



COLUMNISTS

Techniques

What is *technique* in chess? One definition is how to win a won position, but a more general definition is applying something you already know to achieve a positive goal, such as:

- 1. Achieving a draw from a known drawn position,
- 2. Winning from a winning one, or
- 3. Promoting a pawn where a certain procedure is required.

For example, it is technique to know how to win certain types of K+P vs. K endgames with the opposition, or how to mate with a Q+K vs. K.

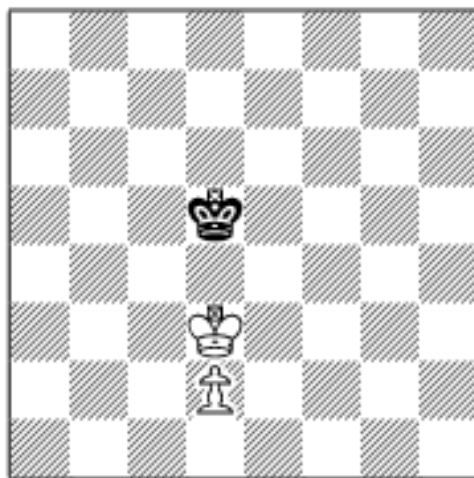
In this article I want to discuss some techniques (or, more generally, “methods”) that I sometimes use as instructional tools. The first involves the aforementioned K+P vs. K endgame.

Novice Nook

Dan Heisman

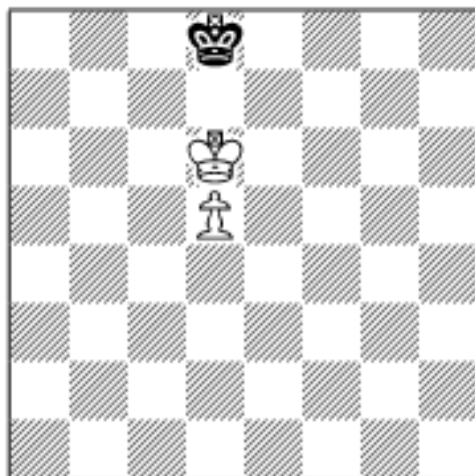
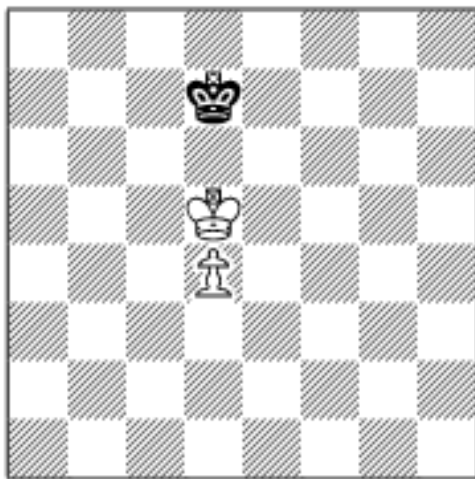
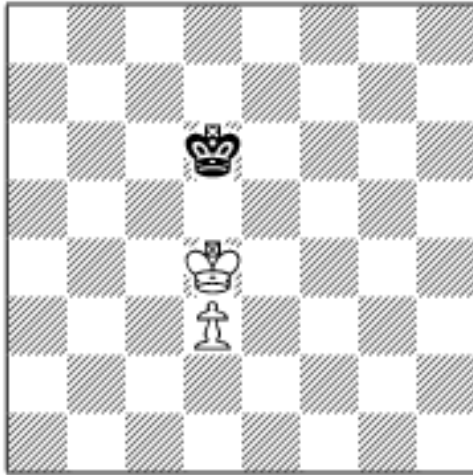


Tic-Tac-Toe



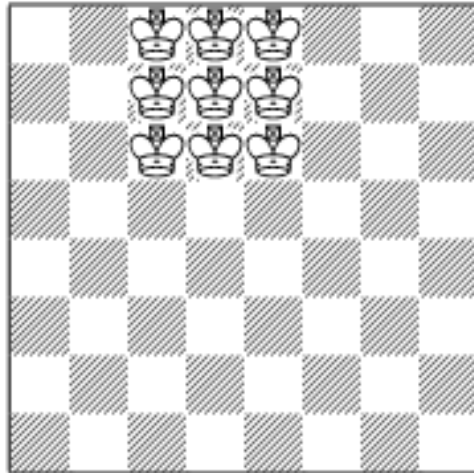
In the above position, basic endgame textbooks tell you that whoever has the “opposition” achieves his goal: White to play means that Black has the opposition, so Black achieves the draw; if Black is to play, then with best play White can win (because Black, to move, must give way and White wins by advancing his King to the fourth rank). Suppose we move

this same King and pawn vs. King structure up the board to each of the next three ranks:



If you have studied opposition, you might think that each of these three positions have the same two evaluations as the first position: White to play draws and Black to play loses. But it isn't true!

