturing on a4 because of 15...Qxa4?? 16 b3. By getting the queens off the board, White consolidates his space advantage.

15...Qxd3 16 Bxd3 Rg8

After 16...f5 17 Nxc5 Nxc5 18 Bc2 fxe4 19 Nxe5 += White’s bishop-pair grants him a comfortable advantage.

17 Bg5!
White threatens the powerful retreat Bh4, driving the g3-knight away. Black has to act quickly to obtain counterplay.

17...f5! 18 Nxc5 Nxc5 19 Nxe5 Nxd3+ 20 Nxd3 Nxe4 21 h4!

This is an exquisite positional move, freeing h3 for the white rook and preventing ...Nxg5 due to the pressure White would then create on h7 down the h-file.

21...c6 22 Nf2! +=

White has ideas like Nxe4 and Rh3 in mind. Even as we head deeper into the endgame, White maintains his better pieces and extra space. Although White had to display a lot of skill in maintaining his advantage, the overall impression of White having a lot of space and better pieces remains.

As the next example demonstrates, sometimes our pawn-structure commits us to logical plans. In what follows, Black made a move inconsistent with his previous play and the solid position he had built up.

Black to play

Melekhina – L. Kaufman
In this typical position, Black made a huge strategic error, giving White an entirely free hand in the centre and improving the passive e2-knight, which would have had no apparent work for the foreseeable future.

17...exd4?

Black gives up almost all of his central control for free. Instead:

a) 17...Nb6!? was the most natural way to improve the knight. Here we can see that the pawn on e5 serves its usual purpose: it prevents White from effectively playing f4 and it limits White’s knights. If White plays f4, Black can take on f4 and strike back with ...f5 in many cases. There’s a reason why e5 is a stronghold in the Ruy Lopez: it is extremely hard for White to prove anything when Black retains such great central control. 18 c4! (18 f4 exf4 19 Nxf4 Nxf4 20 gxf4 f5 = is certainly not worse for Black and may lead to the isolation of both of White’s kingside pawns; 18 d5 Bd7 19 c4 Na4 is at least equal for Black) 18...f6 19 d5 Bf7 (19...Bc8 20 Qc2 is also better for White) 20 a4 += gives White a small edge.

b) 17...f6! is a perfectly sound and healthy move, when Black has no problems at all. The bishop is no longer in any danger and White has no clear plan for making progress. 18 f4! (18 c3 Nb6 19 c4 Qd7 20 Kh2 exd4 21 f4 Ne5! 22 fxe5 fxe5 gives Black full compensation for the piece) 18...Bf7 19 c3 Re8 20 Nc4 Ngf8 emphasizes the extreme solidity of Black’s position, and he maintains equality without a problem.

18 Nxd4 (D)

18 f4! is a worthwhile move to throw in before capturing on d4. Then 18...Ne7 19 Nxd4 Nc5 20 Qf3 puts the queen on a better square than in the game and gives White a large advantage.
18...Nc5

Black gets a square, but it’s not worth anything because he’s attacking an overprotected point and the c5-knight can be challenged by a knight on b3 in the near future.

19 Qc3 Bd7?!

With the bishop retreating, Black has seemingly just given up the entire centre for no reason. 19...Na4! 20 Qe3 Bd7 21 c4 Re8 22 f4 is definitely better for White as well.

20 f4

20 Nf5! +–.

20...f6?!

20...Na4 21 Qc4 Nc5 22 N2b3 +–.

21 N2b3 +/–

and White won on move 47.
In the following position, Black’s most consistent move was to complete his development:

![Chess board diagram](image)

Black to play

**Sargissian – Grischchuk**

*European Team Ch, Reykjavik 2015*

**18...Rc8!**

This is a typical example because Black is just a single move away from equalizing, but he needs to choose this one move carefully. White has a direct threat to b7 and Black has a couple of ways to deal with it. The most obvious is to block on c6 with his knight. The other idea is to improve Black’s worst-placed piece first by bringing the rook to c8, although White gets to improve his king with Kb2 after that. Yet this was definitely the correct choice because White’s only threats involve bringing the knight to d6, which he succeeded in doing in the game. By playing ...Rc8! first, Black causes the d2-rook to be undefended so that Nd6 no longer threatens Nxb7 if there is a rook on d8.
18...Nc6? was the move played in the game, and it left Black passive and unable to get the kind of counterplay he had been seeking. 19 Ne4 Rb8 (19...Ke7 20 Nc5 Bc8 21 Rc2 Bf5 22 Bxc6! bxc6 23 e4 gives White a large advantage; after 19...Rd8?! 20 Nd6 +/– White wins a pawn) 20 Nd6 f5 21 Nxb7! e4 22 Nc5 exf3 23 Nxe6+ Ke7 24 Nf4 fxg2 25 Nxc2 g5 26 h4! h6 27 hxg5 hxg5 28 Ne1 led to an extremely tough endgame for Black, which White converted into victory on move 46.

**19 Kb2 Nc6 20 Ne4 Rd8!**

By entering the endgame, Black easily defends his queenside.

**21 Rxd8+**

21 Nd6 Ke7 =.

**21...Nxd8 22 Nd6 b6 23 Nb5 a5 24 Kc3 Ke7 =**

White is unable to make progress with his king or break through anywhere.

In our final example of the chapter, White was outrated by about 400 Elo points. He committed to a very firm and sound plan, but later backed out of it.
This position occurred after concrete play in one of the main lines of the Nimzo-Indian. Things now get very sharp and White commits to an interesting, yet sound plan.

15...b6! 16 c6!?

White tries to keep his extra material. 16 Nb5 Ke7 is also fine for Black.

16...Ba6 17 g3!? 18 Bh3+!

18 e3?! Rxd4! 19 exd4 Re8+ 20 Kd2 Nxf2 leaves Black with an extra piece
and a small advantage.

18...Kc7 (D)

White to play

19 Rd1?

Suddenly White changes gears and decides not to anchor the bishop on d7 right away. By wasting a crucial tempo, White fails to win the h1-knight in time. This is typical though: very concrete and tactical positions demand accuracy and make you pay the highest price for inconsistent play. One inconsistently used tempo was all it took here for White to lose rather than draw.

After 19 Bd7! Bxc4 20 Rc1 Ba6 21 Kf1 h5 22 Kg2 Nxf2 23 Kxf2 Rh6 24 e4 h4 Black merely has enough counterplay.

19...Bxc4

19...Rd6! 20 Bg2 Nxf2 21 Kxf2 Bxc4 –/+.

20 Bd7 h5 21 b3 Ba6 22 Bh3?

This also showed complete inconsistency in White’s play in a very tactical
position. White put the bishop on d7 to block the d-file and win back the knight on h1. Switching plans repeatedly in such a critical position led to an immediate loss. After 22 Kf1! h4 23 Kg2 Nxf2 24 Kxf2 hxg3+ 25 hgx3 Rh5 –/+ Black has a substantial advantage, but there is still all to fight for from White’s perspective.

22...h4! 23 g4 Rhe8

Now White will suffer heavy material loss. 23...Ng3 –+ is also good.

24 e3 Rd6

24...Re4 25 Bg2 Nxf2 26 Kxf2 Rgx4 –+.

25 Bg2 Ng3! 26 hxg3 hxg3 27 Bf1?

27 Bf3 Rf6 28 Rd2 Re5 29 a4 Bc8 –+.

27...gxf2+ 28 Kd2

28 Kxf2 Rf6+ –+.

28...Bc8 29 Be2 Rxd4+ 0-1

By not following through on his initial plan of Bd7, White wasted time and lost without much of a fight.

When we are committed to an idea, it is often because we have moved a pawn that cannot move backwards or have spent a significant amount of time that will be utterly wasted if we do not execute our intended plan. Make sure you know how much your moves are investing before you play them. If you are fully invested in a plan, be consistent.
12: Critical Moments

Rather than start with tricky definitions, I shall examine the dominant views on critical moments and explain a logical way to mesh them coherently and make more sense of critical moments. It makes sense to start with the two published chess books on critical moments before plunging into my dissection of the subject.

In the book *The Critical Moment*, experienced grandmaster Iossif Dorfman mentions that there are several critical moments per game. Although this is often true, it becomes tricky when you play sharp openings where the evaluation of the position can change on nearly every move. In such cases, seemingly every move could be characterized as a critical moment. His definition of a critical moment is a position at the end of a series of forced moves, or one in which there is a possible structural change or exchange of material. One problem is that some position-types that involve piece exchanges are fundamentally not critical at all. For instance, completely symmetrical positions with all the pawns on one side of the board and no major vulnerabilities for either side. I would include a wide range of other situations in his definition as well. At these critical moments, Dorfman suggests that we play either statically or dynamically. The problem here is that static and dynamic factors are not so black and white: they are almost always intertwined. Very often when we improve a piece or our pawn-structure, it is a good move both statically and dynamically. Although I like the book and the examples he uses, it is tough to decide what to take away concretely from this approach to critical moments because the definition is a bit lop-sided, incomplete and unclear on specific advice. Essentially what he seems to be suggesting is that a critical moment is a very important point in a game where you are justified in going into a long think and should do so, while in non-critical moments, you should not. In the current 90 minute and 30-second increment standard FIDE time-limit, I am really not sure we can justify going into solidly long thinks any time, say, piece exchanges are likely to occur.
In the book *Critical Moments in Chess*, Correspondence IM Gaprindashvili suggested that there are usually two or three critical moments per game. As mentioned above, if you play really sharp openings, most likely there will be a lot more than that. Although there are often just a few ultra-critical moments per game, I do not know where he got those figures from. In the book, he wrote that critical moments arise most frequently during the struggle for the initiative, the development of the initiative (or creation of an attack) and upon the delivery of a decisive blow. I would not refer to critical moments as when you have to deliver the decisive blow. I think that is fundamentally the wrong way to look at it, and doesn’t appreciate static factors in a position well. Amateur players think they have to deliver the decisive blow in a lot of positions where there is no reason to think that one even exists. This kind of advice does not seem to help an amateur player, who probably already suffers from Tal Syndrome.

Certainly many positions are critical when one has only one way to force a win, but it often happens that a large advantage can be maintained without any risk and no critical moment occurs. Narrowing down critical moments to initiative-based events seems to be too simplistic, and misses out on a lot of relevant positional factors such as important piece exchanges like Dorfman mentions. We are also left wondering how to deal with the time factor. Should we go into long thinks only in critical moments like most authors suggest? We can only guess what the author proposes. It seems that he too views critical moments as crucial positions to invest time on. It is hard to understand why they were both so simplistic with their definitions, when chess is so obviously not that simple.

I define critical moments as important points in a game that may be worth spending a lot of time on because the evaluation of the position may be radically altered based on what you choose. In some cases, there simply will not be time to go into a long think if a position is messy and complicated for a long time with sharp attacks for both sides. We are often forced simply to play chess in a practical manner with respect to how we handle our time. Critical moments that I want to focus on involve either a far-reaching piece exchange, an important pawn-structure transmogrification, a crucial piece reconfiguration, a newly-resolved situation on the board, a direct positional threat, a sharp position in which one or both sides may lose immediately, or
where one side (usually Black, if we’re referring to the late opening stage) has to play a move that equalizes or else be worse for many moves, or where White has to find a way to prove an advantage (or at least pressure) or have nothing in the position besides immediate equality. Positions are often critical when the opponent is one move away from completing his development and you may have one last chance to prevent him from doing so.

These are not things that strong players tend to think consciously about though, because they are usually internalized based on what you are looking for in a position and thinking about. You need to gain experience in long tournament games and gradually develop your skill in time management and recognition of the relative importance or criticality of positions. The list of situations I mentioned above is certainly useful, but it probably will not help a lot to follow a set of rules during a practical game. Even if you identify the critical moments accurately after investing some time going through the main characteristics of critical moments, you still need to actually play those critical moments well. For this reason, my main focus with respect to critical moments is in analysis after the game, and in general recognition and awareness of positions to spend time on during games. Hence, discussing critical moments is closely connected to time usage.

Critical moments cannot be discussed without mentioning time-pressure. Most players I know had no problems with time-trouble at all in the old ‘2 hours for 40 moves’ time-limit. Then when FIDE switched to 90 minutes + 30 seconds per move as the default time-limit, there was really no good way to adjust. Almost every player I know ends up in time-trouble a lot. People act as if there is some kind of simple solution to avoid it. I genuinely do not think there is. Calculation takes time at the board and it seems like the old masters had the right idea when they estimated how long a chess game should be so you have time to calculate the moves you are thinking about. Real chess is played at a length that allows for effective thought and progress. Your game analysis should be similar. When the time-limit was shortened, it was done almost exclusively for convenience and excitement at the obvious detriment of quality of play. All of the old advice on time-trouble from books assumed that you got into time-trouble because of an irrational misuse of your time in a longer time-limit. So be careful when reading time-trouble advice from older books, and apply only the ideas that make sense nowadays.
Nowadays with less time to think, you are regularly forced to make a logical comparison of the two best moves you are considering and make the decision either based on some clear logical reason or a strong intuitive thrust favouring one move over the other. When you play a little more quickly, you are able to retain more energy for the end of the game, which is vital since we know that players statistically play about 200 Elo weaker from move 30 to 40 during what is usually time-pressure.

Sometimes you really will not find the best move, even when in peak form. This is nothing to feel bad about. Chess is a very difficult game and it is easy to be misled by the simplicity of some engine moves. In critical positions, it is helpful to grasp your limits and know when you will not be able to calculate or reason out the best move in a position, and therefore will need to make a decision based more on judgement. The point is clearly not to do this all the time, but just in certain cases when you know that an extra ten minutes spent thinking will not dramatically help in solving the position at the board. When effectively applied, this allows you to save time on the clock and will allow you to avoid having to make complex decisions under severe time-pressure. Statistically, and unsurprisingly, people play the weakest chess when in time-trouble in complicated positions.

Elite coach and grandmaster Simen Agdestein gives first priority (in dynamic positions or critical ones presumably) to sacrifices, then checks. He said that, “If you calculate and you have to go backwards with your pieces, you are not dynamically better.” I think what he meant was that if you calculate and there is no specific gain of something, then you are not dynamically better and your initial assessment was wrong if you thought you were better with a direct, forcing line. Many players say you should first look at checks, so I found his distinctions and comments here to be fascinating. Grandmaster Agdestein is a noted expert on deeply understanding piece exchanges and explaining their importance to his students, so it makes sense that he emphasizes looking for favourable exchanges.

I do not find the ‘checks, captures, threats’ (CCT) idea to be very useful for practical players. It causes players to start randomly looking at ten checks whenever the king is exposed, which usually confuses them and puts them into analysis paralysis. There is an over-reliance on checking the king, which
very often just makes the opponent’s king safer. As I tell my students all the
time: only play a move if it actually has logic behind it. If you check a king
just to check it, you might well be chasing it from a dangerous square to a
safe place. I see this in amateur games all the time. This is why people so
often recall Nimzowitsch’s maxim, “the threat is stronger than its execution”.
If the opponent’s king is in a mating-net, be very careful about throwing
random checks at it, because it might just chase it to safety. Check if it leads
to mate, win of material, or some other clear important goal such as putting
the king in a worse position.

Normally practical players get a feeling for the most important moments in
their games that have the most long-term consequences just by playing long
games and realizing which decisions caused them the most suffering or the
most joy. Careful analysis of one’s games is very important in developing
your understanding of critical moments as well; in earlier chapters I have
already emphasized looking for the most important moments in your games
and trying to understand what you got right and wrong in such positions. This
gradually increases your intuition for critical moments and can enable you to
develop your own ideas about how to handle critical moments. This process
may cause some players to admit to themselves that they cannot accurately
calculate or evaluate some positions so well, and need to make decisions
based on other methods, such as simple comparison of their top two
candidate moves.

Let’s see an example of a position that I consider to be a critical one.
This position is critical because White has a clear positional threat (e4 followed by Rc7) and Black only has one or two moves to make before his development is completed and he has a good position.

16...Ba6?!

I thought I would succeed in completing development and quickly challenging the c-file with a rook. What I missed is that putting the bishop on d7 avoids any tempo-gaining moves that target e7 or e6 and enables Black to challenge the c-file much more effectively. With 16...Bd7, Black would like to play ...Ba3 followed by putting a rook on c8, when he can win the fight for the c-file. After 17 e4 Nf6 18 Rc7 Rfc8 19 Rdc1 Bd8 20 Rxc8 Rxc8 21 Bg5 fxe4 22 fxe4 Kf7 23 Rxc8 Bxc8 Black intends ...h6 followed by ...Bb7 and this may slightly favour him. Although White technically has an ideal pawn-centre, he cannot easily advance either of the pawns without creating weaknesses.

17 e4 Nf6 18 Rc6
Now the e6-pawn becomes awkward to defend.

18...Kf7?! 

I did not anticipate the problems that I would face on the e6-square in the game. I had to admit my error and retreat the bishop. Coming back with 18...Bc8! looked too slow during the game, but does actually emphasize how solid Black’s position is. 19 e5! (19 Bg5 Ba3 20 exf5 exf5 21 Bxf6 gxf6 22 f4 Bb7 23 Rc7 Bxg2 24 Kxg2 Rfc8 =) 19...Nd5 20 f4 g6 leaves Black with a completely satisfactory position where White’s bishops and b3-knight cannot make any real headway.

19 d5 

I completely missed the power of this d5 push, which opens lines for the g2-bishop and makes way for the b3-knight to hop to d4.

19...exd5 20 e5 (D)

\[
\text{Black to play}
\]

This is the key idea. Black’s knight is forced back to no man’s land.

20...Ne8?
This leaves a8 undefended so that ...Bc4 is no longer an anchor to secure my position to a small extent.

20...Ng8! looked bad to me in the game, but seeing the idea of playing ...Bc4 followed by ...Ba3 makes a lot of sense of these moves now. 21 f4 Bc4 22 Rc1 Ba3 23 Rc7+ Ne7 24 R1xc4 dxc4 25 Bxa8 Rxa8 26 Rxc4 Nd5 27 Kf2 gives White a very modest advantage.

21 f4 Rd8 22 Nd4

White’s positional domination is incredible here.

22...Bb7 23 Rdc1

White just wants to play Ne6.

23...Bc5?!

23...Kg8 24 Ne6 Rb8 25 Bxd5 Bxc6 26 Rxc6 Rf7 is still clearly better for White because he will be able to regain the exchange and have a strong protected passed pawn with equal material afterwards.

24 R6xc5 bxc5 25 Rxc5 Kg6??

Not finding any decent move, I simply blundered and resigned immediately. 25...Rb8 26 Bb4 +–.

26 Ne6 1-0

Various thinking methods such as the method of elimination and the method of comparison often make navigating through critical moments a lot easier. The simplest example of the method of elimination is when your opponent threatens mate in one and you realize that only one move avoids immediate mate. Under those circumstances, obviously you should play that move immediately. The simplest example of the method of comparison is when you have two very similar moves, but one of the moves has a clear advantage over the other, with no drawbacks at all. In that case, obviously you would
want to choose the more advantageous move. This is one of those instances where very simple logic is applied in chess. It is easy to apply when one move has advantages that the others do not, or one move has specific disadvantages that other moves do not and can be discarded right away. For instance, with a choice of two moves that seem similar but one of them leaves you with a ‘superfluous’ knight, as a matter of principle, you may want to avoid it.

To create critical moments for your opponents more often, try to make choices that render it difficult for your opponent to find moves. Sometimes I see a forced series of exchanges that makes it easy for the opponent to play, but by keeping more tension, I can maintain roughly the same evaluation of the position but quite a lot more difficult decisions for my opponent.

In highly concrete positions (that is, ones where everything depends on calculable specifics), the evaluation of the position can hinge dramatically on a choice between several natural-looking moves. This is important to be aware of when you have a massive advantage, as you may want to avoid making things concrete and more difficult for yourself if there is a way to win with no risk. Concrete positions tend to feature one side with the initiative. When we have the initiative, the position usually becomes easier to play because we can frequently make direct attacks on every single move that are not hard to find. This is one reason why 2200 players most often beat grandmasters after obtaining an initiative that allows them to find ten strong moves in a row. Positions can become easiest to play well when defending a concrete position too, because concrete positions with only one move good cause almost all players to play above their strength and find the ‘only’ moves through process of elimination. This is useful to be aware of, especially when playing much weaker or much stronger opposition: this fact may guide you towards or away from certain positions as a result. As the weaker player, we often want to force the play and make it more concrete if we are statically worse and under pressure.

One of the most obvious reasons why you should generally not play too quickly in the opening is that critical positions can arise and pass right by you. Making quick moves at critical moments can easily change the evaluation of the position in favour of your opponent. The idea of playing
quickly in the opening to save time for other phases is common at elite grandmaster level, but only works for them because of their extremely high level of play to begin with and their familiarity with the positions they are playing. When they play quickly, they are almost certain that the moves they are playing are not poor ones. They also sense critical moments extremely well, which helps them focus on when to go into their deepest thinks. Amateur players should be more cautious. On the first move out of your concrete opening knowledge, it is worthwhile to go into your first real think and try to understand the position well.

As discussed earlier, sometimes we reach positions where we will not be able to figure out for certain which of two moves is stronger at the board. It is important to realize this and to make a practical decision on positional factors or comparison. Even Boris Gelfand, who was in the top five in the world for a lot of his career, frequently said he had no idea what move was best in a number of games. This is not a matter of lack of confidence at all. It is simply an admission of the fact that chess is a very difficult game and in some positions thinking for fifteen minutes will not give us any clear answers about the best move. You will have to figure out which types of positions you fail to play good moves in after long thinks through introspection and thinking about the errors you made in your past games.

Dr Kenneth Regan’s analysis and reports showed that slightly more than 70% of positions have one single best move according to the computer. Furthermore, in about 20% of cases, the second-best move is just as strong as the top move for practical purposes (e.g., a +.05 difference does not mean much), so it seems fair to say that only 50% of positions in chess have one best move. That does not sound like a lot, all things considered, when you think of how much instructional chess material tries to equate all positions to strictly solving a unique problem. This fact emphasizes the importance of practical chess, and not getting bogged down in trying to find the absolute best move too often, especially in time-trouble. Not only will you not solve many difficult problems at the board even in your best form, but in many cases there is no unique solution to find anyway. Believing you can play perfect moves in chess is actually a lack of objectivity.

Let’s look at some more examples of critical moments. The first highlights
pawn-breaks. If a break cannot be stopped, then you often have time to continue development or improve your pieces before playing it. However, if the opponent has the potential to permanently stop your best pawn-break, then carrying it out is time-sensitive.

**Black to play**

**Svidler – Gelfand**

*Jerusalem rapid 2014*

This position is critical because Black has to make a crucial decision about which pawn-break to aim for in this semi-closed position. The opening phase is over and Black has a chance at equalizing if he can make the right strategic choice. White has the bishop-pair and is planning to increase the scope of his unopposed bishop by playing a4-a5-a6. Black needs to choose how he wants to strike back at the centre and get some counterplay. The main options are 16...c5, 16...e5 and 16...f5.

16...f5?

16...e5! is best, as it increases the g7-bishop’s scope while shutting out the g3-bishop. 17 dxe5 Bxe5 18 f4 Bc7 19 Bf3 (19 e5 Rad8 =) 19...a5 = leaves Black equal.
Although 16...c5!? is not best, it is still stronger than the game move. Black desperately needs to fight for counterplay by increasing the scope of his g7-bishop, which is rather shut out from the play. 17 dxc5! (after 17 Qa3 Rfc8 Black intends to put the bishop on f8 to defend the c5-pawn) 17...Qxc5 18 Rac1 Qa5 19 Rc7 += leaves Black defending for a long time.

17 a4! fxe4 18 a5 Nd5 19 a6 b6 20 Qc2 c5

20...Rac8 21 Qxe4 Qd7 22 Rac1 Rf5 23 Rfd1 +/–.

21 dxc5 bxc5?!

21...Qxc5 22 Qxe4 Qe7 23 Rab1 is clearly better for White but much more defensible than the game continuation.

Now (after 21...bxc5?!) the simple 22 Ra5! would have given White an objectively winning position.

The following position is critical because White has developed all his pieces and Black is one move away from repelling the attack.
If Black just gets one free move to snag the e6-pawn, the position will be equal. If White is going to make something happen here, it must be right now, and he must consider all of his possible threatening options that may exploit the energy of his pieces.

26 e5!!

This combination works because the a8-rook is undefended, so Qf3 can be played with tempo. White has the crucial move Nf7 in a number of lines, which only works because the white queen is able to come to f3 (and later g4) while attacking something. The knight being stranded on a5 so far away from the action on the kingside plays a major role, and the tragic position of Black’s king is the whole reason White is able to sacrifice material for this attack. In a number of the variations below, the pawn-shield covering Black’s king gets ripped open and there is no way to defend.

In the game, 26 Qf7+? Qxf7 27 exf7+ Kh8 28 Nf3 Nc4 was equal.

26...dxe5

26...hxg5 27 exd6 Qb7 28 Qf5 shows sheer dominance and allows the white pawns to roll through.

27 Qf3 Nb7

Or: 27...Nc6 28 Nf7 Nxe6 (28...Rc8 29 Qg4 +–) 29 Nxhr+ gxh6 30 Qg4+ +–; 27...Qb7 28 e7! Qxf3 (28...hxg5 29 Rd8! is perhaps the most amazing line of this analysis, showing just how overloaded the black queen is) 29 Nxf3 Ne6 30 Nxe5 Re8 31 Rd7 g5 32 Rxa7 +–.

28 Nf7 Nxe6 (D)
White to play

29 Nxe6+!

This is the whole point. White exposes Black’s king and then attacks the e6-knight with tempo.

29...gxh6 30 Qg4+ Ng5

This is the only line which maintains material equality, so it makes sense to consider it as the main continuation. After 30...Kf7? 31 Qf5+ Ke7 32 Qh7+ Ke8 33 Qg8+ Nf8 34 Rf1 +– White picks up the f8-knight.

31 Bxg5 Qg7 32 Qe6+ Qf7 33 Qxh6 Rf8 34 Qh4 +–

Despite equal material, White is winning due to the threat of Bh6. Black’s completely exposed king cannot survive against White’s active attacking pieces.

This next position is taken from a blitz game on ICC in 2014.
This is a very appealing exercise because statically White is dominating the position. Given the chance to play e6, the game may end abruptly.

1...c5! 2 dxc6!

2 Qf4 is met by 2...g5!. Playing moves like ...c5! and ...g5! in a row like this may seem shocking, but they are in fact forced because White cannot be allowed to dominate the board with a centralized queen supporting a huge pawn-wedge. Black is much better after 3 Qa4 Nxe5 –/+ or 3 Qf5 Bc8! –/+ – this is the point, winning the e5-pawn.

2...Bxc6 3 Rad1 Bxg2 4 Kxg2 Qc6+ 5 Qd5 Nb8 =+

In the end, White’s isolated pawns cause him to be slightly worse.

In the following critical moment, Black needs to choose between various pawn-breaks.
Black to play

12...c5!

By playing this move, Black makes sure that White’s king will not find a safe haven. If White castles queenside then Black will have the open c-file to work with. Other moves:

a) 12...e5 is a reasonable-looking try, but the problem is that White can just leave the pawn on d4 and Black has no effective counterplay: 13 g5! (13 0-0-0 exd4 14 exd4 b5! gives Black superb counterplay on the queenside thanks to the hook on a3 that makes it easy for Black to open lines on that wing) 13...Nd5 (13...Ne8?! 14 h4 +/–) 14 Nxd5 cxd5 15 Bxd5 Qxg5 16 Bxb7 +=.

b) 12...Nd5 was played by Ehlvest (in 1986) and Sedlak (in 2007). One problem with the move is that the d5-square is not a stable post for the knight because it can be chased away by e4. White also has a free hand to put his knight on e4. 13 h4 Qb6 14 0-0-0 leaves Black struggling for equality, while 13 Ne4 also deserves consideration, as in Bartel-Sedlak, European Team Ch, Khersonissos 2007.

