

## GM Alex Fishbein on the Endings

IN PURSUIT OF 30,000  
ENDGAME PATTERNS YOU  
NEED TO KNOW

# A HUGE ENDGAME ALPHABET

In ACM issue #21, our endgame specialist GM Alex Fishbein, directed the spotlight on memorable metaphors on the road to endgame mastery. This time around the metaphors might not be that “memorable,” but the positions certainly are – imagine that this is like a huge endgame alphabet you need to learn by heart in order to apply it properly.



**M**y friend Robert Glassman, a New Jersey expert, once asked Garry Kasparov: “What separates a top-level GM from a weaker GM (or a non-GM)?”

Garry K’s answer was “The top-level GM knows 30,000 patterns. Weaker players know 10,000 patterns, if that.”

To “know” a position, or a type of position, means that you don’t need to calculate anything: you are fully confident of the evaluation of the position and familiar with the basic plans. It could be called “intuition,” but it’s stronger than that: it’s knowledge that allows you to quickly make decisions that would otherwise be very difficult.

In this article, I would like to explore some important endgame patterns and talk about expanding your knowledge base by connecting and generalizing examples you run across.

### The Eternal Bishop

Alexander Alekhine’s Nottingham 1936 book has several famous quotes. One of my favorites is in the very first game, Alekhine-Flohr: (Don’t worry, I am not going to send you on another dreamy trip to the past; the rest of this article will feature modern chess.)



CHESS JOURNALISTS OF AMERICA

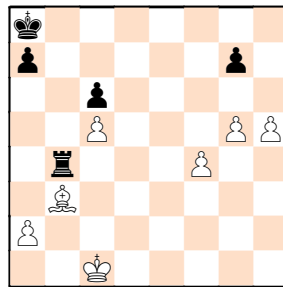


**Alex Fishbein** is an American grandmaster, residing in Tennessee. He was the winner of the inaugural Denker Tournament of High School Champions in 1985. He won several national and international tournaments in the 1990s, including in Denmark and Norway, and became a grandmaster in 1992. He then began a career in finance but continued to compete in his spare time, including four times in the U.S. Championship in the 2000s. He is known for his endgame knowledge, having won the Best Endgame Prize in the 2004 U.S. Championship, written a well-received book on pawn endings in 1993 and helped in revising Dvoretsky's *Endgame Manual* in 2020.

writes: “One of the combinations that an experienced player does not need to calculate to a finish. He **knows** that under the given circumstances the kingside pawns must become overwhelming.”

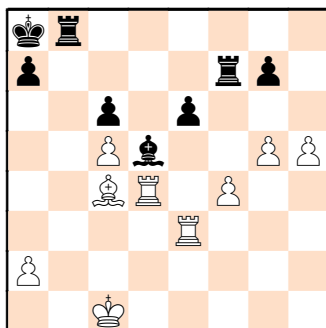
Alekhine emphasized “knows” in bold print. And as a Russian schoolboy, I also saw this example in one of Kotov’s books, with a wish that the reader also will “know” many positions. Of course, to me it was still a mystery why sacrificing the exchange is such an obvious winning plan. Today, the engine prefers 46.♔xd5 exd5 47.♞e6, but Alekhine’s method might teach us something.

46...♔xe6 47.♔xe6 ♜fb7 48.♔b3 ♞h8 I would prefer this finale: 48...♞b4 49.♞xb4 ♞xb4

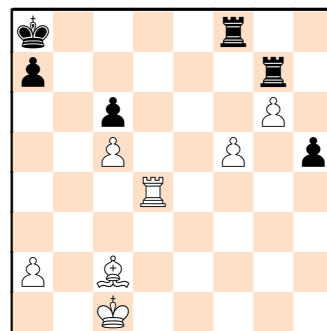


50.h6 g6 51.g6! Note that the bishop is defended by one pawn and guides the second pawn to promotion. 51...♞xf4 52.g7+-.

49.h6! g6 50.g6 ♞g7 51.f5 ♞f8 52.♔c2 h5



46.♞xe6 The fourth world champion



53.♞d6 ♞e7 54.f6 ♞e1+ 55.♔d2 ♞f1 56.f7 h4 57.♞d7 Black resigned

Not too complicated. But what are we supposed to know? Under what “given circumstances” will the pawns be overwhelming? Alekhine didn’t say, and I don’t remember if Kotov did.

The white bishop was stronger than the opposing rook. In a geometric sense, the bishop is actually a longer-range piece than a rook: it can sit in one corner and attack the opposite corner of the board. A rook cannot do that.

This endgame was a simple example of a pattern I will call “the eternal bishop”: a bishop that is securely

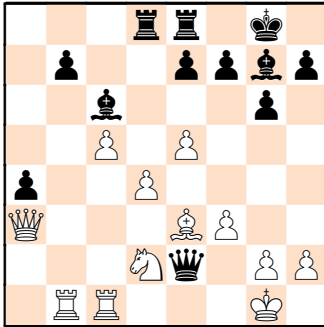


guarded by a pawn and is in touch with another of its pawns, usually a passed one.

