The 1960 World Championship match brought a breath of fresh air and an infusion of young blood into the chess world. Mikhail Tal, just age 23, wrested the title from the 48-year-old Mikhail Botvinnik, who, except for one year, had held the title since 1948. It was not just Tal’s youth and his being a fresh face that excited chess fans; most of all it was his style of play: daring, aggressive, provocative, tactically complicated, full of intuitive sacrifices and combinations, in sharp contrast to Botvinnik, who had become more coldly logical and strategic as he grew older.

Botvinnik made it his highest priority during the match to steer away from complications and give Tal’s combinative genius as little scope as possible. In this he was largely successful; only a few games — notably the 1st, 6th, and 19th — feature the sort of dashing attacks by which Tal had slashed his way through the Interzonal and Candidates tournaments. But Tal showed himself not just a tactician, but a complete player, capable of careful positional play and masterful endgame technique, and possessing the spirit, stamina and determination necessary to overcome Botvinnik’s strong and tenacious resistance. Thus Tal’s victory, by a score of +6 -2 =13, was fully deserved.

Tal capped his victory by producing what many consider the best book ever written on a world title match by one of the players. Tal does not just analyze moves, he describes the whole process he underwent before and during the match: studying Botvinnik as a man and player, deciding what openings to use and expect, describing his feelings going into each game, etc. And he explains his chess ideas at length: the strategic goals of various openings, how he chose a plan suitable to a given position, why he rejected a plausible-looking move or chose one that seemed implausible, etc. And he is forthcoming about his mistakes, sometimes even too self-critical (e.g. move 29 of game 18). Overall the book is a pleasure to read, and very instructive for the average player.
Here, however, we are concerned only with concrete tactical analysis. As I have done with books by Lasker, Alekhine, Capablanca, Euwe, Tarrasch, Tartakower, Najdorf, Nimzovich, Fine and others, the text moves and note variations in Tal-Botvinnik 1960 were subjected to computer analysis. (For full technical details and methodology see the appendix at the end of this work.)

It should be kept in mind that we are, necessarily, concerned mainly with mistakes. Tal’s analysis was upheld or at least not contradicted much more often than serious errors were found, but correct notes are usually not mentioned; otherwise we would be duplicating almost the whole book. So almost everything pointed out here is an error. The reader should not take from this a false impression that Tal was a bad annotator, or that I wish to belittle him; far from it. The plain fact is that no human annotator from pre-computer times can avoid errors in a book of this sort. Chess is just too complicated, and *errare humanum est*.

With some annotators, one can sense a recurring pattern to their mistakes. Nimzovich is too intent on proving his pet theories, Alekhine misses (or suppresses?) unpleasant possibilities, Capablanca is sometimes over-confident, Euwe is too self-effacing, Lasker and Fine are too superficial, and Tartakower is downright sloppy. No comparably clear pattern emerged from Tal’s book, but there were a few recurring themes:

**Understatement:** On several occasions, Tal gives a dire situation a rather mild assessment. See for example Game 2, move 20, where he merely says a certain line is “not good for Black,” but Black is losing a whole rook. Or Game 3, move 30, where he deems a line as “risky” for Black, when White is about to go up a whole queen.

**Poor work with lost games:** There is a notable drop in the quality of Tal’s notes for his two losses (Games 8 and 9). Tal may have felt too discouraged, unmotivated, or upset with himself to give these games much effort.

**Going harder on himself than on Botvinnik:** In Game 9, Tal gives his 21.Qg3 two question marks and calls it “the weakest move in the match,” which it definitely was not. He appends a “??” to several other moves of his, almost all undeservedly. Yet Botvinnik, who obviously made more mistakes, including the match’s two worst blunders, seldom gets a “?”. Perhaps Tal was just being respectful toward the Patriarch of Soviet Chess, but objectively he was not fair to himself.

**Recklessness in note variations:** Knowing that Botvinnik could not be bowled over as easily as lesser players, Tal usually kept his natural aggressiveness under admirable restraint throughout the match. However, in some note variations, such as at move 13 of Game 20, he would “cast caution to the winds,” saying he would have played some wild line to muddy the waters. He was fortunate that he did not actually get a chance to play these, as many are objectively quite unsound.

If the story one hears about the writing of this book is true, it may explain how some errors occurred. Supposedly, Tal dictated all game moves and note variations *without using any board or pieces*. He simply visualized everything in his head, making the book perhaps the greatest exhibition of blindfold chess skill ever known. Still, working from an actual board might have eliminated some of the errors, especially the howlers, of which there are more than a few.
Some explanation of our conventions. The games are given in full. Text moves are in **boldface**, note moves in normal type. Diagrams of actual game positions are 14-point, while diagrams from note variations are in 12-point. Analytical punctuation of text moves – *e.g.* ! or ? – is Tal’s own. When a text move or note line of Tal’s shows punctuation or comment in **red** – *e.g.* 22...**g7?** (⊙ 22...**e4!=*) – it means I have inserted an engine’s opinion.

Sometimes Informator evaluation symbols: +−, −+, ±, ±, etc., are used, but I generally prefer the engines’ numerical assessment — *e.g.* 28.**f5 (+2.58), or 35.⊙×f3 **g7 (-2.25) — to indicate the status of a position, as I consider this more precise and informative. The numbers represent Komodo’s and/or Stockfish’s evaluation of the position to the nearest hundredth of a pawn, *e.g.* a difference of exactly one pawn, with no other relevant non-material differences, has the value +1.00 when in White’s favor, or -1.00 when in Black’s. A position where White is considered better by 3½ pawns (or the equivalent, such as a minor piece) would get the value +3.50, the advantage of a rook +5.00, etc. With the symbols, a position where White is up knight for pawn, and another where he’s up a queen, would both get a “+−”, but there is obviously a big difference.

At the end of many notes you will see a more detailed entry such as “(+0.95 K/24)” or “(-1.37 SF/36)”. These show first the numerical evaluation, secondly the engine used (K for Komodo 11.2.2, SF for Stockfish 10), and finally the depth to which the analysis reached in ply, *e.g.* “K/24” means Komodo looked 24 half-moves beyond the board position. In some cases, especially where the evaluation is overwhelmingly in favor of one side or the other, I did not bother giving the engine or the ply depth.

The Informator symbols used here are:

- ± White has a slight advantage
- ± White has a definite advantage
- +− White has a winning position
- ≡ Black has a slight advantage
- ≡ Black has a definite advantage
- −+ Black has a winning position
- ⊙ a better move is
- ⊗ the only playable move, or the only move that retains a significant advantage
- ⊖ with the intention or idea of
- ≪ with compensation for material

Tal lived to see the start of the computer era in chess, but not long enough to see engines that greatly surpassed even world champions. If he’s looking down from above, I hope he understands that the goal here is only objective chess truth, a goal I hope he would endorse. I found the project a very interesting one, and I hope the reader receives some enlightenment and enjoyment from it.

*Taylor Kingston, San Diego, California, March 2019*
Game 1, Tal-Botvinnik, Moscow, 15 March 1960, French Defense [C18]: A well-played game by Tal, in which he trumped Botvinnik’s opening preparation. We found few errors in his notes, but a number of improvements were possible.

1.e4 e6 2.d4 d5 3.Qc3 Qb4 4.e5 c5 5.a3 Qxc3+ 6.bxc3 Qc7 7.Qg4 f5 8.Qg3 Qe7 9.Qxg7 h8 10.Qxh7 cxd4 11.Qd1 Qd7

Tal comments “If White plays now 12.Qf3, then after 12...Qa4 13.Qd3 (Q 13.b1, 13.Qg5, 13.Qg5, or 13.Qh4, all =) 13...Qxc3 his position immediately becomes critical.”

That is rather an understatement! Forced then is 14.Qe2 (if 14.Qb1 or 14.Qa2 Qxd3+) 14...Qxc2 (not 14...Qa1?? 15.Qg5+-) 15.Qxc2 Qxc2+ 16.Qd2 Qc4+ (16...Qg2 is also good) 17.Qe1 Qbc6 and White is just about lost (-1.98 K/20).

12.Qh5+ Qg6 13.Qe2

One variation Tal gives here goes wrong at two points. He writes “The straightforward 13...Qa4 runs up against 14.Qf4 Qxc3 15.Qd3 Qxa1 16.Qxg6 Qc6 17.Qf4+!” The errors are both at move 15:
White must avoid Tal’s 15...d3?, which could lose, in favor of 15...a2!, which wins (+3.37 K/22). The problem with 15...d3? becomes apparent if Black plays not 15...a1??, but 15...d7!:

White must then play 16.e2 (if 16.d6 a1?? d6+), after which comes the mutually forced line 16...0–0 17.xg6 (if 17.e2 d6 xe5+) 17...a1 18.e7+ b8 19.d8 b8

and now if (a) 20.e7? c8 21.a6 a1 22.a5 a2 23.d2 (23.d7?? d5+) 23...c4+ 24.e1 c5 25.a5 c5++ (-3.93 K/20), or better (b) 20.e1 c5 21.f1 c3, with a probably winning position for Black (-1.81 K/22).

13...d3 14.cxd3 a4+ 15.e1

15...e5
Black was already in trouble, and Tal is correct to observe that this move makes his game worse. Better is his recommendation 15...\(\text{Nc6}\) 16.f4 0–0–0 17.\(\text{d2}\). He cites another line credited to the Czech master Podgorny, 15...\(\text{b5}\), then says “but by 16.\(\text{g5}\) \(\text{d}3\) 17.\(\text{d2}\) White seizes the initiative.” However, Komodo sees no initiative for White after 17...\(\text{f7}\). Rather than bothering to defend the c-pawn, it prefers 17.\(\text{d1}\),

with a plus for White after either 17...\(\text{a6}\) 18.f4, or 17...\(\text{xe2}\) 18.\(\text{c3+}\) 19.\(\text{f1}\) \(\text{e5}\) 20.f4 \(\text{g7}\) 21.\(\text{f3}\) \(\text{c6}\) 22.\(\text{h4}\) \(\text{g7}\) 23.\(\text{e3}\), when White’s bishop pair and other factors compensate for the nominal pawn minus (+1.53 SF/29).

16.\(\text{g5}\)

Here Tal says “16...\(\text{f4}\) does not work in view of 17.d4 \(\text{f5}\) 18.\(\text{xf4}\) \(\text{c2}\) 19.\(\text{e2}\).” That line is indeed good for White (+2.34), but the last move can be made even better: 19.\(\text{d3!}\) \(\text{c3+}\) 20.\(\text{e2}\)

20...\(\text{c2}\) [if 20...\(\text{c6}\) 21.\(\text{xg6+}\) (+6.75), or 20...\(\text{b2+}\) 21.\(\text{e3}\) (+7.66)] 21.\(\text{ac1}\) \(\text{c6}\) 22.\(\text{xxc2}\) \(\text{d4+}\) 23.\(\text{d1}\) \(\text{xc2}\) 24.\(\text{xxc2}\) \(\text{a1+}\) 25.\(\text{d2}\) \(\text{h1}\) 26.\(\text{g6}\) and mate in five.

16...\(\text{c6}\) 17.d4 \(\text{c7}\) 18.\(\text{h4!}\) e5 19.\(\text{h3}\)
19...\texttt{f7} \texttt{vllllllllV}

Tal correctly comments “Bad would be 19...f4,”

but the counter he gives, 20.\texttt{g4}, is far from the strongest (+0.84 K/20). Much better is 20.dxe5! \texttt{vllllllllV} (if 20...\texttt{cxe5} 21.\texttt{xf4}) 21.\texttt{d2}

\texttt{vllllllllV}

and:

\textbf{(a)} 21...\texttt{d7} 22.\texttt{xf4}! \texttt{xf4} 23.\texttt{f7+ e7} 24.\texttt{e3 g7} 25.\texttt{xf4 xf4} 26.\texttt{xh4} (+3.40 K/20);

\textbf{(b)} 21...\texttt{f5} 22.\texttt{xf4 c2+} 23.\texttt{e1 b2}

24.\texttt{d1!!} (not 24.\texttt{g6? x1+}) 24...\texttt{xd1} 25.\texttt{e3+ f7} 26.\texttt{xd1 c5} 27.h5 \texttt{xf4} 28.\texttt{xf4 eae8} 29.\texttt{xd5+} (+7.15).

Returning to the actual game:
20.\textit{dxe5} \textit{\textit{cxe5}} 21.\textit{\textit{\textit{\textit{e3}}} d7} 22.\textit{\textit{\textit{b1}}} b6 23.\textit{\textit{f4}}

Tal writes “White’s pieces are poised like a coiled mainspring. If Black now plays
23...\textit{h8}, then after 24.\textit{\textit{xg6}} \textit{\textit{\textit{xg6}}} 25.\textit{\textit{e2}}, the threat \textit{\textit{e2-a6}} will decide the game.” Perhaps not. 25...\textit{f4}! forces the queen back: 26.\textit{g4+} \textit{c7} 27.\textit{xf4+} \textit{\textit{xf4}} 28.\textit{\textit{g6}} \textit{\textit{ae8}}:

Now not 29.\textit{\textit{xe8?}} \textit{\textit{xe8+}} 30.\textit{\textit{e2}} \textit{\textit{b5++}}, so after either 29.\textit{\textit{e2}} \textit{\textit{xe3}} 30.\textit{\textit{xe3}} \textit{\textit{h4+}}, or 29.\textit{\textit{g5}} \textit{\textit{\textit{\textit{\textit{g5}}} xg5}} 30.\textit{\textit{h5\textit{xg5}}} \textit{\textit{\textit{xe3+}}} 31.\textit{\textit{fxe3}} \textit{\textit{g8}}. White’s advantage is much reduced and may not be sufficient to win (about +0.80). Rather than first exchanging knights, much stronger is the immediate 24.\textit{\textit{e2}}!

Then after 24...\textit{\textit{xf4}} (everything else is much worse) 25.\textit{a6!! c6} (if 25...\textit{\textit{\textit{fg6}}} 26.\textit{\textit{xa4++}})
26.Bxf4 g6 27.b5! d8 – This is forced; if 27...b5 28.b7+ and mate shortly. 28.g5+ c7 29.xc6 xc6 30.h5!

30...d7 (if 30...xh5?? 31.xb6++ , or 30...f8 31.e7++) 31.b5+ c7 32.hxg6 and Black can resign (+5.70). We found no further important errors or improvements after this point.

23...ae8 24.b4 c6 25.d1 xg4 26.xg4 g6 27.d4 e3+ 28.f4 c7 29.c4 dxc4 30.xc4 g7 31.xg8 xg8 32.h5 1–0

Game 2, Botvinnik-Tal, Moscow, 17 March 1960, Modern Benoni [A61]:

1.d4 f6 2.c4 c5 3.d5 e6 4.c3 e5 5.cxd5 d6 6.f3 g6 7.g5 g7 8.d2 h6 9.h4 g5 10.g3 h5 11.c4 xg3 12.hxg3 0–0 13.e3 e7 14.e2 d8 15.0–0 d7 16.a4 e5 17.xe5 xg5 18.a5 b8 19.a2 d7 20.b5

Only one very minor thing to note here. As he did after move 11 in Game 1, Tal makes quite an understatement in this game, at move 20. In this position,

where he played 20...x5, Tal says “If 20...a6, then 21.a3 and 21...b5 22.xb6 xb6 23.c4 is not good for Black.”

Not good for Black indeed! White wins a whole rook.
20...\textit{\textbf{b}xb5} 21.\textit{\textbf{b}}xb5 \textit{b}6 22.\textit{\textbf{a}}6 \textit{\textbf{B}}bc8 23.\textit{\textbf{W}}d3 \textit{\textbf{B}}c7 24.\textit{\textbf{b}}3 \textit{\textbf{W}}c3 25.\textit{\textbf{W}}×c3 \textit{\textbf{Q}}×c3 26.\textit{\textbf{c}}2 \textit{\textbf{Q}}f6 27.\textit{\textbf{g}}4 \textit{\textbf{B}}e7 28.\textit{\textbf{c}}c4 \textit{\textbf{B}}c8 29.g3 \textit{\textbf{Q}}g7 30.\textit{\textbf{d}}d1 \textit{\textbf{W}}f8 31.\textit{\textbf{d}}d3 \textit{\textbf{Q}}h7 32.\textit{\textbf{g}}2 \textit{\textbf{g}}6 33.\textit{\textbf{d}}1 \textit{\textbf{h}}5 34.\textit{\textbf{g}}×h5+ \textit{\textbf{Q}}×h5 35.\textit{\textbf{g}}4+ \textit{\textbf{g}}g6 36.\textit{\textbf{c}}c2 \textit{\textbf{h}}8 37.\textit{\textbf{d}}d3+ \textit{\textbf{f}}f6 38.\textit{\textbf{g}}g3 \textit{\textbf{B}}e8 39.\textit{\textbf{b}}b5 \textit{\textbf{B}}e4 40.\textit{\textbf{c}}c4 \textit{\textbf{B}}×c4 41.b×c4 \textit{\textbf{B}}e7 42.\textit{\textbf{a}}a4 \textit{\textbf{e}}5+ 43.\textit{\textbf{f}}f3 \textit{\textbf{h}}4 44.\textit{\textbf{g}}g1 f5 $\frac{1}{2}$–$\frac{1}{2}$

Game 3, Tal-Botvinnik, Moscow, 19 March 1960, Caro-Kann Defense [B11]:

Before getting into the match game, we look at some comments Tal made about a pre-match training game in an extensive note to White’s fifth move of the match game. With Tal presumably playing White and his second Alexander Koblents Black, the training game began:

1.e4 c6 2.\textit{\textbf{c}}c3 \textit{\textbf{d}}5 3.\textit{\textbf{f}}f3 \textit{\textbf{g}}4 4.\textit{\textbf{h}}3 \textit{\textbf{xf}}3 5.gxf3 \textit{\textbf{e}}5 6.f4 dxe4 7.fxe5 Qd4 8.Qe2 Qxe5 9.d4 Q×d4 10.\textit{\textbf{d}}×e4 \textit{\textbf{e}}7 11.\textit{\textbf{f}}b4 \textit{\textbf{xb}}2 12.\textit{\textbf{d}}d1 \textit{\textbf{f}}6 13.\textit{\textbf{d}}d6+ \textit{\textbf{f}}f8 14.\textit{\textbf{e}}7+ \textit{\textbf{e}}7 15.\textit{\textbf{f}}5+ \textit{\textbf{e}}8 16.\textit{\textbf{g}}×g7+ \textit{\textbf{f}}f8 17.\textit{\textbf{d}}d6+:

We give Tal’s variations here with our punctuation in red. He writes “after 17...\textit{\textbf{g}}g8 18.\textit{\textbf{g}}1 Black is defenseless, for example 18...\textit{\textbf{c}}c3+ 19.\textit{\textbf{e}}d2 \textit{\textbf{xd}}2+(??) 20.\textit{\textbf{xd}}d2 \textit{\textbf{e}}4+ 21.\textit{\textbf{e}}e3 \textit{\textbf{x}}d6 22.\textit{\textbf{e}}×e6#.” But Black is not so defenseless. There is no need for 19...\textit{\textbf{xd}}2+??; instead he has 19...\textit{\textbf{a}}a1+!

and now if 20.\textit{\textbf{e}}e2? \textit{\textbf{h}}5! 21.\textit{\textbf{f}}5 \textit{\textbf{g}}4! 22.\textit{\textbf{h}}×g4 h4!!+ (-2.60 K/20), therefore White must accept a draw by 20.\textit{\textbf{d}}d1 \textit{\textbf{c}}3+ etc. 17...\textit{\textbf{g}}g7 18.\textit{\textbf{g}}1+
Here Tal correctly describes the text 18...g4 as “the only move.” He is also correct that the only other legal move, 18...Kh6, is significantly worse, but his refutation goes astray: 19.f4+ h5 20.e2+ h4 21.g3+(??) xh3 22.f1+(?) g4 23.e5+ f5 24.xb2

with, he says, “a very strong attack.” But after 24...e8+ 25.d2 (if 25.e2 bd7=) 25.e4+ 26.c1 xf2 27.d3+ xd3+ 28.xd3 a6 the game is even. Back at move 21,

correct is 21.g5+ xh3 22.f1 and mate in two, e.g. 22...e5 23.h1+ h2 24.d3+. After 21.g3+? Black can at least avoid a quick mate with 21...g5 22.e5+ (+2.57), but if he plays Tal’s 21...xh3,

then not 22.f1+?, which as shown above only draws, but either of two quick mates: 22.h1+ g2 23.h2+ g1 24.d2*, or 22.f1 and 23.h1*. The training game ended 19.xg4+ f6 20.f4+ g7, draw.