13 0-0-0

Playing for an attack and trying to exploit the bishop-pair is one of the most
challenging attempts here. Other moves: 13 g5 Ne8 14 h4 cxd4 15 exd4 e5 16 Be3 exd4 17 Bxd4 Ne5 =; 13 0-0 Rc8 14 Bd3 h6 15 Rad1 cxd4 16 exd4 Nb6 17 Ne4 Nfd5 =.

13...Rc8 14 Ba2 Be7!

This move may look passive and mysterious, but it is actually a subtle piece of reciprocal logic aimed at actively lashing out with ...b5! in a way that does not leave the bishop attacked after Nxb5.

15 Kb1 b5! 16 g5 Ne8 17 Nxb5 Qb6 18 Nc3 Rb8 19 Bc1 cxd4 20 exd4 Bxg5 =

In our next example, Black needed to decide if a pawn could be captured or not. The consequences were very important for the overall outcome of the game.

Black to play

Vallejo Pons – Ponomariov

Bilbao 2014
In this fairly simple position, it looks like Black is about to solve most of his problems by playing ...bxc5, intending ...Na5 in most cases. A short draw seemed a probable result until...

19...f5?

This is clearly a positional error. Rather than fighting for concrete squares and provoking weaknesses in White’s camp, Black provokes an exchange which just gives White a knight that dominates a bishop.

19...bxc5! is correct. This move can be played as long as you convince yourself that Qb5 or a rook move to b1 doesn’t win immediately. Since it requires fewer than 5 ply of calculation to realize that, it’s hard to understand why this move wasn’t played. 20 Rfc1 (20 Rfb1 f5! is also definitely not bad for Black; 20 Qb5 Na5! 21 Bxb7 Rfb8 was not particularly hard to see, when Black is at least equal) 20...Na5! 21 Bxb7 Nxb7 22 Rab1 Na5 23 Rxc5 Nb3 24 Rc3 Qxa3 = and Black is definitely not worse.

20 Bxc6! Bxc6 21 Ne5

Vallejo beautifully dominates the game from this point forward. The bishop on the long diagonal is exposed, has no targets, and easily gets manhandled by the knight.

21...Bd5 22 Rfc1! Rfb8 (D)
23 Nd3!?

This was a very unpleasant move for Black to face in a practical game, but objectively 23 f3! is better: 23...Qd8 (23...bxc5, seeking activity down the b-file, is met by 24 Rxc5 Rb3 25 Rac1 h6 26 Rxc7 Qg5 27 f4 +=) 24 Nd3 +=.

23...Bb7?!

Black had better options, but nothing that solves his problems completely. 23...bxc5 24 Rxc5 Rb3 25 Nb4 gives White free rein to press for many moves, while after 23...b5 24 Qh5 White still retains a small plus in view of the idea of Re1 followed by f3 and e4.

24 Nb4 Ra5

24...Rf8 25 Rc3! +/– gives White a very large positional advantage.

25 c6

Now Black’s light-squared bishop is a sorry sight.

25...Bc8 26 e4! fxe4?!
26...e5 27 d5 is also bad for Black, while 26...Qd6 27 Rd1 fxe4 28 Qxe4 +/- leaves Black completely bound up.

**27 Qxe4 Ba6**

After 27...Qd6 28 Re1 it’s unlikely that Black can survive.

**28 Rc3 +–**

and White won on move 42.

The next position was featured in the Rowson’s book *Chess for Zebras*. The verdict on the opening should hinge on concrete play in the centre.

![Chessboard diagram](image)

*White to play*

**T. Petersen – Rowson**

*Torshavn 2000*

It is important to point out that Black has the bishop-pair here and his unopposed bishop on g7 is hoping to break out with an effective ...e5 or ...c5 advance. Playing ...d5 and castling first before executing the pawn-break
makes a lot of sense.

10 f4!?

This seems an improvement over the game continuation. White plans to follow up with Qf3 and 0-0-0, but may also include the move e4 if Black doesn’t prevent him from doing so.

Rowson praised 10 a4?!, but it is actually a rather ineffective solution in view of 10...Qe7 11 f4 f5 12 a5 0-0 13 Qe2 c5 =+. White does much better to counter Black’s main central breaks to activate the g7-bishop, as in our main line with f4, Qf3 and 0-0-0. Under those circumstances, White is well-placed to counter Black’s thrusts.

Other moves: 10 Qf3 (as played in the actual game) 10...0-0 11 0-0-0 c6 12 Nb3 d5 =+; 10 Be2 0-0 =+.

10...0-0

10...Qe7 11 Qf3 f5 12 fxg5 Qxg5 13 0-0-0 Nf6 14 Be2 d5 =.

11 Qf3

11 Qe2!? d5 12 0-0-0 c5 13 fxg5 Qxg5 14 Nf3 Qe7 15 g4 b5! =.

11...f5!

After 11...d5 12 0-0-0 (White intends e4) 12...c5 13 Be2! a6 (Black wants to get in ...b5 as soon as possible) 14 fxg5 Qxg5 15 Rh5 Qf6 16 dxc5 Nxc5 17 e4! d4 18 Rxc5 dxc3 19 Rxc3 Bd7, despite White’s extra pawn, Black is able to hold a dynamic balance with ...Bc6 in view of his bishop-pair and White’s three isolated pawns.

12 g4 Nf6 13 gxf5 g4 14 Qf2 exf5 15 0-0-0

White threatens e4, so Black’s best way to equalize is the simple 15...d5! =.
The following position is critical because Black is one move away from equalizing. White needs to decide if he can create any threats or needs to acquiesce to simplifications and an equal position.

White to play

Parligras – Makolli

European Team Ch, Reykjavik 2015

It looks like Black may even be pushing White back, with ...e5 and ...Bb4 in the pipeline. White has to check carefully to see if there are any ways to keep his initiative going.

18 Nxe6!?

White’s only chance to fight for a pull is the capture on e6, which looks hard to believe because the c4-bishop is threatened and this places another piece under attack. Other moves:

a) 18 Bf1 e5 19 Rxc8 Rxc8 20 Nf5 Bb4 21 Rf2 g6 22 Nh6+ Kg7 23 g4 Ng8 is objectively equal, but may be a little harder for White to handle.

b) 18 Be2 was the move actually chosen in the game. Then 18...Rxc1+?! 19
Nxc1 Rc8 20 Nd3 gave White slightly the more comfortable position, and he eventually won. 18...e5! is a much better fighting move: 19 Nf5 Bb4 20 Rdc2 Rxc2 21 Rxc2 Rc8 22 Rxc8+ Bxc8 23 a3 Bf8 24 Bc1 Be6 25 Bd1 Nd5! (a nice move that keeps the initiative; Black threatens ...Nf4) 26 Na5 Bc5+ 27 Kf1 Bxf5 28 Bxa4 Bd7 29 Nb7 Bd4 30 Bc2 Ne3+ 31 Bxe3 Bxe3 32 b4 Bc1 33 Nc5 Bc8 34 Nd3 Bxa3 35 Bb3 Kf8 36 Ke2 a5 37 bxa5 Bd6 =.

18...Rfe8

This is an excellent counter. Black threatens both the c4-bishop and the e6-knight. Luckily, White has one more trick up his sleeve.

Black had numerous captures to try here, but White has good tries for an advantage against most of them:

a) 18...fxe6? 19 Bxe6+ Kh8 20 Bxc8 Rxc8 21 Rxc8+ Bxc8 (in this structure, White’s protected passed e-pawn is very strong and Black is unable to prevent the white rook from penetrating to c7) 22 Rc2 Bd7 23 Rc7 +–.

b) 18...Rxc4 19 Nxf8 Rxc1+ 20 Nxc1 Kxf8 21 Nb3 +=.

c) 18...Nxb2!? is a shocking move that threatens ...Nxc4. 19 Rxb2 Ba3 20 Nxf8 Bxb2 21 Rc2 bxc4 22 Nc5 Ba3 23 Nxb7 (here Black has the two isolated pawns on the queenside and White is slightly better) 23...Kxf8 24 Na5 +=.

d) 18...bxc4 19 Nxf8 c3! (a fantastic intermediate move, sacrificing the pawn to keep the c-file closed; 19...Bxf8 20 Na5 c3! 21 bxc3 Ba8 22 Rcd1 +=) 20 bxc3 Kxf8 21 c4 Bc6 leads to a dynamically balanced game because Black has the bishop-pair, his king is close to the centre for the endgame, and White’s c-pawn is not dangerous.

19 Nc7! (D)
Black to play

This is the crucial follow-up: due to Black’s poor king position, he has to opt for something besides 19...Rxc7?.

19...bxc4!

19...Red8? allows 20 Rxd8+ Bxd8 21 Nxb5! axb5 22 Bxb5 Rxc1+ 23 Nxc1 Nxb2?! (23...Bb6 24 Bxb6 Nxb6 25 a4 +/-) 24 Bd4 Nd1 25 Be2 +–, beautifully trapping the d1-knight.

20 Nxe8 Nxe8 21 Na5 c3!

This is a typical example of provoking a pawn-weakness: the pawn was going to be lost anyway, so it might as well be desperadoed away to leave White with two isolated pawns on the queenside. 21...Bb4 is easier to handle: 22 Nxb7 Bxd2 23 Bxd2 Nxb2 24 Kf1 +–.

22 bxc3 Ba8 23 Rd7 Bd8 24 Nb3 Nc7! 25 Rd4 Bc6! 26 Na5 Be8 27 Nb7 Ne6 28 Rd2 Be7 29 Nd6 Ra8!

29...Rd8 30 Nf5 +–.

30 Nxe8 Rxe8 31 Rd7 g6 32 Kf2 Ba3 33 Rc2 Rc8 34 c4 Kg7
and Black finally equalizes.

In this example, the position was critical and the difference between the best and second-best move was quite meaningful, thus justifying a serious expenditure of time at the board.

Critical positions come in many forms, but in every instance we can justify a meaningful think in the position because it may make a big difference to the outcome of the game.
13: Sports Psychology in Chess

The sporting side in chess is not often discussed, but it would help every player to think about his sporting performance objectively and look for ways to improve.

Goal Setting

Professional players need to think about how they manage themselves in between titles mentally and continually create goals for themselves. I would say I did not think very much about titles. When I became a FIDE master I knew that I was breaking 2300 and I knew I was at that level and there was nothing to worry about. Becoming an IM was a different thing because it does not happen overnight. You need to work really hard for the norms and for the rating. I tried not to think about it too much because thinking about it just makes you more nervous. You just want to go out there and, move by move, play the best moves that you possibly can.

My goal now is to help players improve as much as possible and pursue the grandmaster title at a later point since I have not played seriously in a long time. My short-term goals are usually on a day-to-day basis and very practical and achievable, such as writing an article by a given deadline or reading five pages of a book and completing certain physical exercises.

It is important as a chess-player to understand some established ideas in psychology. For the most part, I feel the best if I think I gave it my all at the board and played as well as I could have at the time. If I do so, I know that the results will come and I am doing the most I can to get the outcomes I want.
Pre-Performance Routine

Players need to establish a routine in chess, not necessarily one that is different just prior to events. This is a largely misunderstood topic. In most cases, my more active students will be playing constantly, so we will do everything the same way all the time. Many players think it is necessary to study like crazy and be fully prepared in every single line before an event. I do not think it is really like that so much. You should get an idea of what variations you want to play, test some lines online a little and it is perfectly fine to spend a full day before the tournament not doing anything related to chess. It is really important to make sure you get a solid amount of sleep each night during and before a tournament. Before each game, do things that relax you, give you more energy, help you be alert, remove nervousness and remind you what you are capable of.

Anxiety Control and Stress Management

“If you fall prey to the temptation to constantly search for something positive to grab on to in hopes of eliminating, hiding, or concealing negative emotions, you will lose in the game of life. You cannot get rid of the negative emotions without unintentionally squelching happiness, meaning, grit, curiosity, maturity, wisdom, and personal growth. Choose to numb the negatives and you numb the positives too.” – Todd B. Kashdan and Robert Biswas-Diener in The Power of Negative Emotion. It is imperative to identify, use, understand, and manage emotions in positive ways to relieve stress and overcome adversity. I propose developing a strategy for relieving stress and overcoming adversity if you naturally have trouble with it. Apply logic to your emotions.

As a coach, five of the most common psychological problems my students experience during their games are the following:

1. Being quite moody during some games.

2. Letting previous games affect the present game.
3. Getting very affected by a mistake in the middle of the game that affects subsequent quality adversely.

4. Underestimating opponents.

5. Being too easily satisfied with a draw against higher-rateds instead of pushing hard.

Of course, there are no instant solutions to all of these psychological problems, but just being aware that you are doing some of these things will help you consciously attempt to come up with a strategy for dealing with them. Personally, I got over my moodiness by largely removing ego from my game and focusing almost exclusively on one decision at a time. I deal with losses well by getting the loss out of my system or remembering the experience of winning by playing some blitz games online. The psychological issues with specific opponents tend to be dealt with most easily through immersion and simply trying to set the most problems for your opponents. Players who have difficulty spotting their opponents’ counterplay, for instance, need to think more consciously about the question “What is the opponent’s idea?”

Coping with must-win situations and severe time-pressure in chess can cause serious mental strain on you. Fortunately, I haven’t been in that many must-win situations. Most of the time I approached them rather casually. I followed the advice of Kasparov, which he applied in game 24 of his 1987 world championship match against Karpov: play calmly and try to put the opponent under some pressure and see if I can make my opponent make some mistakes and play the game down to the very last pawn. Of course, given that a draw and a loss are nearly equivalent outcomes, one will aim to unbalance the play if possible in must-win situations, but I do not fully advocate playing extremely risky or dubious lines when you have to win if your opponent may realistically refute them. There is almost nothing worse than losing in 20 moves in a must-win game and wondering what would have happened had you just played a calm, long game and challenged your opponent and forced him to make the most difficult decisions possible. In essence, must-win games are not all that different from how you should usually play, except that you might take slightly more risk in certain areas, but it should not be done at the detriment of quality.
Against solid play, a much stronger player is likely to be frustrated and not able to do anything against it. To deal with the stress of playing stronger opposition, it can help not to think in terms of playing for a draw or playing passively, but rather think of yourself as playing actively but conservatively if your intention is to play solidly. If you think of your own play as active and based on seeking the initiative, it is much easier psychologically to play powerful moves without fear. Go into these games with the intention of improving your awareness in all aspects and of playing the absolute best chess you can.

Develop an understanding of yourself and your own limitations. For example, if you have observed, from experience, that if you think more than five minutes about a particular move you nearly always end up playing that move, thinking for fifteen minutes in such cases may just waste time and be you rationalizing the move to yourself even though you know you are going to play it anyway.

Evaluate the position objectively before taking a draw against a higher-rated opponent. After all, it may be your only chance the whole year for a fantastic scalp. Gradually this should allow you to overcome the fear and pressure that you may normally feel in this kind of a situation.

As the higher-rated player, it is important not to give out draws too easily as well, and to have the mental fortitude to keep the opponent under pressure for a long time. I shall now offer a few examples of a grandmaster giving out draws far too easily to weaker opponents.

**Vašiček – Lalić**

*Tabor 2014*

In this game, Black made the mistake of agreeing a draw against an opponent hundreds of Elo points weaker in an unbalanced position while not having any weaknesses in his own camp. He may have been irrationally afraid of something, but it was important to look at the structure calmly and evaluate the position objectively before giving in and offering a draw so meekly. This game had exactly the kind of final position one would expect a grandmaster to win against weaker opposition: he gets to press for free and without any
real risk.

1 d4 Nf6 2 Nf3 e6 3 Bg5 h6

3...c5 is also a good line, while 3...Be7 is OK for Black too.

4 Bh4

4 Bxf6 Qxf6 5 e4 is a main-line position that can arise from both the Torre and the Trompowsky.

4...d6 5 Nbd2

5 c3 g5 6 Bg3 Nh5 is another direction in which the play could head; Black intends to put his bishop on g7 and eventually grab the bishop-pair.

5...g5 6 Bg3 Nh5 7 e4 Bg7 8 c3 Qe7?!

Black wastes time with his queen instead of playing more directly with castling and ...f5 or ...c5, viz. 8...0-0! 9 e5 (9 Bd3 f5 10 Qe2 is an alternative) 9...c5 10 exd6 cxd4 would have equalized with active play for Black.

9 e5

After 9 Bd3! e5 10 Nf1 White intends Ne3, which eyes d5 and f5. 10...Nxe3+ 11 hxe3 exd4 12 Nxd4 Nc6 gives Black enough counterplay to hold the balance.

9...Nxe3 10 exd6 (D)

10 hxg3 Nc6 11 Bb5 Bd7 12 exd6 cxd6 13 0-0 h5 14 Re1 d5 leaves White’s kingside a little awkward to defend.
10...Qxd6?

Taking on d6 with the queen is positionally bad because it makes it much harder to increase the scope of Black’s unopposed bishop on g7 by playing ...e5. Taking back with the queen also costs Black multiple tempi, and avoids improving Black’s structure the way the pawn capture would have done. 10...cxd6! 11 hxg3 Nc6 12 Bd3 h5 13 Qe2 Bd7 14 0-0-0 g4 15 Nh4 0-0-0 =.

11 hxg3 b6

11...Nd7 12 Bd3 c5 13 Nc4 Qc7 14 Qe2 b5 15 Ne3 +.

12 Bd3 Bb7 13 Be4?!

13 Nc4! Qe7 14 Nce5 h5 15 Qa4+ Kd8 16 g4 +.

13...Bxe4 14 Nxe4 Qd5 15 Qe2 Nd7 (D)
And a draw was agreed.

\[ 1/2 - 1/2 \]

With so much material on the board and no threats for White, it is strange for a grandmaster with Black to accept a draw against someone over 340 Elo points lower rated. Let’s consider some likely continuations.

16 0-0 0-0!

16...0-0-0 17 c4 Qb7 18 Rad1 g4 19 Nh4 Rhg8 20 b4 Kb8 21 b5 Nf6 22 Nc3 may offer White a slight grip.

17 c4 Qa5

17...Qf5 18 Rad1 Rfd8 is a tense, balanced position where Black has everything to play for. Among other reasons, his g7-bishop being the best minor piece on the board is a very good basis on which to keep playing.

18 Rfd1 g4

18...Rad8 19 Rd3 c5 20 Rad1 Nf6 =.
19 Nh4 Rfe8 20 Nc3 Nf6 21 Nb5 Rac8 22 a4 Qa6 23 Qc2 Qb7

This is a position a grandmaster has to play out against a weaker player.

Oddly enough, the same players actually played again and agreed another short draw in a position that should have been played out by the stronger player. Sometimes we do not know what to do or simply feel uncomfortable in certain positions, but this is no reason to give up all hopes of winning the game in a position that is not worse for you. Surely sometimes there are reasons for accepting a relatively short draw, such as gain of substantial rating, the position genuinely being very hard to win, or severe time-pressure. In the previous game and the next one, Black had plenty of winning chances and no objective problems and should have continued normally for a win.

Vašiček – Lalić

Tabor 2015

1 e4 c5 2 c3 Nf6 3 e5 Nd5 4 d4 cxd4 5 Nf3 Nc6 6 cxd4 d6 7 Bc4 dxe5 8 dxe5 Ndb4

This is actually quite a good fighting line, making it awkward for an unprepared player with White to navigate the position.

9 0-0 Qxd1 10 Rxd1 Bg4

Now Black threatens ...Nc2. The immediate 10...Nc2?! 11 Na3! Nxa1? loses to 12 Nb5.

11 e6

White sacrifices a pawn to double his opponent’s e-pawns and try to make it difficult for Black to complete his development. 11 Nc3! Bxf3 12 gxf3 Nxe5 13 Bb3 a6 14 Nd5 Nxd5 15 Bxd5 Nc6 16 Be3 e6 =.

11...fxe6 12 Nc3 Rc8
12...g6! 13 h3 Bxf3 14 gxf3 Nc2 15 Nb5 Kf7 16 Nc7 Rd8 is slightly better for Black.

13 Bb3 g6 14 Be3?! (D)

After 14 h3 Bxf3 15 gxf3 Rd8 16 Be3 Bg7 17 Rxd8+ Nxd8 18 Bxa7 Rf8 Black gets his worst-placed piece into the game: 19 Kg2 Rf5 =.

Black to play

½-½

Once again, the game should not have ended in a draw here.

14...Bg7!

Black has plenty of pieces left on the board, an extra pawn and easy development, so of course he should not agree a draw against a player 320 Elo points lower rated than him. Despite the fact that White looks solid and active, it was necessary to complete development and see how White would continue. This is a typical spot where a weaker player with White would start to go wrong.

15 Rac1 Rf8! 16 Ne4 Nd5 =+
Tournament chess makes many players nervous, as the previous examples showed. Effectively dealing with our stress at the board is necessary to play our best chess, so it is worth thinking seriously about strategies for doing that. Tournament chess takes a lot of time and is stressful, like any form of serious competition is. That is one reason why 99.9% of rated players are under 2200. If it were easy, this would not be the case. I view that as a good thing. I love the sense of a challenge. Personally, I am not as motivated by beating weaker players as I am by an all-play-all GM event full of strong GMs. It is important to get to the point that you become eager to play stronger players. There is nothing like the sense of satisfaction when you visibly make progress in something after hard work. The stress is worth it in the end.

**Time-Pressure**

Time-pressure is linked to some of the most difficult psychological issues in chess. Time-pressure has to be dealt with by seriously examining your biggest expenditures of time and what moves you considered at that time. You will need to simplify your thought-process to deal with the constraints of a practical game. Mainly the focus should be on cutting out clearly bad and wasteful calculations from our thought-process. This is one of many reasons why it is ideal to input as much as you can recall calculating at the board as possible into your game analysis files. It helps you weed out bad calculations, poor assessments, and helps you clarify and improve your practical game thinking.

One international master I know proposed the idea of keeping 10 minutes on the clock for the rest of the game for at least your last 10 moves. I have thoughts of this consciously over the board, but it is very hard to apply if you are in a critical position and need to play accurately but have around 10 minutes left and do not feel confident with your move yet. During time-pressure, you mostly just want to make it through the time-pressure (assuming there is more time added on move 40) and focus as much as possible. If you get below 10 minutes, try to make each move in less than 2
minutes. Consciously think of this when going into a think with less than 10 minutes left so you do not get too bogged down in perfectionism. Try to play simple and sound moves when you see that they are possible. This is assuming there is not a simple and forced line that propels you to the next time-control. For the most part, focus on being aware of your weaknesses, your king position, and all of the relevant things that can lose you the game.

In the past, to cope with serious time-trouble issues, coaches like Mark Dvoretsky made it their sole focus during games for students to concentrate on not having problems on the clock. When I started playing against stronger players over the board regularly when I was 1900, my focus was on being aware of my weaknesses in my own position, to make sure I did not self-destruct or have a lot of unforced errors, as these unforced errors seem to be costing most players below 2000 the most. The one single question “What is the opponent’s idea?” should be asked on every move. Books like Recognizing Your Opponent’s Resources are useful in allowing you to become more and more aware of your opponents’ intentions and possible ideas. Books like this may be advanced, but you can get a very good idea about the opponent’s ideas and intentions from thinking about it more consciously. I started studying Dvoretsky early on, so I usually did not have a big issue with considering counterplay from the opponent, but many players really need to shift their focus in-game.

In 2015, Gelfand wrote, “When you are short of time, you usually calculate concrete variations, but do not pay too much attention to the strategic aspects of the position. And changes in the pawn-structure are all about long-term strategic potential.” This is precisely why one needs to consciously pay extra attention to positional weaknesses you create in time-pressure. In some cases in time-pressure, it can make sense on general grounds to avoid a seriously weakening move of which you do not see an exact concrete refutation. Of course, if the move you want to play looks like it wins or is obviously the only move, then you should play it. If other moves seem close in your mind, there is no problem with being more structure-conscious in severe time-trouble.

After your games, when you write down the five moves you spent the most time on (as I recommended near the start of Chapter 9), also make a note of
the two main candidate moves you were considering on each of those moves. You may find that one of the moves you considered could have been quickly discarded, saving you a lot of time. This will allow you to figure out how to use your time more effectively in future games.

Figure out what works for you specifically in time-trouble. If I reach move 30 with 2 minutes left and a 30-second increment, I am generally able to play all of my moves within 45 seconds and reach the next time-control. Other players are unable to do this, and need to take a more disciplined stand and make sure to keep more time in reserve.

Motivation

Motivation is a huge part of chess, as I wrote about in detail in the Introduction. One should truly love the game, the process, and the completion of goals along the way in your chess career. At one point I was motivated to read every game collection I could find written by a player over 2600 FIDE. In the end, I succeeded in doing so, but I would not expect the average player to do anything too extreme like that. Nowadays computers are much stronger than when I was starting out, and it is much easier to learn from your own games by merely analysing them with engines, doing exercises and playing as much as possible. I would focus on short-term goals that are realistic and that you can do every day.

Intrinsic motivation tends to be the most powerful, but with structure extrinsic motivation works well too. I always used to set mini-goals for myself. I’d wake up and say, “Today I’ll read four pages of a chess book before I do anything else.” Then after I had done that, the whole rest of the day I knew I had already done something productive. Even simple little things like this can improve mood, motivation, and give players a feeling of productiveness. There’s definitely a bit of a domino effect in that area as well. Once you get used to studying and feeling good about it, you tend to study more and get better and more efficient at studying. Things get easier with time.
Incidentally, an empirically-based understanding of how much time it takes to become an international master (if that is your goal) and what it takes to get there should be motivating for practically all players who are realistic about mastery in essentially every other field. Base your views of your own potential on objective merits and on how much time and effort you can really put into the game and playing serious chess.

You cannot control who will show up, and you cannot control the outcome of the game (at least I really hope you do not try to). But you can control how much energy you have at the board and your attitude towards your preparation. Competing in chess is playing a game after all, so do not forget to have fun and try to enjoy the positions you are playing. If you come out of a tournament better off than when you started, you have gained something very useful to build on. If things do not go exactly how you wanted, use your preparation, results, and game condition as motivation to better yourself in the future, rather than as something to drag you down.

I was still able to find time for chess when I was working 40 hours a week. I ran home after work, popped open a chess book and wanted to study. If you have that kind of enthusiasm for learning about something, you will do it. Many players might not have that drive right now. Sometimes reverse psychology can be good to take away all the pressure from yourself. Most of the time true love for the game brings you back to it, no matter how many times you take a break. If a break can help you develop an enormous drive, that is not bad at all.

Try to have commitment devices that get you focused and motivated to play and study chess as much as possible. This might be regular lessons with a coach, books you enjoy, or games you look forward to – whatever keeps your passion and hunger for the game at a maximum. A nice chessboard is a commitment device, and actually helped make me want to study chess a lot on a physical board.

Passion, taking the initiative, risk-taking, failure, experience, commitment and achievement are all parts of the path we take towards mastery in competitive fields. It is hard to make progress if you remove any of them (although some people can achieve success in other areas of life without risking failure much). In chess, some people try to avoid failure and some
think they do not need the experience. Many others simply lack a little bit of passion or do not want to commit to making plans and pursuing goals (often for fear of failure). Luckily in my case, I always was passionate, took the initiative to travel to play, was fearless at the board, failed a lot, but gained experience and kept coming back until my goals were reached.

What would your life be like if you made use of all the potential you have? This is a great question to ask yourself whenever you need motivation in life and in chess. Rather than thinking of just the here and now, I like to ask, “Where do I want to be in 18 months?” We are in it for the long haul and need to develop good habits that make motivation less and less necessary so we will do things on our own without much effort needed. Think of the steps you can take to reach your potential in chess and put all of your energy towards carrying out that plan.