Let's see a more recent example:

Fabiano Caruana	2792
Magnus Carlsen	2865

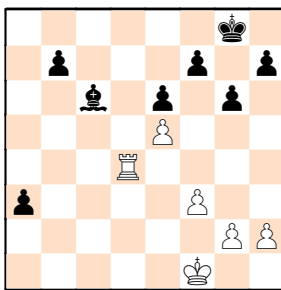
Tata Steel Masters, Wijk aan Zee 2022



26...Rxd4! This certainly looks like an interesting exchange sacrifice, but is it so obvious Black is better after this? It might have been to Magnus Carlsen. The bishop on c6 is an eternal bishop: it's protected by a pawn, protects another passed pawn, and can only be displaced at the cost of a rook.

27.♙xd4 ♖xd2 28.♞d1 ♕f4 29.♜b4 e6 30.♙c3 In the endgame, the eternal bishop will be even stronger!

30...♜xb4! 31.♙xb4 31...♞xb4 ♙f8! 32.♙d4 ♞d8 33.♞a1 loses tactically to 33...♞xd4! 34.♞xd4 ♙xc5 35.♞ad1 a3 36.♙f1 ♙xd4 37.♞xd4



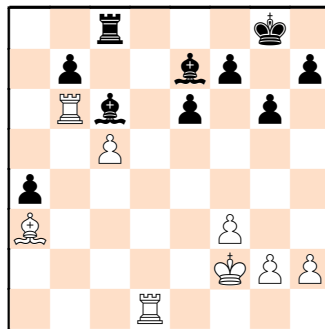
37...b5! 38.♙e1 b4! 39.♞xb4 a2 and the bishop protects both squares on the a-file that the white rook can touch: a4 and a8.

31...♙xe5 32.♙a3 ♙f6 33.♙f2 ♙e7 34.♞b6 ♞c8



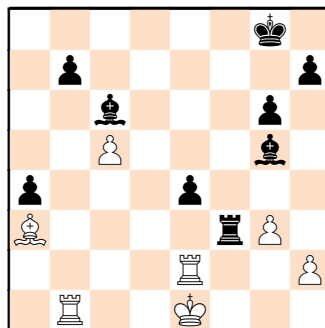
▲ Fabiano Caruana and Magnus Carlsen.

Photo by Lennart Ootes



Black has two pawns for the exchange, which means that the eternal bishop will soon have a brother in arms, the e-pawn.

35.♞d2 f6 36.f4 e5 37.fxe5 fxe5 38.♞e2 ♞f8+ 39.♙e1 ♞f5 40.♞b1 e4 41.♞c1 ♙h4+ 42.g3 ♙g5 43.♞b1 ♞f3

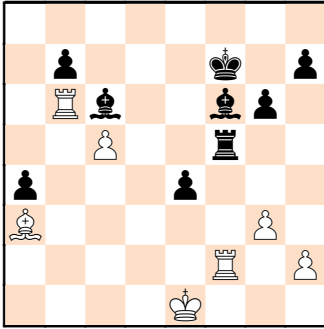


To "know" a position, or a type of position, means that you don't need to calculate anything: you are fully confident of the evaluation of the position and familiar with the basic plans. It could be called "intuition," but it's stronger than that: it's knowledge that allows you to quickly make decisions that would otherwise be very difficult.



White's pieces are hopelessly passive, trying to guard the two passed pawns.

44.♙c1 ♘f6 45.♞b6 ♜f5 46.♙a3 ♔f7 47.♞f2



47...♞f3! 48.♞xf3 48.♙b2 ♙d8!

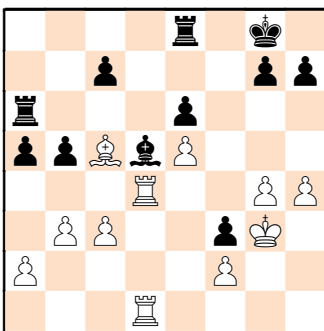
48...exf3 49.♔f1 ♙d4 White resigned

The first check against the white king on f1 will be decisive. Are you convinced now that the eternal bishop is stronger than a rook?

Alekhine and Kotov notwithstanding, I probably got my first introduction to the eternal bishop from the following game:

Anatoly Karpov	2725
Viktor Korchnoi	2665

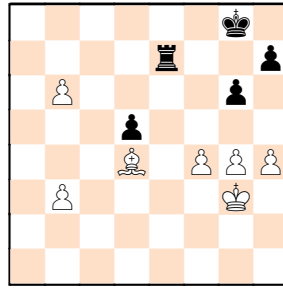
Game 14, World Championship Match, Baguio City 1978



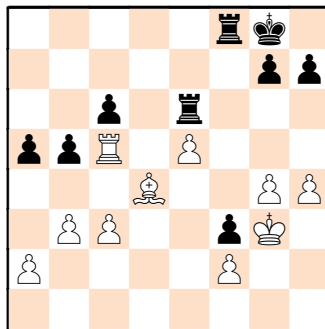
28...♞c6? Underestimating the exchange sacrifice.