Now to the actual match game, in which several improvements and one important correction to Tal’s notes were found.

1.e4 c6 2.c3 d5 3.f3 g4 4.h3 xf3 5.gxf3 e6 6.d4 d7 7.f4 b4 8.h4 g6
Here Tal examines a long gambit variation he contemplated but abandoned, 9.a3 dxc3+ 10.bxc3 dxe4 11.fxe4 Qe4 12.Qf3 a5 13.Qh3 Qf6 14.h5 0–0 15.h6:

He now gave 15...gxh6, which is good enough (-2.05), but best by far is 15...g5! leaving White the very unpleasant choice between 16.Qh2 g4 (-6.06), and 16.Qxg5 Qxg5 17.Qxf6 Qxh3 (-7.04). Continuing with Tal’s line, a further improvement is possible after 15...gxh6 16.Qe5 g5 17.Qxf6 Qxh3 18.Qd2:

Tal’s 18...Qg5? only draws if White plays 19.Qg2! instead of 19.Qd3?. The winner for Black is 18...Qxh2! 19.Qxf2 (if 19.Qg2 Qg4++) 19...Qe5 (-3.96 K/23).

Returning to the game:
9.e5 d5 10.g5 a5 11.d2 b6 12.a3 e7

Here Tal says 13.g5 f6 “wins by force.” This seems an exaggeration. Certainly after 14.exf6 Black has an advantage no matter how he recaptures (about -0.35 to -0.65 K/23), but there is no clear win yet.

13.e3 g6 14.a4 d8 15.d2 g7 16.g5 h6 17.xh6 f5 18.f4 xh4 19.xh4 xh4 20.0–0 b5 21.c5 xg5 22.dxc5 xg5 23.e2 23...e7 24.b1 c7 25.h1 0–0 26.g3 f5 27.h7 f8 28.f4 d8 29.d3

Here, where Black played 29...h8, Tal comments “There is also the tempting 29...g5 followed by 30.h2 (correct is 30.g3 so that if 30...h8 31.xf7) 30...h8. On this, White had prepared a curious rejoinder: 31.xf5 exf5 32.d3! h7 33.xf5+ d7 34.xh7 e6 35.f4 and White has a favorable endgame since he has rid himself of his doubled pawns and his queen is effectively posted.” Tal is fortunate he did not play this “curious” line, as after 29...g5 30.h2? h8 31.xf5 exf5 32.d3, Botvinnik would probably have played not 32...h7 but 32...f4!, when White’s bishop is permanently entombed and Black is effectively a piece ahead. A likely
continuation then is 33.\( f5 + \) \( c7 \) 34.\( xf7 \) \( b6 \) 35.b4 (if 35.\( h7 \) \( xh7 \) 36.\( xh7 \) a5−+) 35...\( f8 \) (not 35...\( xh2 ? \) 36.\( e6 \) \( f8 \) 37.\( f6 + \)) 36.\( g1 \) \( xf7 \) 37.\( xf7 \) \( f8 \),

followed by 38...\( e7 \) and wins.

Returning to the game:

29...\( h8 \) 30.\( xh8 \) 30...\( xh8 \) 31.\( a5 \)

31...\( h1 + \)

Tal writes “On 31...\( b7 \), White sacrifices a bishop, 32.\( xb5 \) \( cxb5 \) 33.\( xb5 + \) \( c7 \) (or 33...\( a8 \) 34.\( c6 + \) with a draw) 34.\( d2 \),”

“and White's threats have surprisingly become quite dangerous.” Not really; it’s still a draw after 34...\( d8 \), 34...\( a8 \), 34...\( c8 \), 34...\( xe5 \), or 34...\( d4 \) (0.00 K/28).;

He also looks at 31...\( b8 \), and concludes understatedly that one sub-variation, 32.a4 \( h1 + \) 33.\( a2 \) \( xf3 \) 34.\( b5 \) \( f4 \) 35.\( bxc6 \) “is risky” for Black.
Indeed it is: Stockfish evaluates the relatively best move for Black, 35...Qb4, at +9.81, then 35...Qxe5 at +63.05, and anything else as allowing mate in three to 21 moves.

32.Qa2 Qxf3 33.Qa6+ Qb8 34.Qxc6 Qxf4 35.Qb5 Qxe5 36.Qe8+ Qb7 37.Qc6+ Qb8 ½–½

Game 4, Botvinnik-Tal, Moscow, 22 March 1960, Nimzo-Indian Defense [E27]: Three
definite analytical errors here, two potentially serious.

1.d4 f5 2.c4 e6 3.Qc3 Qb4 4.a3 Qxc3+ 5.bxc3 0–0 6.f3 d5 7.cxd5 exd5 8.e3 Qf5
9.c2 Qd7 10.Qg3 Qg6 11.Qd3 c5 12.0–0 Qe8 13.Qe1 Qc7

Here Tal examined the variation 14.e4, concluding it “was unfavorable because of 14...cxd4
15.cxd4 dxe4 16.fxe4 (Q 16.Qxe4=) 16...Qc3 17.Qe3 Qd5!”:

But it’s unclear what Tal thought he saw there. 18.Qf2 just forces the knight back and White stands
better (+1.03 K/21). Rather than 17...Qd5?!, better simply 17...Qxe4 18.Qxe4 Qxe4, winning a
pawn.

14.Qxg6 hxg6 15.e4 cxd4 16.cxd4 Qac8
Tal examines several lines here, one being 17.e5 Nh7 18.f4 and now, rather than Ragozin’s 18...Nb6, he proposes “the more interesting 18...f5 19.h4 Qc2 (– 19...Nh6 20.e3 Ng5=) 20.f3 Nh6 21.h5 g×h5 22.e3 Ne4 (?? – The least evil now is to give up a piece with 22...g6 23.exf6 Qxf6=) 23.Q×f5 with a very sharp game”:

Such a line would appeal to Tal’s tactical imagination, but it is so sharp that Black has cut his own throat, viz. 23...Qc6 (White threatened 24.ac1 b2 25.xc8 xc8 26.e7+ winning a rook) 24.ac1 e6 25.xh5 f8 26.g4 g6 27.e7+ e7 28.xc8 and wins.

17.Gg5 Qc2 18.Q×f6 Q×d1 19.e×d1 Q×f6 20.e5 Qh5 21.e2 Qc2 22.f1 g5 23.d×c1 ecx8 24.g3 f6 25.xc2 x×c2 26.b1 b6 27.b5 f×e5 28.d×e5

Here Tal says “On 28...d2, White has at his disposal a very strong answer in 29.b3, followed by f1-e1 and b3-d3 ... White, exchanging the d-pawn for the a-pawn, penetrates to the seventh rank with the rook, after which the e-pawn would become dangerous.” However, playing out that line, 29...g6 30.e1 a2 31.d3 g7 32.xd5 xA3,
Stockfish seems to consider it OK for Black (+0.38 SF/30).

28...c5 29.d4 gf7

30.e2?!

This was the crucial juncture of the game. Tal recognized that Botvinnik should have played 30.f4!, but he thought that after 30...g6 (not 30...gxf4? 31.g4!) 30...gxf4 31.g4+ Kf7 32.Rb3, he could still draw. But he examined only 32.b3, not at all White’s best move. White has very good winning chances after either:

(a) 32.h4 c3 33.xd5 xg3 34.d7+ ef8 35.e6 (+2.16 SF/28);
(b) 32.f2 c4 33.xd5 ef6

and either 34.f3 a4 35.d7+ ef8 36.d3 (+2.20 SF/24), or 34.xe6 xe6 35.d6+ xe5 36.xg6 (+2.21 SF/24). After the text move the game was soon drawn.

30...g6 31.d3 g7 32.b1 a5 33.c2 e6 34.b4 c5 35.h4 g×h4 36.xh4 d4 37.xd4 e5 38.xe6 e6 39.a4 g5 40.e4+ f6 ½–½
Game 5, Tal-Botvinnik, Moscow, 24 March 1960, Caro-Kann Defense [B18]: Several errors here. Some show only after extended computer analysis, but a few are rather elementary, and include one howler.

1.e4 c6 2.d4 d5 3.\(\triangle c3\) d×e4 4.\(\triangle x e4\) \(\triangle f5\) 5.\(\triangle g3\) \(\triangle g6\) 6.\(\triangle 1e2\) e6

Tal examines here several lines stemming from 7.\(\triangle f4\) \(\triangle d6\) 8.h4 \(\triangle c7\) 9.h5 \(\triangle x c2\), including the pawn sacrifice 10.\(\triangle g4\), which he says gives White “a position rich in possibilities.” e.g. 10...\(\triangle f8\) 11.h6 \(\triangle x h6\) 12.\(\triangle x h6\) g×h6 13.\(\triangle f h 5\) “with a very strong attack.”

As with the note at move 17 of the previous game, Tal is intrigued by attacking prospects, but objectively the engines do not agree, viz. 13...\(\triangle b4+\) 14.\(\triangle e2\) (not 14.\(\triangle d2\) \(\triangle x d2+\) 15.\(\triangle x d2\) \(\triangle g6\) -3.48 K/20) 14...\(\triangle d7\) and with care Black will be secure (-2.07 K/20).

7.h4 h6 8.\(\triangle f4\) \(\triangle h7\) 9.\(\triangle c4\) \(\triangle f6\) 10.\(\triangle e2\)

Tal writes that with this move he was trying to provoke his opponent into 10...\(\triangle x d4\), leading to complications distasteful to Botvinnik. He gives three potential replies, all reasonable, but his follow-up analysis to each is flawed, at some points seriously.

(a) His intended reply at the time was 11.0-0,
when he expected 11...\textit{\textfrak{e}}4 12.\textit{\textfrak{e}}3, “with a large positional plus for the pawn.” But 11...\textit{\textfrak{e}}4? is bad because of 12.\textit{\textfrak{x}}e6! fxe6 13.\textit{\textfrak{x}}e6 \textit{\textfrak{e}}5 14.\textit{\textfrak{f}}8 \textit{\textfrak{f}}8 15.\textit{\textfrak{e}}1, and after capturing the \textit{\textfrak{e}}4 White will be a clear pawn up with a sound position. Instead Black should play 11...\textit{\textfrak{d}}d7!, when if 12.\textit{\textfrak{x}}e6 fxe6 13.\textit{\textfrak{x}}e6 \textit{\textfrak{e}}5 14.\textit{\textfrak{c}}7+ \textit{\textfrak{f}}7 15.\textit{\textfrak{c}}4+ \textit{\textfrak{d}}5 16.\textit{\textfrak{x}}a8 \textit{\textfrak{d}}6 he is OK (-0.71 K/24).

Tal also looks at both immediate sacrifices on e6:

(b) 11.\textit{\textfrak{x}}e6 fxe6 12.\textit{\textfrak{x}}e6 \textit{\textfrak{g}}4 13.\textit{\textfrak{c}}7+  

Tal now gives 13...\textit{\textfrak{d}}8, but better is 13...\textit{\textfrak{f}}7 14.\textit{\textfrak{f}}4 \textit{\textfrak{b}}d7 15.\textit{\textfrak{x}}g4 \textit{\textfrak{g}}4 16.\textit{\textfrak{x}}a8 \textit{\textfrak{b}}4+ 17.\textit{\textfrak{c}}3 \textit{\textfrak{c}}5 18.0–0–0 \textit{\textfrak{d}}f6 (-0.77 K/20). His continuation after 13...\textit{\textfrak{d}}8 can be improved, \textit{viz}. 14.\textit{\textfrak{x}}a8 \textit{\textfrak{x}}e2+ 15.\textit{\textfrak{x}}e2 \textit{\textfrak{b}}d7 16.\textit{\textfrak{f}}4 \textit{\textfrak{d}}5,  

and now instead of equality with 17.\textit{\textfrak{g}}3 \textit{\textfrak{x}}c2, White can have a definite edge with 17.0–0–0! (+1.30 K/23).

(c) There is a howler in the line 11.\textit{\textfrak{x}}e6 fxe6 12.\textit{\textfrak{x}}e6+ \textit{\textfrak{d}}8 13.\textit{\textfrak{e}}3,
where Tal then gives 13...\textit{Q}g4 14.\textit{d}d1+ \textit{c}c7 and says it does not lead to a clear advantage. But it most certainly does for White, as 15.\textit{e}e5+ \textit{c}c8 16.\textit{e}6+ wins the queen. Instead of 13...\textit{g}4?? Black should play 13...\textit{d}7 or 13...\textit{x}b2, both of which lead to equality.

Returning to the game:

\begin{center}
\textbf{11.} \textit{e}e3 \textit{bd}7 \textbf{12.} \textit{gh}5 \textit{x}h5 13.\textit{x}h5 \textit{g}8 14.g4 \textit{c}7 15.g5
\end{center}

Here Tal discusses the "interesting complications" arising from 15...\textit{Be}4 16.\textit{R}g1 \textit{B}h2 17.\textit{B}f4 \textit{Q}a5+ 18.\textit{B}d2:

\begin{center}
\textbf{18...} \textit{Q}c7 is given with no further comment. It loses quickly to 19.\textit{Q}xe4 \textit{B}xg1 20.0–0–0 \textit{h}2 21.\textit{Q}xe6! (+3.94 K/20);
\textbf{18...} \textit{Q}f5 is best, and after 19.\textit{d}g3,
\end{center}

Tal's 19...\textit{h}3?? 20.\textit{Q}xe4 \textit{Q}xg1 21.0–0–0 \textit{h}2 22.g6 does indeed leave White with plenty of
compensation (+2.57 K/21). But instead Black can do better by not winning the exchange, viz. 19...\textit{\(\text{\textbf{B}}\times\text{\textbf{g}}3\)!} \(20.\text{\textit{\textbf{R}}\times\text{\textbf{g}}3\) 0–0–0, with an even game.

\begin{center}
\textbf{15\ldots\textbf{B}\textit{\textbf{g}}6 16.0–0–0 0–0–0 17.\textbf{\textit{\textbf{B}}}\times\text{\textbf{g}}5 18.\textbf{\textit{\textbf{B}}}\times\text{\textbf{g}}5 \textbf{f}4+ 19.\textbf{\textit{\textbf{B}}}\times\text{\textbf{f}}4 \textbf{\textit{\textbf{B}}}\times\text{\textbf{f}}4+ 20.\textbf{e}3 \textbf{h}6! 21.\textbf{d}3 \textbf{\textit{\textbf{B}}}\times\text{\textbf{d}}3 22.\textbf{\textit{\textbf{B}}}\times\text{\textbf{d}}3 \textbf{b}6 23.\textbf{\textit{\textbf{B}}}\times\text{\textbf{h}}6 g\times h6 24.\textbf{f}3 f5 25.e1 \textbf{d}6 26.c3 \textbf{g}4 27.e2}
\end{center}

Tal repeatedly points out how Botvinnik tried to avoid tactical complications throughout the match. Here he says Botvinnik “had no intention of satisfying White’s desire to sharpen the position after 27...\textit{\textbf{R}}\times\text{\textbf{h}}4 28.\textbf{\textit{\textbf{B}}}\times\text{\textbf{f}}4 \textbf{d}7 29.\textbf{\textit{\textbf{B}}}\text{\textbf{g}}6 \textbf{h}2 30.\textbf{f}8+ \textbf{e}7 31.\textbf{\textit{\textbf{B}}}f5.”

\begin{center}
\begin{tabular}{c}
\text{\begin{tikzpicture}[scale=0.6]}
\end{tikzpicture}}
\end{tabular}
\end{center}

However, had that line occurred, Tal was better advised to play 31.\textit{\textbf{B}}g6+ with equality. 31.\textbf{\textit{\textbf{R}}}f5? allows Black to trap and eventually win White’s knight, or by threatening it, to force fatal concessions, viz. 31...\textit{\textbf{B}}g2! 32.\textbf{\textit{\textbf{B}}}h7 \textbf{g}6 33.\textbf{f}4 \textbf{d}5 34.c4 \textbf{d}4 35.\textbf{f}8 \textbf{f}6 36.\textbf{\textit{\textbf{R}}}f6 \textbf{g}6

\begin{center}
\textbf{27...\textbf{d}5 28.\textbf{h}1 \textbf{d}8 29.\textbf{g}3 \textbf{\textit{\textbf{B}}}\times\text{\textbf{g}}3 30.\textbf{f}\times\text{\textbf{g}}3 \textbf{g}8 31.\textbf{d}2 \textbf{g}4 32.e1 \textbf{d}7 33.\textbf{f}2 \textbf{e}4 34.e1 \textbf{d}6 35.\textbf{c}1 \textbf{e}1 36.\textbf{\textit{\textbf{B}}}\times\text{\textbf{e}}1 c5 37.e2}
\end{center}
Here Tal examines a suggestion by Ragozin: 37...c4 38.\(\text{f3}\) b5 39.\(\text{e2}\) – Tal gives this a ? – 39...a5 40.\(\text{f4}\) \(\text{b6}\) 41.\(\text{e2}\) \(\text{a4}\) 42.\(\text{b3}\) c\(\times\)b3, “and Black has remote threats.” While Black definitely stands better at the end of that variation (-1.67 SF/30), it’s not 39.\(\text{e2}\) that deserves the question mark, but 41.\(\text{e2}\). If instead White plays 41.g4!, Stockfish indicates he holds the draw (0.00 SF/33).