**Peak Performance**

Many players peak at random intervals and cannot really explain why this happens, although in my case it was much easier to understand. The peak of my career was probably when I was in a very good streak while I was pursuing the IM title. I had beaten a couple of GMs around that time and I was confident and in good chess condition. I was playing with no fear, I had no qualms about trying all different kinds of things: new openings, new ideas like some slightly risky positional plans in the late middlegame. I wasn’t afraid of losing. When I lost games I just bounced back very quickly by analysing the games, learning from my mistakes, getting ready for the next game and getting plenty of sleep. I relaxed and focused on playing good moves in the next game. The best games that I won against grandmasters (two FIDE-rated games I won with Black against players rated within 10 Elo points of 2600) were similar: I played confident, sound, purposeful moves in the opening and my opponent tried a strange plan that backfired, allowing me to expose some specific weakness in his position that he had completely underestimated. Playing sound, healthy, energetic chess is vital, and it is worthwhile for you to develop a feeling for healthy moves that improve your position with no downside.
Leadership and Communication

Education is important for the sport of chess and being an author instils a certain leadership role in an educator. It is especially important to communicate ideas well with students and have a healthy, positive mindset. Literature is important in chess because it gives us structure for our study, helps us get closer to the truth, helps us improve our play and gives us intellectually challenging and thought-provoking material. Opening and endgame books can serve as great reference books if they are written diligently and professionally. It is nice to have reference books in your home in the same way that is nice to have a dictionary in your home.

Every experienced chess-player I know would want to have a full-time coach if he could afford it. Coaching of any kind would always be desired. A coach with a broad base of ideas and very good awareness of positional weaknesses, structures, tactical mistakes and the like can be very useful in coaching stronger players. He may have greater awareness in any or all of those areas than his student even if he is a weaker player. An analytical, systematic person is essentially ideal for this kind of job. I communicate ideas with my students differently based on their skill level. I try to make it more fundamental when it is a discussion with a student who is closer to beginner level. The focus is mostly on improving one’s worst pieces, finding good squares for the pieces in general, and raising my student’s tactical awareness by drawing their attention to what leads to a tactic existing. For example, an awkward and undefended piece on the side of the board may be the entire basis for a tactical shot that would look completely pointless otherwise. The goal is to connect and find common ground that we can both relate to, understand, and work on together. There is never any direct criticism of the decision made, but rather clear advice given on how to move forward and how to avoid mistakes that were made.

Two different grandmasters hired me specifically for the task of analysing openings and explaining the logic of the position and the ideas behind the moves I analysed at certain key stages. Obtaining a good understanding of an opening leads to a much better selection of candidate moves by a player. As
players work together, they can bounce ideas off each other and form a collective understanding of openings and positions, and giving each other a second opinion. By putting their beliefs under the microscope in this way, they force each other not to overlook important strategic points that they might have missed while working on their own.

Concentration

Concentration is a difficult issue to tackle because the obvious advice is to tell everyone to exercise a lot, sleep well, and have a clean diet so that they can handle long, gruelling events. For me, having the least possible stress allows me to focus the most on the position at hand. When I rarely leave the board during an entire game, I notice that my concentration is almost always the highest and I notice the most important aspects in the position most easily. It will be difficult to concentrate if you woke up more than 12 hours before the game starts. I like to be awake for a few hours before a game to feel the most fresh and mentally alert. Eating a healthy breakfast before a morning round is ideal, so that you do not have any digestion or hunger problems. I strongly urge chess-players to look into a serious physical workout routine, even if it is just 10 minutes a day. For posture and brain activity, it must be beneficial.

Your ability to focus is crucial in chess. You need to have energy at the board for mental dexterity. Besides sleep, we should have our mind in good condition and be highly motivated and eager to play. By simply being in a ‘chess mood’ thanks to looking through one of my favourite chess books before a game, it helps my focus and concentration at the board. For some players, certain types of music put them in the mood to play. If this applies to you, you may want to make and save a playlist that will best put you in that sort of mood and make it a routine to listen to it before tournament games.

It has hurt me in some games that I assumed I would win a game that was clearly better for me. That feeling is probably a bad one to conjure up during a game, and makes many players less watchful and aware. When I start to have this feeling, I try to adjust by simply focusing back in on what my best
next move is. That one decision is essentially all that matters when you are playing a game, but it is easy to lose sight of it.

**Teamwork**

Teamwork is not the first thing most people think of when chess is mentioned. At my level, it is quite important though, and a good relationship with training partners, seconds, organizers and team-mates is vital. ‘Social facilitation’ is essentially that we do things better around other people. First instance, you will play better, more disciplined chess over the board than on ICC. By working together with a partner or friend, your motivation to work on or play chess will almost always be higher. A major step forward for me in my chess was the friendships and working relationships I created with strong players. I constantly had new and fresh ideas for them, and even much stronger players always seemed to appreciate my input since it was something they would not hear anywhere else. A good relationship with a second is perhaps not as important as one might think, but as long as there is a clear agreement on what to work on, the work can flow normally without any problems. It does not need to be a close friendship of any kind if you can keep the chess discussions clear and focused. I would say a good relationship with a weekly coach is much more important, since that relationship is a lot more personal, with more conversations and human interaction than sending variations back and forth.

**Confidence**

Confidence is a difficult subject to write about in chess, because there is not a whole lot to say to make an underconfident person suddenly confident. A normal level of confidence is optimal. The main thing to steer clear of is being afraid to lose. In the next section, ‘Avoiding Fear’, I explain simply why I have almost no fear when facing stronger players. Outside of that, you have to be able to deal positively with the psychological pain of tough losses.
in tournament games. In my case, the simplest activity for dealing with this was just to play blitz games after bad losses, to remember the feeling of winning. In a few isolated cases, I even lost many of those blitz games in a row without winning any. Nevertheless, this shifted my focus from the game I had just lost, to my poor blitz play. Although that might sound bizarre, it helps you move forward and deal with the sting of defeat.

When you are struggling in a tournament, you need to play safe, simple moves to build your confidence. You may not be in the right mental state for your best calculation.

Those who view intelligence as fixed account for most of the ‘overconfidence effect’. Overconfidence is preserved, in part, by attending to easy tasks rather than difficult ones. Growth mindsets lead to openness to difficulty and, in turn, greater self-insight. Teaching a growth mindset makes students open to difficulty and less overconfident. When the wave of reality hits the overconfident player in chess, in most cases they do not react well. I strongly advocate a growth mindset and an objective realization of just how much you can improve not only in chess, but throughout life generally. It makes a lot of sense to have a holistic view on intelligence that includes personality traits which influence mindset and attitude towards higher-order thinking like problem-solving. In chess, we can definitely alter our mindset and attitudes which play a huge role not only at the board, but in how we see the game and work on the game. Make mistakes and move forward with the healthiest mindset possible.

One thing that I can advise, though, is to be careful about your perception of your own knowledge. Experienced trainers are very familiar with expressions like “I already know what I need to know” or “I already know that”. This is an example of the Dunning-Kruger effect. This occurs when people fail to properly gauge their level of competence in something and consider themselves much more competent than others. This lack of awareness is actually caused by their lower level of competence, preventing them from critically analysing their performances and knowledge properly, leading to a significant overestimation of themselves. For instance, if a player points out something about superfluous knights, it is not uncommon to hear a local club player reply that he already knows about this concept. Even if he does, that is
not the point: even if you know about a concept, there is a lot of nuance and subtlety to each concept and idea in chess. That would be like reading the title of most of these chapters and not looking inside because you are already familiar with roughly what I am discussing. A more open-minded approach with a looser and more objective attitude towards knowledge is much better in chess.

Ideally you would be task-involved – that is, interested in your chess work for its own qualities. This tends to lead to greater intrinsic motivation. Task-oriented players are less threatened by failure because their ego is not as tied to outcomes, but more closely aimed at achieving mastery and having maximum enjoyment. Ego-oriented players tend to take losses more personally. When I think about the reactions of hundreds of titled players I have seen after games, this is especially true when I think about the outbursts I have seen. Ego-oriented competitors also have a tendency to set unrealistically high or low goals so that they can have an excuse if they do not reach their goals. Task-oriented players, on the other hand, persist at tasks longer and are more confident. Chess-players who have confidence issues especially should try to become much more task-oriented.

Elite players sometimes lose games in under 25 moves. For instance, Mamedyarov-Carlsen, Doha 2015 was a disaster for White, who was losing before move 20. It happens. The games are painful sometimes, but we have to identify the problems and seek solutions. Even top players need to make it a rule of thumb and habit to make a blunder-check before every single move, no matter how simple the position might seem.

A lot of players are affected by the trend the game has taken when they get into a passive or very defensive position, and become a bit too emotional when thinking about the position. Accepting the position you have on the board is a hard thing for many players, but also emphasizes why it is important to evaluate positions well.

After a negative psychological trend during a game in which the opponent has suddenly changed things in his favour, it is important to mentally reset. Reset your thoughts on the position and reset your emotional state as well. To reset your emotional state, going on a short walk around the playing hall can be effective, time permitting. To reset your thoughts on the position, asking
yourself about the opponent’s idea, the weaknesses present in the position, and the worst-placed piece for both sides can help you be more objective in a difficult situation and improve your confidence.

Once I lived with a grandmaster and lost 100 blitz games in a row to him, even at time odds for some of them. I have no problem losing so many games in a row, and it is actually a healthy sign. Momentarily being fed up just makes me want to try more. This has to be the healthiest way of looking at it: realizing either you’re one of the luckiest people ever to be in the 0.000001% who get to be one of the greats, or you have to come up with ways to cope with and counteract it.

As Grandmaster Rowson pointed out in *Chess for Zebras*, in general, the stronger the player, the more likely he is to say “I don’t know” about a position. This is easy to misinterpret, so it is important to understand exactly what this means. This does not mean that very strong players handle a position with minimal confidence and a lack of ideas. Most likely they can highlight the two or three best moves in a given position. It just means that they appreciate the complexity in the position, realize why it is nuanced, and are not completely sure that the move they played or want to play is the best. They may also not be sure about the evaluation of the position, but have a good guess between two possibilities. Although the idea that they are so uncertain may sound surprising, this is understandable: those with more skill should also grasp nuance more accurately than weaker players.

On the reverse end, being certain about the best move in a very complicated position (especially one that would be difficult for strong grandmasters) may indicate a certain level of close-mindedness that is holding you back in chess. For one thing, it is likely that you are missing many important candidate moves in your move search if you quickly obtain certainty about the best moves in every position. Similarly, your rating should give you some indication of how accurate your judgements are about what the best move is. I usually refrain from making very strong or dogmatic claims about chess positions until I have either analysed them deeply or verified my views with an engine to make sure I did not make an error. A basic level of professionalism and desire to be accurate keeps me from making bold statements that cannot be backed up.
Most people intuitively get that to make criticisms of published writing or analysis they have to give actual improvements, or the criticisms are empty ones. This applies to chess-playing as well when you criticize someone’s play. If someone played a move and you call it a bad one, you have a burden of proof to demonstrate that there were qualitatively better moves. Perhaps they in fact made the best decision because there were no better options. Most objective analysts strive to give flexible judgements (especially when they are not able to check their claims with an engine) and be direct about not being sure about something. Open-minded attitudes come across very well in chess, and grandmasters are regularly heard in analysis saying a position is very complicated and hard to judge.

Nevertheless, during tournaments, players may criticize moves you made, without having a reason why your move was bad, and without offering an improvement. This all relates back to the Dunning-Kruger effect. The stronger the player, the less likely he will be in general to have baseless criticisms. The issue is that weaker players who are extremely overconfident about their solutions may become close-minded and it limits their ability to think differently, and ultimately improve.

On top of that, it is important not to misinterpret false confidence as real confidence. I have met numerous professional athletes who took criticisms in chess as personal slights, and were not able to pursue chess very seriously due to insecurity. It is important to handle criticism well in chess, and to seek out expert opinion from those more knowledgeable than you are. Unlike in the vast majority of other fields, in chess the opinions of experts are easy to prove or demonstrate.

Chess is often very frustrating. It is important to bounce back from tough losses and learn as much as you can in order to play more strongly next time. There is always room to grow and excel in every aspect of chess. Chess gives everyone the ability to see ourselves grow and change. When you have confidence issues, think about what your life would be like if you made use of all of the potential you have. Then work in that direction and confidence will flow naturally.
Avoiding Fear

“If a call to action is motivated by fear, people will block it, unless [the] call to action has specific steps. A group of people received a pamphlet describing the dangers of tetanus infection. It didn’t describe much else. The second group of people got a description of tetanus infection, plus a set of instructions on how to get vaccinated. The second group exhibited a much higher sign-up rate for tetanus vaccination than the first one, where many participants tried to block out the high-fear message urging that something as rare as tetanus would never happen to them.” – N.Goldstein, S.Martin and R.Cialdini, Yes!. This is one of my favourite quotes about fear and rationalization. We see such things very frequently in chess as well. One example is that players who are irrationally afraid of facing some variation often create the most absurd rationalizations for not entering, studying, or preparing the line. It may even be that entering the line would give them a large advantage from the opening, but they still fear it. As a coach who presses strong players to strive for the maximum in the opening, my goal is then to lay out a clear game plan and set of prepared responses for each of the likely eventualities. Once goaded by me, many players will decide to enter lines they never would have considered playing.

“Inactivity leads to depression” is one of my favourite psychological quotes of all time, taken from the book The Boogie Man by Douglas Lyell. Similarly, being active and in a good mood overall makes us more joyful, less stressed out, and less fearful. For chess-players consumed in serious mental work so many hours a day (at least during a tournament), it is absolutely imperative to become strong mentally.

Exposure to stronger players is the easiest way to reduce your fears of potential opponents and increase your confidence over time. For me it was simply a matter of playing a lot of grandmasters and getting comfortable with playing them. During my first 10 games against grandmasters, I felt nervous and intimidated. But after 50 games against grandmasters, I was not nervous any more due to exposure. Not unlike other things in life, you get comfortable after doing them repeatedly. Become disciplined in dealing with losses so that they do not mentally destroy you. A healthy attitude towards analysing one’s games is going to be the best way to move forward for
essentially any player.

I wrote over 100 tournament reports in a row for a magazine in Hungary and in each event I checked the winner and loser’s last tournament. In the vast majority of cases, their last tournament did not reveal much about their performance in the given tournament. Especially common were cases where someone lost 15 or 20 Elo in one event and people thought they were playing badly, but then they won the next event convincingly. This happened a lot with GM Vajda, GM Krisztian Szabo, and a few others that come to mind. Having a -15 tournament and a +15 tournament back-to-back really shouldn’t be very surprising.

Chess form has minimal application to the vast majority of chess-players. Simply, when you play well, you will often continue to keep playing well. When you are playing somewhat badly, it is completely unclear what will happen in your next event. Those who dwell too much upon being out of form tend to suffer from a placebo effect. To avoid this problem, the most rational thing to do is not to place special emphasis on it. There is a lot of variance in chess and one should accept it. As long as you are working in the right direction, you should be confident that you are moving forward, even if you encounter temporary setbacks.

Chess-players tend to be very strong mentally. Even people with self-confidence issues are usually very good at trying to play the best move on every move. In chess, you really do control a lot. It is interesting that when I worked on a panel with a couple of statisticians, they confirmed statistically what my intuition and tournament experience led me to believe: chess-players do not actually play worse after losses, and the only type of ‘form’ that exists is positive form, when you are on a roll and experiencing peak performance. This may say something about the resilience and fighting spirit of chess-players in general, but it may also just show that psychology matters a lot less in playing the best move than people outside of chess might imagine.

Effort
The most recent psychological studies I found from December 2015 showed that effort applied is the number one indicator of success in a given field. You are responsible for the effort you put in, and it dictates to a large extent how far you are going to go. We cannot easily control how many resources we have, but we can put in a lot of effort to our pursuits if we try. In my chess training, I often forced myself to be disciplined and insisted on putting in a minimal amount of chess book study per day to serve as a commitment device for myself.

An additional reason why playing higher-rated players is beneficial is due to the effort factor emphasized throughout the book: to get the maximum benefit from training and playing, you should exert the most effort possible. Playing each game against a stronger opponent as if it may be the best of your life is a healthy way to consistently push yourself to put in the maximum amount of effort you can.
Let us see how all of these thoughts and ideas about understanding chess games work out in practice by examining some games played at the highest level. The first one features World Champion Magnus Carlsen being outplayed by a player approximately 300 Elo weaker. In fact, White missed a very powerful move as early as move 14, which would have put Carlsen on the ropes. Later Carlsen missed a very strong continuation himself, opting for a safe ‘practical’ line instead. Sometimes we only get one chance. This was one of those times.

S.B. Hansen – Carlsen

*European Team Ch, Reykjavik 2015*

1 d4 Nf6 2 c4 e6 3 Nf3 d5 4 g3 Bb4+ 5 Bd2 Bd6

Carlsen sometimes plays this interesting new line of the Catalan. Black intends to play ...c6 in the near future, and possibly take on c4 with the dark-squared bishop in a more active position than in the 5...Be7 main line. On d6, the bishop also sometimes discourages White from playing Bf4 or otherwise finding a good square for his dark-squared bishop.

6 Bg2 c6 7 0-0

7 Nc3 Nbd7 8 b3 dxc4 9 bxc4 e5 gives Black enough counterplay because if White plays e3, Black is able to take on d4 and check on e7 with his queen, which is awkward for White to block effectively.

7 Qc2! 0-0 8 0-0 Nbd7 9 Rd1 Ne4 10 Ne1! is the most critical line, putting the whole variation to the test.

7...Nbd7 8 Nc3

White gambits the c4-pawn and chooses one of the most aggressive ways of
playing. If Black refuses to take it, White has ideas like playing e4 directly or making moves such as b3 or c5 in preparation for a stronger e4.

8...dxc4 9 Bg5!

White plays this annoying pin and has ideas of playing either e4 or Ne4. Black can opt for 9...h6 or to castle quickly and break the pin or support the c4-pawn, as Magnus played.

9...0-0 10 Qc2 (D)

10 Ne4 Be7 11 Nxf6+ Bxf6 12 Bxf6 Qxf6 13 Qc2 b5 14 b3 Ba6 =.

Black to play

White strives to play Ne4 in an improved version, because in this case he would be able to capture on c4 with his queen at the end of the variation.

10...b5?!

Carlsen takes a risk with this pawn-push, perhaps underestimating the potential danger along the h1-a8 diagonal. A safer set-up is 10...Be7 11 a4 a5 12 Bxf6 Nxf6 13 e3 Nd7 14 Qe2 e5 =.

11 a4 Qb6 12 e4?!
White threatens e5, but Black can just put the bishop on the natural b4-square to avoid losing material or creating any weaknesses. 12 Ne5! Nxe5 13 dxe5 Bxe5 14 axb5 emphasizes White’s strong queenside pressure: 14...Rb8 15 Be3 c5 16 Na4 Qc7 17 Qxc4 +=.

12...b4?!

After 12...Bb4! 13 Bxf6 Nxf6 14 axb5 Bxc3 15 bxc3 cxb5 16 Ng5 g6 17 e5 Nd5 18 Ne4 Bb7 19 Rfb1 a6 Black is rock solid and has equalized.

13 a5 Qc7? (D)

It was better to keep the queen on a6 to guard the c4-pawn: 13...Qa6 14 Na4 b3 15 Qb1 e5 16 Bxf6 gxf6 17 Rd1 exd4 18 Rxd4 Be7 19 Qc1 +=.

White to play

14 e5?

White loses his pawn-duo, and so relinquishes his space advantage. White did not sense how weak Black’s queenside pawn-structure would be if he simply moved the knight out of the way: 14 Na4! is a simple and good move, with the dual threats of e5 and Qxc4. Then 14...e5 15 Qxc4 Re8 16 Rfc1! exd4 17 Nxd4 Nxe4 18 Qxc6 Qxc6 19 Rxc6 Bf8 20 Rcc1 is positionally lost for
Black, but 14...b3! 15 Qe2 e5 is an active attempt to keep Black in the game. Nevertheless, White retains a very large advantage after 16 Qxc4 Nxe4 (16...Rb8 17 Qe2 h6 18 Be3 +/-) 17 Be3 exd4 18 Nxd4 Ne5 19 Qxb3 +/- as Black has a much worse position with numerous weaknesses. White would have had excellent chances to beat the World Champion in that case.

14...bxc3 15 exd6

White obtains the bishop-pair and seemingly looks as if he will have pressure against Black’s pawns on c4 and c6. What he may have underestimated is that the bishop on c8 is actually not such a bad piece once it comes out to a6. For instance, if White’s queen is on c3 and the bishop is on a6, White always has to concern himself with ...Nd5 or ...Ne4.

15...Qxd6 16 bxc3 Ba6

Black has the excellent d5-square available for his knight, which is one of the reasons why the bishop-pair is not dominant at all for White here. When you have the bishop-pair, typically it is important which stable central squares the opponent’s knights have access to.

17 Rfe1

After 17 Bf4 Qe7 18 Bg5 h6 19 Bxf6 Qxf6 20 Nd2 Rac8 21 f4 Rfe8 22 Bh3 Qd8 23 Ne4 Nf6 24 Nc5 Bb5 Black has enough counterplay.

17...Nd5! (D)
White to play

Black puts his knight on the best square and prevents Bf4 from ever being good.

18 Bc1

The bishop heads for a3.

18...Rfb8

18...Qc7! is the best way to avoid the a3-f8 skewer and allows Black to achieve excellent piece harmony with ...Rab8 and sometimes ...Rfe8 and ...c5. 19 Nd2 Rab8 20 Ba3 Rfc8 (this may also be a good square) 21 Ne4 Rb3 22 Bd6 Qd8 =+.

19 Ba3

19 Ng5 N7f6 20 Be4 Nxe4 21 Nxe4 Qe7 22 Ng5 g6 23 Ne4 Rb5 24 Bg5 Qf8 25 Qd2 Rab8 =.

19...Qc7 20 Ng5

This move is a little dubious and relies on a bluff, but it nearly worked. 20 Nd2! is the consistent move, because it keeps pressure on c4 and allows
White to play an interesting consolidating idea with Rec1 and Qd1 followed by Ne4. 20...Rb7 21 Bf1 h6 22 Nxc4 Bxc4 23 Bxc4 Qxa5 24 Rec1 Qc7 25 Bf1 c5 =.

20...N7f6 21 Bh3

White puts all his eggs in one basket, relying solely on the Nxf7 shot against Black’s most obvious try. Amazingly, this bluff worked against the best player in the world. However, even the objectively preferable 21 Ne4! Nxe4 22 Bxe4 allows Black a large advantage after 22...h6 23 Qd2 Rb5, with the idea of taking on a5.

21...Bc8?

Black decides to prevent the sacrifice, even though the king would have actually been completely safe on g6 in one of the key variations. After calling the bluff with 21...Rb3!, Black can just ignore the threat to f7 by taking on c3, and in some cases, taking on a3 afterwards, which allows the black king to run away on the dark squares. Following 22 Nxf7 Rxc3 23 Qd2 (23 Qa2 Kxf7 24 Bxe6+ Kg6 =+) 23...Rxa3! (now is the time to take on a3 so that the king can recapture on f7; 23...Kxf7? 24 Bxe6+ Kg6 25 Re5 h6 26 Bf5+ Kf7 27 Be6+ Kg6 =) 24 Rxa3 Kxf7 25 Bxe6+ Kf8 26 Rf3 Qd6 27 Re5 h6 28 Qe2 Bb5 =/+ Black intends ...Re8 with a massive advantage.

22 Bf1 Rb3 23 Bxc4 Rxc3 24 Qe2 Rb8 25 Nf3 (D)
Black to play

White intends Ne5.

25...Nb4

Black threatens to put the knight on c2.

26 Rec1 Rxc1+ 27 Bxc1 Nbd5 28 Qc2
28 Bd2 Bd7 29 Re1 Be8 30 Rc1 Qd8 =.

28...c5

28...h6! (Black would like to follow up with ...Bb7) 29 Bd2 Bd7 30 Rc1 Be8 31 Qd3 Qd6 32 Re1 Qd8 33 Rc1 Rb2 34 Re1 Qc7 35 Rd1 Qb8 =+

29 Bf1 cxd4 30 Qxc7

With the queens off, the World Champion failed to obtain any winning chances:

30...Nxc7 31 Nxd4 Ba6 32 Nc6 Rb7 33 Bg2
33 Bxa6 Nxa6 34 Be3 Nd5 35 Bd4 f6 36 f4 Rc7 37 Nxa7 Rc2 =.
33...Ncd5 34 Ba3 Rc7

34...Bb5! 35 Nd4 Bd3 36 Rd1 Ba6 37 Nc6 h6 38 Rc1 Bb5 39 Ne7+ Kh7 40 Nc8 Bd3 41 Nd6 Rd7 gives Black counterplay.

35 Rc1 Bb5

Black gives up a pawn and the game heads towards an immediate draw. 35...h6 36 Ne7+ Rxe7 37 Bxe7 Nxe7 38 Rc7 Nc8 39 Rc6 Bb7 =.

36 Bxd5 Nxd5 37 Nxa7 Rxc1+ 38 Bxc1 Bd7 39 Kf1 Kf8

39...e5 40 Ke2 e4 41 Kd1 Kf7 42 Kc2 Ba4+ 43 Kb2 Ke7 =.

40 Ke2 Ke8 41 Kd3 Nb4+ 42 Kc4 Nc6 43 Nxc6 ½-½

In the next game, one of the top grandmasters in the United States won with Black against a grandmaster rated nearly 2600. These struggles are interesting to dissect and reveal quite a bit about the nuances needed to beat a 2600 grandmaster and the way elite grandmasters try to set problems for them.

A. Ramirez – Kamsky

National Open, Las Vegas 2014

1 Nf3 Nf6 2 c4 c6 3 d4 d5 4 Nc3 a6

The ...a6 Slav is extremely common to see in Kamsky’s repertoire.

5 e3 g6

This is the fourth most common move behind 5...b5, 5...e6 and 5...Bf5. Nevertheless, it makes some sense here because ...g6 lines are less troublesome when the c1-bishop is locked in at home than when it can come out to, say, f4.
6 Bd3 Bg7 7 0-0 0-0 8 Qb3

8 b3 is another good theoretical test of the line.

8...dxc4 9 Bxc4 b5 10 Be2 Bf5! (D)

White to play

Black’s play may look strange, but he has ...Nbd7, ...Qc7 and ...e5 in mind. White has to react quickly to prevent this idea from coming to fruition.

11 Ng5!

White insists on getting in the e4 push. Complications now occur with White sacrificing a pawn, but obtaining the bishop-pair.

11...h6 12 e4 hxg5 13 exf5 gxf5 14 Bxg5 Qxd4 15 Rad1 Qc5

Black is getting very close to fully consolidating with ...Nbd7 and ...Rfe8, so White has to make something happen quickly.

16 Rc1 Qa7 17 Qb4!

White has dangerous ideas of Qf4 or Qh4. 17 Bf3 Nbd7 18 Bxc6 Rac8 19 Bxd7 Qxd7 20 Bxf6 Bxf6 21 Rcd1 Qc6 22 Nd5 Rfd8 =.
18 Qh4

The immediate 18 g4! is even stronger, as Black has to give back his extra pawn to get developed and activate his queen. After 18...Nbd7 19 gxf5 Qc5 20 Qxc5 Nxc5 21 Be3 += White has the better endgame due to his bishop-pair.

18...Nbd7

Black intends ...Nh7, when he would succeed in relieving almost all of the pressure on his position. White needed to admit that this plan was unstoppable and simply bring his worst-placed piece into the game.

19 Bh6?

19 Rfd1! Nh7 20 Be3 Qb7 21 Bf4 += leaves White slightly better due to his positional bind. He even carries aggressive threats like g4!? and Rd3-g3.

19...Ne5!

With the pressure off the f6-knight, Black brings his dormant d7-knight over
to the active g6-square.

20 Bxg7

This was a poor choice, allowing Black to activate his rook via h8. 20 Be3 was more resilient, but still better for Black after 20...Ng6 =+.

20...Kxg7 21 Qg5+ Ng6 (D)

White to play

Black is a pawn up and would like to play the obvious ...Rad8.