29.♞xd5! exd5 30.♞xd5 ♞ce6 31.♙d4 c6 32.♞c5 ♞f8 A critical point. It makes sense to try to trade rooks with 32...♞d8, and the resulting variation was analyzed by Karpov, and later by Kasparov: 33.♔xf3 ♞d5 34.♞xd5 cxd5 35.a3! ♞c6

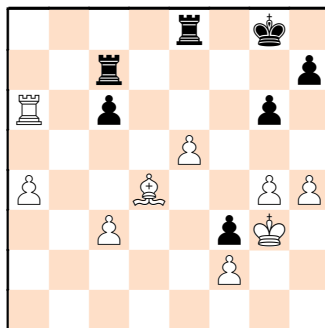
36.♔g3! b4 37.axb4 axb4 38.cxb4 ♞c1 39.e6 ♞e1 40.b5 ♞xe6 41.b6 ♞e7 42.f4 g6



Kasparov got to this position and thought Black could draw, but the bishop becomes eternal again with 43.♙e5! ♔f7 44.♔f3! and White wins easily. The king walks over to the queenside and Black cannot do the same in time, e.g. 44...♔e8 45.♔e3 ♞f7 46.♔d4 ♔d8 47.♔xd5 ♔c8 48.♔c6, etc.



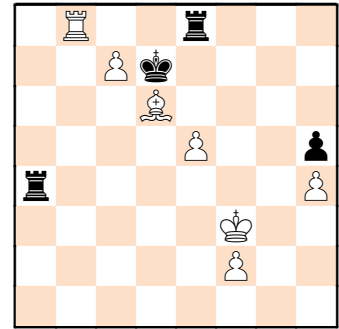
33.a4! bxa4 34.bxa4 g6 35.♞xa5 ♞ee8 36.♞a7 ♞f7 37.♞a6 ♞c7



38.♙c5! The bishop slides to its next eternal post, moving its convoy with it.

38...♞cc8 39.♙d6 ♞a8 40.♞xc6 ♞xa4 41.♔xf3 h5 42.gxh5 gxh5 43.c4 ♞a2 44.♞b6 ♔f7 45.c5 ♞a4 46.c6 ♔e6

47.c7 ♔d7 48.♞b8



The triumph of the bishop and its diagonal army!

48...♞c8 49.♔e3 ♞xh4 50.e6+! Black resigned

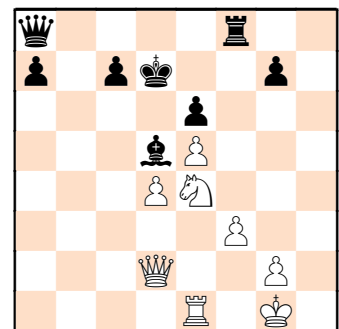
On 50...♔xe6 the bishop delivers the final blow with 51.♙g3!

### Rook Endings Are Always Drawn!?

Tarrasch's dictum, while exaggerated for stronger effect, still rings true. But "drawn" does not mean the game will end in a draw, as we shall see. Elite GM Alireza Firouzja demonstrated excellent knowledge of endgame patterns in this game from the Candidates' Tournament.

Teimour Radjabov	2753
Alireza Firouzja	2793

FIDE Candidates, Madrid 2022



31...♙xe4! Under a dangerous attack, Alireza heads for the safety of a pawn-down ending.

32.♞xe4 ♔d5 33.♞b4 ♞g8! 34.♞a4+ ♞c6 35.♞xa7 ♞a8! 36.♞c5 ♞xc5 37.dxc5 ♔c6



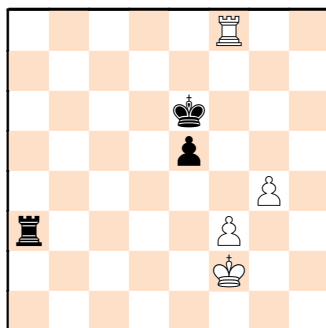


▲ Alireza Firouzja. Photo by Lennart Ootes

We have two vs. one, but with a passed pawn. Is this a draw? Yes, and you have to “know” it (in the Alekhine sense of the word). Stockfish 15 has a different word for it: “0.19”.

41.♖f7 ♜d6 42.♙f2 e5 43.g4 White’s passed pawn is not going anywhere.

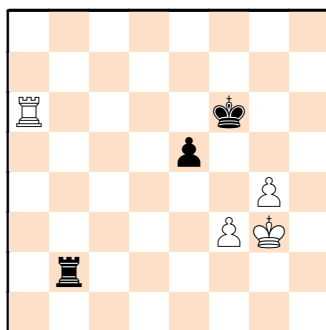
43...♙e6 44.♖f5 ♖a3! 45.♖f8 45.♙g3 runs into 45...e4!=, but now White is threatening to move the king up.