37...c\(\times\)d4 38.c\(\times\)d4 \(\text{f6}\) 39.\(\text{d3}\) \(\text{h5}\) 40.\(\text{e2}\) e5

One last minor comment. Here Tal, explaining his preference for 41.a4, says “Of course, 41.d\(\times\)e5+ \(\text{f}\)xe5 42.\(\text{e3}\) \(\text{g3}\)! 43.\(\text{g3}\) f4+ 44.\(\text{f3}\) f\(\times\)g3 45.\(\text{g3}\) h5 does not work, since Black wins the ensuing pawn endgame.” Tal obviously saw that 42.\(\text{e3}\) was a losing move, but he gave no alternatives. We merely note that any move by either the a- or b-pawn would hold the draw.

41.a4 \(\text{f6}\) 42.d\(\times\)e5+ \(\text{f}\)xe5 43.b4 \(\frac{1}{2}\)–\(\frac{1}{2}\)

Game 6, Botvinnik-Tal, Moscow, 26 March 1960, King’s Indian Defense [E69]: For once Botvinnik did not succeed in suppressing complications, and the result was a devilishly bewildering game. In some variations even the engines could not reach a definite conclusion. No wonder it baffled both Tal and Botvinnik, but Botvinnik more.
1.c4 Nf6 2.Nf3 g6 3.g3 Bg7 4.Bg2 0-0 5.d4 d6 6.c3 bd7 7.0-0 e5 8.e4 c6 9.h3 b6 10.d5 cxd5 11.exd5 c5 12.e1 d7 13.d3 xd3 14.xd3 f6c8 15.b1 h5 16.e3 b4 17.e2 c4 18.fc1 ac8

Tal makes no mention of it, but it appears Botvinnik missed an opportunity here, namely 19.a3!

Black then has only two moves that are at all playable:
(a) If 19...Qb3 20.Bxa7 is safe, since on 20...b6 21.Qc2 forces 21...xc2 22.xc2 b5. White has won a pawn and need not fear counter-play by 20...f5, as then he gets his own threats going first with 21.f1 etc. as in the next note.

(b) Worse is 19...Qa5 20.f1!

and:
(b1) 20...d8 21.e1 c4 22.a7 (+1.78 K/22);
(b2) 20...e8 21.d2 c4 22.a1 d7 (if 22...b5?? 23.b4 a6 24.a4++) 23.b5! x2 24.a7 x2 25.xc1 a6 26.c8

26...f8 [if 26...f6 27.c7 f8 28.g4 h6 29.g5 hxg5 30.xg5 e7 31.f3 and Black is in virtual Zugzwang (+5.05 K/24)] 27.xd6 x6 28.b4 e7 29.xd6+ x6 30.xe8+-. As important as a2-a3 became in later variations, and considering how it could have pre-empted Black’s intended ...f7-f5 counter-play, it is curious that it passed unnoticed here.
19. $\text{Kh}2 \text{f}5$ 20.e$\text{xf}5$ $\text{Q}x\text{f}5$

Here Tal writes “On 21.a$\text{a}3$ $\text{Q}b$3 22.$\text{Q}e$4 $\text{B}c$2 (?? $\text{Q}b$3 $\text{Q}c$1 $\text{B}x$1 $\text{Q}x$c1 $\text{Q}x$e4 25.$\text{Q}x$e4 $\text{Q}f$6=) 23.$\text{B}x$c2 $\text{B}x$c2 24.$\text{Q}d$1 Black can try the interesting piece sacrifice 24...$\text{Q}f$4,

“whose complications defy calculation.” They do not defy Komodo: 25.g$\text{xf}4$ e$\text{xf}4$ 26.$\text{B}d$1! (not 26.$\text{B}x$e4? $\text{Q}b$3 27.$\text{B}x$e4 $\text{B}x$e4 28.$\text{B}x$e4 $\text{Q}g$3+ 29.$\text{K}h$1 $\text{Q}x$h3+ 30.$\text{Q}d$1 $\text{B}x$c2 f3 31.$\text{B}x$f3 $\text{Q}x$h3=) 26...$\text{B}x$b2 27.$\text{B}x$b3 $\text{B}x$b3 28.$\text{Q}x$f4 and White wins (+3.62 K/24).

21.$\text{Q}a$1 $\text{Q}f$4!? Tal calls this “a purely positional piece sacrifice,” but its tactical complications are maddening. 22.$\text{Q}x$f4 $\text{e}x$f4

Now Tal devotes over two pages to the ramifications of 23.a$\text{a}3$ $\text{Q}b$3 24.$\text{Q}x$a7, a line later recommended by the Russian master Grigory Goldberg, a second of Botvinnik’s, as winning for White. In that case the position is actually less favorable for White and considerably more complex than in the variations after 21.a$\text{a}3$ above, and it is hard, even with computer assistance, to determine if White can still win. Tal said “I intended here to continue 24...$\text{Q}e$5,”
and he then looks at three main lines:

(a) 25.\texttt{g1} b6. Aside from pointing out that 26.\texttt{d1? b2} 27.\texttt{a2 c3! “does not help”} (more understatement; Black then wins handily), Tal gives no further analysis and reaches no conclusion. Both engines recommend 26.a4, leading to a complicated struggle that may slightly favor White (+0.57 SF/30), but we would not bet the house on it.

(b) Tal says the “most interesting” line is 25.\texttt{f3}, but Stockfish quickly rejects the continuation 25...b6 that he, citing analysis by Konstantinopolsky, considers. Instead, it prefers 25...\texttt{a8?!}:

The \texttt{a7} then cannot be rescued except at the cost of the other bishop and a pawn (26.\texttt{b5? c1} 27.\texttt{x1 d3} 28.\texttt{d4 e2} 29.\texttt{x3 f3} 30.\texttt{d4 d5+-}). Stockfish sees best play continuing 26.a4 \texttt{xc7} 27.a3 \texttt{b6} 28.a5 (28.\texttt{x4? f2+}) 28...\texttt{c5} 29.\texttt{a4 x3} 30.bxa3 \texttt{xc1} 31.xb6,

which it rates as even, but the position is highly imbalanced would probably be to Tal’s taste.

The problem with 25...b6 is that rather than Konstantinopolsky’s 26.\texttt{d1}, which does not yield a winning advantage and is probably no better than equal, White has a move neither he nor Tal considered, 26.a4!:
Stockfish then sees 26...\textsc{b}4 27.a5 \textsc{b}xa5 28.\textsc{e}a4 \textsc{w}x\textsc{a}4 29.\textsc{c}x\textsc{a}4 \textsc{b}xc1 30.\textsc{c}3,

when White has \textsc{w}+\textsc{c}-for-\textsc{w}+\textsc{w} and stands pretty well (+1.55 SF/27). Note that Black cannot play \textsc{a}xc3?? 31.bxc3 \textsc{b}1xc3, as then 32.\textsc{g}4 is ruinous, with the looming threat of \textsc{w}e2-e6+.

\textbf{(c)} The other line Tal discusses, 25.f3, is White’s best choice, and 25...\textsc{b}6 Black’s best reply.

However, neither engine likes the two lines he then considers, 26.\textsc{f}2 and 26.\textsc{d}1. As in the 25.\textsc{f}3 variation above, they prefer 26.a4!

Stockfish’s top ten options then for Black are all rated between +2.25 and +3.25. We give what it sees as the least evil: 26...\textsc{b}4 27.\textsc{c}1

and:

\textbf{(c1)} 27...\textsc{b}xc1 28.\textsc{b}xc1 \textsc{w}x\textsc{a}4 29.\textsc{c}7 (+1.50 K/22, +2.38 SF/26);
(c2) 27...c2 leads to more exchanges but not necessarily simplification, *viz.* 28.\(c2\) 29.\(c2\) 29.\(c2\) 30.\(c1\),

reaching a position with a myriad of possibilities that defy conclusive analysis. Stockfish pegs it at +2.55. While White may not ultimately win (only his f- and h-pawns survive in most lines), he does have an extra piece and should not lose.

Returning to the game:

23.\(d2\) 24.\(ab1\) f3

25.\(b2\)?

Tal correctly pegs this as the losing move. He also examines the correct continuation, 25.\(f3\) 26.\(b1\) 27.\(c2\),
which then branches into two lines:

(a) 27.\(Ec1\), and either:

(a1) 27...\(Qf5\) 28.\(g4\) \(e5+\) 29.\(x\)\(e5\) \(xe5+\) \(f4+-\);

(a2) 27...\(b2\) – Here both Tal and Botvinnik believed White could do no better than force a draw by 28.\(b1\) etc., but he can: 28.\(g4\)! \(e5+\) 29.\(g2\) \(c7\) 30.\(e6+\) \(h8\) (if 30...\(g7??\) 31.\(h6+)\)

31.\(d1\) \(d4\) 32.\(xc4\) \(xc4\) 33.\(f3\) \(g7\) 34.\(e5\) (+2.75 \(K/22\), +4.43 SF/30);

(b) Several days after the game GM Salo Flohr (another close associate of Botvinnik’s) recommended 27.\(e4\) as winning, and Tal agrees, giving it two exclaims. Stockfish at first was skeptical, but given enough time, supported the verdict. 27.\(e4\) creates a long, mutually forced continuation:

27...\(xe4\) 28.\(xe4!\) \(xb1\) 29.\(d6\) \(f8\) 30.\(e6+\) \(h8\) 31.\(f7+\) \(xf7\) 32.\(xf7\) \(f5\) 33.\(f5\) \(gxf5\) 34.\(g3\),

but now not 34...\(e5+??\) as Flohr and Tal give, as then 35.\(f4\) is decisive (+9.00 SF/33), but 34...\(g8\), when 35.\(e3\) gives White the better and probably winning ending (+3.99 SF/46).

The engines found no further significant errors or improvements in Tal’s few notes on the remaining moves.

25...\(fxe2\) 26.\(b3\) \(d4\) 27.\(e1\) \(e5+\) 28.\(g1\) \(f4\) 29.\(xe2\) \(xc1\) 30.\(d4\) \(e1+\)

31.\(f1\) \(e4\) 32.\(e2\) \(e5\) 33.\(f4\) \(f6\) 34.\(xb7\) \(xd5\) 35.\(c7\) \(a2\) 36.\(xa7\) \(c4\)

37.\(a8+\) \(f7\) 38.\(b7\) \(e6\) 39.\(a3\) \(d5\) 40.\(f2\) \(h4+\) 41.\(g2\) \(d6\) 42.\(g3\) \(g3\)

43.\(xc4\) \(xc4\) 44.\(xg3\) \(d5\) 45.\(a7\) \(c3\) 46.\(c7\) \(d4\) 0–1

Game 7, Tal-Botvinnik, Moscow, 29 March 1960, Caro-Kann Defense [B18]: Tal’s annotations are quite accurate in the first part of this game (and thus elicit no comment from us), but from move 25 on there are mistakes, one very puzzling.

1.\(e4\) \(c6\) 2.\(d4\) \(d5\) 3.\(c3\) \(dxe4\) 4.\(xe4\) \(f5\) 5.\(g3\) \(g6\) 6.\(e2\) \(d7\) 7.\(h4\) \(h6\) 8.\(f4\) \(h7\)

9.\(c4\) \(e5\) 10.\(e2\) \(e7\) 11.\(dxe5\) \(x5\) 12.\(e3\) \(c5\) 13.\(xc5\) \(x2+\) 14.\(xe2\) \(c5\)

15.\(e1\) \(f6\) 16.\(b4\) \(cd7\) 17.\(f6\) \(f8\) 18.\(b3\) \(g5\) 19.\(hxg5\) \(hxg5\) 20.\(h3\) \(g8\)

21.\(ed1\) \(a5\) 22.\(xa5\) \(c5\) 23.\(ed6\) \(e7\) 24.\(ad1\) \(e5\) 25.\(h5\)
Tal, explaining Black’s next move, says here “White had in his arsenal a tactical possibility in 26.\textit{xd7+} \textit{x}d7 27.\textit{xd7+} \textit{x}d7 28.\textit{f6+} \textit{d6} 29.\textit{xh7}” (see diagram below). This must be considered the book’s third howler. Tal is fortunate Black did not make some neutral move that would have prompted him to play this unsound combination,

because after 29...g4! 30.a3g5 (if 30.a4h8+-, or 30.a6f6? g\times h3 31.a5g8?? h2+- ) 30...g\times g5 31.a5xg5 \textit{x}g5 White is busted,

down the exchange in a lost ending (-3.69 K/25).

25...g6?

Tal’s analysis here of the alternatives 25...f5 and 25...h8 is sound, but he is wrong to give this a “?” As will be seen, the crucial mistake came later.

26.a3d7+ a3d7 27.a3d7+ a3d7 28.a6f6+ a6d6 29.a5xg8 a5c5 30.a5h6 f6 – Somewhat better here was 30...a5e7. 31.a5g4
Another undeserved question mark. The text was the best move available to Black. Tal says “White’s problem would have been much more difficult on 31...f5(?) 32.\(\text{c}3(?!\) f4 33.\(\text{c}4+ \text{e}7\).” But that position is actually even. The flaw in 31...f5? is seen after 32.\(\text{h6}\!\!\!\!\!\!\!\!\!

when best play continues 32...f4 33.e2, and now probably best is 33...e7 34.d2+, because after 33...c2 34.f7+ e7 35.f5+ b3 36.axb3 b5 37.e4 e6 38.f4+ e5 39.e3 x3+ 40.d3+ d5 41.f4,

we reach the same material imbalance as in the game. Stockfish thinks White’s pawns will be more trouble to Black than Black’s to White (+2.62 SF/30).

32.\(\text{f6}\)

This was the real losing move. After 32...f5 or 32...b1 the game is even. Tal does say “it would have been stronger to retreat the bishop,” but he still believes White would then be winning. Stockfish does not agree, seeing it as no more than +0.10 out to 35 ply.
33.a×b3 \( \text{b} \times b \) 34.\( \text{Q} \times g5 \) \( \text{b} \times b \) 35.f4 \( \text{b} \times b \) 36.e2 \( \text{b} \times b \) 37.f3 \( \text{b} \times b \) 38.g4 \( \text{b} \times b \) 39.g3 b5 40.\( \text{Q} \times d5 \) 41.f5 b4 42.f6 \( \text{a} \times a \) 43.f7 \( \text{a} \times a \) 44.\( \text{h} \times h \) 45.\( \text{d} \times d \) 46.b2

46.\( \text{f} \times b3 \)

Tal says “The immediate promotion of the pawn to a queen would lose.” While it definitely would be a mistake, it’s not quite that bad: 46.f8Q \( \text{Q} \times f8 \) 47.\( \text{d} \times d4 \) 48.b1 \( \text{d} \times d3 \) 49.e6 \( \text{c} \times c2 \) 50.e3+ \( \text{b} \times b3 \) 51.b1 \( \text{c} \times c2 \) etc., draw.

46...d4 47.e2 c5 48.f8Q \( \text{Q} \times f8 \) 49.e8Q c4 50.e6+ \( \text{d} \times d5 \) 51.e4+ \( \text{d} \times d4 \) 52.b1 1-0

**Game 8, Botvinnik-Tal, Moscow, 31 March 1960, Modern Benoni [A61]:** Not one of Tal’s best annotation jobs, nor a very well played game by either player. Tal’s notes include two howlers and several other significant errors of both commission and omission. Perhaps the painful way in which he lost — he says “It seemed as if my spirit had been hopelessly broken.” — made it too unpleasant for him to look at the game with depth and objectivity.

1.d4 \( \text{d} \times f6 \) 2.c4 e6 3.e3 f3 c5 4.d5 e×d5 5.c×d5 g6 6.c3 g7 7.g5 0-0 8.e3 e8 9.d2 d6 10.e2 a6 11.a4 bd7 12.0-0 c7 13.c2 b6 14.f3 c4 15.e×f6 \( \text{f} \times f6 \) 16.a5 d7 17.e4 e5 18.e×c4 d8

Tal says here “Superficially more active is 19.\( \text{b} \times b4 \), but there is nothing after 19...b5 20.a×b6 \( \text{b} \times b6 \) (\( \text{a} \times b6 \)) and Black’s initiative after the exchange of queens compensates for loss of the pawn.” But queens need not be exchanged:
21.\textit{a}4! \textit{b}8 (if 21...\textit{x}b2?? 22.\textit{b}1++ , or 21...\textit{x}b2?? 22.\textit{c}4++) 22.\textit{c}4 \textit{f}8 (otherwise the knight can’t move) 23.\textit{c}6 and Black’s d-pawn falls (+1.81 K/21).