22 h4?

22 Bf3 Nd5 –/+.

22...Nh7

Black actually did not need to prevent h5 at all: 22...b4! 23 Nd1 (after 23 h5 bxc3 24 hxg6 Ne4 Black wins convincingly) 23...Rh8 24 g3 (24 h5 Ne4 wins for Black) 24...Ne4 –+.

23 Qg3 f4?!
It is better to challenge the queen on g3 with the black queen from b8:
23...Qb8! 24 Qe3 Qe5 –/+.

24 Qf3 Nhx4 25 Qxf4 Ng6 26 Qd6?!

White goes chasing material, but neglects his king. 26 Qf3 is much better, so that if Black tries to bring the h7-knight to f6, White can play Bd3 and keep Black’s knights at bay. Then 26...Rac8 27 Rfd1 Qb8 =+ leaves Black just a little better.

26...Nf6 27 Qxc6 Rh8

White’s king is now extremely weak, and only very accurate play will succeed in avoiding immediate material loss.

28 Qf3?

28 Bf3 is the best idea, to try to prevent Black’s queen from making it over to h4, but after 28...Qd4 29 Ne4 (29 g3?! Ne5 30 Qxa8 Rxa8 31 Bxa8 b4 32 Nd1 Ne4 ends the show) 29...Nd5 –/+ Black threatens the very strong ...Ne5.

28...Rh6

With ...Rah8 on the horizon, there is not a whole lot for White to do.

29 Ne4 Nxe4 30 Qxe4 Rah8 31 g3 f5 32 Qc6 Ne5 33 Qg2 Kf6 0-1

White resigned in view of ...Qh7 coming up next.

To summarise: in an amazingly long theoretical main line, White should have obtained an edge with an accurate choice on move 18. Black wriggled out and within a few moves was already pressing for the win. The position became extremely critical around move 20 and then things spiralled out of control.

Lastly, let’s walk through a game that is widely considered one of the most complicated modern elite grandmaster games. It was pointed out to me by a
few grandmasters and nicely highlights the level of risk top players will take from both sides of the board.

Carlsen – Topalov

Wijk aan Zee 2012

In this game, White won the opening battle with relatively simple play. For some reason, he decided not to put his bishop on the e3-square on moves 11, 12 and 13 and then obtained no advantage.

1 e4 c5 2 Nf3 d6 3 Bb5+ Nd7 4 c3

This line is relatively rare, but actually quite dangerous. In many cases, the play resembles a Ruy Lopez. Typically Najdorf players opt for 3...Nd7 to get sharp positions, but do not like Ruy Lopez structures nearly as much as sharper wide-open Najdorf positions. For this reason, this try for White has a certain psychological value to it.

4...Nf6 5 Qe2 a6 6 Ba4 Qc7?!

Putting the queen on c7 is a little inflexible. In some cases, Black might want to put the queen on b6 after playing ...b5. Thus 6...b5! 7 Bc2 Bb7 8 d4 e6 is the most solid way for Black to handle the position. It looks quite passive on the surface, but may be the best way to equalize against the simple 4 c3 system. 9 a4 cxd4 10 cxd4 Be7 11 0-0 0-0 12 Bf4 Nb6 =.

7 0-0 e5

7...e6 is no better: 8 Bc2 Be7 9 d4 0-0 10 Re1 +=.

8 d4 b5 9 Bc2 cxd4?!

The immediate 9...Be7 is better, because then White has a harder time developing his b1-knight. Additionally, playing the rook to c1 would not make any sense with the c-file closed. After 10 a4 b4 11 dxc5 Qxc5 12 Be3 Qa5 13 Nfd2! += White threatens Nc4 and has a small advantage.

10 cxd4 Be7 (D)
11 Nc3?!  

This is not bad, but there was no reason even to invite the structural change which could have occurred after ...b4 in a few moves. 11 Be3! Bb7 12 Rc1 0-0 13 d5 gives White a comfortable advantage because Black’s minor pieces feel quite cramped and White’s structure is superior.

11...0-0 12 Bg5  

White makes the position unnecessarily complex, whereas simple development would maintain his small edge due to Black’s lack of counterplay: 12 Be3! b4 13 Nd5 Nxd5 14 exd5 e4 15 Bxe4 Nf6 16 Rfc1 Qd7 17 Bd2 +=.

12...h6 13 Bh4?!  

13 Be3 b4 14 Na4 a5 15 Rfc1 Ba6 16 Bd3 gives White a better structure.

13...Bb7  

Black has equalized and is planning to play ...Rac8 or ...b4.

14 Rad1
14 a3 Rac8 15 Rad1 Rfe8 =.

14...Rac8 15 Bb3
White avoids losing a piece to ...b4. 15 a3 Rfe8 =.

15...Rfe8
Black prepares to strengthen the idea of ...b4 by defending the e7-bishop and completing development.

16 dxe5
This is a very committal structural change. White needs to be prepared to deal with ...b4 on the next move. 16 Rfe1 Bf8 =.

16...dxe5 (D)

![Chess Diagram]

*White to play*

Black threatens ...Bb4! followed by ...Nh5.

17 Bg3?!

After 17 Rd2! White can meet 17...Bb4 with 18 Rfd1, when the d7-knight
will need further protection if Black wants to move his f6-knight. 17...b4 18 Bxf6 Nxf6 19 Nd5 Nxd5 20 Bxd5 Bxd5 21 Rxd5 Qc4 leads to an equal ending.

17...Bf8?

It is hard to understand why Topalov did not play ...Bb4 on this move or the next; e.g., 17...Bb4! 18 Nd5 Bxd5 19 exd5 (19 Bxd5 is met by 19...Qc2) 19...Bd6 –/+.

18 h3 Nb6?!

18...Bb4! is clearly best: 19 Rc1 Bxc3 20 Rxc3 Nc5 =+.

19 Nh4?!

By putting the knight on h4, White opts for a mistaken plan, which led to an attack that was a complete bluff. 19 Bh4! latches onto the f6-knight and holds the balance: 19...Qc6 20 Bg3 Qc7 =.

19...Nc4 20 Nf5?!

White gives up a pawn for questionable compensation. 20 Nf3 Bb4 21 Bxc4 bxc4 22 Nd2 Red8 23 Bh4!? g5 24 Bg3 Rd3 25 Nf3 (White is just trying to take on e5 and equalize) 25...Bxc3 26 bxc3 Nxe4 27 Bxe5 Nxc3 28 Qxd3! is a crazy-looking line that leads to an equal endgame: 28...cxd3 29 Bxc7 Nxd1 30 Rxd1 Rxc7 31 Rxd3 Rc1+ 32 Kh2 Rc2 =.

20 Nxb2 21 Bh4?

And with this move, White decides to go all-out with the rook sacrifice rather than back down and end up with simply a pawn less. 21 Rc1 Nc4 22 Rfd1 Qb6 23 Bh4 g6 =+ offers White minimal compensation.

21...Nxd1 22 Bxf6 Nxc3 23 Qg4 (D)
This is a picturesque position: White is a pawn and a rook down and bluffing one of the top grandmasters in the world. The basis of his rook sacrifice is the fact that he threatens to take on both g7 and h6, but Black has a tempo at his disposal to defend. Black defends coyly, rather than trying to calculate out a winning line.

23...Bxe4?!  
23...Re6! is a key defensive manoeuvre. The win for Black does not look particularly difficult for a top player to calculate:

a) After 24 Bxe6 fxe6 25 Ne7+ Kh8 26 Qg6 White threatens to mate by taking on h6, but Black just needs to find the bishop capture on e4 here: 26...Bxe4 27 Qxh6+ Bh7 28 Nxc8 Qxc8 29 Bxe5 Nxa2 —+.

b) 24 Nxg7 Rxf6 25 Ne8+ Kh8 26 Nxf6 Bg7 27 Qf5 Bxf6 28 Qxf6+ Kg8 —+.

24 Nxe6+?

After this check, White has surprisingly few threats against Black’s king on the h-file. 24 Nxe7! Kh7 25 Nxe8 Rxe8 26 Rd1 Bg6 27 Rd7 Ne2+ 28 Kf1 Ng3+! 29 fxg3 Qc1+ 30 Ke2 h5 is slightly better for Black; it is likely that
White will now put his queen on g5 and go into a worse ending.

24...Kh7 25 Bxf7 (D)

Despite the dangerous appearance of White’s pieces, he does not have any crushing threats. He intends to modestly bring his rook in with Rd1 to try to bring it into d7.

After 25 Nxf7!? Bd5! there is no mate to Black’s king: 26 Bc2+ Ne4 27 Ng5+ Kg8 –+.

[Diagram with notation for the next moves]

Black to play

25...Qxf7?

Black saw ghosts here, when he just needed to make sure that all the squares around his king were sufficiently safe. 25...Qb7! threatens ...Rc6, which would refute the attack completely. After 26 Bg8+ Kh8 27 Bb3 Black is a full rook up and wins by simply blocking the a2-g8 diagonal: 27...Rc4 –+.

26 Nxf7 gxf6 27 f4

Now the game enters a new phase, with White having enough activity to hold the balance against Black’s two rooks.
27...Bg6! 28 Qh4+ Kg7 29 fxe5
White threatens Qxf6+ followed by Qh8#.

29...Ne4 30 Rxf6! Bc5+ 31 Kh2 Nxf6 32 Qxf6+ Kh7 33 Ng5+ Kh6
White could have forced a repetition here had he wanted one, but he decided to press on for the win.

34 Ne6 Rxe6! 35 Qxe6 Re8 36 Qf6
White has surprisingly few threats, so Black can calmly push his queenside pawns without any problem.

36...Be7?
Black gets afraid for no particular reason and lets White regain some material. 36...a5! 37 Qf3 b4 38 Qd5 Bf8 39 Qxa5 Bf7 =.

37 Qxa6 b4 38 Qc4 (D)

38 g3 Bf8 39 e6 Be7 40 h4 +=.
38...Bf8?!

Walking the king over is safer: 38...Kg7! 39 Qc6 Kf7 =.

39 g4

39 Qh4+ Kg7 40 Qf6+ Kh7 41 e6 is the most accurate try.

39...Kh7

39...Kg7! 40 e6 Kf6 =.

40 e6

White now threatens to win by h4-h5.

40...Bd6+ 41 Kg2 Be7!

Black holds h4 at bay.

42 Qc7 Kg8 43 Kg3

White threatens h4 again.

43...Kf8? (D)

43...Bf6! 44 Qc4 Be5+ 45 Kf3 Bf6 46 Qxb4 Rxe6 47 a4 Bf7 =.
White to play

44 Qf4?+

Oddly, White refrained from his main idea for no particular reason. 44 h4! Rd8 45 Qc1 Rd3+ 46 Kh2 Kg8 47 h5 Be8 48 h6 +–.

44...Kg7?

44...Kg8! looks a lot more logical, as it puts the king further away from White’s queen so that Black can avoid checks of any kind by playing ...Rd8 and ...Be8: 45 h4 Rd8! 46 Kg2 Be8 47 Qc4 Rd6 48 h5 Rc6 49 Qe4 Rc1 and Black holds. He even threatens ...Bc6.

45 Qd4+?

White’s refusal to play h4 is nothing short of strange: 45 h4! Rd8 46 Kg2 Rh8 47 Qe5+ Kg8 48 Qb8+ Kg7 49 Qa7 Kf8 50 g5 +–.

45...Kg8 46 h4 Rd8!

Black gains a crucial tempo for defence thanks to White’s mistaken check on d4.

47 Qc4
After 47 Qa7 Rd3+ 48 Kf4 Bd6+ 49 Kg5 Be8 Black appears to hold as well.

47...Bd3?

This was a blunder. Black could have won the h4-pawn with tempo with no negative consequences: 47...Rd3+! 48 Kg2 Rd2+ 49 Kf3 Bxh4 50 e7+ Kg7 51 Qxb4 Rf2+ =.

48 Qc6

White threatens to win by Qb7.

48...Bb1

After 48...Kg7 49 Qb6 Rd6 50 Qa7 Kf8 51 Qa8+ Kg7 52 Qe8 Rxe6 53 Qd7 White scoops up a piece and wins.

49 h5 Bxa2

49...Kg7 50 Qc1 +–.

50 Qe4

White now carries out h6 with a quick win.

50...Kh8 51 h6 Bf6 52 e7 Re8 53 Qf4

There is no stopping mate.

53...Bg7 54 hxg7+ Kxg7 55 g5 Kg8 56 Qf6 1-0

This was a thoroughly strange game in all of its phases, with unusually weak play in the opening, middlegame and endgame for players of this calibre. Since it was a late round, it is possible that the players were just extremely exhausted. In any case, the amount of errors present in this game should give hope and perspective to many amateur players. Even the very best make plenty of mistakes in positions they do not understand so well.
Conclusions and Recommendations

To become an effective chess-player, one must not only build up a base of knowledge and skill, but also be able to approach the game with a calm and sober emotional state. At no point in my chess career did I ever have any inclination towards anger or anxiety at the board. My approach reflected being very task-oriented, rather than ego-oriented, because the focus should be on good moves and ideas as opposed to crushing someone’s ego or an obsession with the specific result of a game.

As has been made clear earlier in the text, chess is a very difficult game that is hard to grapple with precisely because it is so multifaceted. I am going to bring up the elephant in the room that no one wants to talk about: a very high percentage of chess-players are introverts not getting enough daily activity; many have low energy levels much of the time. For the vast majority of them, raising their energy level would increase their capacity for working, improve their mood, and improve their endurance (and probably even calculation) during an actual chess game. I myself was quite lazy and somewhat physically unmotivated for a period of time. As a travelling chess-player, it is difficult to find realistic possibilities for physical training on the go. My mood, conditioning and overall endurance improved a lot once I started cooking healthier meals and doing physical routines that I could maintain on the go.

A good start is to make small steps towards a healthier lifestyle. In 2015, I started waking up and doing 20 push-ups, followed by 12 lunges and a 30-second ‘plank’. I repeat these three exercises three times each so that all nine exercises take around 10 minutes. The good thing is that all of these exercises can even be done from a hotel room while playing in a tournament. There really is not a good excuse to avoid something small and easily applicable like this. Even after I tore my rotator cuff and could barely use my upper body for a year, I created a daily workout routine for my legs and my core to stay in shape and keep my mind sharp. It is important as chess-players not to neglect our health.
A good idea is to make a spreadsheet that lists each day of the week on the left columns, with various inputs to fill in for the vertical columns. In the vertical columns I would list total calories consumed, weight first thing in the morning, gym performance (1-10), overall energy (1-10), sleep quality (1-10), water intake (in litres), as well as chess effort (1-10) and chess study (1-10). Once a day you can fill in all of this information in a span of about two minutes. It is extremely simple and research does show quantitative feedback is very effective in leading to qualitative results.

A 30-minute workout that I sometimes do is to complete 100 squats, 100 leg lifts, 100 pull-ups, 100 push-ups, and 100 dips. This is often called the 500 workout. It does not take long and can be done in a park with a pull-up bar. For fat-burning, ‘suicides’ (a common drill for basketball) are very effective to do three times a week. It is essentially all a matter of motivation and wanting it badly. If you have the time and desire, you can move into the top 1% in chess and the top 1% in physical conditioning if your will is strong.

On the same topic of personal decisions that may motivate you in chess, keeping lists of short-term activities and goals is extremely useful for chess-players. I would keep lists of short-term goals for everything. I keep a couple of different notepads on my desk for chess. One is devoted to opening lines that need to be checked or that I am simply curious about. One is for recent games that caught my eye. You would be surprised how easy it is to stay organized if you get into the habit of writing down all of your chess curiosities and concretely learning from them.

On the topic of chess study recommendations, I have started a curriculum with one of my students in which he is assigned a certain amount of work from a book for one week and I give him questions to answer from the text. Now we are working through Positional Decision-Making in Chess. With some discipline, in a year you can read six of the best chess books ever written using a relatively short amount of time each day. I used to motivate myself by studying four pages a day every morning right when I woke up. Having a very manageable goal such as this makes it more likely that you will finish the book.
These are arguably the best six games collections to date, as they are essentially the only ones written by players over 2750 and with high-quality modern analysis:


3. *Kramnik: My Life and Games* by Vladimir Kramnik and Yakov Damsky

4. *Garry Kasparov on Garry Kasparov, Part III: 1993-2005* by Garry Kasparov (or one of his earlier games collections – this is the latest one and why I suggest it)

5. *Positional Decision-Making in Chess* by Boris Gelfand

6. *Fire on Board 2* by Alexei Shirov

Other games collections by strong grandmasters include John Nunn’s *Grandmaster Chess Move by Move* and Victor Bologan’s *Selected Games*.

Keep in mind, this is not very many books, so it does make sense to own all of them. In total, these eight books are cheaper than the chemistry textbook on my desk.

Players work too infrequently on improving their chess logic. By studying the thoughts of the best players, you get a pretty clear insight into the moves they consider, the logic they use, and how they make decisions. It is a lot more multifaceted and knowledge-enriching than just spotting a tactical device.

I was strongly urged to write about other chess book recommendations of mine and how master players from my generation view chess books. I asked 20 native English speakers who were IM strength and above about which chess books they had read and the following were the most commonly-mentioned besides the ones listed above. In no particular order:
My 60 Memorable Games by Bobby Fischer

Endgame Strategy by Mikhail Shereshevsky

The Life and Games of Mikhail Tal by Mikhail Tal

Improve Your Chess Now by Jonathan Tisdall

Secrets of Chess Training by Mark Dvoretsky

Positional Play by Mark Dvoretsky and Artur Yusupov

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Creative Chess by Amatzia Avni

Imagination in Chess by Paata Gaprindashvili

Chess for Zebras by Jonathan Rowson

Perfect Your Chess by Andrei Volokitin and Vladimir Grabinsky

I studied all of these books myself before I became an international master. Obviously it is not necessary to study so many books to become a strong player, but for those that like structure, like the topic being discussed, and like keeping track of their study, many of these books can be helpful. There are not many books that most players of a generation would have read, but
this list covers all of the major common ones that the players I polled mentioned.

You might encounter players who make odd predictions about your future chess trajectory. Never accept the limitations of somebody else. Do not give up before you have tried for yourself. That is the only way to know or not know if you can do something. I gave it a try. That’s how I know where I stand. Get in there and give it a try.

I hope that you were able to use this book to improve your understanding of logical concepts like metagame thinking and the burden of proof. And I hope you continually benefit from the book’s practical topics like fundamental aspects of chess and chess improvement, psychology in chess, self-study, what to think about on and off the board, and using engines.

Chess is an amazing game, teaching you everything from planning to patience to humility. One of my life goals is spreading knowledge about chess to the world. I hope this book has succeeded in that goal and provided you with a lot of new ideas to help you make progress in your chess.

The mind is a muscle that needs to be employed and the service of virtue is the very best thing we can do. Aristotle said that the pursuit of excellence, particularly in virtue, is the surest path to happiness, and happiness is the one thing we don’t seek for the sake of something else. Pursuing excellence through chess has been very satisfying for me. I hope this book can help you pursue excellence and bring you happiness as well.
Games

Almasi – Naiditsch

Andersen, Ma. – Kislik

Antoshin – Novopashin

Anurag – Spasov, V.

Berczes – Kislik

Botvinnik – Petrosian

Bridge, N. – Jones, G.

Bromberger – Haba

Carlsen – Hansen, S.B.; Nakamura; Topalov

Clancy – Kleinman, M.

Cornette – Efimenko

Crafty – Kislik

Danin – Malaniuk

Efimenko – Cornette

Erdos – Filip, L.

Fernandez, D. – Kislik

‘files’ – ‘threeply’

Filip, L. – Erdos

Fischer, R. – Levina
GELFAND – Svidler

GEORGIEV, Ki. – Gwaze

GETZ – Piceu

GRISHCHUK – Jobava; Sargissian

GWAZE – Georgiev, Ki.

HABA – Bromberger

HANSEN, S.B. – Carlsen

HEINZEL – Lalić

HERA – Kislik

HOVHANNISYAN – Vokhidov, S.

‘INTRINSIC29’ – ‘Terminator2’

IVANCHUK – Volkov

JAUS – Kislik

JOBAVA – Grischchuk; Nakamura; Savchenko, B.

JONES, G. – Bridge, N.

JU WENJUN – Rapport

KAMSKY – Ramirez, A.

KANOVSKY – Kislik

KARIAKIN – Svidler

KASPAROV – Movsesian
KAUFMAN, L. – **Melekhina**

KISLIK – Andersen, Ma.; Berczes; Crafty; Fernandez, D.; Hera; Jaus; Kanovsky; Nagy, B.; Narayanan; Rajlich, I.; Sardy; Tesik

KJARTANSSON – Yilmaz

KLEIN, D. – Swinkels

KLEINMAN, M. – **Clancy**

KNUDSEN, E. – Mahmoud, Mahmoud

LALIĆ – Heinzel; Pizzuto; Vašiček, Vašiček

LEVINA – **Fischer, R.**

MAHMOUD – Knudsen, E., Knudsen, E.

MAKOLLI – **Parligras**

MALAKHOV – Nybäck

MALANIUK – **Danin**

MATLAKOV – **Onishchuk, V.**

MELEKHINA – Kaufman, L.

MOVSESIAN – Kasparov

NAGY, B. – **Kislik**

NAIDITSCH – **Almasi**

NAKAMURA – **Carlsen; Jobava**

NARAYANAN – Kislik

NOVOPASHIN – **Antoshin**
Nyback – Malakhov
Onishchuk, V. – Matlakov
Parligras – Makolli
Petersen, T. – Rowson
Petrosian – Botvinnik; Spassky
Piceu – Getz
Pizzuto – Lalić
Ponomariov – Vallejo Pons
Rajlich, I. – Kislik
Ramirez, A. – Kamsky
Rapport – Ju Wenjun
Rodshtein, M. – Safarli
Rowson – Petersen, T.
Safarli – Rodshtein, M.
Sardy – Kislik
Sargissian – Grishchuk
Savchenko, B. – Jobava
Schneider, B. – Van den Doel
Sielecki – Yakovenko
Spasov, V. – Anurag
Spassky – Petrosian
Svidler – Gelfand; Kariakin
Swinkels – Klein, D.
‘Terminator2’ – ‘Intrinsic29’
Tesik – Kislik
‘Threeply’ – ‘files’
Topalov – Carlsen
Vachier-Lagrave – Vallejo Pons
Vallejo Pons – Ponomariov; Vachier-Lagrave
Van den Doel – Schneider, B.
Vasiček – Lalić, Lalić
Vokhidov, S. – Hovhannisyan
Volkov – Ivanchuk
Yakovenko – Sielecki
Yılmaz – Kjartansson
Study

Minsky, M.
Directors: Dr John Nunn GM, Murray Chandler GM and Graham Burgess FM
German Editor: Petra Nunn WFM
Erik Kislik is an International Master originally from California who lives in Budapest. He is an expert in computer chess and one of the most in-demand chess trainers on ICC. He has coached many grandmasters and assisted a number of elite players with their opening preparation.
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Secrets of Grandmaster Chess – John Nunn

John Nunn’s Best Games – John Nunn

Dynamic Pawn Play in Chess – Dražen Marović


The Giant Chess Puzzle Book – Zenon Franco

The Cambridge Springs – Krzysztof Panczyk and Jacek Ilczuk

Understanding the King’s Indian – Mikhail Golubev
How to Calculate Chess Tactics – Valeri Beim

Perfect Your Chess – Andrei Volokitin and Vladimir Grabinsky

Chess Training for Budding Champions – Jesper Hall

Play the Sicilian Dragon – Edward Dearing

Mastering the Najdorf – Julen Arizmendi and Javier Moreno

The Quickest Chess Victories of All Time (new enlarged edition) – Graham Burgess

How to Become a Deadly Chess Tactician – David LeMoir

Play the Open Games as Black – John Emms

Anti-Sicilians: A Guide for Black – Dorian Rogozenko

50 Essential Chess Lessons – Steve Giddins

Instructive Modern Chess Masterpieces – Igor Stohl

The Gambit Guide to the Torre Attack – Graham Burgess

An Explosive Chess Opening Repertoire for Black – Jouni Yrjölä and Jussi Tella

How Chess Games are Won and Lost – Lars Bo Hansen

Essential Chess Sacrifices – David LeMoir

A Course in Chess Tactics – Dejan Bojkov and Vladimir Georgiev

Chess Endgames for Kids – Karsten Müller

Storming the Barricades – Larry Christiansen

A Complete Chess Course – Antonio Gude
Problem Chess: Art and Magic on the Chessboard – Göran Forslund

Understanding the Scandinavian – Sergey Kasparov

Grandmaster Chess Move by Move – John Nunn

How to Beat 1 d4 – James Rizzitano

Understanding the Leningrad Dutch – Valeri Beim


Understanding the Marshall Attack – David Vigorito

Understanding Rook Endgames – Karsten Müller and Yakov Konoval

Chess for Life – Matthew Sadler and Natasha Regan

Fundamental Checkmates – Antonio Gude

A Simple Chess Opening Repertoire for White – Sam Collins

Instructive Chess Miniatures – Alper Efe Ataman

Play the Classical Dutch – Simon Williams

The Seven Deadly Chess Sins – Jonathan Rowson

The Slav – Graham Burgess

Chess Strategy for Kids – Thomas Engqvist

Your First Chess Lessons – Paul van der Sterren

How to Play Dynamic Chess – Valeri Beim

Improve Your Positional Chess – Carsten Hansen

Solving in Style – John Nunn
Understanding the Sicilian – Mikhail Golubev

My Secrets in the Ruy Lopez – Lajos Portisch

Extreme Chess Tactics – Yochanan Afek

The Chess Attacker’s Handbook – Michael Song and Razvan Preotu

125 Chess Opening Surprises – Graham Burgess

Fundamental Chess Tactics – Antonio Gude

How to Beat the Open Games – Sverre Johnsen

Applying Logic in Chess – Erik Kislik
FCO: Fundamental Chess Openings

Paul van der Sterren

This just has to be the perfect single-volume survival guide. All openings are covered, with detailed verbal explanations of plans for both sides.

The first moves of a chess game define the nature of the whole struggle, as both players stake their claim to the critical squares and start to develop their plans. It is essential to play purposefully and to avoid falling into traps or reaching a position that you don’t understand. This is not a book that provides masses of variations to memorize. Paul van der Sterren instead offers a wealth of ideas and explanation, together with the basic variations of each and every opening. This knowledge will equip players to succeed in the opening up to good club level, and provide a superb grounding in opening play on which to build a more sophisticated repertoire. The strategies he explains will, unlike ever-changing chess opening theory, remain valid as long as chess is played, and so the time spent studying this book will be rewarded many times over.

“Also available on Chess Studio.”

“The format of the book is very friendly, openings very clearly set out and identified, with the variations touched upon in short and sweet sections” – John Lee Shaw, CHESS CHECK (e-zine)
Fundamental Chess Endings

Karsten Müller and Frank Lamprecht

This is the first truly modern one-volume endgame encyclopaedia. It makes full use of endgame tablebases and analytical engines that access these tablebases; where previous authors could only make educated guesses, Müller and Lamprecht have often been able to state the definitive truth, or get much closer to it. Covers all major types of endgame, featuring rules of thumb, thinking methods, principles, practical advice, and much more.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“The authors love the endgame phase of the game and this shows in the writing. ... Anyone reading it will seriously improve their game.” – British Chess Federation Book of the Year Award press release
A Cunning Chess Opening Repertoire for White

Graham Burgess

A good opening repertoire need not require an enormous amount of study to be highly effective. A cunning choice of lines and move-orders can steer the game to positions that we like and deny the opponent his preferred strategies. The main cornerstones of this repertoire are carefully chosen Queen’s Gambit lines, the Torre Attack (vs ...e6), and a variety of fianchetto options against the King’s Indian and related set-ups. White’s position is kept highly flexible, with many possible transpositions to a wide variety of systems that the reader can use to extend and vary the repertoire. The book features a wealth of new ideas and original analysis.