45...♙e6! 45...♖b3?? 46.♙g3! and White will win; if 46...e4 47.♖e8+.

46.♖b8 ♙f7 47.♖c8 ♙e7 48.♖c2 ♙f6 49.♖e2 ♖b3 50.♖e3 ♖b2+ 51.♙g3 ♖c2 52.♖a3 52.♙h4 is useless: 52...♖h2+.

52...♖b2 53.♖a6+

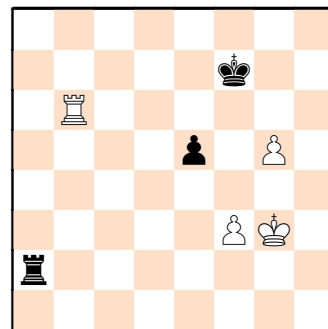


53...♙f7 53...♙g5?? 54.♖e6 ♖e2 55.♖xe5+! ♖xe5 56.f4+ ♙f6 57.fxg5+ ♙xe5 58.♙h4+-.

54.♖h6 ♖b3 55.♙f2 ♖a3 56.♖b6 ♙e7 56...♖a2+ 57.♙g3 ♙g7 would draw too.

57.♙e2 ♖c3 58.♙f2 ♖a3 59.♖b2 ♙f6 60.♖e2 ♖b3 61.♖e3 ♖b2+ 62.♙g3 ♖c2 63.♖b3 ♖a2 64.♖b6+

♙f7 65.g5



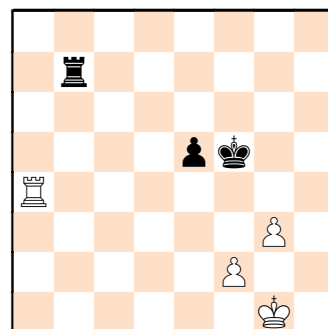
65...♖a4 66.♖f6+ ♙e7 67.♖h6 ♙f7 68.♖h4 ♖a5 69.♙g4 ♖a4+ 70.♙h5 ♖a3 71.f4 exf4 Draw

Firouzja knew this ending. How do I know this?

- 1) His rating is almost 2800 (and once went beyond that).
- 2) Although very young, he has plenty of experience in this ending!

Alireza Firouzja	2770
Shakhriyar Mamedyarov	2765

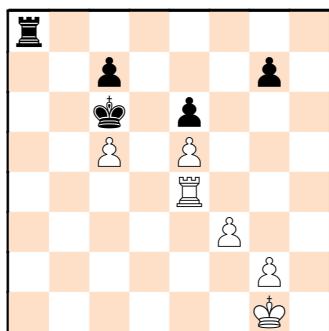
European Team Championship, Terme Catez 2021



Isn’t this the same position as the previous game?

42...e4?! If Black had kept the pawn on e5, and White played f2-f3 and g2-g4, it indeed would be. But Shakh moves the pawn to e4, creating a hidden possibility for his opponent. Therefore, a “pass” like 42...♖b2 should be preferred.

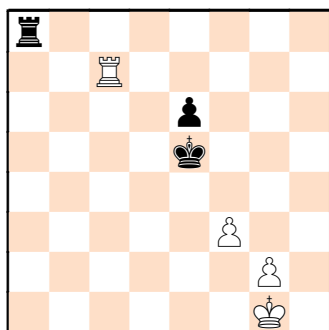
43.♖a5+ ♙f6 Certainly not 43...♙g4?? 44.♖e5 ♖b4 45.♙g2 ♖a4 46.♖xe4+!, as we saw in one of the lines of the previous example.



White’s only hope is to pick off the g-pawn, but Firouzja has seen that the black king gets active.

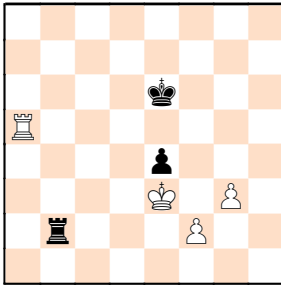
38.♖g4 ♙xc5 39.♖xg7 ♙d5 40.♖xc7 40.f4 ♙e4 41.g3 ♙f3 offers White no winning chances.

40...♙xe5





44.♔f1 ♖b3 45.♕e2 ♜c3 45...♞b2+?? would lose: 46.♕e3 ♕e6

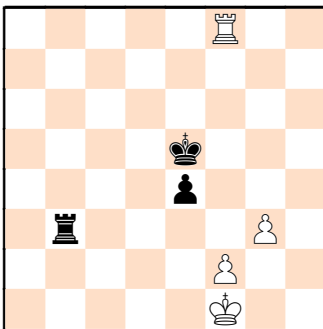


47.♞h5 ♕f6 48.♞h4 ♕f5 49.♞f4+.

46.♞a8! ♞b3 47.♞f8+ White tests the black king.