19.\textit{a}2 \textit{f}5 20.\textit{c}3 \textit{g}5 21.\textit{c}4 \textit{g}4 22.\textit{e}2 \textit{f}6 23.\textit{a}4 \textit{h}8

Here Tal mentions an “amusing tactical shot” he intended had White played 24.\textit{ac}1, to wit: 
24...\textit{x}h2+ (??; Black has no good move, but least bad is 24...\textit{f}4) 25.\textit{x}h2 \textit{x}e3(??) 26.\textit{e}3 \textit{e}6+ 27.\textit{g}1 \textit{g}3 28.\textit{f}xg3 Qxe3+ 29.\textit{h}2 \textit{h}6+ 30.\textit{h}5 \textit{f}6 “with good attacking prospects.”

Only Botvinnik would have been amused, and in this position Black has only resigning prospects, for White is fine after 31.\textit{c}4! (+4.99). And White is even better off if he varies earlier with 28.\textit{h}5!,

\textit{viz}. 28...\textit{x}\textit{h}5 29.fxg3 (+10.76), or 28...\textit{g}f2+ 29.\textit{xf}2 \textit{xe}3 30.\textit{c}4 (+7.94).

24.g3 h5 25.f4!
Tal calls this “very strongly played,” but it actually almost deserves a ?!. The only alternative he looks at is 25.f3. The engines prefer any of about a dozen other continuations, chief of which is 25...ab6! xb6 26.xb6 b8 27.ac1,

and the queenside pressure forces Black to forget any notions of kingside attack, e.g. 27...h4 28.a4 d8 (if 28...d8 29.c7) 29.d3 f8 30.c4 f7 31.fc1 d7 (forced) 32.xd7 xd7 33.xd7 xd7 34.xf5 (+4.05).

25...d4 26.a3b8 27.ab6

Tal seems correct to say that 27.e×d4 is stronger, but best is 27.fd1!
when follows 27...a7 28.ab6 c5 29.ac1 e4 30.d3,

and the threat of 31.e4 xe4 32.xd6 forces 30...d8 31.e4 xe4 32.d2 f5 33.c7 (+3.34 K/21).

27..h4 28.ad1 x b6 29.a b6 c5

30.gxh4

Tal gives this move no punctuation, but it definitely deserved a ?. With it White forfeits almost all his advantage. Tal says “It is difficult to find an active plan for White,” but the engines have no trouble seeing one: 30.c1! intending 31.xd6 x d6 32.xc5 +−, to which Black has no antidote.

30..d7

Tal comments “30..e4 seemed stronger, after which the exchange of queens would not have been possible.” Not so. After 31.d3!,

threatening 32.e4 and 33.xd6, 31..c5 is forced and then with 32.c3 queens are exchanged.

31.c3
Tal makes no comment, but a better way to force the queen exchange was 31.b4 \( \text{c8} \) 32.\( \text{a1} \) \( \pm \). The text allows Black complete equality.

\[ \text{31...} \text{\text{x}c3} \text{ 32.bxc3} \text{ \text{b5} 33.\text{f}e1} \]

\[ \text{33...} \text{\text{d}e4} \]

Again no comment from Tal. Best was 33...\( \text{\text{x}c4} \) 34.\( \text{\text{x}c4} \) \( \text{g7} \) intending to recover the h-pawn by \( \text{e8} \) or \( \text{g7} \)-h6-h5, with Black restored to full equality in either case.

34.\( \text{c}1 \)

Tal correctly calls this a blunder, but gives no alternative. Simplest was probably 34.\( \text{d3} \)=. Interesting but riskier (and therefore probably not to Botvinnik’s taste) was 34.\( \text{d4}? \), when if 34...\( \text{x}c3 \) 35.\( \text{d3} \) \( \text{xc4} \) 36.\( \text{xc4} \) \( \text{xd5} \) 37.\( \text{f2} \) \( \text{b6} \) 38.\( \text{d4} \) a position arises where Black has taken all of White’s queenside pawns, but White should soon have all of Black’s on the kingside (+1.11 K/22).

34...\( \text{bc8}? \)

Yet another error to add to chess history’s already bulging Wrong Rook file. As Tal mournfully points out 34...\( \text{ec8}! \) would have won, \( \text{v.i.z.} \) 35.\( \text{a5} \) \( \text{xe2} \) 36.\( \text{xe2} \) \( \text{xc3} \) 37.\( \text{xc3} \) \( \text{xc3} \),
and unlike after the text move, the b-pawn is defended.

35. \( \text{Na5} \) \( \text{Bxe2} \) 36. \( \text{Bxe2} \) \( \text{c3} \) 37. \( \text{Bxc3} \) \( \text{Bxc3} \) 38. \( \text{b7} \)

38...\( \text{e}x\text{e3} \)

Tal says “It was necessary to continue 38...\( \text{b8} \) 39. \( \text{xf6} \) \( \text{d3} \) 40. \( \text{xf5} \) \( \text{d5} \) 41. \( \text{e4} \) \( \text{xf5} \) 42. \( \text{e}x\text{f5} \) \( \text{xb6} \) with a drawn endgame.” This line is correct up to move 41. There,

Tal’s inexplicable 41...\( \text{xf5} \)? is disastrous and entirely unnecessary. Black would be fine after the natural 41...\( \text{b5} \)=, or 41...\( \text{d1}+ \) 42. \( \text{f2} \) \( \text{xb6} \)=. From the position at the end of Tal’s line,

Stockfish continues 43. \( \text{f2} \) a5 44. \( \text{g3} \) a6 45. \( \text{e6} \) a8 46. f6 \( \text{g8} \) 47. \( \text{e7} \) a4 48. \( \text{g7} \)
48...h8 (if 48...f8 49.h5 a6 50.c7 xf6 51.a7 g8 52.xa4 +7.38 SF/28) 49.g5 a3 50.f7 f8 (50...h7 51.a5! transposes) 51.a5 xf7 52.xa3 and obviously White will win (+6.85 SF/31).

39.xe3 xe3 40.d6 d3 41.f7+ 1–0

**Game 9, Tal-Botvinnik, Moscow, 2 April 1960, Caro-Kann Defense [B18]:** Tal seems not to have worked as hard analyzing the games he lost as the wins and draws. Some major analytical errors here, including what at first appears to be a three-blunder Charlie Fox.

1.e4 c6 2.d4 d5 3.c3 dxe4 4.xe4 f5 5.g3 g6 6.e2 f6 7.h4 h6 8.f4 h7 9.c4 e6 10.0–0 d6 11.xe6 fxe6 12.xe6

12...c7

Tal and Koblents had prepared this sacrificial line in advance. That makes the error-ridden note Tal gives here all the more surprising. He writes “It would have been better to continue 12...bd7 ... However, White can play the surprising ‘rim shot’ 13.h5(?), which gives his opponent an unpleasant position ... Evidently, the best reply to 13.h5 is 13...f8(??), but after 14.f4(??) the bishop on e6 will be reinforced, giving rise to very diverse combinations. I think that the reader will be rather interested in analyzing this sharp continuation.”

Indeed we are. It turns out every move Tal gives is a blunder. After 12...bd7, best is 13.e1, when White has reasonable attacking chances to compensate for the sacrificed piece. If 13.h5??, then not 13...f8??, but 13...e7! 14.e1 0–0–0 15.h3 f7, and Black is already out of danger (-1.70 K/21, -2.54 SF/26). If Black is so foolish as to play 13...f8??,
then not 14.f4??, but the obvious 14.Qxg7+ Ke7 15.Qxh6+ (±3.71 K/20, +5.17 SF/25). After
14.f4??, Black would simply continue as above with 14...e7 15.f5 0–0–0 (−2.78 K/25, −3.88
SF/25). We would call this a true Charlie Fox* note, one of the worst we have ever seen from any
annotator, except that we strongly suspect 13...Rf8 is a typo (even though it is found in the original
Russian edition, not just the English translation), and Tal actually meant 13...f8:

While not at all as good as 13...e7!, it at least delivers Black from impending loss and leads to
dynamic equality, e.g. 14.Re1 g6 15.f4 f7=, or 14...xh5 15.xh5 g8 16.f3+ f6=.
Stockfish actually sees both variations as somewhat better for Black.

13.Re1

13...bd7

Here Tal looks at 13...xg3 14.fxg3 xg3, and says “White intended to continue 15.e2, and
Black’s king is in great danger.”

* Charlie Fox: A polite acronym of the military slang term for an operation where everything goes wrong: a cluster fuck.
The engines, which don’t get nervous, think Black is all right after 15...\( \text{Nd7} \) 16.\( \text{d5} \) \( \text{Be4} \), though Komodo is more guarded in its assessment (-1.21) than Stockfish (-1.86).

In this note’s other variation, 15.\( \text{c8+} \),

Tal has Black continuing 15...\( \text{d8(?!)} \) 16.\( \text{xh7} \) \( (? \text{ 16.e3 c7 17.h3=}) \) 16...\( \text{g4=} + \), but rather than count on the blunder at move 16, Black is best advised to play 15...\( \text{Be4}! \) (-2.96 K/22, -4.48 SF/25).

14.\( \text{g8+ f8} \) 15.\( \text{xh7} \) \( \text{h7} \) 16.\( \text{f5} \)

Here Tal calls “premature” a line suggested by Ragozin: 16...\( \text{h2=} \) 17.\( \text{h1} \) \( \text{g6} \) 18.\( \text{xh6} \) \( \text{f4=) 20.g3 f2 21.f1 g3 22.g4} \), which he says “leads to loss of the exchange without any real compensation.” However, the engines consider 16...\( \text{h2=} \) objectively best if followed up properly. After 17.\( \text{h1} \) \( \text{g6} \) 18.\( \text{xh6=} + \),

not 18...\( \text{xh6} \) but 18...\( \text{g8=} ! \), leading to complications where with best play Black comes out ahead: 19.g3 \( \text{xg3} \) 20.\( \text{e7=} \) (not 20.fxg3 \( \text{gx5} \) -2.62 K/20) 20...\( \text{f7} \).
21...f3 (if 21.g3?? hxh4+ , or 21.fxg3?? xg3++) 21...hxh6 22.fxg3 e8 23.e2 xe7 24.exe7+ xe7 25.e3+ ef7 26.eh6 eg3 27.f1 h3+ 28.g1 g4+ 29.h2 xd4,

reaching an endgame somewhat like Game 7, though with queens on the board. Both engines see it as definitely favorable for Black.

16...g6 17.h6+ g8 18.d6 xd6 19.g5 e7 20.d3 g7

21.g3??

Tal calls this “the weakest move in the match.” He correctly says “Actually, at this point, White does not stand so badly,” but the alternative line he gives is flawed. Best was 21.xe7+ xe7 22.d2 intending 23.d1 and White indeed does not stand so badly (-0.38 K/22).

Tal’s recommended line, 21.f4 ae8 22.e5, is better for Black than he realized, and can be improved further. Here,
the line Tal gives, 22...c5 23.c3 c×d4 24.c×d4 (?! 24...e×d4? E×e5 (? 24...b6+?) 25.f×e5 E×e5 26.f×f6+ #, is a pipe dream. Better is 22...Ee6!, unpinning the knight and more or less forcing 23...f6+ $×f6

24.f1 (if 24.d1? g×g4+, or 24.ea1? g×g4 25.E×e6 E×e6 26.E×e6 $×e6+?) 24...d7 25.E×e6 $×e6 (-1.67 SF/28).

21...E×e1+ 22.E×e1 $×g3 23.f×g3 f8

One note variation here can be improved considerably. After 24.E7+ E7 25.E×f7+ $×f7 26.f2, Tal has Black continue 26...Ee6. This is not at all bad, but why not 26...e4+ 27.f3 $×g5+ 28.h×g5,
reducing White’s kingside pawns to tripled impotence, and making the ending easy for Black?

24. \(c4\) \(\text{Ng4}\) 25. \(d5\) \(\text{cxd5}\) 26. \(cxd5\) \(\text{Qf6}\) 27. \(d6\) \(\text{Qf7}\) 28. \(e1\) \(Qd7\) 29. \(c7\) 29... \(\text{Qf7}\) 30. \(\text{x6}\) \(\text{x6}\) 31. \(\text{f2}\) \(\text{e6}\) 32. \(\text{x7}\) \(\text{x7}\) 33. \(\text{f3}\) \(\text{x6}\) 34. \(\text{f4}\) \(\text{e6}\) 35. \(g4\) \(\text{d5+}\) 36. \(\text{e4}\) \(\text{f6+}\) 37. \(\text{f4}\) \(\text{d5+}\) 38. \(\text{e4}\) \(\text{b4}\)

39. \(a3\)?

The ? Tal gives here is undeserved. It makes very little difference what White does now, and the text may actually be best. He claims that “in the variation selected by Botvinnik, the position of the pawn on a4 instead of a3 would have given White a draw.” The engines do not support this conclusion. Playing 39.a4 and then proceeding as in the game, we have 39... \(\text{c6}\) 40. \(\text{h5}\) \(\text{g5}\) 41. \(\text{h6}\) \(\text{f6}\) 42. \(\text{d5}\):

Now 42... \(\text{g6}\), as in the game, may have been what Tal was thinking of, but it should still eventually win (-2.37 SF/39). However, clearly winning is 42... \(\text{b4+}\) (also good are 42... \(\text{a5}\), 42... \(\text{a5}\), and 42... \(\text{b8}\) 43. \(\text{c4}\) \(\text{a5}\) 44. \(\text{b5}\) \(\text{d3}\) 45. \(\text{b3}\) (if 45. \(\text{x5}\) \(\text{x5}\) \(\text{b2}\) -12.66 SF/32) 45... \(\text{c1}\) 46. \(\text{h7}\) \(\text{g7}\) 47. \(\text{x5}\) \(\text{x5}\) \(\text{b3+}\), reaching a position Stockfish rates at -60.95!

39... \(\text{c6}\) 40. \(\text{h5}\) \(\text{g5}\) 41. \(\text{h6}\) \(\text{f6}\) 42. \(\text{d5}\) \(\text{g6}\) 43. \(\text{e6}\) \(\text{a5}\) 44. \(\text{a4}\) \(\text{b3}\) 45. \(\text{d6}\) \(\text{a5}\) 46. \(\text{d5}\) \(\text{h6}\) 47. \(\text{c4}\) \(\text{c1}\) 48. \(\text{b5}\) \(\text{d3}\) 49. \(\text{b3}\) \(\text{c1}\) 50. \(\text{x5}\) \(\text{x3}\) \(\text{b3+}\) 51. \(\text{b4}\) \(\text{c1}\) 52. \(\text{c3}\) \(\text{x6}\) 53. \(\text{c2}\) \(\text{b2}\) 54. \(\text{d3}\) \(\text{c1+}\) 55. \(\text{c2}\) \(\text{e2}\) 56. \(\text{d3}\) \(\text{f4+}\) 57. \(\text{c4}\) \(\text{f6}\) 58. \(\text{g3}\) \(\text{e2}\) 0–1

Game 10, Botvinnik-Tal, Moscow, 5 April 1960, King’s Indian Defense [E89]: A complex queenless middle game starting at move 20, which remained complex into the endgame. Tal’s
notes are sometimes vindicated by the engines, in other cases contradicted, though usually understandably, given the complex difficulty of the game. Ultimately Tal did have a chance to win, but missed it.

1.d4 ♘f6 2.c4 g6 3.♗c3 ♘g7 4.e4 d6 5.f3 0–0 6.♗e3 e5 7.d5 c6 8.♕d2 c×d5 9.c×d5 a6 10.g4 ♗bd7 11.♕g2 h5 12.♕g5 h×g4 13.f×g4 ♘c5 14.♗g3 ♘×g4

One variation in the note here can be improved slightly. In the line 15.h3 ♘f3 16.♗g1 ♘c×e4 17.♗×e4 ♘e4,

Tal says “Black stands well” after 18.♕×e4 f6 19.♕×f6 ♘×f6 20.♕×f6+ ♘×f6, but the game is actually quite even after 21.♕g5. Black can gain some advantage, however, with 17...♕e4! 18.♕×f6 (not 18.♕e4?? ♘×e4 19.♕×d8 ♘×d2++) 18...♕×f6 19.♕×e4 ♘h4+ 20.♕f2 ♘h6=.

15.b4 ♘cd7 16.h3 ♘f3 17.♕h2 a5 18.b5 ♘b6 19.♕f2 ♘×f2+ 20.♕×f2 ♘h5 21.b6 ♗f8 22.b5 ♘e8 23.♕×h5 g×h5

24.♕e3
Tal comments strangely “Here 24.Rb1 even loses, since in the variations after 24...Qc5 the e-pawn turns out to be defenseless.” All White need do is 25.Qc3 and the pawn is defended. The best Black has then is 25...d3+ 26.axd3 Qxc3 27.e2=.

24...Qc5 25.Qxc5

Another strange note here: “On 25.Qc3,

![chessboard]

“Black would reply 25...Qb3 and he gets an excellent position.” That would again lead only to equality after 26.Rb1 Qxc3 27.Rxh3 Qxb3 28.axb3=. Better is 25...Qf6! and the e-pawn cannot be defended (if 26.Qg2?? Qd3+), thus either 26.Qc1 Qcxe4 27.Qxe4 Qxc1+ 28.Qxc1 Qxe4+, or 26.Qg2 Qb3 27.axb3 Qxc3 28.Qh6 Qh7 29.Qxg7 Qxe4 30.Qa4 Qc1+ 31.Qe2 f5.

![chessboard]

and now forced is 32.Qxe4 fxe4 33.Qf6 Qac8 34.Qg7+ Qh6 35.Qc7 Q8xc7 36.bxc7 Qxc7,

![chessboard]

and with Black’s extra pawns, the rook-vs-bishops ending favors him (-0.90 SF/30).

25...Qxc5 26.Qd3 Qac8 27.Qe2 Qc1 28.Qxc1 Qxc1 29.Qf1 Qc5 30.Qb1 Qf6 31.Qa3 Qd8 32.Qc4 f5 33.Qe3 fxe4 34.Qxe4 Qh8 35.Qd3
35...\(\text{\textit{f6}}\)

Tal’s note here is overly worried: “Worse was 35...\(\text{\textit{g5}}\), since after 36.\(\text{\textit{f5}}\) White can look to create a dangerous kingside attack.” In fact 35...\(\text{\textit{g5}}\) was about as good as the text or any of several other moves. If 36.\(\text{\textit{f5}}\) \(\text{\textit{c1}}\) would squelch any attack (+0.05 SF/28).