Also available on Chess Studio.

“This is the way opening books should be written. It is a training repertoire book which you can use to build a solid white repertoire for your career. It is not a ‘hope they make a mistake and fall for the trap’ book. Best value if you want to learn to play the opening like a grandmaster.” – Danny Woodall, Amazon.com review
Mastering the Chess Openings Volume 1

John Watson

In this major four-volume work, Watson explains not only the ideas and strategies behind specific openings, but also the interconnections of chess openings taken as a whole. By presenting the common threads that underlie opening play, he provides a permanent basis for playing openings of any type. Volume 1 offers both entertainment and challenging study material in king’s pawn openings such as the Sicilian and Ruy Lopez.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“The publication of this series is a bellwether event in chess publishing, and all players should avail themselves of the opportunity to read these books.” – Mark Donlan, CHESS HORIZONS

“All of these epic Watson works have one thing in common. You walk away after reading with a deeper understanding of chess.” – Pete Tamburro, CHESS LIFE
Mastering the Chess Openings Volume 2

John Watson

Watson presents a wide-ranging view of the way in which top-class players really handle the opening, rather than an idealized and simplified model. This volume, focusing on queen’s pawn openings, will make chess-players think hard about how they begin their games. It also offers both entertainment and challenging study material in openings such as the Nimzo-Indian, King’s Indian and the entire Queen’s Gambit complex.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“Watson has managed to present the most important openings after 1 d4 and analyses them in detail as well as explaining the backgrounds. ... you have the feeling you are holding a real classic in your hand. It may sound exaggerated, but I believe Watson is a sort of modern Aron Nimzowitsch. Absolutely recommended!” – Martin Rieger, WWW.FREECHESS.DE
Mastering the Chess Openings Volume 3

John Watson

In the third volume of his highly acclaimed series, Watson moves on to flank openings. He provides in-depth coverage of the English Opening, while drawing upon many themes from the first two books. Particularly in the context of reversed and analogous forms of standard structures, we understand why certain ideas work and others don’t, and experience the concept of ‘Cross-Pollination’ at work in even more varied forms than seen in earlier volumes.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“This volume can be read separate from the other two in this series; however, I recommend reading all three books. They will truly take your game to the next level and help you understand the opening phase so much better, as well as help minimize the risk of starting the game out from an inferior position. Those who play the English Opening should buy this book without any hesitation. This book is a modern classic. It is genuinely instructive and provides numerous examples of original analysis and improvements over existing theory.” – Carsten Hansen, CHESSCAFE.COM
Mastering the Chess Openings Volume 4

John Watson

This final volume draws together many themes in a wide-ranging discussion of general opening topics. In the process, Watson covers a variety of opening structures and variations not seen in the earlier volumes and presents a great wealth of original analysis. He also explains how players should best prepare and choose their openings for the level at which they play. The final topics are the future of chess openings and the skills that will be most important as chess evolves in the forthcoming decades.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“The section on gambit play is extremely well done and must reading for any player coming up through the ranks. So too is the following chapter ‘Choosing and Preparing Openings’ which is pure gold. Watson gives well-considered suggestions for appropriate openings for players from just beyond beginner to 2300 that will solve many amateurs’ perennial headache. Highly Recommended” – IM John Donaldson, US Team Captain
Chess Openings for Kids

John Watson and Graham Burgess

This book teaches the names and starting moves of all the main chess openings, and explains the basic ideas. Beginners will learn how to position their pieces for maximum impact. More experienced players will discover some remarkable tactical and strategic themes that are vital for chess mastery.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“A very succinct overview of the main openings and the ideas behind them”
– GM Luke McShane, NEW IN CHESS

“To be able to provide both enthusiasm, inspiration and basic knowledge is a praiseworthy effort.” – FARBRORTHEGURU.BLOGSPOT.COM
A Killer Chess Opening Repertoire (new enlarged edition)

Aaron Summerscale and Sverre Johnsen

Bored with the same old openings? Worried about having to learn too much theory? Then this book – a set of exceptionally dangerous opening weapons for White – will come as a godsend. The queen’s pawn repertoire is based on rapid piece development, and includes many lethal attacking ideas and traps.

Also available on Chess Studio.

“Johnsen has chosen to build on the first edition, addressing the areas where theory has substantially changed or Summerscale’s original coverage needed expanding. Offers a nice mix for the player who doesn’t like to study theory too much but still wants a chance to come out of the opening with chances for an advantage” – IM John Donaldson, US Team Captain
How to Beat Your Dad at Chess

Murray Chandler

The enduring bestseller – explaining in simple terms all the basic checkmate patterns. Learn about the 50 Deadly Checkmates – attacking patterns that occur repeatedly in games between players of all standards.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“Fun to read for players of any age or any strength” – GM Lubosh Kavalek, Washington Post
Chess Tactics for Kids

Murray Chandler

In an easy-to-understand format, this book explains how to bamboozle your chess opponents using commonly occurring tactical motifs. 50 different tactical motifs are covered, all leading to the win of material.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“As a teacher of scholastic/junior players, I have long wished for a comprehensive yet brief and inexpensive guide to chess tactics. Finally a work that fills the bill” – Bill Whited, CHESS COUNTRY
Attack with Black

Valery Aveskulov

Need a reliable way to fight for the initiative when White plays 1 d4? Grandmaster Aveskulov presents a sound but ultra-aggressive repertoire based on gambits that have proved their worth in grandmaster play over many years. The Benko Gambit offers Black very active piece-play and intense positional pressure. If White dodges the Benko, we hit him with the Blumenfeld, sacrificing a pawn to set up a strong pawn-centre. Aveskulov examines all of White’s options and move-orders after 1 d4 Nf6.

Also available on Chess Studio.

“This isn’t like previous books on the Benko ... this book has the real strength of taking the total Black approach in hand. Anyone looking to fill out a full defense to 1 d4 would do well to pick this up.” – Bill McGeary, WWW.CHESSVILLE.COM
The Gambit Book of Instructive Chess Puzzles

Graham Burgess

Solving chess puzzles is one of the most effective ways to improve your game. This convenient book provides 300 exercises, with instructive points highlighted in the solutions.

Also available as a German-language Kindle edition.

“There are several things a successful book on tactical puzzles should have. They include examples that are not well-known, material arranged not by theme but by degree of difficulty and perhaps most importantly solutions that are detailed enough to explain to the student why they went wrong. Burgess passes all these tests with flying colors.” – IM John Donaldson, US Team Captain
Chess Puzzles for Kids

Murray Chandler

This chess puzzle super-challenge contains 100 fun positions to solve, ranging from encouragingly easy to mind-numbingly hard. Using an innovative format, every puzzle is preceded by an instructive example, illustrating an important pattern. Chess Puzzles for Kids will quickly enable children to enjoy using their new-found skills to outwit friends and relatives.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“Grandmaster Murray Chandler writes excellent books for kids who already know how to play. ... presents the mating and tactical patterns in such a clear and entertaining way that it is a joy to read it.” – GM Lubosh Kavalek, Huffington Post
Understanding Pawn Play in Chess

Dražen Marović

Chess owes its extraordinary depth to pawns. These humble pieces can take on many roles in the chess struggle. They can be blockers, battering-rams, self-sacrificing heroes, and can even be promoted to the ranks of royalty. Marović investigates high-quality games to provide the reader with an armoury of pawn-play concepts that will help him make the right judgements at the board.

Also available on Chess Studio.

Also available as a German-language Kindle edition.

“GM Marović utilizes all his experience as a GM and trainer to outline appropriate strategies associated with specific pawn-structures: isolated pawns (specifically IQP), isolated pawn couples, hanging pawns, passed, doubled and backward pawns, pawn-chains and pawn-islands. This approach ... has of course been attempted before, but not, that I have seen, with such clarity as in this book” – Jonathan Tait, BCCA
The Most Amazing Chess Moves of All Time

John Emms

Very occasionally, a chess move is played that astonishes the whole world. It may be a move of astounding complexity, unearthly beauty, deep paradox... or all three. The move is discussed and analysed around the world as chess-players attempt to fathom both why the move works, and how on earth anyone thought of it in the first place. In this book John Emms has selected, from hundreds of candidates, the 200 most amazing chess moves of all time. In each case, the reader is given the chance to try to find the move for himself – making this one of the most challenging chess puzzle books ever published.

Also available on Chess Studio.

“...you are getting double value for money – a wonderful games collection and a ‘find the continuation’ complication. A really enjoyable and instructive book.” – Alan Sutton, EN PASSANT
A Rock-Solid Chess Opening Repertoire for Black

Viacheslav Eingorn

Grandmaster Eingorn shows that it is possible both to play solidly, and to take White out of his comfort zone. The repertoire, based on playing 1...e6, is strikingly creative and will appeal to those who want a stress-free life as Black. You will get every chance to demonstrate your chess skills, and are very unlikely to be blown off the board by a sharp prepared line. Eingorn’s subtle move-orders are particularly effective if White refuses to pick up the gauntlet, as Black can then use his delay in playing ...Nf6 to good effect and take the fight directly to his opponent.

Also available on Chess Studio.

“...shows depth of reading and balanced research. ... A pleasure to recommend this little gem of a book. ... Perhaps the best book of 2012 so far. A creative effort.” – James Pratt, British Chess Magazine
Understanding Chess Middlegames

John Nunn

The middlegame is the phase of the chess battle where most games are decided, yet is the one that has received the least systematic treatment from chess writers. With the outstanding clarity for which he is famous, Nunn breaks down complex problems into bite-sized pieces. Each of the 100 lessons features two inspiring examples from modern chess, with a clear focus on the key instructive points.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“I own several books on the Middlegame in chess written by esteemed Grandmasters but this one is probably my favourite. John Nunn knows his subject; he is three-times World Chess Solving Champion” – Carl Portman, CARLSPLANET.CO.UK
Understanding the Chess Openings

Sam Collins

A comprehensive guide to all important chess openings. There is coverage of all major variations, and helpful descriptions and explanation of the typical strategies for both sides.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“Anyone rated under 1700 should own this book and even higher rated players who are looking to fill in the blanks in their repertoire can benefit. It arms you with the knowledge of where to focus your resources when investing money on other opening books.” – Carsten Hansen, CHESSCAFE.COM
The Ultimate Chess Puzzle Book

John Emms

This book provides a wealth of puzzle positions to test just about every facet of your tactical skills. The book begins with 100 relatively easy positions suitable for novices, and ends with 100 extremely tough puzzles, which provide a mind-bending challenge even for top-class players. There are 1001 puzzles in all.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“The material is well chosen, and a marking system enables you to assess your performance relative to masters and grandmasters” – Leonard Barden, Evening Standard
Chess for Zebras

Jonathan Rowson

An insight into human idiosyncrasies, in all phases of the game. The reader will begin to appreciate chess at a more profound level, while enjoying a book overflowing with common sense and humour.

*Also available on* Chess Studio.

*Also available as a German-language Kindle edition.*

“I warmly recommend the book, especially to players frustrated by a long period of stagnation. Most chess books attempt to change what we think, but Rowson’s helps us to change how we think, and in the long run, that’s what will pay the biggest dividends” – Dennis Monokroussos, CHess TODAY
Understanding Chess Move by Move

John Nunn

Thirty modern games are examined in depth, to help the reader understand the most important aspects of chess and to illustrate modern chess principles in action. Virtually every move is explained using words that everyone can understand.

*Also available on* [Chess Studio](#).

*Also available as German-language Chess Studio and Kindle editions.*

“This is a great book from one of the best chess writers in the world. He does a fine job explaining the plans ‘move by move’ so everybody can understand what it’s all about” – Søren Søgaard, SEAGAARD REVIEWS
365 Ways to Checkmate

Joe Gallagher

Tactics based on checkmate ideas against the enemy king decide a large proportion of chess games, so it is vital to be alert to these possibilities when they occur. Joe Gallagher provides 365 checkmate puzzles to help readers sharpen their skills. In each position, the task is to find a way to force a clear-cut win.

“One of the things that makes this a good book is Gallagher’s skill at selecting examples and placing them at the right level of difficulty. Another is offering detailed solutions which often cover plausible sidelines that might have attracted the reader.” – IM John Donaldson, JEREMYSILMAN.COM
1001 Deadly Checkmates

John Nunn

The ability to spot checkmates is a vital skill – and this easy-to-use book shows you how it is done. With the help of Grandmaster John Nunn, you will be ready to shock your next opponent with a deadly checkmate, whether in a school match, a club tournament – or even a championship game!

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“A great book, which I think will be useful to a wide range of players, say from 1400 to 2400. Chess is largely a matter of pattern recognition, so exercises like these are useful to everyone.” – Frederick Rhine, CHICAGOCHESS.BLOGSPOT.COM
Secrets of Modern Chess Strategy

John Watson

In a profound but thoroughly practical manner, this classic work explores how chess concepts have evolved over the past 70 years. Acclaimed double-winner of the British Chess Federation and United States Chess Federation ‘Book of the Year’ awards.

Also available on Chess Studio.

Also available as a German-language Kindle edition.

“can, without resorting to hyperbole, be considered a classic” – GM Nigel Short, The Sunday Telegraph
Chess Strategy in Action

John Watson

Here Watson fleshes out the theory presented to enormous acclaim in *Secrets of Modern Chess Strategy*. He illustrates the modern practice of chess with examples from imaginative players such as Kasparov, Kramnik, Anand and Ivanchuk, and tempestuous innovators like Shirov and Morozevich.

*Also available on* [Chess Studio](#).

*Also available as a German-language Kindle edition.*

“...above all else Watson is excellent at explaining these mysterious grandmaster concepts to the club player” – IM Richard Palliser, CHESS MONTHLY
Learn Chess Tactics

John Nunn

This book teaches basic tactical ideas such as the fork, pin and discovered attack, and introduces general ideas like elimination, immobilization and compulsion. A basic knowledge of simple tactics will enable a novice to start winning games, by giving checkmate or capturing material.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“The quality of the material, the fine layout, and the enlightening comments make this book the ideal introduction to chess tactics for the inexperienced player.” – SCHACHMARKT
How to Build Your Chess Opening Repertoire

Steve Giddins

Whether a novice or a master, every player needs to select an opening repertoire. In this book, the first to focus on these issues, Steve Giddins provides common-sense guidance on one of the perennial problems facing chess-players. He tackles questions such as: whether to play main lines, offbeat openings or ‘universal’ systems; how to avoid being ‘move-ordered’; how to use computers; and if and when to depart from or change your repertoire.

Also available on Chess Studio.

Also available as a German-language Kindle edition.

“I can recommend this book unreservedly to anyone who is serious about improving” – Phil Adams, 3Cs website
Secrets of Practical Chess (new enlarged edition)

John Nunn

What is the best way to improve your chess results? Memorizing openings, learning endgames... there must be an easier way! How about making the most of your existing talent? Contains 45% more material than the first edition.

Also available on Chess Studio.

“Grandmaster John Nunn offers practical advice on how to improve your chess results. It includes guidance on making decisions at the board, the study of opening, middlegame and endgame play, use of computers plus the selection and use of chess books. ... I found the chapters on use of computers and the selection and use of chess books of particular interest” – David Mills, Time Trouble
The Road to Chess Improvement

Alex Yermolinsky

“How can I improve my game?” is a perennial question facing chess-players. Alex Yermolinsky is well-qualified to offer advice – having trained himself, slowly but surely raising his game to top-class grandmaster standard. In this award-winning book he passes on many of the insights he has gained over the years, steering the reader away from ‘quick-fix’ approaches and focusing on the critical areas of chess understanding and over-the-board decision-making.

Also available on Chess Studio.

Also available as a German-language Kindle edition.

“a magnificent achievement, by far the finest book I’ve ever seen on the subject of practical play” – GM Matthew Sadler, NEW IN CHESS
Understanding Chess Endgames

John Nunn

Assuming no specialized endgame knowledge, John Nunn presents 100 key endgame concepts, and explains how they are used to win games or save difficult positions. He covers all the main types of endgames and typical thinking methods, and so equips readers with all the skills needed to excel in this vital phase of the game up to good club level and beyond.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“A fantastic endgame primer ... Nunn has distilled a vast amount of detailed endgame research into clear and well-presented chunks. There are 100 short sections, each with four examples, each with a diagram, fitting neatly across two pages” – GM Daniel King, THE GUARDIAN
101 Chess Opening Traps

*Steve Giddins*

This timeless collection of deadly traps might win you games in just a handful of moves! The book focuses on established opening traps that club players are most likely to fall for.

*Also available on* [Chess Studio](#).

“To my delight and amazement [my opponent] fell straight into the trap” – Alec Toll, OPEN FILE
Learn Chess

John Nunn

Starting with the very basics, this book tells you everything you need to know to become a successful chess-player. No prior knowledge is assumed. The reader learns step-by-step, with each new point illustrated by clear examples. By the end of the book, the reader will be fully ready to take on opponents across the board, or on the Internet, and start winning.

Also available on Chess Studio.

Also available as a German-language Kindle edition.

“an excellent primer. The prose is lucid and the presentation systematic; an adult reader with no prior knowledge of the game will be taught all he needs to know” – James Vigus, DRAGON
Chess for Children

*Murray Chandler and Helen Milligan*

With this charming book, children will delight in learning the basic moves of chess. All the rules are explained step by step, assuming no prior knowledge. The lessons are reinforced by the inventive tales that George is told by his pet alligator Kirsty, self-proclaimed Grand Alligator of chess.

Chess is widely recognized as a useful tool for developing creative thinking in children, yet the rules of the game are straightforward. With this book, even children as young as five can enjoy exciting games and will thoroughly enjoy outwitting friends and relatives.

*Also available on* Chess Studio.

*Also available as German-language Chess Studio and Kindle editions.*

“...the best book of its type ever published” – Peter Connor, CHESSCOUNTRY.COM

“The highly professional design of this book commends it for use in chess lessons for beginners” – Dr W. Schweizer, ROCHADE
Grandmaster Secrets: The Caro-Kann

Peter Wells

The Caro-Kann is one of the most popular responses to 1 e4. Black stakes a claim to the central squares and seeks free development for all his pieces. While solid, it is by no means a drawing weapon – the resulting positions generally contain at least a degree of imbalance and the critical lines lead to sharp positions with chances for both sides. Many new approaches for both sides have been developed in recent years, and a good understanding of these ideas is vital for anyone looking to handle either side of the Caro with success.

Also available on Chess Studio.

“I would be quick to pick up this book as an e4 player or if I defended it with the Caro-Kann. Wells really focuses on how to play the opening by presenting a wide range of ideas for both sides. Explanations abound ... the analysis and coverage is outstanding.” – Lou Mercuri, CHESS HORIZONS
Play the Najdorf Sicilian

James Rizzitano

The Najdorf Sicilian has a unique place amongst chess openings: for several decades it has been regarded by the top grandmasters as the best way for Black to play soundly for a win against 1 e4. James Rizzitano, a battle-hardened Sicilian warrior, distils the most important ideas and themes from current practice to provide an ideal guide for those looking to succeed as White or Black in the Najdorf in the modern scientific era.

Also available on Chess Studio.

“A good book for those that want to start playing the Najdorf with Black and also recommendable for Najdorf players not the least because it is very much up to date and includes state of the art knowledge about the lines presented. Also quite useful for players that face the Najdorf with White, specially those that play Bg5 or Be3 since so many different lines for Black are analysed here.” – Hedinn Steingrimsson, WWW.SCHACH-WELT.DE
The Alekhine is arguably the most forcing and aggressive reply to 1 e4. Black immediately forces the pace and drags the game onto his own favoured territory. Those who specialize in the Alekhine find that the opening has a real practical sting and quick-strike potential. The coverage in this book is even-handed, and there are abundant ideas presented to both sides.

Also available on Chess Studio.

“This is Bogdanov’s third book for Gambit, showing that this quality publishing house trusts the author – and why wouldn’t they? The language is fluent and informative, and the sample games are well chosen and instructive.” – Marko Tauriainen, Suomen Shakk
Chess Explained: The Queen’s Gambit Declined

James Rizzitano

The Queen’s Gambit Declined is one of the most important and popular of chess openings. Both sides have ways to create imbalance and test their opponent’s skills and knowledge in a full-blooded struggle. In addition to the traditional main lines with Bg5, White has at his disposal the Exchange Variation, and the Bf4 system, both of which can be handled in highly aggressive style if he wishes. Rizzitano covers all these lines and a plethora of other important options, focusing on the fundamental ideas on which they are based.

Also available on Chess Studio.

“I should also loudly call attention to Rizzitano’s new, well-written, and amazingly well-researched Chess Explained: The Queen’s Gambit Declined...” – John Watson, The Week in Chess
Chess Explained: The French

Viacheslav Eingorn and Valentin Bogdanov

The French appeals to a wide range of chess temperaments: it is solid yet uncompromising, and with a variety of chaotic variations to appeal to the most bloodthirsty of players, but also offering more tranquil lines to those seeking a quieter existence. Chess Explained books provide an understanding of an opening and the middlegames to which it leads, enabling you to find the right moves and plans in your own games.

*Also available on [Chess Studio](http://www.chessstudio.com).*

“...if you are considering utilizing the French as a weapon against 1 e4, then this book is a very good and inexpensive way of deciding if the opening is for you. It will give you a solid grounding in fundamental positional ideas and typical tactics in the French.” – Munroe Morrison, *OPEN FILE*
The Classical (1 e4 c5 2 Nf3 d6 3 d4 cxd4 4 Nxd4 Nf6 5 Nc3 Nc6) is one of the most popular and respected systems of the Sicilian. Black develops his pieces more quickly than in many Sicilian systems, and intricate piece-play often results. Yermolinsky covers lines that retain the independent significance of the Classical move-order, such as 6 Bc4 Qb6 – a line in which he is a leading specialist.

“Yermo’s book represents a good way to get to grips with this sound and interesting opening system.” – Phil Adams, 3Cs website
The c3 Sicilian is one of White’s most popular and poisonous ways to avoid the main lines of the Sicilian. With the forcing line 1 e4 c5 2 c3, White denies his opponent the chance to demonstrate his preparation in some chaotic system. There are plenty of tricks and traps in the c3 Sicilian, and the open piece-play that often results can lead to quick attacks and means that careless play will rarely go unpunished.

“...the format is well suited to the average club player who wishes to start using this variation.” – David Mills, TIME TROUBLE
Chess Explained: The Grünfeld

Valentin Bogdanov

The Grünfeld creates immediate imbalance: Black strikes at White’s centre with all available resources. In the main lines, White creates a large pawn-centre and launches an attack. While the theory of these lines has been extensively developed, there is a coherent logical thread that needs to be understood in order to get to grips with the theory and handle the resulting positions. This book features a special contribution from Viacheslav Eingorn on the key ideas of the Rb1 Exchange main line, which he was instrumental in developing.

Also available on Chess Studio.

“If you like aggression when you play Black then this book is for you. It creates immediate imbalance and again it is crucial to know how to handle this opening as White too.” – Carl Portman, DEFENCE FOCUS
Chess Explained: The Nimzo-Indian

Reinaldo Vera

The Nimzo-Indian is one of the most important of all chess openings, and popular at all levels of play. It provides winning chances for both sides as it leads to structures of great strategic variety and complexity. Key battlegrounds in the Nimzo include the blockade, IQP positions, the handling of unbalanced pawn-structures, and the struggle between bishop and knight. An understanding of these topics will prove valuable in a very broad context.

Also available on Chess Studio.

“This is a very well-written book with enough analytical material to launch your Nimzo-Indian career, and more than enough explanation to justify the series title.” – John Watson, The Week in Chess
Chess Explained: The Queen’s Indian

Peter Wells

The Queen’s Indian is an important and popular opening at all levels of play. Black’s flexible stance allows him to choose between a range of solid and dynamic structures. In turn, White can play flexibly, opposing Black’s fianchetto, or can try to force the pace in the centre and start a hand-to-hand fight. It is an opening rich in nuances, and many of the modern main lines involve moves that look extravagant, but are backed up by a deep underlying logic.

Also available on Chess Studio.

Also available as a German-language Kindle edition.

“The annotations in particular really impressed me, for the author actually did explain what was happening at every stage of the game. Everything appeared logical as I played through the games and read the annotations. Where alternatives are given, you are told why a certain move is good or bad, not just the fact that it is so. Peter Wells is to be congratulated on presenting everything so lucidly.” – Alan Sutton, EN PASSANT
Chess Explained: The Modern Benoni

Zenon Franco

The Modern Benoni is one of the few openings where White has no easy way to force drawish simplifications or deny Black any dynamic counterplay. In this book Franco shows how Black can seek to create the kind of mayhem that has attracted champions such as Tal, Kasparov and Topalov to the Benoni, and also demonstrates how White can seek either to put a positional clamp on the game, or else to storm Black’s position before his development is complete. A special section deals with the vital question of move-orders.

Also available on Chess Studio.

“These books provide 25 well annotated, up to date model games which you can use to guide you when learning the openings. Excellent introduction to these openings for intermediate players.” – Paul Dunn, AUSTRALIAN CHESS
Chess Explained: The Meran Semi-Slav

Reinaldo Vera

Belying its solid classical appearance, the Semi-Slav is one of Black’s most aggressive responses when White opens with the queen’s pawn. The Meran is its traditional main line, and often leads to chaotic positions of immense strategic and tactical richness. Vera draws upon decades of personal experience to explain the underlying logic of the Meran and related lines, and to pick out the key features of positions that to the untrained eye might appear random and unfathomable.

Also available on Chess Studio.

“What he offers is honesty! I like that. It means to me you can trust the rest of the book because he is honest about his own contribution.” – Bob Long, WWW.CHESSCO.COM
The Taimanov Sicilian is one of the most flexible options for Black in the Open Sicilian. It leads to a great variety of central structures, and the player with the better understanding of typical Sicilian themes will often emerge victorious – Taimanov positions need to be understood well in order to be played well. This book covers the Paulsen set-up with ...Qc7 in addition to the ‘pure’ Taimanov with ...Nge7.

“...I’m really impressed with how thorough and helpful the explanations are. I’m quite sure that anyone interested in taking up the Taimanov would learn a lot from this book – in fact, the average club player would probably be able to make do with this as his or her one and only Taimanov book.” – S. Evan Kreider, WWW.CHESSVILLE.COM
Chess Explained: The Main-Line Slav

David Vigorito

The Main-Line Slav is one of the key battlegrounds of modern chess, with adherents among all levels of chess-players. This book discusses all major lines following the moves 1 d4 d5 2 c4 c6 3 Nf3 Nf6 4 Nc3 dxc4. Vigorito dissects the most important themes and nuances, placing them firmly in the context of the practical struggle, making sure that readers will be familiar with the resources at their disposal, and understand when to employ them.

Also available on Chess Studio.

“...a solid understanding of the pawn-structures and piece-play will be the main factor in the success of any player who takes on this opening. ... As an introductory work to the Main-Line Slav, this book is an excellent place to start” – Carsten Hansen, WWW.CHESSCAFE.COM
The English Opening is a flexible and dynamic choice for White, which avoids a great deal of sharp and well-mapped opening theory. It is popular with all levels of chess-players, and has been used to good effect at world championship level by Kasparov, Korchnoi, Botvinnik and other greats of the game. The English gives rise to an immense variety of structures, ranging from reversed Sicilians to Hedgehogs and fluid or locked central structures.

“Altogether I found this book really helpful in both the white as well as the black side of this opening.” – Andy May, WWW.NSGCHESS.COM
Nunn’s Chess Endings Volume 1

John Nunn

Going beyond standard texts, Dr Nunn shows how to apply knowledge of standard endgames to find the right methods in tricky real-life practical situations – even when they differ greatly from the idealized forms given by traditional endgame manuals. Nunn shows that lack of familiarity with key ideas can cause important ideas and themes to be missed even by very strong players. We discover that a staggering amount of previously published endgame analysis is simply wrong, and that many of the standard guidelines are at best partially true. This first volume covers general topics and discusses in detail pawn endings, queen endings and minor-piece endings.