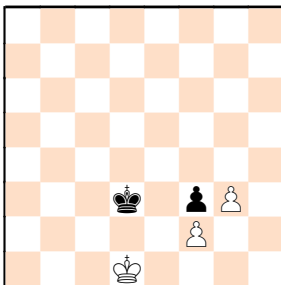
47...♕e5 Of course, not 47...♔g5?? 48.♞f4+-.

48.♔f1!



Huh? Aren't all rook endings drawn? If so, how does Black stop the obvious white plan of ♔f1-g2-h3 and then move forward with the g-pawn?

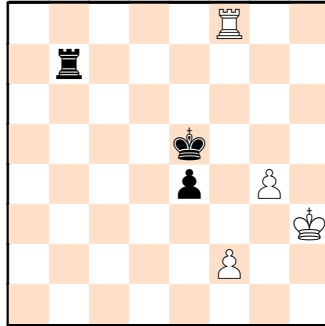
48...♔d4? There was only one way: 48...♞f3! 49.♞xf3 (49.♞e8+ ♔d4 50.♔g2 ♞f7 51.g4 ♞f4 52.♔g3 ♞f3+) 49...exf3 50.♕e1 ♕e4 51.♔d1 ♔d3



Add this to your known patterns. White

cannot win. 52.♕e1 (52.♔c1?? ♕e2+-) 52...♕e4 53.♔f1 ♕f5 54.♔g1 ♕g5! (54...♔g4?? 55.♕h2+-) 55.♕h1 ♕f5 56.♕h2 ♕g4 57.♔g1 ♕f5= (57...♔h3?? 58.♔f1+-).

49.♔g2 ♞b7 50.♔h3 ♕e5 51.g4



The ending was drawn, but it didn't end in a draw.

Ironically, Firouzja later drew a pawn-down ending with a similar structure against the same opponent, Mamedyarov! He had plenty of opportunity to learn all the subtleties of these endings. And with the modern time controls when you have only minutes, or seconds, remaining to find the right move at the end, this knowledge becomes critical.

The good news is that, in the last five years, computers have learned to evaluate endings very well. A skilled computer user (and skilled chess player) can learn a lot more endgame theory now than the Russian schoolboy could even dream about.

On the subject of dreaming, the next endgame pattern I want to show you is one that I feel a personal connection with. When I was 12 years old (and a USCF expert), I was trying to solve this position in my head before going to sleep.

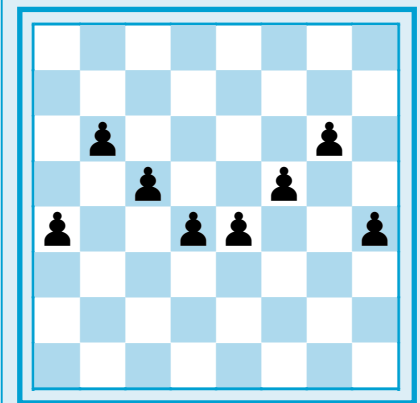
### Two Knights versus King and a Knight Pawn

I was always fascinated by the Two Knights vs. Pawn endgame. It is a paradox that two knights cannot force checkmate against a lone king, but can force mate if the defender has a pawn. The king and the free knight, helped

occasionally by the blockading knight which guards some squares, drive the enemy king to the corner and confine it to two squares. Then the blockading knight releases the pawn and helps stalemate the black king, while the pawn tries to queen. If the queen shows up too late, the two knights will force mate.

### Troitsky line

This plan depends on the pawn being safely blockaded by a knight behind the "Troitsky line:"



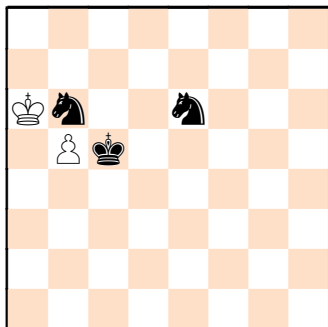
This means that if the pawn is blockaded on e4 or d4 by a knight on e3 (d3), White wins. If it's on h4, White also wins. But a g-pawn draws even if it's blockaded as far back as g5! That didn't make logical sense to me.

I occasionally had difficulty falling asleep, and sleeping pills were not recommended for a 12-year-old kid. I remember that, when I couldn't sleep, I would try to move these two knights in my head and try to figure out why they can't win against a pawn on g5. I found the answer: stalemate!



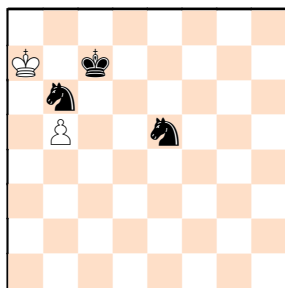
**Parham Maghsoodloo** 2716  
**Pentala Harikrishna** 2701

Prague Masters 2022



Here, the pawn is advanced even one square further than it needs to be. This makes the drawing technique really simple. But you're not going to find it over the board if you don't know it!