36.\(\text{\textit{g2}}\)

Here Tal writes “For a long time I considered the consequences of 36.\(\text{\textit{f1}}\),”

... and on 36.\(\text{\textit{c4}}\) \(\text{\textit{x}}\)\(\text{\textit{e4}}\) 37.\(\text{\textit{f8}}+\) \(\text{\textit{g7}}\) 40.\(\text{\textit{x}}\)\(\text{\textit{d8}}\) \(\text{\textit{f2}}+\) 41.\(\text{\textit{c3}}\) \(\text{\textit{x}}\)\(\text{\textit{h3}}\),

“with a very unclear endgame.” It is understandable that such a position would be unclear to a human analyst, but Stockfish sees deeply and quickly, and says White is probably lost on any move except 42.\(\text{\textit{d7}}\)!, after which comes 42...\(\text{\textit{g6}}\) (42...\(\text{\textit{f8}}\) 43.\(\text{\textit{x}}\)\(\text{\textit{b7}}\)?) 43.\(\text{\textit{x}}\)\(\text{\textit{d6}}+\) \(\text{\textit{g5}}\) 44.\(\text{\textit{b4}}\) \(\text{\textit{c8}}\) 45.\(\text{\textit{d7}}\) (0.00 SF/25)) 37.\(\text{\textit{f8}}+\) \(\text{\textit{g7}}\) 38.\(\text{\textit{x}}\)\(\text{\textit{d8}}\) \(\text{\textit{f6}}\) 39.\(\text{\textit{f5}}+\) \(\text{\textit{g6}}\) 40.\(\text{\textit{x}}\)\(\text{\textit{d6}}\) \(\text{\textit{x}}\)\(\text{\textit{d5}}+\) 41.\(\text{\textit{e3}}\)+.

Actually best after 36.\(\text{\textit{f1}}\) is 36...\(\text{\textit{b5}}\), but if after 36...a4 White were to play 37.a3?, then 37...\(\text{\textit{b5}}\)! becomes all the stronger:
viz. 38.Qc4 $b3+ 39.Qe2 $g7! 40.$x$6 $xb6 41.$f3 $c5 42.$f5+ $f7 43.$d3 $xa3 (-2.07 SF/27).

36...$g8 37.a4 $e7 38.$f3 $f8

39.$g1+

Here Tal considers 39.$b5, “as was recommended by many commentators.” Happily, Stockfish validates his analysis, seeing the position after 39...$xb5 40.a$x$b5 a4 41.$c4 $f7 42.$a5 e4+ as not just “extremely attractive for Black” (yet another understatement!) but outright winning.

Forced then is 43.$x$e4 $xe4 44.$xe4 a3 45.$x$7 a2 46.$d8+ $g6 47.$b7 a1$g 48.$b8 $b1+ 49.$f3 (anything else allows mate soon) 49...$f1+ 50.$g3 (again, the only move to escape mate) 50...h4+ 51.$h2 $f2+ 52.$h1 $f3+ 53.$g1 $g3+ 54.$f1 $x$h3+ 55.$e2 $g2+ 56.$d3 $x$5+ etc. (-26.05 SF/26).

White’s play in this variation can be improved somewhat by 41.$d1,
(instead of 41...c4), but after 41...a3 42.b3 e4+ 43.e2 (if 43.d4? h6++) 43...d7 44.c2 c5 Black should eventually win (-2.25 SF/29).

39...h7 40.e4+ x4 41.e4 h6 42.f5 c4+ 43.d3 x4 44.d6 d4+ 45.e2 x5 46.e4 h8 47.f6 d2+

Tal is somewhat critical of this move, saying 47...d8 was more precise, but the text is at least as good if not better.

48.f3 d8 49.g6

49...a4?

Here Tal is correct to append a question mark, but the line he recommends in its place, 49...g7 50.x5 f8 51.f6 e7,

leads to nothing: 52.e4! a4 53.x5 a3 54.e6 xf6 55.xf6 a2 56.f1=.

However, Black did have a win here, and it is a pity for Tal that he and Koblents did not find it in their adjournment analysis. It starts with 49...h6-d2!: 
Many continuations are now possible for White; we give two that offer the most resistance and illustrate the main winning techniques involved:

(a) 50.\(\text{Nh}5\) \(\text{Bc}3!\) 51.\(\text{Ke}2\) (if 51.\(\text{Ke}4?\) \(a4\)++) 51...e4 52.\(\text{g}3\) \(\text{c}8\) 53.\(\text{e}3\) \(a4\) 54.\(\text{xe}4\) \(\text{a}8\) 55.\(\text{d}3\) \(\text{b}2\) 56.\(\text{e}2\) (if 56.\(\text{c}2\) \(a3\) 57.\(\text{e}1\) \(\text{d}4\) - 7.84 SF/37) 56...\(a3\) 57.\(\text{xb}2\) \(a\times b2\) 58.\(\text{c}2\) \(\text{a}5\) 59.\(\text{f}4\) \(\text{b}5\) and wins;

(b) 50.\(\text{e}4\) \(a4\) 51.\(\text{g}3\) \(\text{a}8\) 52.\(\text{g}2\) (if 52.\(\text{a}3\) \(\text{c}1\)) 52...\(\text{f}4\) 53.\(\text{c}2\) \(\text{g}5!\) 54.\(\text{e}5\) \(a3\) 55.\(\text{a}2\) \(\text{c}1\)

56.\(\text{d}6\) [if 56.\(\text{h}5?\) \(\text{a}5\)+, or 56.\(\text{d}7\) \(\text{b}2\)+ 57.\(\text{d}6\) \(\text{c}8\) 58.\(\text{c}5\) \(\text{c}6\)+ 59.\(\text{d}5\) \(\text{xb}6\) etc. (-6.32 SF/28)] 56...\(\text{d}8\)+ 57.\(\text{c}7\) \(\text{d}2\)+:

White will have to give up his rook for the a-pawn, and even though he may get all the black pawns, e.g. after 58.\(\text{x}a3\) \(\text{x}a3\) 59.\(\text{x}b7\) \(\text{h}2\) 60.\(\text{x}h5\), Black will have no trouble winning. But this is all in the realm of “might have been.”

50.\(\text{h}6\)+ \(\text{g}7\) 51.\(\text{h}7\)+ \(\text{x}f6\) 52.\(\text{x}b7\) \(\text{d}3\)+ 53.\(\text{g}2\) \(\text{b}3\) 54.\(\text{a}7\) \(a3\) 55.\(\text{b}7\) \(\text{f}5\) 56.\(\text{a}3\) \(\text{b}7\) 57.\(\text{a}4\) \(\text{b}2\)+ 58.\(\text{f}3\) \(\text{b}3\)+ 59.\(\text{g}2\) \(\text{e}3\) 60.\(\text{h}4\) \(\frac{1}{2}\)-\(\frac{1}{2}\)

Game 11, Tal-Botvinnik, Moscow, 7 April 1960, Réti Opening [D78]: Back on the winning track, Tal delivers here one of his better analytical jobs. We found a few improvements, and only two serious errors in a minor sub-variation.

1.f3 \(\text{f}6\) 2.\(g3\) \(g6\) 3.\(\text{g}2\) \(\text{g}7\) 4.0-0 0-0 5.c4 \(c6\) 6.b3 \(\text{e}4\) 7.d4 \(d5\) 8.\(b2\) \(e6\) 9.\(\text{bd}2\) \(x\times d2\) 10.\(\text{x}d2\) \(\text{a}6\) 11.\(\text{ac}1\) \(\text{d}6\) 12.\(\text{e}5\) \(\text{fd}8\) 13.\(\text{fd}1\) \(\text{ac}8\) 14.\(\text{a}5\) \(d\times c4\) 15.\(\text{c}4\) \(c7\) 16.\(\text{e}1\) \(\text{b}8\) 17.e4 \(\text{bc}4\) 18.\(\text{xc}4\) \(\text{c}7\) 19.\(\text{h}3\) \(c6\) 20.\(\text{c}1\) \(a8\) 21.\(\text{g}5\) \(\text{e}8\) 22.\(\text{d}2\) \(f5\) 23.\(\text{h}6\) \(\text{x}h6\) 24.\(\text{x}h6\) \(\text{f}6\) 25.\(\text{e}1\) \(\text{f}8\) 26.\(c5\) \(\text{d}8\) 27.\(\text{e}5\) \(\text{ef}7\) 28.\(\text{d}2\) \(\text{d}6\) 29.\(\text{f}1\) \(\text{d}7\) 30.e\(\times f5\) \(\text{xf}5\) 31.\(\text{e}4\) \(\text{f}6\) 32.\(h4\) \(\text{g}7\) 33.\(h5\) \(g\times h5\) 34.\(\text{h}4\)
34...g8

Tal says “It would have been more difficult to break through if Black had played 34...h6!.” It might not have been all that hard. Komodo gives, for example, 35...ee4 d5 36...h5 g6 37...he5 f6 38...xe6! xe4 39...d6 g6d6 40.e3

40...f6 (if 40...dxd4? 41...h3 d7d6 42...f5 g5 43...e7+...g8 44...xh7 +2.51 K/20) 41...h3 f7 (41...d8?? 42...e7+) 42...f4 d8±.

35...d3 g7

Tal makes no comment here, but this was a crucial mistake deserving a “?”). The engines see only a very small advantage for White, if any, after 35...df7 (about +0.35 K/20), or 35...f8 (0.00 SF/32).

36...e5 ff7

37...h6

Tal says moves like this “beg to be played,” and since he was trying to take advantage of Botvinnik’s time pressure it has a psychological point, but objectively it was better to have the rooks spearhead the charge and use the queen for alternating long-distance attacks against h7, e6, and other weak points. For example 37...e4h5 e7 38...h6 (preventing 38...f6)
38...f8 (if 38...d5 39.e2 c7 40.e4 f8 41.c4 d6 42.xh7 xh7 43.xh7 xh7 44.xh7++) 39.c2 g8 40.b4! d5 (if 40...xh4 41.xh4+) 41.e2 f4 42.xh7+ xh7 43.g4+

43...f8 (if 43...h8 44.xh7+ xh7 45.f4+, or 43...f7 44.xh7 xg4 45.e7 xh4 46.gxh4++) 44.xh7 e2+ 45.xe2 xh7 46.xh7 xh7 47.g2

47.e7 (+2.26 K/20, +3.18 SF/28). As the further course of the game shows, Tal realized this and soon drew the queen back to more useful squares, saying “one of the basic principles was worth remembering – the strongest of the major pieces goes in the rear.”

37...e7 38.e5+ d5
Tal explains here how he examined the combination 39.\textit{\textbf{x}}h7+ \textit{\textbf{x}}h7 40.\textit{\textbf{g}}4+ \textit{\textbf{h}}8 41.\textit{\textbf{g}}6 \textit{\textbf{f}}8 42.\textit{\textbf{g}}h4 \textit{\textbf{f}}6 43.\textit{\textbf{x}}f6+ \textit{\textbf{x}}f6 44.\textit{\textbf{x}}h7+ \textit{\textbf{g}}8 45.\textit{\textbf{h}}8+ \textit{\textbf{f}}7 46.\textit{\textbf{h}}4h7+ “with a won rook endgame.” However, he correctly decided to reject this because of 41...\textit{\textbf{f}}6+! But if 41...\textit{\textbf{f}}8 is played,

the variation can be improved at three points. First, White now is less bad off playing 42.\textit{\textbf{x}}h7+ \textit{\textbf{x}}h7 43.\textit{\textbf{x}}e6 (-1.40 SF/31). If 42.\textit{\textbf{g}}h4?,

then not 42...\textit{\textbf{f}}6? but 42...\textit{\textbf{e}}7! 43.\textit{\textbf{x}}h7+ \textit{\textbf{x}}h7 44.\textit{\textbf{x}}h7+ \textit{\textbf{g}}xh7 45.\textit{\textbf{e}}x6 and Black may well win (-1.44 K/21, -2.70 SF/27). Finally, after 42...\textit{\textbf{f}}6 43.\textit{\textbf{x}}f6+ \textit{\textbf{x}}f6 44.\textit{\textbf{x}}h7+ \textit{\textbf{g}}8 45.\textit{\textbf{h}}8+ \textit{\textbf{f}}7,

better than 46.\textit{\textbf{h}}4h7+ is 46.\textit{\textbf{x}}f8+ \textit{\textbf{f}}x8 47.\textit{\textbf{h}}4h7 winning another pawn, since 47...\textit{\textbf{f}}7?? 48.\textit{\textbf{x}}f7+ \textit{\textbf{f}}x7 49.g4 is a trivial win for White.

39.\textit{\textbf{d}}2 \textit{\textbf{f}}6 40.\textit{\textbf{h}}6 \textit{\textbf{d}}6 41.\textit{\textbf{f}}4
Botvinnik sealed his move here. Tal explains how he and his second Koblents went over the various possibilities in adjournment analysis. Their conclusions are mostly upheld by the engines, with one major exception in a sub-variation. After 41...e5 42.dxe5 Qxe5 43.Rhxf6 43.Rf5, Tal says “Now 43...Qd4 does not work,”

“because of 44.Ehxf6 (?? 44.Eg2+) Eg3+ 45.Ef1 Ed3(??) 46.Eg5+ Eh8 47.Ef7.” Had this line actually been played, Botvinnik would no doubt have been delighted to play, instead of 45...Ed3??, the winning 45...a1+!

forcing 46.Ee1 (if 46.Ee2 Ee7+ etc.) 46...Eg1+ 47.Eg1 Ee1++.

41...Ef8 42.Ee3 43.Exf7 Ef7 44.Ee5! Ec7 45.Ec5!

Tal comments here “Now, bad is 45...a6 46.Eb6 and Black cannot continue 46...Ec8 47.Ee6!, and after 46...Ec5 47.Ed8+ Ef8 White wins with 48.Eh7+.” This overlooks a much better defense Black has, namely 46...Ed7!
when if 47.\texttt{xB}7? \texttt{Exg3+} 48.fxg3 \texttt{Exd4+} 49.\texttt{gxg2} \texttt{Exd3} 50.\texttt{Exc7} \texttt{Exd2+} 51.\texttt{Exb1} \texttt{Exh6}, draw. To make any progress White would have to continue 47.\texttt{a7}, showing that he should have put the queen there in the first place, rather than stop at b6. After 46.\texttt{a7!} \texttt{Exd7},

then 47.\texttt{b8+}! (again not 47.\texttt{xb7} \texttt{Exg3+} etc., draw) 47...\texttt{f7} 48.\texttt{xb7:}

and now if 48...\texttt{Exg3+} 49.fxg3 \texttt{Exd4+} 50.\texttt{h2} \texttt{Exd3} we see the key difference, that 51.\texttt{Exc7+} is check,

giving Black no chance to win back his rook with 51...\texttt{d2+}.

45...\texttt{f3} 46.\texttt{xh7+} \texttt{h7} 47.\texttt{g5+} \texttt{h8} 48.\texttt{d8+} \texttt{g7} 49.\texttt{h7+} \texttt{h7} 50.\texttt{xc7+} \texttt{g6} 51.\texttt{b7} \texttt{e4}
52.\texttt{\textbf{a}}6

Here Tal explained why he did not play 52.\texttt{\textbf{x}}a7, saying “after 52...\texttt{\textbf{e}}1+ 53.\texttt{\textbf{g}}2 \texttt{\textbf{e}}4+ 54.\texttt{\textbf{h}}2(?! ) \texttt{\textbf{f}}3 White would have to let his opponent get a passed pawn by continuing 55.d5.” However, this can be avoided by playing 54.\texttt{\textbf{f}}1!, and the king escapes toward the center as in the actual game.

Still, there was nothing wrong with the text move. The rest of the game needs no comment.

52.\texttt{\textbf{e}}1+ 53.\texttt{\textbf{g}}2 \texttt{\textbf{e}}4+ 54.\texttt{\textbf{f}}1 \texttt{\textbf{b}}1+ 55.\texttt{\textbf{e}}2 \texttt{\textbf{c}}2+ 56.\texttt{\textbf{f}}3 \texttt{\textbf{f}}5+ 57.\texttt{\textbf{e}}3 \texttt{\textbf{g}}5+ 58.\texttt{\textbf{e}}2 \texttt{\textbf{h}}5+ 59.\texttt{\textbf{d}}2 \texttt{\textbf{f}}6 60.\texttt{\textbf{x}}c6 \texttt{\textbf{a}}5+ 61.\texttt{\textbf{c}}3 \texttt{\textbf{x}}a2+ 62.\texttt{\textbf{e}}3 \texttt{\textbf{f}}7 63.d5 \texttt{\textbf{e}}xd5 64.\texttt{\textbf{c}}7+ \texttt{\textbf{f}}6 65.\texttt{\textbf{c}}6+ \texttt{\textbf{e}}7 66.\texttt{\textbf{x}}d5 \texttt{\textbf{a}}1 67.\texttt{\textbf{e}}4+ \texttt{\textbf{f}}7 68.\texttt{\textbf{f}}4 \texttt{\textbf{c}}1+ 69.\texttt{\textbf{g}}4 \texttt{\textbf{a}}1 70.\texttt{\textbf{d}}5+ \texttt{\textbf{f}}8 71.\texttt{\textbf{f}}5 \texttt{\textbf{b}}1+ 72.\texttt{\textbf{f}}6 1–0

Game 12, Botvinnik-Tal, Moscow, 12 April 1960, Queen’s Gambit Declined [D40]: A very tense, complicated game, with at least two major mistakes in the text moves (see move 31). There are also quite a few errors in Tal’s notes. Some are due to the near-impossibility of correct human analysis of the queen endgame, but in other cases Tal simply gets lost in the labyrinthine middle-game complexities.