Also available on Chess Studio.

“I think this really is a fantastic book. ... The book’s introduction and the first chapter (The Three Key Endgame Skills) are some of the best endgame-related chess prose I’ve read in a long time.” – Arne Moll, CHESSVIBES.COM
Nunn’s Chess Endings Volume 2

John Nunn

In this award-winning two-volume series, Dr John Nunn identifies new and important motifs which occur repeatedly in over-the-board play. Tactical elements are heavily featured, and the focus is on endgames that are susceptible to concrete analysis. The discussion is geared to the over-the-board player; the ideas underlying the analysis – however complex – are richly explained in words. This second volume focuses on rook endgames – the most common and important category of practical endgames. Nunn also covers endings with rooks and minor pieces, a wide and rich area of strategic endgame play that is universally recognized as vital for chess mastery, but nevertheless neglected in chess literature.

Also available on Chess Studio.

“The book is in many respects different and better than the majority of the other books on the endgame where often the inspiration of the author languishes after a few chapters. ... the reader undoubtedly takes profit even from a passive or lazy reading: so great is the way the author explains complex positions making them easy and appealing to any range of audience”
– Martin Eden, SOLOSCACCHI
Garry Kasparov’s Greatest Chess Games Volume 1

Igor Stohl

Garry Kasparov dominated the chess world for more than twenty years. His dynamism and preparation set an example that is followed by most ambitious players. Igor Stohl has selected 74 of Kasparov’s best and most instructive games from 1973 to 1993, and annotated them in detail. The emphasis is on explaining the thoughts behind Kasparov’s decisions, and the principles and concepts embodied by his moves. Stohl provides a wealth of fresh insights into these landmark games, together with many new analytical points. This makes the book outstanding study material for all chess enthusiasts.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“[Stohl] often improves on Kasparov’s past comments. It is one of this year’s best books, and it could be a great help to Kasparov in preparation of his own works about his career.” – GM Lubomir Kavalek, WASHINGTON POST
This second volume covers Kasparov’s career from 1993 up to his retirement in 2005, a period during which he successfully faced the challenge of a new generation and achieved some of his greatest successes, both creatively and competitively.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“Congratulations to Gambit and to Igor Stohl for this masterpiece! As a matter of fact I would like at this point to state how much this book for me personally constitutes an absolute milestone in the field of chess books, but extraordinary quality needs no more words. ... sets new standards in the field of commentary and presentation of mastergames! Categorically a must-buy!” – Martin Rieger, WWW.FREECHESS.DE
Endgame Challenge

John Nunn

John Nunn presents 250 challenging positions where your task is to find a cunning way to win or draw. In many cases the odds against success seem overwhelming, yet by using all the tactical resources in the position it is possible to achieve the goal. Nunn’s detailed solutions contain many points and clarifications that have hitherto gone unmentioned, so readers will rarely be left to wonder whether their intended solution really did work. In an over-the-board game, the ability to use the pieces in harmony is paramount, and those players who can exploit every resource in a position are those who become champions. While the focus in this book is on tactics, readers will also develop a greater understanding of many important endgame topics, such as fortresses, stalemate defences, the opposition and zugzwang.

Also available on Chess Studio.

“The first 50 pages contain 250 diagrams to solve, and then we get 250 pages of shocking solutions – shocking in the sense that even world-class players might draw or even resign positions, when beautiful and unlikely possibilities still exist” – Bab Wilders, NEDERLANDS DAGBLAD
John Nunn’s Chess Course

John Nunn

Following on from his successful books Understanding Chess Endgames and Understanding Chess Middlegames, John Nunn fleshes out the theory by showing how World Champion Emanuel Lasker handled a wide variety of practical situations. We see how Lasker’s play, which his opponents found so unfathomable, was based on logic, extreme pragmatism and a deep understanding of how chess-players think. Nunn covers topics not usually considered, such as queenless middlegames and manoeuvring, and dissects strategic issues including piece-activity, pawn-structure and bishop vs knight. He looks at psychological aspects of chess, such as choosing lines which are most uncomfortable for the opponent. The explanations focus on general ideas rather than detailed analysis. The book concludes with a selection of exercises, with full commentary and explanation.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“Now and again, amongst the hundreds of new books published, a jewel arrives. ... Choosing to examine chess strategy, tactics, etc., through the medium of the career of one player satisfies two objectives – one, the biographical chess career of a world champion and the other, all techniques necessary to become a proficient chess-player. Nunn succeeds magnificently in achieving this. When I was involved in running a chess stall at congresses, many times I faced the question ‘Can you recommend a chess book that I can read?’ Now, I would not struggle to find an answer.” – Bill Frost, CHESS DEVON
The Stonewall Dutch is a traditional favourite amongst club players, as it offers Black ready-made attacking plans on the kingside. As Bent Larsen noted, the Dutch also has the tendency to ‘bring out the coward’ in opponents, giving it an added practical sting. However, up until the late 1980s, the Stonewall wasn’t fully trusted at grandmaster level, despite its earlier use by Alekhine and Botvinnik. Black’s attacking plans were too one-sided, and White’s methods too well worked out. The change came when a new generation of players, including Nigel Short and Simen Agdestein, showed that Black could handle his position in many other ways, including play on the queenside and in the centre, with the ‘Stonewall’ structure stifling White’s attempts to generate play of his own. Agdestein in particular has continued to experiment with many new set-ups and move-orders for Black, and this book contains a wealth of new recommendations and suggestions based on this work.

Also available on Chess Studio.

“An outstanding book ... Not only do the authors rehabilitate an underestimated opening – they even do so by means of inspiring chapters supported by the personal experiences of leading experts.” – GM Peter Heine Nielsen, SKAKBLADET
Secrets of Positional Chess

Dražen Marović

How can one determine if a piece is weak or strong? Or if a square is weak or strong? These are the principal questions that grandmaster and trainer Dražen Marović addresses in this important book. By discussing carefully-chosen games and positions, Marović explains how to recognize good and bad features of positions, and how to make use of one’s advantages and exploit the opponent’s weaknesses.

Also available on Chess Studio.

Also available as a German-language Kindle edition.

“As in his previous works, Marović’s deep knowledge shines through and he makes welcome use of classics and not just recent games. This work looks at many important positional principles, such as the weakness of the second rank or the use of rooks on half-open files ... the club player who takes time to study its many themes, and hundreds of well-explained examples, should significantly boost the depth of their positional understanding memory bank”

– Richard Palliser
Secrets of Chess Defence

Mihail Marin

Good defensive abilities earn players a great many half-points and full-points. The climax of the defence is the launching of a devastating counter-attack, a skill at which all the great chess champions have been adept. Of particular interest to club players is Marin’s discussion of how to defend against unsound attacks, and the problem of how to parry the attack while retaining winning chances. Other topics include attack and defence in equal positions, where both sides must judge carefully how much of their resources to devote to the attack and the counter-attack. The main subject, though, is the case where the defender is fighting for his life, and must decide how to maximize his chances of survival. Marin considers psychological issues and explains the main options available to the defender: simplification, cold-blooded defence, a positional sacrifice, ‘blackmailing’ the attacker, or a counter-attack.

“Chess defence is invariably the part of the game that a lot of players don’t like to study because they find it too boring or they’d rather attack like Tal. In this his first publication, Mihail has written a book that will change your mind about defence as an important element to the game.” – Michael Stevenson, New Zealand Chess
Secrets of Attacking Chess

Mihail Marin

What are the premises for a successful attack? Marin discusses the traditional concept that a player with the advantage is obliged to attack, and also the value of notions of logic and justice in deciding whether to attack. If we believe an attack is justified, but cannot back it up with concrete variations, how do we decide whether to trust our intuition? Marin surveys typical attacking scenarios, such an attack on two wings, with a queenside attack as a prelude for a swift strike on the other wing, and all-out attacks against apparently well-defended positions. He also explains why grandmasters generally prefer to maintain as many options as possible, and investigates the role of prophylactic thinking in attacking play.

Also available on Chess Studio.

“A quick glance at Secrets of Attacking Chess might prove somewhat intimidating. While there is plenty of explanatory prose Marin believes in backing up his conclusions with concrete analysis. A closer look reveals that Marin has a definite pedagogical bent and has taken pains to sprinkle instructive comments throughout the book that are destined to stay with the reader. Highly Recommended.” – IM John Donaldson, jeremysilman.com
Anand has been one of the world’s top players for more than two decades, but it’s not just his results that make Anand special. His style of play leads to highly spectacular games, and his speed of thought is the stuff of legends. He is also a great explainer of ideas, as his annotations for this book demonstrate. Anand is renowned as ‘Mr Nice Guy’, popular with both the public and his fellow supergrandmasters. This new expanded edition of the award-winning Vishy Anand: My Best Games of Chess features 30 extra games from the period of Anand’s greatest successes, selected by Anand and annotated by John Nunn, and also contains a biographical sketch and a detailed career record.

“This book is full of wonderful games, many of which are tremendously complex, and occasionally the variations run to a considerable depth – neither Anand nor Nunn refrains from showing concrete variations, where the position warrants it. But both offer a nice balance of explanatory annotation as well, so there is a great deal of instructional value in here as well.” – GM Luke McShane, NEW IN CHESS
Win with the London System

Sverre Johnsen and Vlatko Kovačević

The London System is a perennial favourite of club players, as it is a very sound and solid system with a real practical sting. The authors of this new book seek to maximize this sting in two principal ways. Firstly, by explaining in detail the typical plans for White, they help readers to make the most of their chances, whether they are based on a kingside attack, queenside penetration, central play, or transition to a favourable endgame. Secondly, they advocate some subtle move-orders that limit Black’s options, and give White possibilities to change the nature of the game and go straight for the kill if Black responds casually or inappropriately. These move-orders have been tested successfully by co-author Kovačević at grandmaster level, and much of the analysis presented here is of totally new variations, and is previously unpublished. Covers all responses to 1 d4 against which White can use the London System.

Also available on Chess Studio.

Also available as a German-language Kindle edition.

“This is a first-class book, extremely well written, about a system that for too long has had its light hidden under a bushel.” – Michael Stevenson, New Zealand Chess
How to Play Chess Endgames

Karsten Müller and Wolfgang Pajeken

In this companion volume to the award-winning Fundamental Chess Endings, Müller and Pajeken focus on the practical side of playing endgames. They cover all aspects of strategic endgames, with particular emphasis on thinking methods, and ways to create difficulties for opponents over the board. Using hundreds of outstanding examples from modern practice, the authors explain not only how to conduct ‘classical’ endgame tasks, such as exploiting an extra pawn or more active pieces, but also how to handle the extremely unbalanced endings that often arise from the dynamic openings favoured nowadays. All varieties of endgames are covered, and there are more than 200 exercises for the reader, together with full solutions.

Also available on Chess Studio.

“Karsten Müller rose to the Mount Olympus of endgame literature with Fundamental Chess Endings. ... His latest book, How to Play Chess Endings, with colleague Wolfgang Pajeken, is a sequel to that standard work.” – Harry Schaack, KARL
101 Winning Chess Strategies

Angus Dunnington

Without strategy, a chess game is just a series of tactical tricks. A good strategy binds together the tactics, and enables a player to make methodical progress towards victory. This book makes sure you will never be short of winning strategies. Angus Dunnington utilizes his many years of chess playing and training to provide an arsenal of ideas that can be employed in many types of position. These plans have been proven in many grandmaster games, so you can be sure that by using them your game will be soundly based.

Also available on Chess Studio.

“...a useful book for players seeking to improve their creativity and piece coordination” – Alan Borwell, SCOTTISH CORRESPONDENCE CHESS
The Dynamic English

Tony Kosten

In the first book to explain the popular English Opening for many years, Grandmaster Kosten supplies players of the white side with a set of weapons that will equip them to challenge any opponent they face. Kosten concentrates on aggressive treatments of the English – an approach that has brought him great success in tournament play. His book provides everything you need to start attacking with the English Opening.

Also available on Chess Studio.

“Grandmaster Tony Kosten, a great exponent of this line, makes out a compelling case for this opening. He conveys his understanding with great skill” – IM Craig Pritchett, THE HERALD
A Strategic Chess Opening Repertoire for White

John Watson

Such has been the acclaim for John Watson’s ground-breaking works on modern chess strategy and his insightful opening books, that it is only natural that he now presents a strategic opening repertoire. The repertoire is based on 1 d4 and 2 c4, following up with methodical play in the centre. Watson uses his vast opening knowledge to pick cunning move-orders and poisonous sequences that will force opponents to think for themselves, providing a true test of chess understanding. Throughout, he discusses strategies for both sides, so readers will be fully ready to pounce on any inaccuracies, and have all the tools to decide on the most appropriate plans for White.

Also available on Chess Studio.

“Watson’s Secrets of Modern Chess Strategy I consider as one of the best books ever written! So for me Watson is the big star among chess book authors and I presume that all his books are best sellers – and that this last one, A Strategic Chess Opening Repertoire for White, also will be that” – GM Simen Agdestein, VERDENS GANG
Most chess puzzle books put you in an artificial situation: you are told a combination exists, what the theme is and what you are required to achieve. This one is different. In a real game, a player may sometimes need to find a combination. On the other hand he may have to reject a tactical idea and simply find a good positional move. His task is to find the right move, whatever it may be. The 300 puzzles in this book put you precisely in that situation. Spectacular ideas abound in these positions, but it is for you to decide whether to go in for them, or whether you would be falling into a trap. If you need them, there are hints to help you on your way. The book ends with a series of tests to measure your skills against those of other players.

“I think puzzle books serve as a great training tool before tournaments, to sharpen up tactics and help players to get into the groove of being able to calculate some lengthy variations. I don’t have a great deal of puzzle books but this is clearly the best one on my bookshelf!” – GM Stephen Gordon, 3Cs Chess
Secrets of Pawn Endings

Karsten Müller and Frank Lamprecht

This book provides a thorough course in endings with just kings and pawns, from the simple to the highly complex. Armed with this knowledge, the reader will also be able to tackle other types of endgame with greater confidence and certainty. Many interesting and beautiful positions are included, and there are test positions for the reader to solve. The authors follow the rigorously logical conventions introduced by John Nunn in his famous series of endgame manuals. This has necessitated a phenomenal amount of new analysis of theoretical positions to assess precisely the merits of each and every move.

Also available on Chess Studio.

“For years, Secrets of Pawn Endings has been one of my favorite endgame books. Müller and Lamprecht have written a book of great theoretical and practical significance. Secrets of Pawn Endings is a must-have.” – Josh Specht, CHESSVIDEOS.TV
Secrets of Rook Endings

John Nunn

The first edition of this book ushered in a new era in chess publishing. It was the first book based on computer-generated position databases that are guaranteed to provide the actual result of a position.

However, this book is no computer print-out. It takes a human ‘oracle’ to extract the useful information from this mass of data and to identify new principles to help the rest of us appreciate the key practical points. Dr John Nunn, top-class grandmaster and renowned theoretician, performs this role admirably. He has identified where previous theory has been overturned, and where there are important new results. Dr Nunn was also the first to reveal the general importance of the many ‘reciprocal zugzwang’ positions.

Also available on Chess Studio.

“I am sure that in fifty years’ time Secrets of Rook Endings will be regarded as one of the great classics of the twentieth century. It is as close as any book can ever realistically come to perfection on its subject.” – GM Julian Hodgson, British Chess Magazine
Secrets of Pawnless Endings

John Nunn

After the success of Secrets of Rook Endings, John Nunn turns his attention towards endgames without pawns. These occur surprisingly often in practice and are extremely tactical in nature. This book unites man and machine in the search for ultimate answers. The computer databases created by Ken Thompson, formerly of Bell Laboratories, can state with certainty the correct result of any position with five pieces or fewer. John Nunn has extracted the most important information from these databases and presented it in the form of guidelines and specific key positions, which can be more readily digested by the human mind. With most competitive games these days being played to a finish in a single session, this knowledge may prove invaluable over the board.

This is a new and expanded edition of an important book. Since the first edition was published, the databases for six-man endings have been created, resulting in some surprising and paradoxical discoveries. The coverage has therefore been expanded to include the most interesting features of these endings.

Also available on Chess Studio.

“...a treasure trove of the precisely extraordinary, with considerable practical value for more serious players in the earlier sections” – GM Jon Speelman, The Independent
Secrets of Grandmaster Chess

John Nunn

This book, originally published in 1997, is an updated edition of Secrets of Grandmaster Play, which was hailed as a modern classic and won the British Chess Federation Book of the Year Award in 1988. It covers Nunn’s career from childhood up to 1985 and features 24 of John Nunn’s best and most instructive games, including his award-winning 1985 victory over Beliavsky. This superb manual of strategy and tactics also offers advice on how to think at the board and insights into the world of professional chess.

Also available on Chess Studio.

“A beautifully eloquent and instructive blend of variations and verbal explanations.” – INSIDE CHESS
John Nunn’s Best Games

John Nunn

Winner of the British Chess Federation Book of the Year Award

John Nunn has an unparalleled reputation as a chess theoretician and writer of the highest class. In this book he focuses his attention on his own games and annotates 40 complete games and many game fragments.

The book covers the period 1985-93, when Nunn rose to enter the world top 10, and includes victories over Short, Tal, Korchnoi, Anand, Gelfand, Portisch, Judit Polgar and many other top players. The analysis of these games provides a manual of attacking chess from one of the world’s best tacticians. This book is far more than a collection of superbly analysed games, however, since the author has brought the games to life with anecdotes from the events, and provides many practical tips which will be of benefit to aspiring chess players of all levels of ability.

Also available on Chess Studio.

“[Nunn’s] combination of erudition and straightforwardness makes him a particularly good subject to emulate. ... Perhaps the high point of this collection is Nunn’s 25-move victory over Sokolov of the USSR at the Dubai Olympiad, 1986. Wiping a top Soviet player off the board so unceremoniously was something that British players simply never did until Nunn and Tony Miles came along.” – T.D. Welsh, ‘Top 500’ Amazon.co.uk reviewer
Dynamic Pawn Play in Chess

Dražen Marović

This book tackles fundamental questions such as: ‘How should pawns be used to fight for the centre?’ and ‘How does the central pawn formation affect planning for both sides?’ These issues are central to understanding chess. Marović discusses central pawn-structures and their impact on play both in the centre and on the wings. He begins by surveying how the pawn’s role in controlling the centre has been developed over the last 150 years, and how this has led to the refinement of concepts such as the ‘dynamic’ backward pawn and the positional exchange sacrifice. The bulk of the book is devoted to discussions of the main type of centre: Open Centre; Closed/Blocked Centre; Fixed Centre; and in particular the Mobile/Dynamic Centre.

“Marović has obviously been in the company of some of the greatest players and listened carefully to what they had to say ... this book is excellent value and is sure to improve your chess” – Chris Rice, WEEKEND CHESS
The Survival Guide to Rook Endings

*John Emms*

For all chess-players – from beginners to grandmasters, and whatever their style of play – one thing is certain: rook endings will arise in a great many of their games. Yet it is precisely in this area of the game that many players give away hard-earned points, either through lack of knowledge or inadequate understanding. Most previous books on the subject have been extremely technical and theoretical, but this one is different. John Emms provides the essential specific knowledge and explains the key concepts that will enable readers to find the right plan in most common types of rook endings.

*Also available on Chess Studio.*

“If you didn’t purchase this book first time around then I think you missed out. Rook endgame knowledge is at the core of endgame theory. Many club players would save a huge amount of points by having the confidence to go into a rook endgame, especially when a pawn or two down.” – Munroe Morrison, *Open File*
More than anything else, a player’s ability to find tactical solutions determines how successful he is over-the-board. No endgame scheme, opening idea or strategic plan, however brilliant a concept it may be, is of any value unless it is accurately calculated and implemented. This book provides a wealth of chess puzzles to test just about every facet of your tactical ability. Franco has searched recent events and used powerful computers to seek out previously unpublished puzzles, and has also drawn extensively upon Latin American sources that he has been scouring for brilliant examples over the last three decades. The book begins with 120 relatively easy positions suitable for novices, and ends with 80 extremely tough puzzles, which provide a mind-bending challenge even for grandmasters. There are 1001 puzzles in all, including themed sections and graded tests, all with detailed computer-verified solutions and verbal explanations of the main instructive points.

“Most of the positions will not have been seen before in other publications and you will not fail to improve your game – certainly your tactical awareness – if you have the discipline to work through this lovely book. Chess problems are like life. We are given a question and we don’t always know the answer. Is it right to turn away and not try to find that answer? Maybe we should just roll up our sleeves and meet that challenge head on; after all the answers are all there, waiting to be found. Enjoy the journey and absorb yourself in just some of the delightful mysteries of the 64 squares.” – Carl Portman, DEFENCE FOCUS
The Cambridge Springs

Krzysztof Panczyk and Jacek Ilczuk

The Cambridge Springs is a popular defence to the Queen’s Gambit that takes its name from the famous tournament in 1904 during which it was tested in a number of games. Since then it has become firmly established as a club-player’s favourite, since Black sets a number of traps and can generate a very quick initiative if White fails to respond precisely. Several world champions have used the Cambridge Springs, most notably Alekhine and Smyslov, while Kasparov has played it on occasion, including a sensationally quick victory over Karpov in 1985. The authors combine thorough research with a wealth of original material to offer comprehensive coverage of this combative system. While the main body of the book covers both sides of the Cambridge Springs, it also offers Black a repertoire against White’s alternative options in the Queen’s Gambit, the most important of which is the Exchange Variation.

“A professional effort where the authors have made their own contributions and have overturned long-held erroneous conclusions. I’m quite happy giving it 9/10” – GM Glenn Flear, NEW IN CHESS
Understanding the King’s Indian

Mikhail Golubev

Despite its sharp and aggressive nature, the King’s Indian is an opening that lends itself well to discussion in terms of plans, ideas and pawn-structures. Those who are familiar with these underlying themes will enjoy an enormous practical advantage when facing those who lack this understanding, even if they are theoretically well-prepared. This engaging personal account of the King’s Indian is also wide-ranging and detailed. The main games are all from Golubev’s own practice, enabling him to provide a completely accurate description of the decisions at the board. The notes contain a wealth of references to games and ideas from other King’s Indian specialists, and the coverage is sufficient to provide Black with a flexible and aggressive repertoire.

“If you work with this book, you will affirm that the author is with you in the tiniest details, thorough, self-critical, and comprehensively analytical” – E. Carl, ROCHADE
How to Calculate Chess Tactics

Valeri Beim

Thinking methods are at the heart of the chess struggle, yet most players devote little conscious effort to improving their calculating ability. Much of the previous literature on the subject has presented idealized models that have limited relevance to the hurly-burly of practical chess, or else provide little more than *ad hoc* suggestions. Here, experienced trainer Valeri Beim strikes a balance by explaining how to use intuition and logic together to solve tactical problems in a methodical way. He also offers advice on when it is best to calculate ‘like a machine’, and when it is better to rely on intuitive assessment.

_Also available on Chess Studio._

_Also available as German-language Chess Studio and Kindle editions._

“One of Beim’s insights is that, when we find a beautiful combination that fails, we’re often halfway to finding the move we should play. The opponent’s strength that breaks our attack is precisely the target we should set about undermining. ... Beim shares with us a set of tools that, once mastered, appear well-designed for rapid, effective calculation in the critical positions that separate the master from the amateur.” – Derek Grimmell, CHESSCAFE.COM
Perfect Your Chess

Andrei Volokitin and Vladimir Grabinsky

Andrei Volokitin is one of a rare breed of players: he achieved a ranking in the world’s top 20 while still a teenager, playing dynamic and often brilliant chess. Although we cannot all aspire to emulate his achievements, there is much that we can learn from his training methods, his games and his general approach to chess. These topics are the subject of this book, written in collaboration with his trainer. The core material of the book is 369 positions where the reader is given a task or asked a question. These tasks resemble those that players regularly face over the board, and are especially useful from a training viewpoint. Many of the positions are from Volokitin’s own games, so we get the ‘inside story’ on some truly spectacular chess. We are also presented with fine examples from Grabinsky’s training files, carefully collected and graded over the years for their instructive merit. The commentaries and detailed solutions explain the key issues in each position, and also convey the authors’ philosophy of chess and their love for the game.

“...I had the opportunity to ask 21-year-old GM Valery Aveskulov, how it was that the Ukraine produced so many great young talents. I had already factored in a tradition of excellence, government and private support, and an economically challenging environment in which being a chess professional did not look so bad, but Valery added one more key ingredient – good coaching. One of the best he said was IM Grabinsky of Lvov and then rattled off a list of teenage IMs and GMs over 2500 on a rapid course toward 2600. Perfect Your Chess is geared towards this level and many of the young talents Aveskulov mentioned have gone through this material which relies on the games of Volokitin and others.” – IM John Donaldson, USA Team Captain
Chess Training for Budding Champions

Jesper Hall

Many chess-players find it difficult to improve their game beyond a certain level. They can see basic tactics, know a little about openings and can calculate a few moves ahead. However, so do their opponents. What is the next level, and how does one get there? This book is aimed at chess-players who have progressed well beyond beginner level and have acquired the basic skills required to play at club level, but need guidance to improve their understanding of chess. It is based on the training program that Hall himself followed when he was an up-and-coming player. The lessons are not based on ‘quick fixes’, but instead provide a well-rounded course in all aspects of chess that will equip the reader well for his chessboard battles, and provide a firm yet flexible basis for further improvement.

Also available as a German-language Kindle edition.

“The examples are great, the pieces of advice even better and the presentation is logical and easy to follow” – BIBLIOTEKSTJÄNST
Play the Sicilian Dragon

Edward Dearing

The Dragon Variation is one of the key battlegrounds of modern chess, and a perennial favourite of ambitious chess-players of all standards. Black develops his pieces so as to maximize the strategic pluses granted him in the Open Sicilian. If White is to expose a defect in the Dragon, it must be by a direct attack, and this leads to ferocious battles, with White trying to checkmate the black king via the h-file, while Black seeks to gain counterplay down the c-file and on the long diagonal. In the Dragon, many Sicilian themes are seen in their clearest form, with the ...Rxc3 exchange sacrifice particularly important. Even Dragon endgames tend to be very sharp, with Black often possessing a swathe of mobile pawns in return for an exchange, a piece, or even a whole rook. In hazardous territory, a guide is essential, and Edward Dearing has stepped up to offer his services. He explains at length the all-important general themes, and advises on how to choose plans and methods, drawing upon his many years of experience and study of the Dragon. Dearing also provides an up-to-date view of Dragon theory, including many new ideas and suggestions to help the reader tailor his Dragon repertoire to suit his own preferences.

“This is the new Dragon bible and because of the analysis it will remain essential to every Dragon player for years to come. Gambit’s emphasis has always been on quality and depth, thus giving their books a long shelf life. Play the Sicilian Dragon is a great example of this, and also one of the best opening books in recent years.” – IM John Watson, THE WEEK IN CHESS
Mastering the Najdorf

Julen Arizmendi and Javier Moreno

The Najdorf is the most popular line of the Sicilian Defence for a very good reason: Black can play for a win without taking undue risks. The Najdorf’s fundamental soundness has been confirmed in countless top-level games, and in particular by Garry Kasparov’s successful use of it throughout his career. White has tried a wide variety of approaches against the Najdorf, including quiet positional lines and the traditional main line with 6 Bg5. Recently the idea of a rapid kingside pawn advance has found favour. The Najdorf’s landscape changes rapidly, and this presents its devotees with a complex task: they must not only keep up-to-date with sharp theoretical lines, but must also have a firm grasp of the strategies that underpin the main systems, both old and new. This book lends a helping hand to those who play the Najdorf or wish to take up this complex opening. Two Najdorf experts from Spain present a flexible repertoire for Black, including a wealth of original analysis of the critical variations. They also explain the key ideas behind the Najdorf, focusing on those plans that are most relevant to modern practice.