**58.♔b7?!** 58.♔a5! The easiest way to defend is to keep the king near the pawn. Black cannot drive the white king away without worsening his own king position. 58...♖c7 is stalemate: this is what is special about the knight pawn! And if 58...♖d4 59.♔a6 ♖f5 60.♔a5 ♖d6 61.♔a6 the king just keeps hanging around the pawn. For example, 61...♖dc4 62.♔a7 ♔d6 63.♔a6 ♔d7 64.♔a7 ♔c7 65.♔a6 ♖e5 66.♔a7



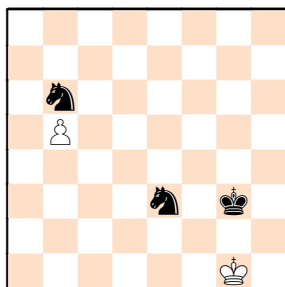
Even though the white king is near the corner, Black cannot do anything. If the knight ever leaves b6, the pawn moves and the game ends. 66...♖ed7 67.♔a6 ♖c5+ Here is the only trap! 68.♔a5 (Not 68.♔a7?? ♖c8+ 69.♔a8 ♖d7 70.b6+ ♖dxb6 mate.) 68...♔b7 How else can Black kick the king out? 69.♔b4 and now the white king reaches h1, where the draw is guaranteed because the white queen from b8 will cover the crucial g3 square. Let's prove it: 69...♖cd7 70.♔c3



▲ Pentala Harikrishna

Photo by Anezka Kruzikova

♔c7 71.♔d3 ♔d6 72.♔e3 ♔d5 73.♔f2 ♔e4 74.♔g1 ♖e5 75.♔h1 ♔f4 76.♔g1 ♔f3 77.♔h1 ♖g4 78.♔g1 ♖e3 79.♔h1 ♔g3 80.♔g1



This is the best Black can do: the white king only has two squares. But there is no checkmate after 80...♖bd5 81.b6 ♖f4 82.b7 ♖h3+ 83.♔h1 ♖g4 because White queens with check. If Black had cut off the king with the knight from f4 and king from f2, then in the final position there is no ...♖g3 mate, again because of the new white queen.

This method also works with the pawn on b4. In that case, when Black forces the king out of the refuge, it dare not go to the h1 corner, but at the right time it can come back toward the a4-a5 squares. Iranian GM, former U-20 World Champion, Parham Maghsoodloo did not know this method and chose the most natural defense: going away from the a8 corner.

**58...♖d8+ 59.♔c7 ♖f7 60.♔b7 ♖e5 61.♔c7 ♖ed7 62.♔d8?** Missing the

last chance to go to safety on b7 and a6. Technically, the game move would not be awarded a question mark, because the position remains drawn. But instead of holding a position which I think should be part of a top player's knowledge base (I realize my opinion is subjective), White will be forced to solve a problem over the board which I don't think can be solved with little time on the clock.

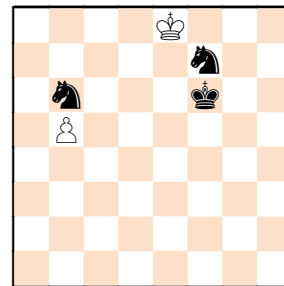
**62...♔d6 63.♔e8 ♖e5 64.♔f8 ♔e6 65.♔g7 ♔f5**



**66.♔h6?** Only 66.♔h7!! ♔g5 67.♔g7 draws. This is mutual Zugzwang.

**66...♔g4! 67.♔h7 ♔h5! 68.♔g7 ♔g5** Zugzwang for White!

**69.♔h7 ♖f7?** Returning the favor! Black wins with 69...♖g4! 70.♔g7 ♖h6! 71.♔f8 ♔f6 72.♔e8 ♖f7!



Another Zugzwang. Here after 73.♔f8 ♖d6 74.♔g8 ♖f5 75.♔f8 ♖g7 76.♔g8



same method as 69...♖g4! in this game! I will let the reader find this game, which is mentioned in the Wikipedia article on this ending!

Surprised that even Anatoly Karpov didn't know it (albeit more than 20 years ago), I asked my colleague and the world's foremost endgame theory expert Karsten Mueller whether the method of keeping the king near the pawn was well known. He said it wasn't, although he mentioned that as a safer method of defense in his annotations to the Maghsoodloo-Harikrishna game. He also pointed me to another interesting recent example, for which I will use Karsten's analysis in ChessBase Magazine:

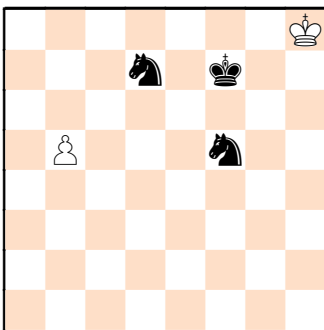
Sergey Karjakin	2760
Samuel Sevian	2634

IOM Chesscom Masters, Douglas 2018

♖e6, and the rest is easy: 77.♗h7 ♘g5 78.♘g8 ♘g6 79.♗h8 ♖d7 80.b6 ♖f6 81.b7 ♖g5 82.b8♗ ♖f7 mate.