1.c4 \texttt{\textbf{f}}6 2.d4 \texttt{\textbf{e}}6 3.\texttt{\textbf{c}}3 d5 4.e3 c5 5.e3 \texttt{\textbf{c}}6 6.a3 \texttt{\textbf{d}}6 7.dxc5 \texttt{\textbf{x}}c5 8.b4 \texttt{\textbf{d}}6 9.\texttt{\textbf{b}}2 0–0 10.cxd5 exd5 11.\texttt{\textbf{b}}5 \texttt{\textbf{b}}8 12.\texttt{\textbf{e}}2 a5 13.bxa5 \texttt{\textbf{x}}a5 14.0–0 \texttt{\textbf{a}}6 15.\texttt{\textbf{e}}5 \texttt{\textbf{x}}e5 16.\texttt{\textbf{e}}5

16...\texttt{\textbf{e}}8

Tal makes a strange comment here: “After 16...\texttt{\textbf{e}}8, which prevents White’s next maneuver, I had to consider 17.\texttt{\textbf{c}}7.” But 17.\texttt{\textbf{c}}7? obviously loses to 17...\texttt{\textbf{x}}e5 18.\texttt{\textbf{a}}6 bxa6 (-1.41 K/20).

17.\texttt{\textbf{d}}3 \texttt{\textbf{e}}4
18.\( \square f4 \)

Tal gives us another of his humorous understatements here: “Bad is 18.\( \square b4 \) \( \square h6 \) 19.\( \square \times d5 \) \( \square h4 \).” Bad indeed: -8.50 K/22 (20.h3 \( \square \times h3 \)).

18...\( \square e5 \) 19.\( \square c1 \) \( \square h6 \)

Tal examines two alternatives for White here, and loses his way in both. First, after 20.\( \square \times d5 \) he gives 20...\( \square c6 \) 21.\( \square f4 \) \( \square h4 \) 22.h3,

and now rather than Tal’s 22...g5?, Black must play 22...\( \square g5 \)!, leading to an even game after either (a) 23.\( \square d4 \) \( \square e8 \) (not 23...\( \square \times d4 ? \) 24.\( \square \times c8 \)!) 24.\( \square d5 \) \( \square e6 \) \( \square d6 \), or (b) 23.\( \square c4 \) \( \square b5 \) 24.\( \square x c6 \) \( \square x h3 \) (24...\( \times c6 ? \) 25.\( \square d8 \)!) 25.\( \square x h3 \) \( b \times c6 \) 26.\( \square x b5 \) \( c \times b5 \) 27.\( \square d5 \). If Black does play 22...g5?,
then not 23.\texttt{h5}?! but 23.\texttt{x6}, creating the long forced line 23...b\texttt{c6} 24.\texttt{d8+ g7} 25.\texttt{d4 f6} 26.\texttt{c4 gf4} (everything else is much worse) 27.\texttt{a7+ g6} 28.\texttt{f7+ g5} 29.\texttt{d4 g4} 30.\texttt{xf4+ xf4} 31.\texttt{a6!}: 

This threatens 32.g3+ \texttt{xg3} 33.f\texttt{g3+ e4} (if 33...\texttt{xg3} 34.\texttt{b3+} and mate shortly, showing why 31.\texttt{a6} was necessary) 34.\texttt{e1+ ad4} 35.\texttt{c4#}. Black can only choose how to die, e.g. 31...\texttt{xh3} 32.e2+ \texttt{g5} 33.f4+ \texttt{g4} 34.\texttt{c8+ f5} 35.\texttt{g7+ h5} 36.e6 \texttt{g5} 37.fxg5 (+6.20), or 31...\texttt{d6} 32.g3+ \texttt{e4} 33.\texttt{c7} (+14.40), or (relatively best) 31...\texttt{xh3} 32.gxh3 \texttt{h3} 33.e1 (+4.71 K/20).

Returning to the note line, after 22...g5? 23.\texttt{h5}?! g4,

Tal again goes wrong with 24.hxg4? \texttt{xg4} 25.\texttt{xg4 exh5}++. Instead White holds with 24.\texttt{f4} (0.00 SF/26). So Tal’s claim that “the immediate capture of the pawn [\textit{i.e.} 20.\texttt{xd5}] loses” is incorrect.

Examining the second alternative, 20.\texttt{d4},

Tal says “A position which is not quite clear arises after 20.\texttt{d4}(!) \texttt{g5} 21.\texttt{fd1 b3(?) 22.xe4 xc1} 23.\texttt{f1(?)”} He correctly concludes that “It is possible that this continuation would have been most promising for White,” but his supporting analysis is flawed. After 20.\texttt{d4} \texttt{g5} 21.\texttt{fd1},
relatively best is 21...d7 22.b2 c6 (+1.44 K/20). After 21...b3? 22.xe4 x1,

not 23.f1! but 23.f3! d7 24.b1 (+2.07 K/20). Black’s kingside attack is getting nowhere, while White’s pressure on the d- and b-pawns will win one or both.

20.d4 c6

21.g3

Tal writes “Interesting was 21.f3 f5 22.d3 ... Black would then have at his disposal only one continuation, 22...d6, which, in view of the eventual threat of g7-g5-g4, maintains equality.”

After 23.b3, threatening 24.fd1 ++, a potential g-pawn advance loses relevance, and Black is more or less forced into 23...c5 24.xc5 xc5 25.xf5 xf5 26.xb7 xa3 27.d4 xd4 28.exd4:
White will soon win Black’s d-pawn. That may not be enough to win, but he will have the only winning chances (+1.20 SF/30).

21...g5 22.d3 e8 23.g4 xg4 24.xg4 xd4 25.exd4 f6 26.e5 d2

27.fd1

Tal examines 27.f4 here, one variation continuing 27...xf1 28.fxg5 xh2 29.xf3+ 30.xf3 e6,

which he deems “unclear.” The engines are able to clarify, and consider White busted. Both Komodo and Stockfish give 31.e5 h5 32.xe6 xxe6 33.c8+ g7 34.xc7 xg5 35.xf7+ g8 36.f3, only differing now, with Komodo preferring 36...a6 (-1.52 K/22), and Stockfish 36...b6 (-3.14 SF/30).

27...xe5 28.xd2 e4 29.c8+ g7 30xb7 e6 31.f1?
We saw earlier how Tal called his 21st move in Game 9 the weakest move of the match, but surely this move of Botvinnik’s is far worse, as now 31...Re4! would have won, viz. 32.g×h4 g×g4+ 33.h×h1 f×f3+ 34.g×g1 g×h4 35.c×c7 g×g6+, or 32.f×f3 e×e3+ 33.h×h1 x×d2 34.g×h4 e×e2 35.g×g1 x×f3+ 36.g×g2 e×e6 etc. Tal considers 31.b×b1 necessary, but 31.b2, b×b4, b×b2 and a×a2 would have likewise maintained equality.

31...e1 Tal is puzzled by his failure to see 31...Re4! here, especially since he had examined it the move before. 32.b5 h3 33.f3 e6 34.df2 f6 35.e×e1 e×e1+ 36.g×g2 g4 37.d×d3 h5 38.f×f1 e×e6 39.x×g4 x×f1 40.x×f1 h×g4

41.a4

At several points in the difficult queen ending (is there any other kind?), Tal is needlessly harsh on himself. Here he looks at 41.g2 b×b6 42.h4 b×b2+ 43.f×f1 a×a1+ 44.e×e2 b×b2+ 45.d×d2 x×a3 46.g×g5+ f×f8 47.x×g4 h×b2+ 48.f×f3 c×c3+ 49.g×g2 d×d2+ 50.h×h3 f×f2 51.d×d1 f×f5 52.d×d3 g×g7 53.g×g4 f×g4+ 54.x×g4,

and concludes that it is unfavorable for Black. But that is only because he continues 54...g1+?? 55.h×h5++. Instead, after 54...h×h8 Black is fine. It does bear mentioning, however, that any other move does lose, so it’s just as well Tal did not paint himself into such a tight corner.

41.b6 42.f×f2 b4 43.e3 x×a4 44.f×f4 a×a2 45.e×e3 x×h2 46.e×e5+ f×f8 47.d×d6+ g×g7 48.x×d5 f×f2+ 49.x×g4 f×f5+ 50.g×g5 x×g3+ 51.x×f5 g×g6+ 52.f×f4 f×f6+ 53.e3 f×f8 54.d×d3 f×f1+ 55.e×e4 g×g2+ 56.e×e5 g×g5+ 57.e×e6 e×e7+ 58.f×f5
58...\texttt{c7} Tal indicates that this is the only move by which Black could have secured the draw. That is not true; Stockfish rates 58...\texttt{f7}, 58...\texttt{a3}, 58...\texttt{b4}, 58...\texttt{h4} and 58...\texttt{h7} all at 0.00. Tal takes the last line a bit further, but after 59.\texttt{e5},

he goes wrong with 59...\texttt{h5}+(either 59...\texttt{h4} or 59...\texttt{e7} hold) 60.\texttt{d6} \texttt{h2}+, and now he has White go wrong with 61.\texttt{e5} which only draws after 61...\texttt{h6}+, when he could win by moving his king to c6, d7, or e6.

59.\texttt{a8}+
Tal here indicates that 59...<f7 would lose, but there is nothing wrong with it. He continues 60.<a2+ <f8 61.<d5,

apparently thinking that proves his point, but Black still draws with 61...<f7+, <e7, <h7+, <b6, <b8, or <c8+.

59...<e7 60.<e4+ <d8 61.<h4+ <c8 62.<h8+ <b7 63.<e5 <f7+ 64.<e4 <g6+ 65.<f5 <d6 66.<f7+ <c8 67.<f5+ <d8 68.<a5+ <e8 69.<d5 <e7 70.<a7+ <d8 71.<a8+ <d7 72.<f5 <e7 ½–½

Game 13, Tal-Botvinnik, Moscow, 14 April 1960, Queen’s Indian Defense [A30]: A short, uneventful draw, which we give without commentary, as no mistakes or improvements were found.

1.c4 c5 2.<f3 <f6 3.<g3 b6 4.<g2 <b7 5.0–0 <g6 6.d4 c×d4 7.<x×d4 <g7 8.<c3 <c6 9.<h4 <h6 10.<d5 <e6 11.<×f6+ <×f6 12.<×f6 <×f6 13.<b1 <a5 14.b3 <e4 15.<b2 <x×b2 16.<×b2 ½–½

Game 14, Botvinnik-Tal, Moscow, 19 April 1960, Nimzo-Indian Defense [E24]: Another short, uneventful, adequately annotated draw.

1.d4 <xf6 2.c4 <e6 3.<c3 <b4 4.a3 <×c3 5.b×c3 <e4 6.<h3 c5 7.<e3 <a5 8.<d2 c×d4 9.c×d4 <×d2 10.<×d2 <×d2+ 11.<×d2 <b6 12.<d3 <a6 13.<hcl <c6 14.<ab1 <e7 15.c5 <×d3 16.<×d3 <ab8 17.<b5 b×c5 18.<c×c5 a6 19.<×b8 <×b8 20.<c2 <e8 21.<f4 d6 22.<c3 <g5 ½–½

Game 15, Tal-Botvinnik, Moscow, 21 April 1960, Caro-Kann Defense [B18]: We have little to add here; the engines generally validate Tal’s analysis. We offer just two improvements and one dissent.

1.e4 <c6 2.d4 d5 3.<c3 <×e4 4.<×e4 <f5 5.<g3 <g6 6.<c4 <e6 7.<e2 <d6 8.<h4 <h6 9.<f4 <×f4 10.<×f4 <f6 11.<d2 <bd7 12.0–0–0 <d5 13.<de1 <b7 14.<b3 <×f4 15.<×f4 <d5 16.<e5 0–0 17.<e4 <b8 18.<d6
Tal’s analysis of the line 18...b5 can be improved. After 19.h5 d6,

he gives 20.h3, but then gaining a significant advantage for White is problematic if Black replies 20...f6. Leading to a probably greater advantage in more direct fashion is first 20.xd5! cxd5

(not 20...e5?? 21.h3 d8 22.g3 g5 23.hxg6 fxg6 24.e6+ h8 25.f7+ xf7 26.xf7+ -- ) and only then 21.h3:

Now 21...f5 is forced; if instead, say, 21...c7 22.c3 d7 23.g3 f6 (or 23...g6 24.f4 g7 25.h1 g5 26.xg5+ etc.) 24.xe6+ x6 25.e6 ad8 26.e7 (+5.65). So then 22.f5 e5 (not 22...xe5?? 23.e7+ h8 24.dxe5+-- ) 23.f5,

and White is a pawn up with very good chances to win another, plus the better position and development (+2.28 SF/30).

19.c4 b6 20.xb8 axb8 21.e5 h7 22.h3 d7 23.c3 x5 24.xe5 b6 25.he3 bc8 26.c4
A variation Tal examines here can be improved. After 26...c5 27.d5 b5? (Tal’s punctuation, which is correct) 28.\textbullet b5 e\textbullet d5,

he gives 29.\textbullet e8+ \textbullet ×e8 30.\textbullet ×e8+ \textbullet ×e8 31.\textbullet ×e8, saying “the ending is not good for Black,” but the engines see it as practically dead even. Rather than trade off all the rooks for some nebulous distant potential, 29.\textbullet e7! wins a non-nebulous pawn,

\textit{viz.} (a) 29...\textbullet b8 30.\textbullet d3 \textbullet ×d3 31.\textbullet ×d3 a6 32.\textbullet e5, or (b) 29...d4 30.\textbullet f3 d\textbullet c3 31.b\textbullet c3 \textbullet g6 32.\textbullet ×a7, or (c) 29...a5 30.\textbullet a7 \textbullet a8 31.\textbullet e7 \textbullet g6 32.\textbullet ed7 \textbullet ×a7 33.\textbullet ×a7 and 34.\textbullet ×a5.

26.\textbullet c7 27.b4 \textbullet f8 28.g4 \textbullet g8 29.\textbullet b3

29...\textbullet h7
Tal here says if 29...c5 30.bxc5 bxc5 31.\(\mathbb{B}\)x\(\mathbb{C}\)5 \(\mathbb{B}\)xc5 32.dxc5 \(\mathbb{B}\)c8 33.\(\mathbb{B}\)d3 \(\mathbb{E}\)e7 34.\(\mathbb{B}\)a4 \(\mathbb{B}\)xc5 35.\(\mathbb{B}\)d7+ \(\mathbb{F}\)6 36.\(\mathbb{S}\)b2 “with a significant advantage” for White. The engines just don’t see it: only +0.15 \(K/22\), and +0.20 \(SF/31\).

30.f4 \(\mathbb{A}\)g8 31.\(\mathbb{B}\)b2 \(\mathbb{A}\)h7 32.h5 \(\mathbb{B}\)dc8 33.\(\mathbb{B}\)c2 \(\mathbb{A}\)g8 34.g5 \(f\)6 35.\(\mathbb{B}\)e4 c5 36.\(\mathbb{A}\)b3 c\(\times\)b4 37.c\(\times\)b4 h\(\times\)g5 38.f\(\times\)g5 f\(\times\)g5 39.\(\mathbb{B}\)g3 \(\mathbb{F}\)f7 40.\(\mathbb{H}\)g5 \(\mathbb{F}\)f2+ 41.\(\mathbb{G}\)a3 \(\mathbb{C}\)c7 ½–½

Game 16, Botvinnik-Tal, Moscow, 23 April 1960, Nimzo-Indian Defense [E24]: Just two corrections here, one major, one minor.

1.d4 \(\mathbb{Q}\)f6 2.c4 e6 3.\(\mathbb{Q}\)c3 \(\mathbb{B}\)b4 4.a3 \(\mathbb{Q}\)c3+ 5.b\(\times\)c3 \(\mathbb{Q}\)e4 6.\(\mathbb{B}\)c2 \(f\)5 7.\(\mathbb{Q}\)h3 d6 8.f3 \(\mathbb{Q}\)f6 9.e4 f\(\times\)e4 10.f\(\times\)e4

10...e5

Tal says here “On 10...0–0, White has the possibility of provoking sharp play if he so desires by 11.e5 dxe5 12.dxe5 \(\mathbb{Q}\)g4 13.\(\mathbb{Q}\)d3 or 13.\(\mathbb{Q}\)g5.” The latter move is fine, quite good for White in fact, but 13.\(\mathbb{Q}\)d3? provokes something rather too sharp, 13...\(\mathbb{Q}\)h4+:

If now 14.\(\mathbb{Q}\)e2 \(\mathbb{Q}\)h5! 15.\(\mathbb{Q}\)e1 \(\mathbb{Q}\)c6 16.\(\mathbb{Q}\)f4 \(\mathbb{Q}\)c\(\times\)e5–+, and of course not 14.g3?? \(\mathbb{Q}\)\(\times\)h3. Relatively best is 14.\(\mathbb{Q}\)d1, but then Black has a wide choice of winning continuations, e.g.

(a) 14...\(\mathbb{Q}\)d7 15.\(\mathbb{Q}\)e2 \(\mathbb{Q}\)d\(\times\)e5 16.\(\mathbb{Q}\)g5 \(\mathbb{Q}\)x\(\mathbb{Q}\)g5! 17.\(\mathbb{Q}\)x\(\mathbb{Q}\)g5 \(\mathbb{Q}\)e3+ (-2.81 \(SF/30\));

(b) 14...\(\mathbb{Q}\)x\(\mathbb{Q}\)e5 15.\(\mathbb{Q}\)g5 \(\mathbb{Q}\)g4+ 16.\(\mathbb{Q}\)e2 \(\mathbb{H}\)h6 17.\(\mathbb{Q}\)x\(\mathbb{Q}\)g4 \(\mathbb{Q}\)x\(\mathbb{Q}\)g4 18.\(\mathbb{Q}\)e7 \(\mathbb{F}\)f7 19.\(\mathbb{Q}\)h4 \(\mathbb{Q}\)e5 (-2.13 \(SF/25\));

(c) 14...b6 15.\(\mathbb{F}\)f1 (15.\(\mathbb{Q}\)e4? \(\mathbb{Q}\)d8\+ 16.\(\mathbb{Q}\)e2 \(\mathbb{A}\)a6 -3.11 \(SF/24\) 15...\(\mathbb{Q}\)xf1+ 16.\(\mathbb{Q}\)xf1 \(\mathbb{Q}\)b7 17.\(\mathbb{Q}\)g5 \(\mathbb{Q}\)h5 18.\(\mathbb{Q}\)c1 \(\mathbb{Q}\)d7 (-3.08 \(SF/25\)).