“If you are interested in taking up the Najdorf, I highly recommend this book if you are looking for a good reference that will let you learn the opening quickly and give you excellent winning chances to boot.” – Bill Whited, Chess Country
The Quickest Chess Victories of All Time (new enlarged edition)

Graham Burgess

This updated and expanded new edition contains a comprehensive collection of the shortest decisive games in chess history. It is an indispensable guide to the pitfalls and traps that lurk in every opening system. An ability to punish errors in the opening is an essential aspect of modern opening play. The thousands of games featured in this book show how to detect the opponent’s errors and take maximum advantage. Studying this book will help you seize your chances to win crisp miniature games, while reducing your chances of suffering an opening catastrophe, and overall will improve the level of your opening and tactical play.

- An outstanding and comprehensive collection of games won in thirteen moves or fewer.
- Explanations of the errors made and how to avoid them.
- Helps sharpen your killer instinct!

Also available on Chess Studio.

“The notes are excellent. Each chapter has a brief summary of the odds of an opening’s difficulty. Transposing move-orders are usually mentioned. Some games have little anecdotes or historical connections. Whenever a game is resigned for less-than-obvious reasons (as most of these are) Burgess explains the mate threat or material loss to us patzers succinctly and precisely. This is really a book of how not to play openings. It will complement any repertoire books and opening encyclopediæ. I highly recommend it for your shelf, even to intermediate players (like me). You might find it entertaining. You will find it useful.” – C. Dunn, Amazon.com reviewer
How to Become a Deadly Chess Tactician

David LeMoir

A guide for chess-players to help them spot unlikely-looking tactical tricks and launch cunning attacks. Readers are shown how to hunt the enemy king and how to seize the initiative with surprising sacrifices. LeMoir shows that the key factors in becoming a deadly tactician are motivation (having the willingness to sacrifice and to consider tactical ideas during play), imagination (being aware of tactical concepts that lead to ideas which other players might miss) and calculation (being able to analyse and calculate effectively). This user-friendly and humorously written book contains many outstanding examples of seized opportunities, together with guidance on how to spot surprising tactics and handle positions of material imbalance. Throughout, there are exercises for the reader to tackle.

Also available on Chess Studio.

“LeMoir has selected his chess material extremely well – there are a huge number of startling examples which I’d never seen before – and his comments are always entertaining or instructive” – GM Matthew Sadler, NEW IN CHESS
Play the Open Games as Black

John Emms

This book fills a gaping chasm in chess literature. For years, those who wish to take on the black side of the Ruy Lopez have had to muddle their way through against the variety of alternative openings at White’s disposal, as there have been no good books to assist them. Grandmaster John Emms is ideally qualified to deal with this subject. Not only does he face these openings as Black, but he also used to play many of them as White before he graduated to the Lopez. He provides no-nonsense answers to such openings as the King’s Gambit, Vienna, Scotch, Four Knights, Italian Game, Bishop’s Opening and the variety of oddball gambits White can try.

Also available on Chess Studio.

“I was also impressed by watching the way Magnus [Carlsen, age 10] read chess books. While the others lay around and relaxed or clowned around in their rooms, Magnus lay in his bed and read Grandmaster John Emms’s Play the Open Games as Black, a brilliant book that covers everything but the Ruy Lopez that one can meet when answering 1 e4 with 1…e5. That the book was in English and at a level more suited for top international players did not appear to worry Magnus in the slightest. He didn’t need to get out a board and pieces either, he simply read the games from the book without a problem.” – GM Simen Agdestein, How Magnus Carlsen Became the Youngest Chess Grandmaster in the World
Ant-Sicilians: A Guide for Black

Dorian Rogozenko

The Sicilian is far and away the most popular chess opening. The reason is obvious: it enables Black to fight for victory without taking excessive risks. The Sicilian scores well in practice and is a firm favourite with players of all standards. Given both the Sicilian’s fearsome reputation and the amount of theoretical preparation required to tackle it head-on, many players prefer to side-step the Open Sicilian with one of the Anti-Sicilian systems at White’s disposal. These include: positionally motivated lines such as the 2 c3 Sicilian and the 3 Bb5 systems; slow but tricky attacking lines including the Closed Sicilian and the King’s Indian Attack; and aggressive but loosening ideas like the Grand Prix Attack and a variety of gambits. This book equips Black to fight against all these lines. In the most critical variations, Rogozenko provides a choice between a solid and an aggressive option. He caters for those who meet 2 Nf3 with the three main moves, 2...d6, 2...e6 and 2...Nc6.

Also available on Chess Studio.

“To be blunt, any player who plays the Sicilian Defense as Black must have this book” – Chris Chambers, Georgia Chess
50 Essential Chess Lessons

Steve Giddins

Steve Giddins has chosen 50 supremely instructive games – some old, some new, and including many that few readers will have seen before. He has annotated these games in detail from a modern perspective, explaining the useful lessons that can be learnt from them, while avoiding the harmful dogma that characterized many older works of this type. Topics include: Attacking the King, Defence, Piece Power, and Endgame Themes. Each game is followed by a recap of the main lessons to be learned. Giddins writes in a highly accessible down-to-earth style that appeals to club players seeking to improve their understanding of practical chess. His knowledge of Russian-language chess literature has enabled him to find many excellent examples that have not appeared in previous western literature.

Also available on Chess Studio.

“Highly recommended for 1200-2000 players seeking for a game collection, especially those who would like to improve their understanding in middlegame pawn-structures. Giddins tried to update Chernev’s Most Instructive Chess Games but he outdid his teacher.” – CHESSBUG.COM
Instructive Modern Chess Masterpieces

Igor Stohl

Igor Stohl has selected 62 outstanding games from recent years and analysed them in painstaking depth. Here he presents his findings to chess enthusiasts, who will find the games entertaining and the annotations both instructive and illuminating. Stohl is an outstanding theoretical expert, so the opening phase of each game reads like a lesson in the key strategic aspects of the opening chosen, with a critical survey of modern trends. The middlegame is dissected and the critical decisions subjected to keen scrutiny – we are invited inside Stohl’s laboratory to join him in the quest for the truth. The endgame phase, if reached, is handled with similar erudition, with insights into the grandmaster’s approach to questions of technique. Following each game there is a discussion of the most important lessons to be learned. The expanded and revised new edition of this award-winning work features 12 new top-level games from the period 2000-7 annotated in great depth – about 40% new material. There are also corrections to the existing notes and a revised Introduction.

Also available on Chess Studio.

“This is an outstandingly thorough and insightful book. I have greatly enjoyed playing through some of the 50 deeply annotated games and learned a fair amount in the process, including various insights in the opening phase in which Stohl is a renowned expert ... I heartily recommend it” – GM Jonathan Rowson
The Gambit Guide to the Torre Attack

Graham Burgess

An award-winning author provides user-friendly coverage of an opening in which he has a wealth of experience against players of all levels. The Torre Attack is a very attractive system for White as it allows him to set the agenda from the outset, preventing many counterattacking systems. It has quick-strike potential if Black is careless or unfamiliar with the subtleties. The book provides detailed coverage and explanation of the Torre. The main themes are explained, and the critical variations examined in detail. The book focuses squarely on the ideas and systems that are of most relevance to the practical player. The analysis has been checked and revised for this new electronic edition.

Also available on Chess Studio.

“A couple of books dealing with the Torre came out early in the nineties, but this superb work by Burgess surpasses them. The Torre is a very flexible set-up and gives White good chances of having a pleasant initiative after 1 d4 Nf6 2 Nf3 e6 with 3 Bg5. The Torre will repay careful study and provide interesting chess. The strategic introduction whets the reader’s appetite right from the word go as Burgess shows, via 12 illustrative games, just how dangerous the Torre is, and readers will realise that by taking up the opening they will have excellent chances of a quick and decisive attack” – IM Richard Palliser, Hull Chess Club Magazine
An Explosive Chess Opening Repertoire for Black

Jouni Yrjölä and Jussi Tella

This book equips the reader with everything he needs to know to play Black in a game of chess. Two experienced Finnish players have described an exciting repertoire based on the move 1...d6 in reply to whatever White’s first move happens to be. Black’s strategy is hypermodern and dynamic: White is encouraged to seize space, while Black develops his pieces rapidly and actively, waiting for the ideal moment to attack and destroy White’s central bastions. The variations advocated have been proven in top-level play and have quick-strike potential if White is at all careless or imprecise. The repertoire is based around the Pirc Defence and the variations 1 d4 d6 2 c4 e5 and 1 d4 d6 2 Nf3 Bg4, which fit seamlessly together with 1...d6 systems against White’s various flank openings.

Also available on Chess Studio.

“To my pleasant surprise the whole book focused solely on Black’s opening move 1...d6. Having dabbled with this a few times myself, I can assure you that the opening is a lot more dazzling than it sounds. The authors appear to have done an extremely diligent job, covering all possibilities for White and, with not far off 300 pages, you get a lot of chess for your money” – GM David Norwood, Weekend Telegraph
How Chess Games are Won and Lost

Lars Bo Hansen

Traditionally, chess games have been divided into three stages – opening, middlegame and endgame – and general principles presented for how to handle each stage. All chess-players will be well aware that these principles all too frequently fail to help in their selection of the best move. In this important work, Lars Bo Hansen, grandmaster and professional educator, presents chess as a game of five phases, and explains the do’s and don’ts in each: the opening; the transition to the early middlegame; the middlegame; strategic endgames; technical endgames. With a wealth of examples from both his own practice and that of his colleagues, Hansen discusses the typical mistakes and pitfalls, and shows how to handle the subtleties unique to each stage. He also gives advice on how to work on your chess in each aspect of the game. Of special value is his explanation of how to study typical middlegames, and that middlegame preparation – a neglected area for most players – is both possible and necessary.

Also available on Chess Studio.

“Very rarely is so much good advice packed into one book. Hansen considers the lessons to be learned from the way his opening repertoire evolved, pawn structures, advice on swindling, defending, when to seek counterplay, tactics, technical endgames and how to use computers to analyse. This amongst many other ideas. What was particularly impressive to me was the 25 pages of discussion on how to play Queen’s Gambit Exchange structures from the point of view of Black and White. Really good stuff. This may be for the advanced player (1800+), but it’s a real treasure trove of ideas. It is very rare that one volume can contain such a wide breadth of information over the whole spectrum of chess ideas without sacrificing depth. A true ‘desert island’ chess book.” – Munroe Morrison, Open File
Essential Chess Sacrifices

David LeMoir

Sacrifices are an essential part of chess. Those who never consider sacrificing will miss countless opportunities and find that promising positions repeatedly slip away. Players who do not appreciate their opponents’ sacrificial possibilities will be unable to see danger signs, and find themselves on the wrong end of too many king-hunts. Rather than merely cataloguing the various possibilities and providing examples, LeMoir discusses the possible follow-ups to the sacrifices, the defensive options against them, and the positional factors that might suggest whether the sacrifice will be sound or unsound. There are many important types of chess positions that can only be played well by those who understand the thematic sacrifices that are possible.

Also available on Chess Studio.

Also available as German-language Chess Studio and Kindle editions.

“What makes this book brilliant, is that the concepts and positions examined are part of any top player’s fundamental chess knowledge. However, for the average player, below this aura of invincibility, there is no way to gain such an understanding without help from a teacher such as Mr LeMoir. We cannot sift through games, recognize the themes, make numerous case studies, and figure out what factors lead to success, and what factors let you down. David LeMoir has done this for us, and anyone who devotes some time to this book will emerge a better chess-player.” – Søren Søgaard, Seagaard Reviews
A Course in Chess Tactics

Dejan Bojkov and Vladimir Georgiev

The advice frequently given to chess-players eager to improve their results is straightforward: study tactics! But there is often little useful guidance as to how this is best done. By solving puzzle positions? Or endgame studies? By dissecting the games of great tacticians? Few books present a structured approach to tactics, so this book fills a valuable niche in the ambitious player’s library. The authors present each major tactical theme in turn, explaining how it works and providing inspiring examples. They then explain how you can spot the idea in your own games and use it to your advantage. You immediately get a chance to put your knowledge to the test, as there are challenging exercises throughout the whole book, with detailed solutions. The second part of the book offers more advanced material, and takes us inside the professional’s tactics laboratory. Here we see how tactical themes are combined, and employed to achieve strategic goals. We are also shown how grandmasters spot the targets for their breathtaking combinations, which we thus come to see not as sheer witchcraft, but as the product of disciplined thought and training.

Also available on Chess Studio.

“The two Bulgarians spend the first part of the book explaining and delineating the elements of tactics (pin, deflection, decoy, discovered attack, etc.) and then move on to some more advanced tactical themes and then top the book off with 40 pages of exercises to reinforce what has been learnt.” – John Saunders, British Chess Magazine
Most chess games are decided in the endgame. It is here where you reap the reward for your good play, or else use all your cunning to deny the opponent victory. Knowing just a few key endgame techniques will dramatically increase your confidence, as you will understand what positions to aim for and which to avoid. Starting with the basic mates and the simplest pawn endings, this book provides all the endgame knowledge that players need to take them through to club level and beyond. Müller carefully guides us step-by-step through a fascinating range of endgame tactics and manoeuvres, helping us understand the underlying logic. Throughout the book, many cunning endgame tricks are highlighted. You will have fun springing them on friends, family – or your opponents in serious tournaments. *Chess Endgames for Kids* makes learning chess endgames fun. But it is also a serious endgame course written by a leading endgame expert, and provides a firm basis for vital skills that will develop throughout your chess career.

*Also available on* Chess Studio.*

*Also available as a German-language Kindle edition.*

“Useful for both young kids and old kids like me!” – GM Matthew Sadler, New in Chess
Storming the Barricades

Larry Christiansen

Many books provide training in how to round off a successful attack with a final combination, but that’s really just the easy part. The difficult thing is to decide how and where to attack in the first place, and to build up the offensive without giving the opponent real counterchances. Larry Christiansen is highly respected by his grandmaster colleagues for his ability to conjure up dangerous attacking chances from almost any position. In this book he takes more than 50 real-life positions, breaks each one down into its key elements and explains the right strategy for conducting a successful attack. The examples are selected to illustrate a wide variety of attacking themes and to provide an instructive and accurate picture of how modern players attack and defend.

*Also available on* Chess Studio.

“Christiansen reveals what he has studied to become a master tactician ... in contrast to many attacking books, Christiansen gives fresh examples from recent years, organizing them according to attacking principles” – GM Lubosh Kavalek, Washington Post
A Complete Chess Course

Antonio Gude

This book is a comprehensive manual for those new to chess, which explains with great clarity the basics of the game. Using innovative methods, Gude ensures that readers quickly grasp each key concept before building on it by introducing new ideas. This is an interactive course. With a total of 280 questions and exercises to tackle, the reader will quickly gain skills rather than mere knowledge. Gude strips the mystery away from tactics and combinations by looking first at the strengths and weaknesses of each piece in isolation, and then showing how they work together with each of the other pieces. He also presents guidelines on chess strategy that will help shape the reader’s understanding of chess, and a wide variety of patterns for the reader’s all-important ‘mental database’. The section on openings explains the main aims of each major opening, and the style of game to which they tend of lead, together with some key variations. Later chapters provide examples of how to launch attacks, putting together the skills from earlier chapters, and deal with issues such as chess training, psychology and competitive chess at club and tournament level.

Also available on Chess Studio.

Antonio Gude is an extremely experienced chess writer and teacher from Spain. Several of his books on tactics and for beginners are long-standing best-sellers in Spanish language. Gude has also translated a great many books, including some of the classics of chess literature.

“My fellow teachers at my elementary-middle school have been trying to get a real curriculum for our chess program, and in Gude’s book I think we’ve found it” – Ben George, Houston, Texas
Problem Chess: Art and Magic on the Chessboard

Göran Forslund

This is a book for those who enjoy problem-solving and appreciate clever solutions, and have at least a basic knowledge of chess. It is about the composition and beauty of chess problems: positions forged not in combat but from pure human imagination, and featuring elegant and surprising solutions. The author offers a personal view of chess problems, conveying an infectious zeal for his subject. Because this is as much a collection of short stories as it is a conventional problem collection. No matter how you use the book, you can expect many hours of excitement and a craving for more. Each chapter presents a variety of chess problems of a specific type, ranging from the familiar ‘mate in two’ puzzles via retro-analytical problems worthy of a whodunit novel to 15-move series problems and the ‘outer limits’ of fairy problems (altered rules or pieces). Throughout, the creative processes of problem chess are at the forefront of the discussion. Readers are given the opportunity to solve most of the problems before being presented with the solutions. Or you can simply enjoy reading the book from cover to cover without ever needing to set up a chessboard.

Also available on Chess Studio.

Göran Forslund (1958–2015) was a computer software professional with a PhD in computer science, with a focus on artificial intelligence. He published chess compositions in most genres, and won awards in the World Chess Composition Tournament, and several of his problems were selected for the FIDE albums. He also served as a judge in chess composition contests. He played regular chess too, with some success: he was a finalist in both the Swedish Junior Championship and the Swedish Correspondence Chess Cup.

“problem books are usually written for the already initiated. But now an exception has been accomplished by Göran Forslund. ... Forslund introduces each chapter with short texts about, for example, ice hockey, film, childhood memories or Einstein’s theory of relativity, and finds relations with chess problems. This makes the book very special and personal, even a little autobiographical.” – IM Axel Ornstein, TIDSKRIFT FÖR SCHACK
The appeal of the Scandinavian Defence is easy to understand: it is very forcing – Black is virtually guaranteed to get his desired structure. There are no annoying ‘Anti-Scandinavians’ to study! But for many decades the Scandinavian was regarded with some suspicion, as Black apparently loses time recapturing on d5. Modern players have a different view. The great Danish player Bent Larsen kickstarted the revolution with his provocative assertion that it is an improved Caro-Kann (and, not least, beating Karpov with our opening)! But the 21st-century Scandinavian is a different beast altogether; the new main line of the whole opening (3...Qd6) has proven to have great strategic richness, with more than a few tactical tricks lurking just behind the scenes. The Scandinavian has been transformed into an opening that strong grandmasters are willing to use as their main defence, rather than as an occasional surprise weapon. This thoroughly modern guide focuses on these new approaches, while also covering the more traditional main lines. Kasparov guides the reader carefully through each system, explaining his recommendations with wit and clarity. With his help, you will have your opponents wishing there really were some ‘Anti-Scandinavian’ lines!

Also available on Chess Studio.

Sergey Kasparov is a grandmaster from Belarus. He plays regularly in international events around the globe and is an experienced writer, with several books and online reports to his credit.

“Conclusion: Understanding the Scandinavian is a new addition to the book market and focuses especially on the strategic basis of the Scandinavian Defence. It is both an instruction manual and a guide book, and distinguishes itself particularly by explaining and illustrating as much as possible of what’s happening on the board.” – Uwe Bekemann, German Correspondence Chess Federation
Grandmaster Chess Move by Move

John Nunn

A collection of John Nunn’s best games from 1994 to the present day, annotated in detail in the same style as the best-selling Understanding Chess Move by Move. Throughout, the emphasis is on what the reader can learn from each game, so the book is ideal study material for those seeking to progress to a higher level of chess understanding. There is also entertainment in abundance: Nunn has a direct aggressive style, and many of his opponents in these games are ambitious young grandmasters from the generation inspired by Kasparov’s dynamic chess. The book also includes all of John Nunn’s compositions – problems and studies – with full solutions.

Also available on Chess Studio.

“GM John Nunn is at the pinnacle of chess writers and this book shows why. His analysis is always first-rate, and he does a good job of using words, where practical, to explain what’s going on. Besides giving you 46 of his most interesting games (complete with detailed notes) played during the last third of his career, he also throws in a slew of chess problems and studies, as well as two interesting articles.” – Michael Jeffreys, WWW.CHESSVILLE.COM
How to Beat 1 d4

James Rizzitano

Rizzitano, author of Understanding Your Chess, presents a full repertoire for Black against 1 d4, based on the Queen’s Gambit Accepted (QGA). The QGA is an extremely popular opening amongst players of all levels, as it gives Black free development and counterpunching potential, especially if White takes up the challenge and tries to set up a broad pawn centre. The QGA’s soundness is shown by the number of top-class grandmasters who have used it in critical games – it was a key factor in Short’s victory over Karpov, and has even been used by Garry Kasparov at world-championship level. Rizzitano has chosen to recommend dependable main lines of the QGA, and throughout emphasizes how Black can create winning chances and White’s typical ways to go wrong. The repertoire is completed by a set of weapons against White’s alternatives to offering the Queen’s Gambit, ranging from the stolid Colle to the weird Hodgson Attack and the reckless Blackmar-Diemer.

Also available on Chess Studio.

James Rizzitano is a strong international master who dominated chess in the New England region during a 14-year period from 1976 to 1989 – he won 157 out of 336 events in which he competed. His career highlights include victories over Alburt, Benjamin, Benko, Christiansen, Dlugy, I.Gurevich and Wolff, and exciting draws with de Firmian, Larsen, Speelman, and the legendary former world champion Tal. Rizzitano has recently made a return to competitive chess.

“Overall, I see no reason not to recommend this book to players from 1200 through at least master level. The analysis is comprehensive, the judgments and evaluations are carefully considered, and a complete repertoire against a major opening move is presented. Highly Recommended.” – Lou Mercuri,

CHESS HORIZONS
Understanding the Leningrad Dutch

Valeri Beim

The Leningrad System of the Dutch Defence is an interesting hybrid of the Dutch and the King’s Indian. For many years, it was viewed with some suspicion in view of the slight positional weaknesses created in Black’s position. However, in the 1980s dynamic new approaches were introduced by such players as Sergei Dolmatov, Evgeny Bareev, Mikhail Gurevich and especially Vladimir Malaniuk. These players showed how an active approach could compensate for these defects, and offer Black excellent winning chances. Since then, the Leningrad has been a popular and effective opening choice for players of all levels. A good understanding of the themes of the Leningrad is at least as important as detailed knowledge of its theory. Valeri Beim has a wealth of experience with the Leningrad Dutch and is an accomplished trainer, so is ideally qualified to guide the reader through the twists and turns of this remarkable opening.

Also available on Chess Studio.

Valeri Beim is a grandmaster who lives in Austria. He has won numerous tournaments and plays in the Austrian and German leagues. For many years, he was the head trainer at the chess school in Odessa (Ukraine), and he was also the trainer of the Israeli olympiad team. This is his second chess book.

“Valeri, as well as being an experienced chess trainer, is a player that uses the Leningrad Dutch Defence himself which is a big plus when writing a chess book. Through nine well-written chapters Valeri covers not only the Leningrad Dutch but also covers what to do if White plays a gambit or tries to deviate early. At the end of the book there is also homework in the form of exercises to do to see how much you’ve learned. If you wish to learn and understand how to play the Leningrad Dutch then this is the book for you.” – Michael Stevenson, New Zealand Chess
The Ruy Lopez: A Guide for Black

Sverre Johnsen and Leif Erlend Johannessen

The Ruy Lopez (or Spanish Opening) is one of the critical chess battlegrounds. It has long been recommended as an excellent chess opening for training purposes, as it leads to a wide variety of structures and strategies. This book is a complete guide to handling the black side of the Lopez, based principally around the Zaitsev Variation, upon which Anatoly Karpov relied during much of his career. This line leads to sharp play, often in open battles where Black gains active counterplay and challenges White to seize the initiative on the kingside. The authors explain in detail how Black can weather the storm. They also explain how Black can handle the practical problem of the Ng5 repetition, and recommend reliable procedures against White’s other options in the Lopez, starting off with the Exchange Variation, and moving on to a variety of closed systems. Throughout, the emphasis is on what readers actually need to know and understand in order to play the opening successfully in practice. There is a great deal of explanation of important ideas, and the authors take pains to guide their readers away from potential pitfalls.

Also available on Chess Studio.

Sverre Johnsen is a FIDE-rated player from Norway. He is an enthusiastic chess analyst, researcher and writer, and co-author of Win with the London System one of the most popular openings books of recent years. Leif Johannessen is a young grandmaster, also from Norway. He plays in several national leagues and has represented his country in many team events. The quality of his opening preparation is shown by the fact that he won the prize for most important theoretical novelty in Informator 92.

“Good chess opening books are all about ‘feel’ – do you feel the authors are making you at home in the variation, do you feel they are giving up their ‘secrets’ to you, the reader, and do you get the feeling they are on your side? Well, this book scores very highly in this respect; take the Preface, for example. It’s a 15 page discussion by GM Johannessen on how to learn a chess opening (albeit aimed at the Zaitsev, but the lessons are universal) – and it does the subject matter wonderful justice. I’ve read magazine and
internet articles which do not come close to Johannessen’s logical explanation of taking an opening from a thought over a coffee at a chess bookstall to a full part of your tournament repertoire. For my money, the best part of the book, although the rest of the material doesn’t lag behind in quality.” – Munroe Morrison, OPEN FILE
The Marshall Attack is a chess opening like no other. Rather than subjecting himself to the ‘Spanish torture’ so typical in the Ruy Lopez, Black simply gives away a centre pawn. But in return, he gets long-term attacking chances and activity that can persist well into the endgame. It is almost a century since Frank Marshall invented his sensational gambit, but it is still controversial, and more popular than ever amongst the best players in the world. In their hands, the Marshall Attack looks remarkably solid – even if White neutralizes Black’s attacking chances and remains a pawn up, Black often achieves full positional compensation. However, the Marshall appears a forbidding opening to ordinary club players, who feel that the theory is too difficult to understand and much too complex to memorize. Many simply avoid it with both colours. That, argues David Vigorito, is a shame. He shows that many typical Marshall positions can be broken down into elements that we can all grasp, and so build up an intuition to guide us. Then we are able to tackle this incredible opening and develop a feel for why pieces go to the squares that they do, and when Black has sufficient compensation, and when he does not. Of course, the Marshall remains a highly sharp and concrete opening, even to those who are versed in its unique brand of black magic. Vigorito provides detailed, cutting-edge theoretical coverage of all its main lines and the most important Anti-Marshall systems.

David Vigorito is an International Master from the United States. He plays regularly in high-level competitions, including the US Championship. He has written extensively for a variety of publications and is a chess teacher. This is his second book for Gambit.

“a good summary of existing theory, and the author has taken care to track down often overlooked, but sometimes theoretically crucial correspondence games, and importantly there is a decent sized section on Anti-Marshall lines that often crop up in practice.” – GM Michael Adams, DAILY TELEGRAPH
Endgames with rooks and pawns are the most frequently occurring in chess, arising in about 1 game in 10. If you learn an important technique in this endgame, chances are you will end up using it sooner or later. And there are a great many methods and concepts that can be mastered with a little effort. This book highlights the key themes in rook endings, and at each turn invites the reader to test his knowledge and skills with abundant exercises. Rook endgame theory does not stand still. New practical examples illustrate novel approaches as players seek to pose problems to their opponents – Magnus Carlsen has shown that even the driest-looking positions can feature deadly traps. The ongoing creation of new endgame tablebases – of which co-author Yakov Konoval has been at the forefront – enables new classes of positions to be assessed with definitive certainty. Using six-man and the brand new seven-man tablebases, the authors re-examine many of the old evaluations and reach new and enlightening conclusions about classic rook endings. You will be startled and amazed, and soon discover that you are becoming a far more effective endgame player.

Also available on Chess Studio.

German grandmaster Karsten Müller is arguably the world’s foremost writer on chess endgames. His ‘masterwork’, Fundamental Chess Endings, is a modern endgame ‘bible’ and was studied intensively in his youth by current World Champion Magnus Carlsen. Yakov Konoval is a Russian chess-player and programmer who studied at Mikhail Botvinnik’s chess school. He has written programs for solving chess problems and has pioneered new techniques for generating endgame tablebases.