**70.♗g7?** White misses his lucky chance with 70.♘g8! ♘g6 (70...♗f6 71.♗h7!) 71.♗f8 ♗f6 72.♗e8!, reaching the position on the previous diagram, but with Black to move. This is all rather abstract.

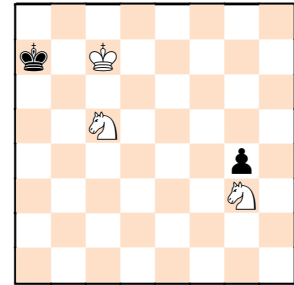
**70...♖d6 71.♗h7 ♖f5 72.♘g8 ♗f6 73.♗h7 ♗f7 74.♗h8 ♖d7**



**White resigned**

It's mate after 75.b6 ♖f6 76.b7 ♖h4 77.b8♗ ♖g6.

I also found the game Topalov-Karpov (Amber rapid 2000), where virtually the same thing happened! Karpov's king walked to the dangerous corner and got into hot water there, although his opponent let him out at one point, failing to find the

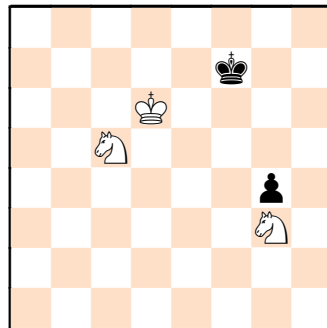


and we know from before that the a8 corner is an automatic draw: 89.♖f5 g3 90.♖d6 g2 91.♖b5+ ♗a8 92.♖a4 g1♗ 93.♖b6+ ♗xb6+.

**82.♖ce4+!** The two knights have formed a barrier. No entry to g5 and h4!

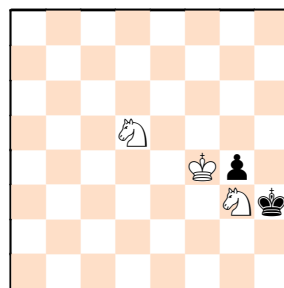
**82...♗f7 83.♖d7 ♗f8 84.♖d6 ♗g7 85.♗e6 ♗g6 86.♖de4! ♗g7 87.♗e7 ♗g8** No chance for stalemate after 87...♗g6 88.♗f8 ♗h7 89.♗f7 ♗h6 90.♗f6 ♗h7 91.♖f5! g3 92.♗f7 g2 93.♖g5+ ♗h8 94.♖e7 g1♗ 95.♖g6 mate.

**88.♗f6 ♗h7 88...♗f8 89.♖d6 ♗g8 90.♖e8 ♗f8 91.♖g7 ♗g8 92.♖e6** and mate soon.



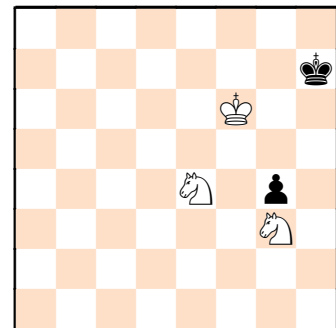
**81...♗f6?** The most dangerous corner is h8. The king must seek safety either on a8, or close to its pawn: 81...♗e8!

**A) 82.♖e6 ♗f7 83.♖c7 ♗f6 84.♖d5+ ♗f7 85.♖d7 ♗g6! 86.♗e6 ♗g5! 87.♗e5 ♗h4 88.♗f4 ♗h3=**



Safe at harbor!

**B) 82.♗e6 ♗d8! 83.♗d6 ♗c8 84.♗c6 ♗b8 85.♖d7+ ♗a8 86.♖c5 ♗b8 87.♗d7 ♗a8 88.♗c7 ♗a7**



**89.♖f5** The black king has so little room now that the blockading knight can run free.

**89...♗g8 89...g3 90.♗f7 g2 91.♖g5+ ♗h8 92.♖e7 g1♗ 93.♖g6 mate.**

**90.♗e7 g3 91.♖f6+ ♗h8 92.♗f8** Black resigned as mate arrives just in time after 92...g2 93.♖d6 g1♗ 94.♖f7 mate.

I would like to thank ACM Managing Editor, Dusan Kronic, for pointing my attention to the Maghsoodloo-Harikrishna game. He also sent me a reader's question, which I will end this article with.





## GENERAL ADVANCE

ACM reader Robert Irons asks: “My opponent resigned just when the ending was getting interesting. My knowledge of ♖+♜ endings is limited, and I find them difficult for making plans since they have lots of tactics. At the point my opponent resigned I was confident of my advantage but not how to make the most of it. My king felt comfortable at c6, but I thought I might need it to help advance the c-pawn. Any help with how to form plans in that final position would be appreciated.”