11.\(\mathbb{Q}\)f2 0–0 12.\(\mathbb{Q}\)e2 c5 13.d\(\times\)e5 d\(\times\)e5 14.0–0 \(\mathbb{Q}\)c6 15.\(\mathbb{Q}\)g5 \(\mathbb{W}\)e8 16.\(\mathbb{Q}\)d1 \(\mathbb{W}\)g6 17.\(\mathbb{Q}\)xf6 \(\mathbb{Q}\)xf6 18.\(\mathbb{Q}\)e3 \(\mathbb{Q}\)xf1+ 19.\(\mathbb{Q}\)xf1 \(\mathbb{Q}\)e6
20. \textit{\textbf{d3}}

Tal writes “On 20.\textit{\textbf{f5}}, I intended to continue 20...\textit{\textbf{d8}} 21.\textit{\textbf{f3}} \textit{\textbf{xf5}} 22.e\textit{\textbf{xf5}} \textit{\textbf{g5}}, and 23.\textit{\textbf{d3}} does not work because of 23...\textit{\textbf{e4}} 24.\textit{\textbf{x}}e4 \textit{\textbf{d2}} 25.\textit{\textbf{g3}} \textit{\textbf{f4}}, with extremely unpleasant threats.”

20...\textit{\textbf{Rd8}} 21.\textit{\textbf{Nd5}} \textit{\textbf{Rf8}} 22.\textit{\textbf{Nd7}} \textit{\textbf{Rxf1+}} 23.\textit{\textbf{Bxf1}} \textit{\textbf{Qf7}} 24.\textit{\textbf{Qd6}} \textit{\textbf{c8}} 25.\textit{\textbf{a6}} \textit{\textbf{f4}} 26.\textit{\textbf{d5+}} \textit{\textbf{h8}} 27.\textit{\textbf{xc5}} \textit{\textbf{e6}} 28.\textit{\textbf{c7}} \textit{\textbf{g8}} 29.\textit{\textbf{f2}} \textit{\textbf{xe4}} 30.\textit{\textbf{e8}} \textit{\textbf{g6}} 31.\textit{\textbf{f8}} \textit{\textbf{e4}} 32.\textit{\textbf{d6}} \textit{\textbf{e5}} 33.\textit{\textbf{c5}} \textit{\textbf{d3}} 34.\textit{\textbf{f5}} \textit{\textbf{e5}} 35.\textit{\textbf{c7}} \textit{\textbf{f7}} 36.\textit{\textbf{xf7}} \textit{\textbf{xf7}} 37.\textit{\textbf{f2}} \textit{\textbf{c4}} 38.\textit{\textbf{xc4}} \textit{\textbf{xc4}} 39.\textit{\textbf{c6}} \textit{\textbf{bxc6}} 40.\textit{\textbf{xc6}} \textit{\textbf{a5}} 41.\textit{\textbf{a4}} \frac{1}{2}–\frac{1}{2}

True in most lines, e.g. 26.\textit{\textbf{b1}} \textit{\textbf{f2+}} 27.\textit{\textbf{h8}} \textit{\textbf{e2++}}, but White is OK after 26.\textit{\textbf{d5+}} \textit{\textbf{f8}} 27.\textit{\textbf{f3}} \textit{\textbf{g5}} 28.\textit{\textbf{g3}} etc., draw.

\textit{\textbf{Game 17}, Tal-Botvinnik, Moscow, 26 April 1960, Caro-Kann Defense [B18]: Several definite analytical mistakes here, including some of howler class.}

1.e4 \textit{\textbf{c6}} 2.d4 \textit{\textbf{d5}} 3.\textit{\textbf{\textbullet{c3}}} d\textit{\textbullet{xe4}} 4.\textit{\textbullet{xe4}} \textit{\textbullet{f5}} 5.\textit{\textbullet{g3}} \textit{\textbullet{g6}} 6.c4 \textit{\textbf{e6}} 7.\textit{\textbf{\textbullet{e2}}} \textit{\textbullet{f6}} 8.\textit{\textbullet{f4}} \textit{\textbullet{d6}} 9.\textit{\textbullet{g6}} h\textit{\textbullet{g6}} 10.\textit{\textbullet{g5}} \textit{\textbullet{bd7}} 11.0–0 \textit{\textbullet{a5}} 12.f4?! 0–0–0 13.a3 \textit{\textbullet{c7}} 14.b4 \textit{\textbullet{b6}} 15.\textit{\textbullet{e2}}

15...\textit{\textbullet{Ee7}}
Tal notes that “several commentators were of the opinion that Black could almost win by continuing 15...e5. Nevertheless, in this position, White gets an extremely active position after 16.fxe5 dxe5 17.g4+ b8 18.c3, and the white bishops are extremely active.”

But it’s Black who gets active first: 18...hx2! 19.xh2 h8+ 20.g1 xg3 21.xf6 gxf6 22.xf6 h2+ 23.f1 e5! 24.dxe5 h1+ 25.f2 xh1 26.xd1 d5

and Black stands better after either 27.f3 xe5 (-1.37 K/23, -2.12 SF/27), or 27.d6 b6+ 28.d4 a5 29.g3 xc3 30.g2 bx5 31.d8+ a7 32.4d7 x3 34.xf7 b2+ 35.h3 xe5 (-1.93 SF/26).

16.d3 f5 17.xe7 xe7 18.c4 f6

19.ab1

Tal calls this move too optimistic, and says 19.a4 was better, but his supporting analysis goes badly awry. After 19...xb4 20.a5 xc4,
best is simply 21.\texttt{Qxc4} \texttt{Qxc4} 22.\texttt{Qxc4} \texttt{Rxd4} 23.\texttt{ac1} with a roughly even game. Tal, however, insists that 21.\texttt{fb1} is best.

In fact it loses to either:

\textbf{(a)} a line Tal does not consider, 21...\texttt{Nb2} 22.\texttt{Qe3} \texttt{Nd5} 23.\texttt{Qf2} \texttt{Qc3} 24.\texttt{xf3} \texttt{Qxb1} 25.\texttt{b1} \texttt{bxd4} 26.\texttt{xf2} \texttt{xf4} and Black has \texttt{R+} \texttt{P} - \texttt{B+N} (-1.51 K/20, -1.76 SF/27);

\textbf{(b)} the line Tal does give, 21...\texttt{d2}:

Now the least evil for White is 22.\texttt{b2} \texttt{d2} 23.\texttt{b4} and Black is simply up two pawns. On Tal’s 22.\texttt{c4??}, Black does not reply with his 22...\texttt{x4+}, but 22...\texttt{e3+!},

which gives White a choice of being mated in 11 after 23.\texttt{h1}, or mated in 20 after 23.\texttt{f1} (we leave it to the reader to work out the details).

19...\texttt{d7} 20.\texttt{bd1} \texttt{Bb8} 21.\texttt{b3} \texttt{c7} 22.a4 \texttt{h4} 23.a5 \texttt{c8} 24.\texttt{e3} \texttt{e7} 25.\texttt{e5} \texttt{hh8} 26.b5 \texttt{xb5} 27.\texttt{xb5} a6 28.\texttt{b2} \texttt{d7} 29.c5 \texttt{a8} 30.\texttt{f3}
30...c6

Tal says “Golombek’s recommendation was worse: 30...ed5, since after 31.c1, it is dangerous to capture on f4, as the threat c5-c6 will become unpleasant.” But after 31...xf4 32.c6,

the engines say Black is just fine, viz. 32...c7 33.xd5 e3+ 34.f2 xd5 35.f1 g5 36.cxb7+ xxb7 (-0.54 K/26). The real problem with 30...ed5 is seen after 31.d3!, intending to pile up pressure on Black’s Achilles’ heel, b7:

For example 31...xf4 32.b3 d5 33.c1 b8 34.f1,

and the knight will soon infiltrate to d6 or b6 with many threats.

Going back to the game position at Black’s 30th move,
objectively best was to put the other knight at d5, 30...Nd5. If White continues 31.Qd3 Qxf4 32.Qb3 Qd5 33.Qc1 as in the above variation, then 33...c6 both prevents c5-c6 and doubly blunts the bishop’s pressure on the long diagonal.

30...c6 31.Qxc6 Qxc6 32.Qf3 Qa4 33.Qd3 Qc8 34.Qb1 Qxa5?! 35.Qb3 Qc7 36.Qa3

36...Qa7

Tal comments here “Better was 36...Qd8, so that he could still play Qc6. On this, of course, possible is 37.Qb2.” Possible yes, advisable no. Correct would be 37.Qf1=. After 37.Qb2?,

Black has 37...Qxd4! 38.Qxb7 d1=,
with then two lines, both better for Black:
(a) 39.\texttt{Rxd1} \texttt{Qxd1+} 40.\texttt{NF1} \texttt{Nd7} 41.\texttt{b4} \texttt{d5} 42.\texttt{a4} \texttt{xc5} (-1.48 K/20, -2.31 SF/26);
(b) 39.\texttt{NF1} \texttt{xb1} 40.\texttt{xb1} \texttt{d4+} 41.\texttt{h1} \texttt{Nd7} and either 42.\texttt{h3} \texttt{xc5} (-2.60 SF/24), or 42.\texttt{b4} \texttt{xb8} 43.\texttt{xb8+} \texttt{xb8} 44.\texttt{c1} (-2.93 SF/30).

37.\texttt{Rb6}

Tal makes a strange comment here: “Now Black cannot continue 37...\texttt{Nd5} in view of 38.\texttt{Ne4}.” But 38.\texttt{Ne4}? simply loses to 38...\texttt{Qxf4},

when White cannot avoid grievous material loss, \textit{viz.} 39.\texttt{d6} \texttt{xb6} 40.\texttt{cxb6+} \texttt{g8} 41.\texttt{xc8} \texttt{d4+} 42.\texttt{f1} \texttt{f8} (-5.42), or 39.\texttt{a4} \texttt{dc7} 40.\texttt{d6} \texttt{xb6} 41.\texttt{xb6} \texttt{d8} (-4.54 SF/25). Correct after 37...\texttt{Nd5} is 38.\texttt{b2} or 38.\texttt{xb7+} \texttt{xb7} 39.\texttt{xb7+} \texttt{xb7} 40.\texttt{h3}, with equality in either case.

37...\texttt{Qxf4} 38.\texttt{e2} \texttt{e4} 39.\texttt{b3}

39...\texttt{d5}??
Tal correctly notes that 39...$a8! was the only defense, but then he continues “Possible [then] would be 40.h3 or 40.Rb4. After both continuations, the position would be very sharp.” 40.h3 is relatively best, the only playable move in fact, but 40.Rb4? would fail to 40...$g4!,

threatening to exchange queens by 41...$e3+, which White can prevent only at too great a cost (-2.12 K/24, -2.79 SF/29).

40...Rxa6+! $b8 41...a4 1–0

Game 18, Botvinnik-Tal, Moscow, 28 April 1960, Nimzo-Indian Defense [E24]: Another difficult endgame, this time of $+Q$-vs-$+Q$. Tal was convinced he was lost after his 29th move up to White’s 37th, but the engines do not bear this out, finding resources he did not suspect, and refuting some of Botvinnik’s ideas. In all a very interesting struggle up through about move 45, after which Botvinnik stubbornly and uselessly played on in an obviously drawn position.

1.d4 $f6 2.c4 e6 3.Nc3 $b4 4.a3 $xc3+ 5.bxc3 Ne4 6.Qc2 f5 7.h3 0–0 8.f3 $f6 9.c5 $b6 10.cxb6 cxb6 11.e3 $c7 12.d2 $e8 13.c4 $a6 14.c1 $d6 15.a4 $c6 16.$x6 $xc6 17.b4 $xb4 18.axb4 $xc4

19.$xc4

Another of Tal’s understatements here: “On 19.$x4, White has a difficult position after 19...$xc4 20.$x4 $fc8 21.b3 $c1+ 22.d1 $b1 or 22...a5.” Indeed, after the latter move the engines say White can just about resign: -2.70 K/22, -3.16 SF/27.

19...$fc8 20.$xe6+ $xe6 21.$d2 $f7 22.f4 a5 23.bxa5 bxa5 24.d3 a4 25.$xc8 $xc8 26.$a1 $c4 27.$b1 a3 28.$b7+ $f6 29.$a7
29...g5??

Tal is far too hard on himself in giving this a double question mark. If anything, the move deserves a mild exlam, as one of only two that maintain deadeye equality, the other being the alternative he later preferred, 29...b2+. Also adequate are 29...c6, 29...h6, and 29...g6.

30.h5+ g6 31.g4 b2+ 32.d2 c4+ 33.d3 b2+ 34.d2 c4+ 35.e2 c6 36.h3 e5

37.dxe5?

Here, Tal is right to append the question mark. Even so, had White played the better 37.d5, Black’s prospects would not have been so “extremely deplorable” as Tal thought, as long as after 37...b6 38.d3,

he avoided his note continuation 38...d6? 39.a3, which probably loses (+1.77 SF/25). Correct instead is 38...b2+,
yielding the following variations:

(a) 39.\( \text{Ke2}\) \( \text{c4}\) 40.\( e4\) (40.\( \text{d3}\) repeats moves or transposes to one of the lines below) 40...\( \text{fxe4}\) 41.\( \text{fxe4}\) \( \text{d6}\) and either 42.\( \text{xa3}\) \( \text{xe4}\), or 42.\( \text{d3}\) \( \text{b3+}\) (but not 42.\( \text{f3}\) \( \text{b5}\));

(b) 39.\( \text{c2}\) \( e4\) 40.\( \text{fxe4}\)

40...\( \text{fxg4}\)! (not 40...\( \text{fxe4}\)? 41.\( \text{c3}\) \( \text{d3}\) 42.\( \text{xa3}\) \( \text{d6}\) 43.\( \text{d4}\)++) 41.\( \text{hxg4}\) \( \text{c4}\) 42.\( \text{d3}\) \( \text{e5}\) 43.\( \text{d4}\) \( \text{xg4}\) 44.\( \text{g3}\) \( \text{h5}\) (0.00 SF/24);

(c) 39.\( \text{d2}\) \( e4\) 40.\( \text{f4}\) \( \text{fxg4}\) 41.\( \text{hxg4}\) \( \text{xf4}\) 42.\( \text{xf4+}\) \( \text{g5}\);

(d) 39.\( \text{c3}\)! – This is the most difficult line for Black, as at most points he has only one saving move. – 39...\( \text{d1+}\) (dubious is 39...\( \text{fxg4}\)!! 40.\( \text{hxg4}\) \( \text{d1+}\) 41.\( \text{c4}\) \( \text{xe3}\) 42.\( \text{c5}\+)

40.\( \text{d2}\) (if 40.\( \text{c4}\) \( \text{xe3}\) 41.\( \text{c5}\) \( \text{c8+}\) 42.\( \text{d6}\) \( \text{c4+}\) 43.\( \text{d7}\) \( \text{b6+}\)++) 40...\( \text{fxg4}\) 41.\( \text{hxg4}\) \( \text{b2+}\) 42.\( \text{xd1}\) \( a2\) 43.\( \text{a6+}\) \( \text{f7}\)

44.\( \text{f6}\) – White has no way to stop the pawn, so he aims to take as many of Black’s as possible. 44...\( \text{b1+}\) (also playable is 44...\( \text{h6}\) 45.\( \text{d7}\) \( \text{b1+}\) 46.\( \text{c2}\) \( \text{a1}\) 47.\( \text{xa1}\) \( \text{xa1}\) 48.\( \text{xe5+}\) \( \text{e7}\) 49.\( \text{e2}\) \( \text{a1}\) 46.\( \text{xa1}\) \( \text{xa1}\) 47.\( \text{h7}\) \( \text{a5}\)
48.e4 (if 48.Nxg5+ Kg6 49.e6 Rxd5=) 48...Ra2+ 49.Ke3 Ra3+ 50.Kf2 Ra2+ 51.g3 g6 52.f8+ Kf7 53.d7 g6 54.xe5+,

and despite White’s pawn preponderance, Stockfish says Black can draw (+0.30 SF/30), probably based on the fact that White’s king is imprisoned.

37...fxg4 38.hxg4 e5 39.a3 c2+ 40.f1 f7 41.e4 – Botvinnik’s sealed move.

41...d2

Tal says here “Botvinnik thought that Black could have more easily secured a draw with 41...c4 42.d3 d2 43.c3 c2 [but] we did not want to exchange rooks.”

Tal’s reluctance to exchange was well founded, and Botvinnik was wrong. White wins in this line, viz. 44.xc2 e3+ 45.e2 xxc2 46.e5 d4+ 47.e3 b3 48.e4 d2+ 49.d5! xf3 50.e6+ e7 51.g3 d2 52.f5+ f6 53.e7 f7
54.\texttt{c}e\texttt{c}5! \texttt{c} (if 54.\texttt{d}d\texttt{d}6? \texttt{c}c4+ 55.\texttt{d}d\texttt{d}7 \texttt{d}e\texttt{e}5+ 56.\texttt{d}d\texttt{d}8 \texttt{d}c6+ 57.\texttt{d}d\texttt{d}7 \texttt{x}e7 draw, or 54.\texttt{c}c\texttt{c}6? \texttt{c}c4 55.\texttt{c}c\texttt{c}7 \texttt{x}e8 draw) 54...\texttt{d}e4+ 55.\texttt{d}d\texttt{d}6 \texttt{f}f6 56.\texttt{d}d\texttt{d}6 \texttt{d}e4+ 57.\texttt{d}d\texttt{d}7 \texttt{d}e\texttt{e}5+ 58.\texttt{c}c\texttt{c}7 \texttt{e}e8 59.\texttt{c}c\texttt{c}6 \texttt{d}e6 60.\texttt{d}d\texttt{d}6 \texttt{f}f7 61.\texttt{e}e8\texttt{f}f+ \texttt{e}e8 62.\texttt{d}d\texttt{d}6 and Stockfish announces mate in 17.