“Unbelievably well written ... many new discoveries are revealed here. One of the best endgame books of all time” – John Elburg, www.chessbooks.nl

“You can feel confident that anything you study and learn on the basis of Müller’s book is 100% correct” – GM Matthew Sadler, New in Chess
In this thought-provoking, wide-ranging and often inspiring book, the authors examine how chess style and abilities vary with age. The conventional wisdom is that greater experience should compensate for a loss of youthful energy, but with so many of the world elite currently in their twenties, chess is increasingly looking like a young man’s game. By making a number of case studies and interviewing players who have stayed strong into their forties, fifties and beyond, the authors show in detail how players can steer their games towards positions where their experience can shine through. Interviewees include: GM John Nunn, GM Yasser Seirawan, GM Nigel Short, GM Judit Polgar, GM Keith Arkell, GM Pia Cramling, FM Terry Chapman, GM Jon Speelman, GM Sergei Tiviakov and WIM Ingrid Lauterbach. By examining so many aspects of chess, the authors have written a work that ends up transcending its subject-matter, and becomes a text on how and why we love chess, the means by which we can play successfully whatever our age and level of play, and how chess is truly a game for life.

Matthew Sadler is one of the strongest British players of recent decades. Having become a GM in his teens, he twice won the British Championship and was awarded an individual gold medal at the 1996 Olympiad. After concentrating on an IT career for more than a decade, he returned to high-level chess in 2010 and quickly regained a spot in the world top 100. Matthew’s struggles to bring his game back up to speed after his long break were part of the inspiration for this book. Natasha Regan is a Women’s International Master from England who achieved a degree in mathematics from Cambridge University. While pursuing a successful career as an actuary in the insurance industry, she has raised a family and maintained a strong interest in chess and other board games, including Go.

“unlike any other chess book I have seen. It addresses the subject of how to sustain, and seek to improve, one’s chess strength throughout life, despite the
inevitable diminution of calculation ability. Sadler and Regan have produced an insightful analysis of the way chess players of different styles adapted to age and the advancement of theory. From this, and candid interviews ... they unveil a tour de force of ideas to consider applying to one’s own game. This is not a book for the aging – it is rather a testament to the value of experience with lessons for players of all ages” – Ross Jackson, NEW ZEALAND CHESS
Fundamental Checkmates

Antonio Gude

SHORTLISTED FOR THE ECF BOOK OF THE YEAR AWARD

Chess might seem a complex and mysterious game, but the ultimate goal is simple: checkmate. Checkmate can occur in all stages of the game, from snap mates in the opening, through middlegame attacks to simplified endgames. Learning how to use our pieces together to corner the enemy king is a fundamental skill that all chess-players must constantly practise, sharpen and develop. This book lays out, in systematic and thorough fashion, a wide range of mating patterns and techniques, in particular showing how each piece-pair can combine to deliver mate. A working knowledge of these ideas enables players to move on to mating combinations, where pieces lay down their lives so that the remaining forces can deliver mate. Gude explains an amazing variety of tactical devices, and illustrates them in unforgettable style with some of the most brilliant mating attacks from practice, new and old. There are chapters on how to attack kings in the centre, as well as standard (and other!) attacks against the castled position. This is a true textbook of checkmate; readers will never be short of mating ideas, and will instinctively know when there is a possibility to launch an attack, or when they must parry the opponent’s threats. Fundamental Checkmates also features more than 300 exercises with full solutions.

Also available on Chess Studio.

Antonio Gude is an extremely experienced chess writer and teacher from Spain. Several of his books on tactics and for beginners are long-standing best-sellers in Spanish language. Gude has also translated a great many books, including some of the classics of chess literature.

“The number of great examples is overwhelming. On the one part there are classic game fragments you may already know, but also a lot is new, giving something for everyone. I myself am currently using this book as study material for my constant training ... the book is actually suitable for any chess player. High recommended” – IM Dirk Schuh, ROCHADE EUROPA
A Simple Chess Opening Repertoire for White

Sam Collins

By choosing variations that lead to similar structures, highly experienced player, writer and teacher Sam Collins has put together an ideal repertoire for players with limited study time. White opens with 1 e4 and develops his pieces to natural squares and seeks open lines and the initiative. A successful repertoire is more than a set of variations; it also requires strategic understanding of the resulting positions and a knowledge of the key tactical methods and patterns. Because many of Collins’s recommendations lead to IQP (Isolated Queen’s Pawn) structures, ideas can easily be transplanted from one opening to another. He gives complete illustrative games that emphasize the main themes. The specific analysis is up-to-the-minute and features many new ideas that have proven their worth in recent grandmaster practice. Throughout there is a great deal of attention to move-order subtleties and on finding nuances in ‘sidelines’ that your opponents are most unlikely to have examined in detail.

Also available on Chess Studio.

Also available as a German-language Kindle edition.

Irish international master Sam Collins won the championship of his home country in 2002 and 2014. He has represented Ireland in numerous Olympiads, winning an individual gold medal at Bled in 2002. He is also an experienced chess teacher who has lectured at the Berkeley Chess School in California. His previous books for Gambit were Chess Explained: The c3 Sicilian and the highly successful general opening work Understanding the Chess Openings.

“Sam Collins delivers a small but very well thought out repertoire book for White, based on lines that I have hardly seen before – for example the Italian line: 1 e4 e5 2 Nf3 Nc6 3 Bc4 Bc5 4 c3 Nf6 5 d4 exd4 6 cxd4 Bb4+ 7 Nbd2!? One of the most interesting repertoire books at this moment!” – John Elburg, www.chessbooks.nl
Warning: this book is not just entertainment. The author wants to teach you a lot about chess and improve the quality of your play! He has selected 53 miniatures from throughout chess history – the earliest are from the 1850s, while the most recent are from grandmaster events just a few months ago!

A miniature is a decisive game, won in 25 moves or fewer. Most of these 53 games feature brilliant tactics, attacks on the king, and even a few outrageous king-hunts. In many, the winner had to overcome cunning defensive ploys and inventive counterattacks. But our aim in this book is not just to admire the players’ skill, but to learn how we can play like this in our own games. Chess coach Ataman is keenly focused on the instructive points, explaining which features of the position justified the attacks, and what prompted the critical decisions. Where analysis is given, it is restricted to what it would be realistic for a human to work out at the board. But why are miniatures so instructive, especially for younger players? It’s because we get to see an idea or plan implemented successfully, in full. Once we understand what players are trying to achieve, we can then appreciate how to oppose these ideas, and the cut-and-thrust typical in modern grandmaster play will make a lot more sense.

Also available on Chess Studio.

Alper Efe Ataman is a FIDE Master from Turkey. He is a chess publisher, author and an experienced trainer, especially at the scholastic level.

“The author has dragged his net wide and rediscovered gems like Freeman-Mednis, New York 1955, played when the future Grandmaster was still a teenager. Instructive Chess Miniatures is a book that will provide plenty of pleasure and instruction at a very reasonable price ... recommended” – IM John Donaldson, USA Team Captain
Play the Classical Dutch

Simon Williams

The Classical Dutch is a flexible opening that often gives Black dynamic attacking chances. In this book, one of its most enthusiastic adherents explains the workings of his favourite opening, and provides Black with a complete repertoire against 1 d4. Few opponents will be ready to take on the Classical Dutch, since it has received little attention in chess literature in recent decades. For an opening that has been played by all-time greats such as Korchnoi, Tal and Larsen, the Classical Dutch’s current lack of popularity is puzzling. In this book, Simon Williams shows how Black can obtain counterchances against each of White’s main options. He also provides recommendations against all of White’s alternative approaches against the Dutch, including a variety of sharp possibilities after 1 d4 f5.

Also available on Chess Studio.

English grandmaster Simon Williams has gained a reputation for playing daring attacking chess. He represented England in World and European Championships in various age groups, and has been a regular in the British Championship since his early teens.

“The author makes a spirited plea for the Dutch. Its key ideas and theory are relatively clear and self-contained, providing a rare opportunity these days to absorb sufficient information to play and experiment confidently without considerable research.” – IM Craig Pritchett, THE HERALD
The Seven Deadly Chess Sins

Jonathan Rowson

Everyone loses chess games occasionally, but all too often we lose a game due to moves that, deep down, we knew were flawed. Why do we commit these chess-board sins? Are they the result of general misconceptions about chess and how it should be played? And how can we recognize the warning signs better? In this thought-provoking and entertaining book, Jonathan Rowson investigates, in his inimitable style, the main reasons why chess-players sometimes go horribly astray, focusing on the underlying psychological pitfalls: Thinking (unnecessary or erroneous); Blinking (missing opportunities; lack of resolution); Wanting (too much concern with the result of the game); Materialism (lack of attention to non-material factors); Egoism (insufficient awareness of the opponent and his ideas); Perfectionism (running short of time; trying too hard); Looseness (“losing the plot”; drifting; poor concentration).

Also available on Chess Studio.

Also available as a German-language Kindle edition.

Jonathan Rowson became Scotland’s third grandmaster in late 1999, within months of graduating from Oxford University. He was runner-up in the 1997 European Junior Championship, Scottish Champion in 1999 and winner of the Canadian Open in 2000. Rowson’s first book, Understanding the Grünfeld, has been highly praised for the quality and originality of his writing, and freshness of approach.

“Whenever two large groups argue over a subject so intensely, that subject must be interesting and thought provoking ... The Seven Deadly Chess Sins is a fascinating, original, insightful work by the most promising young chess writer out there. It’s well worth owning (in fact, I consider it a must own!), and contains a bounty of knowledge that will improve your game at the cellular level if the Zen gene is a dominant one in you ... Quite simply, The Seven Deadly Chess Sins is one of the best chessbooks to come out in many, many years.” – Jeremy Silman, Silman Reviews
The Slav

Graham Burgess

The Slav has been played by 11 of the first 13 World Champions, and has been favoured by many stars of modern chess, including Anand, Kramnik, Shirov, Ivanchuk and Morozevich. Its great popularity is due to its extreme solidity and abundant possibilities for dynamic counterplay. This book provides detailed coverage to help players as both White and Black face the challenges of this tough yet rewarding opening. All lines after 1 d4 d5 2 c4 c6 are discussed, except those that transpose to the Semi-Slav. The sharpest tactical lines of the Slav receive especially detailed coverage. These include the critical piece sacrifice in the main line (5...Bf5 6 Ne5 e6 7 f3 Bb4 8 e4 Bxe4), the Steiner line (5...Bg4) with 6 Ne5 Bh5 7 h3, and the possibly dubious but highly dangerous Geller Gambit (5 e4), which was a favourite of the young Kasparov. The trendy ...a6 lines are also covered systematically for the first time in chess literature.

Also available on Chess Studio.

Graham Burgess holds the world record for marathon blitz chess-playing. He is a highly versatile chess writer, whose previous books range from general guides for relatively inexperienced players to high-level theoretical manuals. His Mammoth Book of Chess won the 1997 British Chess Federation Book of the Year Award, while Nunn’s Chess Openings, of which he is a co-author, has established itself as the leading modern one-volume openings encyclopaedia.

“The Slav continues to remain a very popular opening at all levels and so a thorough survey from the ever diligent Burgess is very welcome. Burgess has meanwhile managed to maintain his reputation as a very conscientious author with this work, as once again he constantly corrects the analysis of others, whilst providing many important suggestions and improvements himself as well as producing clear assessments of lines” – IM Richard Palliser, Hull Chess Club Magazine
Chess Strategy for Kids

Thomas Engqvist

So you have learned how to play chess, studied tactics and know some basic endgames and openings. What’s next? The glue that binds it all together is strategy. By forming a good plan, chess-players seize strong points on the board and target the opponent’s weaknesses. Experienced player and teacher Thomas Engqvist shows that it all depends on logic that can be grasped by players of any age. He explains how to identify the right strategy in a wide range of typical situations. With his guidance, you will soon be finding good plans on your own – and then it will be time to demonstrate your tactical mastery! He first teaches the importance of the central squares and the basics of pawn-play, before examining the role of each of the pieces and how they are affected by the pawn-structure. Finally we see how to use them together to launch attacks of many different types. You then get a chance to test your new strategic skills in 27 exercises, all with full solutions. Chess Strategy for Kids provides a complete course that will help readers understand the potential of their pieces and play more purposefully in their games. Chess will stop feeling like a series of random events as you take command of your forces and direct them like a general in charge of an army.

Also available on Chess Studio.

Thomas Engqvist is an International Master from Sweden with more than three decades’ experience of international chess. He is a successful chess trainer and has also made notable contributions to chess theory. Engqvist is editor of the website schacksnack.se and teaches at a school in the Stockholm area.

“simplifies some chess concepts in a manner that a modern reader can understand and appreciate. ... the author clearly shows he understood Nimzowitsch and knows how to convey Nimzowitsch’s ideas, but he does it in an easier and more appealing fashion. ... I also found the graphics absolutely exhilarating. They show typical chess ideas in a stunning fashion, which makes them easy to remember, especially for the amateur. I think this book can be a nice gift for children who are interested in improving, or for adults who would like to know more about the game but don’t want to deal
with some boring authors of the past who ... didn’t treat the topic in an entertaining manner.” – Davide Nastasio, GEORGIACHESSNEWS.COM
Your First Chess Lessons

Paul van der Sterren

Assuming no previous knowledge of the game, Grandmaster Paul van der Sterren teaches you how to play and draws you into the fascinating world of modern chess. This carefully crafted chess course is divided into true lessons, each building on what has been learned in the previous ones. Before moving on from a topic, you have the chance to test that you have fully understood it with the help of thoughtfully graded exercises. This is a 21st-century guide. Throughout, there are references to online chess resources and suggestions for online activities, such as training, playing and live broadcasts, and chess-related social media. Also dotted throughout the book are pieces of chess lore, practical tips and information about great players past and present.

Also available on Chess Studio.

Grandmaster Paul van der Sterren has won the Dutch Championship on two occasions, and in 1993 reached the Candidates stage of the World Chess Championship. He is an internationally renowned chess writer and editor: he was one of the founding editors of New in Chess, and is author of the bestselling user-friendly opening guide Fundamental Chess Openings.
Chess is fundamentally a dynamic game. Each move changes the situation and the possibilities for both sides. No piece is ever identically as valuable as any other, and their scope changes from move to move. The current generation of supergrandmasters play unrelentingly dynamic chess, but a great deal of chess literature still deals with chess as if it were a predominantly static game. Much of our understanding of the game is based around traditional rules of thumb that might work well ‘on average’ or in ‘typical’ situations. But these rules may not equip us at all well in the specific and sometimes exceptional situations that we face in our games. In this book, Valeri Beim explains how to factor in dynamic considerations, and weigh initiative and time against material and other static factors. This is a realistic account by an experienced trainer and battle-hardened competitor, geared towards the needs of players looking to improve their results. Topics include: Dynamics; Development; The King as a Target; Breakthrough; Initiative.

Valeri Beim is a grandmaster who lives in Austria. He has won numerous tournaments and plays in the Austrian and German leagues. For many years he was the head trainer at the chess school in Odessa, and he was also the trainer of the Israeli Olympiad team. This is his fourth chess book.

“an incredible work, simply the best I have ever read on this topic. I suspect even some players of the first rank will find something to think about, and the rest of us will have our games adjusted forever. If you buy one chess book this year, this should be it. This book is so good, I have to stray from my usual method of categorizing books, and deem it an Instant Classic.” – Don Aldrich, Chess Today
Improve Your Positional Chess

Carsten Hansen

Throughout a game of chess, we must constantly make judgements and decisions that cannot be determined simply by calculation. We must then rely on our positional judgement. Good positional skills are primarily developed by experience, but they can also be learnt. In this book, Carsten Hansen provides a wealth of advice and ideas that will help give readers a helping-hand up to new levels of positional understanding. Paramount in this discussion is the player’s need to weigh up positional elements at the board, and decide which are most important for the situation at hand. Topics include: The Quest for Weaknesses; What is the Initiative?; Understanding Imbalances; The Relative Value of the Pieces; Decisions Regarding Pawn-Structures; Structural Weaknesses; Where and How to Attack. The book is rounded off with exercises to test your understanding of the concepts discussed, together with full solutions.

Carsten Hansen is a FIDE Master from Denmark who currently lives in the USA. He has a reputation for writing well-researched books on major chess topics, and is known to many through his painstaking book reviews on the Internet. This is his fourth book for Gambit.

“I figure to put about 20 Elo points on to my grade (2433) by the time I’ve finished; that’s how good it is. I can’t really say more than that. Oh, and I am enjoying reading it!” – IM Andrew Martin, Seagaard’s Reviews
Solving in Style

John Nunn

In this book, John Nunn, a top-class grandmaster who has also won the World Problem Solving Championship three times, explains the methods by which chess problems and studies are solved. The logical and creative methods advocated, while targeted at the solving of composed positions, may also help players find startling tactical solutions in their games. Solving in Style also constitutes an entertaining and insightful introduction to the world of problems and studies. There are chapters on series problems and other unorthodox stipulations, and also a discussion of specific themes such as the Novotny interference. This brand new electronic edition contains 50% more material than the original print edition. There are new chapters on proof games and solving competitions, as well as a large collection of new problems for readers to solve. Unsound problems from the first edition have been replaced, and errors and omissions corrected.

Also available on Chess Studio.

Dr John Nunn is one of the best-respected figures in world chess. He was among the world’s leading grandmasters for nearly twenty years, winning four gold medals in chess Olympiads and finishing sixth overall in the World Cup in 1989. He is a much-acclaimed writer, whose works have won ‘Book of the Year’ awards in several countries. In 2004, 2007 and 2010 Nunn was crowned World Chess Solving Champion, ahead of many former champions.

“Nunn does an excellent job of explaining the special rules of this parallel universe, but where he is likely to gain the most converts is in the field of chess studies ... Many of these studies look sufficiently ‘game-like’ that the over-the-board player will have no trouble appreciating the beauty and ingenuity involved. Highly recommended” – IM John Donaldson, USA Team Captain
Understanding the Sicilian

Mikhail Golubev

Mikhail Golubev has played the Sicilian as Black and White for the whole of his chess career, specializing in the sharpest and most aggressive systems. Here he presents the whole undiluted truth – as best he sees it – about this most popular and cut-throat of openings.

The quality of the games is striking. Even the list of opponents in junior tournaments features Kramnik and Shirov, while more recent opponents include Ponomariov and Svidler. Ivanchuk’s extraordinary ideas crop up repeatedly. But we also see Golubev facing more ‘normal’ opposition, where as the higher-rated player the top priority was to create winning opportunities.

There is much to learn from Golubev’s honest ‘warts and all’ presentation. We see the process of discovery and experimentation, and develop a feel for the spirit of the Sicilian. There is a wealth of original analysis (all scrupulously computer-checked), novelties and strategic guidance. For Dragon, Sozin/Najdorf and Velimirović players in particular, this book is an absolute must-read, but Anti-Sicilian and Taimanov players are among those who must also watch out. All Sicilian lines are covered, with the exception of those that have never occurred in the more than 440 Sicilian games from Golubev’s professional career.

Also available on Chess Studio.

Mikhail Golubev is a grandmaster from Odessa, Ukraine, who plays regularly in tournaments in eastern and central Europe. He is a noted expert in several sharp and aggressive opening systems, including the King’s Indian and the Dragon. His previous books, The Sicilian Sozin and Understanding the King’s Indian, have been praised for the quantity and quality of their original analysis, and for Golubev’s objectivity in identifying the critical lines.
It’s major news when a legendary player reveals his opening secrets. And when he has rarely written about his games or preparation methods, and was famous for meticulous, ahead-of-his-time opening analysis, it makes it a true publishing event.

Yet that is what eight-time world championship candidate Lajos Portisch has done. In this book, he opens his extensive opening files and presents the most important games and unused novelties in the Ruy Lopez (or Spanish Game). He also explains the strategies and ideas behind these lines, and places the key games in their historical settings. Anecdotes abound, as do reflections on his key rivals, including Fischer, Karpov, Tal, Larsen and Smyslov.

This is also a thoroughly modern work. As well as drawing upon games from his own long career, Portisch includes important Ruy Lopez games by modern champions, including Anand and Carlsen, describing them from his own unique perspective. All analysis has been computer-verified, with Portisch’s hand-made variations standing up to scrutiny in most cases, but with the computer adding new and surprising twists. Thus we see how human creativity can remain a vital component in modern preparation.

Also available on Chess Studio.

Lajos Portisch is one of the greatest players of the modern era. An elite player from the 1960s to the 1990s, he qualified for the candidates eight times and was board 1 for the Hungary team that won olympic gold in 1978, ahead of the USSR. He is one of the 12 Hungarian ‘Sportsmen of the Nation’ – the country’s highest sporting honour.
Extreme Chess Tactics

Yochanan Afek

Tactical ability requires knowledge and skills: knowledge of patterns and tactical methods, and the skill to recognize them, combine them, and calculate accurately.

This book features both composed studies and real-game positions. Composed positions distil tactics into their purest form: nothing irrelevant is present on the board. We can focus purely on the key ideas, which makes them an ideal learning tool. As one of the world’s greatest experts on chess composition, Yochanan Afek is the perfect man to select the best studies for this purpose. In over-the-board chess (in which Afek is also highly accomplished), the tactical ideas tend to be less complex, but they may prove harder to identify – unless they are already familiar to you. Afek provides a case in point in his introduction, where the stunning final move of the 2016 world championship could not possibly have been missed by those familiar with an earlier game. All the real-game positions in this book are taken from games by world champions (male or female).

Following the structure of John Nunn’s best-selling Learn Chess Tactics, in each chapter a theme is introduced and a number of examples are explained. Then the reader immediately gets to use this knowledge in a series of carefully selected exercises.

Also available on Chess Studio.

Yochanan Afek is both a Grandmaster of Composition and an over-the-board International Master. This unique combination of talents makes him a highly insightful writer, noted for his work on the factors that make moves hard to see. He grew up in Tel-Aviv and now lives in Amsterdam. His greatest over-the-board success was winning the Paris Championship in 2002.
The Chess Attacker’s Handbook

Michael Song and Razvan Preotu

Life is too short to play boring chess!

That’s the mantra of the two young authors of this book, and as you read their energetic and insightful words, you may find yourself caught up in their enthusiasm for direct attacking play.

Their over-the-board successes are not based on mere bravado or trickery, but on a profound understanding of the chessboard struggle and thought process. Song and Preotu consider the role of manoeuvring and prophylactic thought, and examine attacks in the endgame, as well as more standard topics such as play on colour complexes and when and how to launch the pawns in an all-out assault.

And because life’s too short to read a boring chess book, the text is packed with advice, study suggestions and anecdotes as well as quotes and references to philosophy and other ‘real-world’ topics. Their examples are drawn from their own practice and their supergrandmaster trainer, as well as modern classics and older gems. Most of their material you will not have seen before; the rest you will not have seen explained this way before.

Also available on Chess Studio.

The authors are the two highest-rated Canadian juniors. Razvan Preotu earned the Grandmaster title in 2016 at the age of 17. The most notable result during his meteoric rise was at the 2016 Calgary International, which he won outright ahead of a strong international field including five GMs. Michael Song became an International Master by winning the North American Under-18 Championship. He has represented Canada many times, winning a bronze medal at the 2011 World Youth Championship. His trainer is supergrandmaster Evgeny Bareev.
125 Chess Opening Surprises

Graham Burgess

Surprising the opponent is a primary aim of modern opening preparation. You can’t afford to be a stationary target – gone are the days when players worked out an elaborate repertoire from which they never varied.

These 125 opening surprises land like bombshells in the apparent calm of standard openings and disorientate your opponents as they grapple with original problems. This book is a treasure-trove of unusual ideas at an early stage of the opening, each with a firm logical foundation, yet running against the grain of conventional play. Each idea has quick-strike potential and is supported by enough concrete analysis to enable you to try it with confidence.

For this new edition, Burgess has thoroughly revised and expanded the original content with a great many new verdicts and additional analysis and ideas. Every single move has been re-examined and checked against current theory. The brand-new sections mostly deal with ideas that were unknown or untopical before 2016 or 2017.

Reviews of the first edition (101 Chess Opening Surprises):

“explodes right in your face, with ideas in all openings ranging from the sublime to the ridiculous” – GM Lubosh Kavalek, WASHINGTON POST

“I was stunned by some of the author’s ideas ... excellent” – GM Paul Motwani, THE SCOTSMAN

Also available on Chess Studio.

FIDE Master Graham Burgess is Gambit’s Editorial Director, and one of the founders of the company. He holds the world record for marathon blitz chess playing, and lives in Minnesota. This is his 24th chess book, his earlier works including well-regarded opening guides and best-selling general texts.
Once a player has learned how the pieces move, the next task is to put them to work – that is, to study tactics. For all players, from beginners to champions, tactical skill is the main component of chess ability. And this skill must be constantly practised and improved.

This book provides a systematic course in chess tactics and hundreds of exercises to sharpen and measure your skills. With Antonio Gude’s assistance, you will understand how the pieces work, so you can carry out your strategic plans and launch devastating attacks. And even in those games where things go wrong, you will always be ready to pounce when given the chance. The book is packed with entertaining and inspiring examples, brought to life with information and stories about some of the more notable figures in chess history.

This is a companion volume to Gude’s much-acclaimed Fundamental Checkmates:

“Books offering tactical positions to solve are universally agreed upon as first-rate training, but before starting out it makes sense to first have a solid grounding in the fundamentals. This book will do that and more.” – IM John Donaldson, USA Team Captain

“[Gude] is well-read, knows important games from the past and present, and uses famous endgame compositions to create a useful mating manual for wide readership” – GM Lubosh Kavalek, HUFFINGTON POST

Also available on Chess Studio.

Antonio Gude is a well-known chess writer and teacher from Spain who has represented his country in international correspondence chess events. His previous book for Gambit, Fundamental Checkmates, was shortlisted for the English Chess Federation Book of the Year Award.
How to Beat the Open Games

Sverre Johnsen

The Open Games (those beginning 1 e4 e5) are now more topical than ever, featuring in a high proportion of elite-level games. This new user-friendly guide offers players of all levels a carefully worked-out repertoire, taking into account this wealth of new material.

Noted opening writer Sverre Johnsen has also taken a critical look at the more traditional Open Games, where theory is often based on old or obscure games. Making extensive use of modern computer engines, he has overturned ancient assessments and found new paths that breathe fresh life into positions long thought to be resolved. It is striking how often in his lines Black is able to seize the initiative.

- A full repertoire for Black with 1 e4 e5 when White avoids the Ruy Lopez
- ...Bc5 and ...Nf6 systems both fully covered after 3 Bc4
- Each chapter starts with a ‘Memorable Game’ to inspire and set the scene

Johnsen has chosen sound lines that are likely to surprise opponents and deny them the type of game they are seeking. He has deeply researched correspondence sources and recent books on the Open Games, and employs similar methods to those that made his earlier opening works so popular among club-level players.

Also available on Chess Studio.

Sverre Johnsen is a chess analyst, researcher, organizer, trainer and writer from Norway. He is co-author of Win with the London System and Win with the Stonewall Dutch, two of the best-selling openings books of recent years.
Applying Logic in Chess

Erik Kislik

Is chess a logical game? What constitutes an advantage in chess? How can we set problems and create psychologically difficult situations for the opponent? These are big questions, and Erik Kislik tackles them and others head-on in this thought-provoking, thoroughly modern, and original work.

He answers the first of those questions with a resounding ‘yes!’ His assessments focus on concrete points: pawn-structure, material imbalance and compensation. Even though the analytical proofs may be complex, he repeatedly shows that these elements are the keys to evaluating positions and forming plans.

As the trainer of players ranging from high-level grandmasters to average club-players, Kislik is very strong on providing practical guidance on topics such as how best to use chess software, choosing hardware, getting psychologically ready for a game and preparing for specific opponents. He is always willing to boldly state his views, even when they run contrary to conventional chess wisdom.

“I was excited by this book because of the way all of the ideas are intertwined and you get very concrete advice ... Everything is applicable and it is easy to see how it applies to the real world.” – from the Foreword by GM Hjörvar Steinn Gretarsson.

Also available on Chess Studio.

Erik Kislik is an International Master originally from California who lives in Budapest. He is an expert in computer chess and one of the most in-demand chess trainers on ICC. He has coached many grandmasters and assisted a number of elite players with their opening preparation.