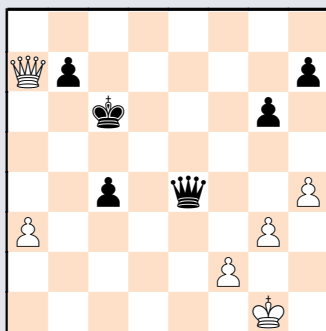
Thank you for your question, Robert Irons! You make a few good points:

- 1) In a position with lots of tactics, it's hard to make precise plans – you have to be flexible.
- 2) You are right that you need the king to march forward. If there is a pattern here, it would be what Nimzovich called “General Advance” (in my English translation of *My System*). He states the rule “The advancing pawn must stay in contact with his own people.” We saw an example of this at the end of the Karpov-Korchnoi game earlier, when the pawn moved together with bishop and rook, but the general advance often requires the king (even in queen endings).
- 3) Indeed, the computer might give you “+4” or “+5”, but not tell you how to actually win the game.

Yves Souply

Robert Irons

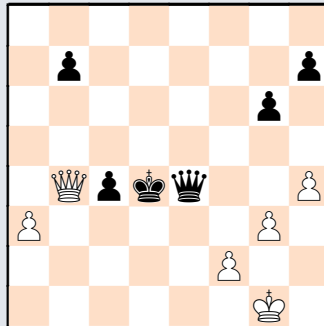
BEL-USA, Correspondence 2022



41. ♖a4+ On a waiting move like 41. ♜h2 Black can proceed with 41...c3

42. ♖a5 ♖d4! (a centralized queen guards many squares) 43. ♜h3 c2.

41... ♜c5 42. ♖b4+ ♜d4

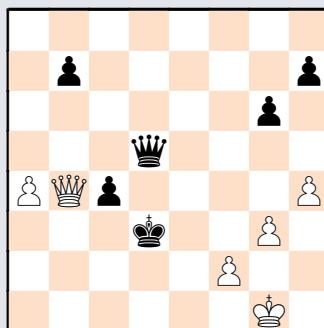


If it were Black to move, he could continue the collective advance with 43... ♖e2. If then 44. ♖xb7 ♖e1+ 45. ♜g2, Black can win by trading queens with 45... ♖e4+. Therefore, White pushes his own pawn closer to queening. But this gives Black new opportunities.

43. a4 ♖f3! Now, 43... ♖e2? 44. ♖xb7 would be only a draw, e.g. 44...c3 (44... ♖e1+ 45. ♜g2 ♖e4+?? 46. ♖xe4+ ♜xe4 47. a5 even wins for White: one tempo is everything!) 45. ♖b6+ ♜d3 46. ♖d6+ ♜c2 47. a5 ♜b1 48. a6 c2 49. ♖b6+=.

44. ♖d6+ On the other hand, with the pawn on a3, this method would not work because of 44. ♖b6+, but here, after 44... ♜c3 White does not have the check on b4, and the general advance will continue.

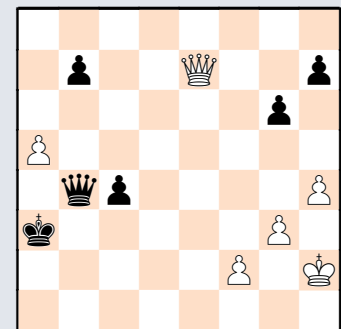
44... ♖d5! 45. ♖b4 ♜d3!



The centralized black queen defends the important b7 pawn and prevents many checks.

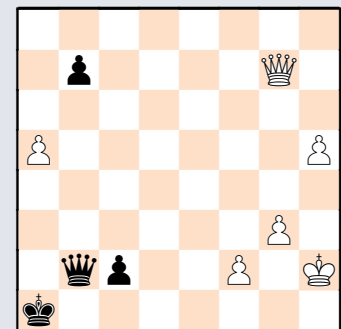
46. ♖b1+ ♜c3 47. a5 ♖f3 48. ♖b5 ♖d1+ 49. ♜h2 ♖b3 50. ♖e5+ ♜c2 50... ♜b4 is also good, looking to pick off the a-pawn. There is nothing wrong with changing the plan (chess is a dynamic game), but I want to show how the original plan, the general advance, wins.

51. ♖e2+ ♜b1 52. ♖e1+ ♜a2 53. ♖e2+ ♜a3 54. ♖e7+ ♖b4



Getting closer. White is running out of checks.

55. ♖xh7 c3 56. ♖xg6 ♜b2 57. ♖g7 ♜b1 58. ♖g6+ c2 59. h5 ♜b2 60. ♖g7+ ♜a2 61. ♖f7+ ♜a1 62. ♖g7+ ♖b2!



Finally! Mr. Irons was correct that White resigned too soon (even in a correspondence game).

This ending shows that knowing lots of patterns is not enough; you also have to apply them in concrete examples, watching out for all kinds of tactics. But the 13<sup>th</sup> world champion's main idea was right: in every game, you will run across patterns that you know, and the wider your knowledge, the stronger you are as a player. ■