42.\texttt{e}e1

Tal mentions here that on 42...\texttt{e}e\texttt{e}d3, “my opponent was prepared to play the clever combination 43.\texttt{a}a\texttt{a}5 \texttt{e}e6(?) 44.f4 \texttt{e}e3+ 45.\texttt{f}f1, and after 45...\texttt{g}x\texttt{f}4 46.\texttt{d}f4+ [Black] loses.” True, however Black can counter the cleverness with 43...\texttt{e}e\texttt{e}3+!

44.\texttt{f}f2 (if 44.\texttt{d}d\texttt{d}1 \texttt{d}f3, and of course not 44.\texttt{d}d2? \texttt{d}c4+) 44...\texttt{e}f3+ 45.\texttt{g}f2 \texttt{d}c6 46.\texttt{x}g5 \texttt{e}e3 47.\texttt{f}f5+ \texttt{e}e7, and Black should draw (+0.76 SF/39).

42...\texttt{g}g2 43.\texttt{b}b3 \texttt{e}e7 44.\texttt{g}g7 \texttt{x}f3+! – Not strictly necessary, as any of several other moves maintain equality, but practically speaking perhaps the easiest and clearest way to force the draw. 45.\texttt{f}f3 \texttt{x}g4 46.\texttt{f}f5+ \texttt{e}e6 47.\texttt{g}g3 \texttt{h}h5 48.\texttt{h}h5 \texttt{x}e4+ 49.\texttt{f}f2 \texttt{e}e5 50.\texttt{g}g3 \texttt{h}h4 51.\texttt{g}g7 \texttt{f}f4 52.\texttt{a}a3 \texttt{d}d4 53.\texttt{a}a6 \texttt{d}d6 54.\texttt{a}a7 \texttt{d}d4 55.\texttt{a}a7 \texttt{f}f4 56.\texttt{a}a7+ \texttt{g}f6 57.\texttt{a}a7 \texttt{e}e4 58.\texttt{h}h5+ \texttt{g}g6 59.\texttt{f}f3 \texttt{b}b4 60.\texttt{g}g3 \texttt{f}f4+ 61.\texttt{e}e3 \texttt{f}f7 62.\texttt{a}a5 \texttt{f}f6 63.\texttt{e}e4 \texttt{f}f5 64.\texttt{a}a6+ \texttt{g}g7 65.\texttt{g}g3 \texttt{e}e5+ 66.\texttt{f}f4 \texttt{b}b5 67.\texttt{e}e4 \texttt{f}f7 68.\texttt{f}f5 \texttt{b}b4+ 69.\texttt{d}d4 \texttt{b}b1 70.\texttt{f}f3 \texttt{b}b4+ 71.\texttt{d}d4 \texttt{b}b1 72.\texttt{c}c6 \texttt{g}g6 73.\texttt{e}e5+ \texttt{h}h5 74.\texttt{a}a5 \texttt{e}e1+ 75.\texttt{f}f3 \texttt{f}f1+ 76.\texttt{g}g3 \texttt{f}f4 ½–½
Game 19, Tal-Botvinnik, Moscow, 3 May 1960, Dutch Defense [A87]: A very exciting game, a tactical slugfest in welcome contrast to some of the long, drawn-out (and drawn) endgames, and the last decisive encounter of the match. Tal sometimes underestimates his chances, sometimes overestimates, but he deserves high praise for his sound judgment at move 25.

1.c4 f5 2.d3 f6 3.g3 g6 4.Bg2 g7 5.d4 d6 6.c3 c6 7.0–0 0–0 8.Qc2 c6 9.d1 e7 10.h1 a5 11.a3 d8 12.e4

12...f×e4

Tal provides yet another understated comment here: “12...e5 seems very risky, since, after the opening of lines, the game will swing in White’s favor ... I intended to play 13.g5, and on 13.c6 14.c5?!, with complications in the center which would be advantageous for White.”

Indeed they would be, e.g.
(a) 14.f×e4 15.c×d6 e6 (15...d×d6?? 16.d×e5--) 16.d×e4 e×e4 17.×e4 e×d4 18.h4 f7 19.e7 e8 20.d×d4 (+1.42 K/20), or
(b) 14.d5 15.d×f6 d×f6 16.d×e5 e×e5 17.e×d5

17.f6 (if 17...c×d5?? 18.d×d5 g7 19.d×e5 d×e5 20.e1 g7 21.b6 b8 22.c4+ e6 23.f4 +6.84 K/20) 18.d6 (+2.22 K/20).
13.\textit{\texttt{\textbf{\textdollar}e4 \texttt{\textbf{\textdollar}e4 14.\texttt{\textbf{\textdollar}xe4 \texttt{\textbf{\textdollar}f7 15.h3 \texttt{\textbf{\textdollar}f6 16.d2}}}}}

\begin{center}
\includegraphics[width=0.4\textwidth]{chess_board_1.png}
\end{center}

16...d5

Here Tal says “Black would get a good game after the quiet 16...c6! and on 17.c3 either 17...e5
18.\texttt{\textbf{\textdollar}xc8 \texttt{\textbf{\textdollar}xc8 19.dxe5 dxe5, with a threat of \texttt{\textbf{\textdollar}f7-d6, or 17...d5, and Black has obtained a very
advantageous position.” The engines do not agree with his assessment, especially at the end of the
first variation,

\begin{center}
\includegraphics[width=0.4\textwidth]{chess_board_2.png}
\end{center}

when 20.c5! would end any notions of \texttt{\textbf{\textdollar}f7-d6 (+0.92 K/22, +1.00 SF/28). Somewhat better is the
second line, 17...d5,

\begin{center}
\includegraphics[width=0.4\textwidth]{chess_board_3.png}
\end{center}

but after 18.\texttt{\textbf{\textdollar}e3 \texttt{\textbf{\textdollar}d6 19.e5 both engines still see White as better (about +0.65).

17.\texttt{\textbf{\textdollar}e2 dxc4 18.f4 \texttt{\textbf{\textdollar}d6 19.g5}}}

\begin{center}
\includegraphics[width=0.4\textwidth]{chess_board_4.png}
\end{center}
Tal considered this “even stronger than 19.\text{e}5,” but almost certainly it was not. Tal and Botvinnik both overlooked how Black might have started some interesting counter-play with 19...\text{h}6?,

forcing 20.\text{x}e6+ (if 20.\text{x}e6? \text{x}f4 21.\text{x}f4 \text{x}h3 22.\text{x}h3 \text{e}ae8=) 20...\text{x}e6 21.\text{x}e6+ \text{f}7 22.\text{x}f6 \text{x}f6 with an even game.

19...\text{e}8 20.\text{g}2 \text{a}6 21.\text{e}4 \text{x}e4 22.\text{x}e4 b5 23.b3 cxb3 24.\text{x}b5 \text{f}8

25.\text{x}b3

Tal remarks that “during the game, it seemed to me that even stronger was 25.\text{b}c1! followed by immediate activation of the rooks,” but adding that he rejected it because “I did not want to annoy my second again. After 25...\text{b}6 26.\text{x}a5 e5 (? \text{c}26...\text{b}7!? 27.\text{x}c7 \text{e}4 28.\text{x}b6 \text{d}5=) 27.dxe5 \text{f}7 (? \text{c}27...\text{e}7=), the position would be very sharp.”

Indeed, so sharp that Black has impaled himself: 28.e6 \text{f}6 (if 28...\text{x}e6/\text{x}e6 29.\text{d}5+-, or 28...\text{x}e6 29.\text{x}c7 \text{f}6 30.\text{x}b6+-) 29.\text{x}c7 (+3.81 K/20).
However, Tal is fortunate that he avoided annoying his second, and played the “simple and good” 25.\texttt{Qxb3}, because 25.\texttt{bc1?!} could have been met by 25...g5!

Based mainly on the fact that this allows Black to keep his passed pawn at b6 (obviously, if now 26.\texttt{Qxb3?? gxf4+}), he gains at least equality in all variations:

(a) 26.\texttt{Axc7 Qxf2+ 27.Kh1 a4=};
(b) 26.\texttt{Bxc7 gxf4 27.Bxc8 Rxc8 28.Qxa6 Rf8=};
(c) 26.\texttt{Be5 Qxf2+ 27.Kh1}

with now two possibilities:

(c1) Black can force White to take a draw with 27...\texttt{Rb6 28.Qxc7} (anything else loses) 28...\texttt{Qxb6} 29.\texttt{Qg7+ Kh8} 30.\texttt{Qh7+ Kg8} 31.\texttt{Qg7+} etc.;
(c2) Black can maintain the tension and try for more with 27...\texttt{c6?!} 28.\texttt{Qxb3} [not 28.\texttt{Axc6?? Axc6}
29.\texttt{Axc6 Axe5} 30.dxe5 \texttt{Qf7} 31.\texttt{Af1} (if 31.\texttt{Af5 Ab7+ 32.\texttt{Kf1 Qf3+})} 31...\texttt{Ab7} 32.\texttt{Qxf7 Axc6+}
33.\texttt{Bxc6 Qxf7} 34.\texttt{b6 a4++} ] 28...\texttt{Axe5} 29.dxe5 \texttt{Rb6=};
(d) 26.\texttt{Be3 Axb6} 27.\texttt{Qd3}

with equality after either:

(d1) 27...\texttt{a6} 28.\texttt{Qb1 Ae2} 29.\texttt{Be1 Af3} 30.\texttt{Qh7+ Kh8}, or

(d2) 27...\texttt{Ab7} 28.d5 exd5 29.\texttt{Qh7+ Kh8} 30.\texttt{Axc7} b2 31.\texttt{Axb6 Axh6} 32.\texttt{Qc2 Aa6}.
(e) 26.\texttt{Qxg5?! Axxg5} 27.\texttt{Axxg5 Axf7} 28.\texttt{Axf4 a4}
29.\textit{c}4 (if 29.\textit{x}c7?? \textit{x}c7 30.\textit{x}c7 \textit{f}8! 31.a1 b2 32.a2 b7 -5.18) 29...d7 30.e3 e5 31.d5 f8 32.c1 a5+;

(f) White can even lose if he’s not careful, for example 26.g5??

26...\textit{x}f2+ 27.h1 b6 28.d3 a6 29.e3 xxe3 30.xe3 b2 31.b1 c4 32.d2 a2 33.a5 xbl 34.xbl b3 (-6.21).

Returning to the game, after 25.\textit{x}b3:

25...b6 26.e3 xbl 27.xb1 b7 28.a2 d5 29.xd5 exd5 30.xc7 a4 31.d3 f5 32.e5 h6 33.e2 c8 34.f3 h3 35.c7! f8 36.b5!

36...e6
Here Tal mentions that on 36...\textit{h}5 37.\textit{e}f4 \textit{c}x\textit{c}7 38.\textit{e}xf8+ \textit{xf}8 39.\textit{h}8+ the queen ending is won for White. This is true, but White can do even better with 37.\textit{g}2!, forcing 37...\textit{c}x\textit{c}7 38.\textit{e}8\textit{f}3+ (if 38...\textit{h}6 39.\textit{e}6+ etc.) 39.\textit{f}3 with an easy \textit{g}-vs-\textit{c} ending (+5.16).

37.\textit{e}5 \textit{c}6 38.\textit{a}5 \textit{a}8 39.\textit{d}2 \textit{c}8 40.\textit{g}2 \textit{d}7 41.h4 \textit{g}4 1-0

\textit{Game 20, Botvinnik-Tal, Moscow, 5 May 1960, Nimzo-Indian Defense [E24]}: A short but intense draw, in which Botvinnik’s prepared opening novelty almost had Tal beat before he got his pieces out of the box. Tal was fortunate that he did not get the chance to play some of the lines he contemplated during the game.

1.d4 \textit{f}6 2.c4 \textit{e}6 3.\textit{c}3 \textit{b}4 4.a3 \textit{c}c3+ 5.bxc3 \textit{e}4 6.e3 \textit{f}5 7.\textit{h}5+ – ChessBase indicates this was the first time for this move in serious competition. Despite Botvinnik’s near-success here, it has seldom been played since. ChessBase gives only a dozen other games (out of 30 reaching the same position after move six), White scoring +6 -3 =3 in them. 7...\textit{g}6 8.\textit{h}6 \textit{d}6 9.f3 \textit{f}6 10.e4 \textit{e}5 11.\textit{g}5 \textit{e}7 12.\textit{d}3

12...\textit{f}8

Tal considers this move forced, but it is not, nor is it close to best. Tal correctly rejects 12...\textit{c}6? and is doubtful about 12...\textit{f}4, but he misses the best alternative, 12...\textit{g}8!: 
Now whether White keeps queens on the board with 13.Qh4 Qg7, or simplifies with 13.Bxe7 Nxh6 14.h4 f7, most of the pressure on Black is relieved.

Returning to the game:

13.Qe2

Examining 13.Qh4 Qf7 14.h6 h8 15.h3,

Tal says “Probably Black would have had to ‘cast caution to the winds,’ continuing 15...e×d4.” Relatively best was actually 15...g8. Tal’s abandonment of caution would have been disastrous, a likely continuation after 15...e×d4 being 16.c×d4 g8 17.0–0 ×h6 18.×h6 f8 19.e3 ×c6 20.e×f5 ×d8 21.×g5+ (not 21.fxg6?! ×h3) 21...e7 22.æe1 ×g5 23.×g5,

and Black has the unpleasant choice between 23...f8 24.×h7+–, and 23...f5 24.f5 g×f5 25.f7+–.

13...f7 14.Qh4 f×e4
15.f×e4

On 15...dxe4 Tal says he intended to continue 15...Nc6:

This too would have been disastrous, *viz.* 16...dxc6+ b×c6 17.dxe5 dxe5 18.0–0 and Black is positionally ruined (+2.03 K/20). Also very strong is straightforward development by 16.0-0 d7 (16...f5? 17.g3) 17.ad1 (+2.88 SF/28). Correct instead after 15...dxe4? is 15...e4, and after either 16...xe4 e×c4 or 16.fx e4 c6, White’s advantage is small.

No further corrections or improvements were found.

15...Ng4 16.h3 Qf2+ 17.d2 ×h4 18.d2 h4 f2 19. hf1 d3 20. f8+ f8 21.d3 e6 22.g3 d7 23.f1 a6 24.f2 g7 25.d2 f8 26.e3 b6 27.b1 f6 ½–½

**Game 21, Tal-Botvinnik, Moscow, 7 May 1960, Queen’s Indian Defense [E19]:** Acknowledging that his position in the match was hopeless, Botvinnik offered a draw after just 17 moves, which Tal naturally accepted, thus winning the title 12½–8½. We found nothing worthy of comment in the game itself, and give it here just for the sake of completeness.

1.d4 f6 2.c4 e6 3.f3 b6 4.g3 b7 5.g2 e7 6.0–0 0–0 7.c3 e4 8.c2 c3 9.f3 f5 10.b3 f6 11.b2 d6 12.ad1 e7 13.e1 xg2 14.g2 c6 15.f3 d7 16.f4 ae8 17.d5 d8 ½–½
Technical and Methodological Appendix

As a scientist must explain his experimental technique in a detailed way that will allow others to replicate it and check the validity of his results, so I will do with my analytical methodology.

The games and annotations in *Tal-Botvinnik 1960* were examined using Komodo 11.2.2 and Stockfish 10, both among the strongest of all analytical engines, rated about 3400 Elo, running on a Dell Inspiron 17 7000 Series with an Intel Core i7-7500U CPU at 2.90 GHz with 16 GB RAM and a 64-bit operating system. Usually the 2-cpu setting was used. The games were accessed via ChessBase 14 with the engines running in “kibitzer” mode, though I kept a copy of the book (the fifth edition from Russell Enterprises, 2000) always at hand, to check for any notational errors databases are sometimes prey to.

In my experience Komodo is generally the stronger engine in the middle game, Stockfish the stronger in endgames, and so I alternated between them accordingly. Stockfish 10 seems notably stronger than SF8, so I used it more often than in previous projects, but it had an annoying tendency to freeze my keyboard. So I usually went through a game with the less recalcitrant Komodo first, then often double-checked key points with Stockfish later. Generally when the “editorial we” is used, I am speaking for both the engines and myself.

Rather than the usual, somewhat vague annotation symbols (+, −, ±, ≠ etc.), I have generally used the engines’ numerical assessment — e.g. 28.Rf5 (+2.58), or 35.Qxf3 g7 (-2.25) — to indicate the status of a position, as I consider this more precise and informative. The numbers represent Komodo’s and/or Stockfish’s evaluation of the position to the nearest hundredth of a pawn, e.g. a difference of exactly one pawn, with no other relevant non-material differences, has the value +1.00 when in White’s favor, or -1.00 when in Black’s. A position where White is considered better by 3½ pawns (or the equivalent, such as a minor piece) would get the value +3.50, the advantage of a rook +5.00, etc. With the symbols, a position where White is up knight for pawn, and another where he’s up a queen, would both get a “+−”, but there is obviously a big difference.

Stockfish seemed to have stronger opinions than Komodo, e.g. a position Komodo assessed at +2.35 might get +2.95 from Stockfish. Still, this was always a matter of degree; there was never an instance where Komodo said +2.35 while Stockfish said -2.35.

These numbers should not always be taken entirely at face value, especially to the right of the decimal point, and they will vary some from one machine to another, or with the time allowed for analysis, but they are generally valid and reliable, and serve as useful shorthand for assessments and comparisons that would otherwise require extensive detailed explanation. I generally tried to reach at least 20 ply deep, and often deeper, before stopping the analysis. In certain endgames, Stockfish can reach 40 or 50 ply in just minutes.

I looked for corrections, additions and enhancements that were significant: not minor half-pawn differences, but cases where an important tactical shot was missed, where a resource that could have changed a loss to a draw or win was overlooked, where a good move was called bad (or vice versa), where a position was misevaluated, or an unsound variation was proposed. Also cases
where there was no real mistake, but an especially interesting variation, or a much stronger one, could be highlighted. I was not concerned with changes in opening theory since 1960. I looked for errors of both commission and omission.

Some positions required much more analysis than others. As the proverb (either ancient Hindu, Russian, or modern apocrypha) says, “Chess is a sea in which a gnat may drink and an elephant may bathe.” In high-level chess one sometimes comes across a game in which several elephants could drown, the complexity being too great for even a 3400-rated engine to fathom. Such positions, though unresolved, are presented when their unresolvability contrasts with a definite verdict by Tal.