The final position of the three instead follows what I call the "Tic-Tac-Toe" rule. This rule begins: "Find the square from which the pawn would begin on its promotion move (on its 7th rank). Now form a Tic-Tac-Toe board with that 7th rank square as the middle (represented below with 9 Kings and the middle square d7)":



Now the Tic-Tac-Toe rule states:

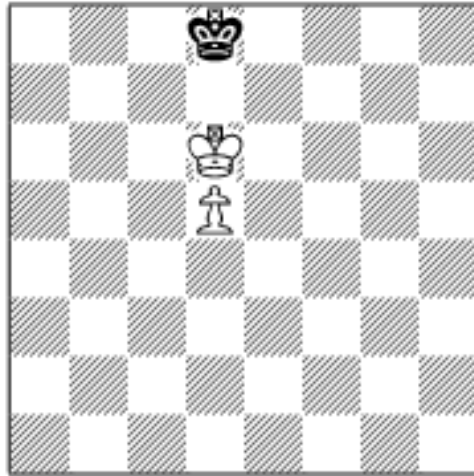
1. If the side with the pawn gets his King to any one of these 9 squares, AND
2. The pawn is on any rank behind that King, AND
3. The opponent's King cannot capture the pawn (of course, the

defending King must still be in the Tic-Tac-Toe area when defending the pawn), THEN

NO MATTER WHO IS TO MOVE, THE SIDE WITH THE PAWN ALWAYS WINS!

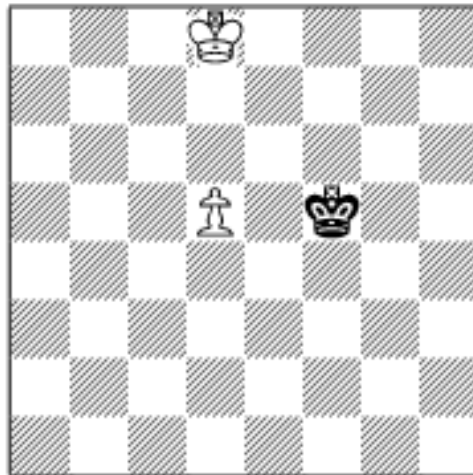
Note: it is impossible to form a Tic-Tac-Toe board around a Rook's pawn, so the rule does not apply to the "a" or "h" pawns.

The Tic-Tac-Toe rule is much more helpful than is opposition in positions with advanced Kings, since having the opposition is obviously not necessary:



In the above position, suppose it is White's move. It looks like Black has the opposition, but the three criteria are met: The White King is on one of the 9 squares, the pawn is on some rank behind him, and the pawn cannot be captured, so it is a win. Thus **1.Ke6** (or **1.Kc6**) **Ke8** **2.d6** **Kd8** **3.d7** **Kc7** **4.Ke7** and promotes. All the other cases are easier. Consider the following

example:



In this position if Black is to move, he wins the pawn with **1...Ke5**, so the third condition is not satisfied. But with White to move, all the conditions are satisfied and White wins easily: **1.d6** **Ke6** **2.Kc7** and White promotes.

Robbing the Corner Store

Probably the two biggest material mistake an inexperienced player makes in "close-to-even" positions is either overvaluing the exchange (winning a Rook for a Bishop or Knight) or giving away the Bishop Pair for less than its worth.

IM Larry Kaufman has calculated that the Bishop Pair – when one side has two Bishops and the other does not – is worth about $\frac{1}{2}$ pawn. Let us compare this with the value of, say, an isolated pawn.

According to my book *Elements of Positional Evaluation* (and others!), an isolated pawn is worth less than a non-isolated pawn because it cannot be guarded by another pawn, and is "more vulnerable." Therefore, pieces have to guard it, thus tying down those pieces, which normally have better things to do. However, an isolated pawn can still capture, guard squares, and promote, so it is only losing, *on the average*, a fraction of its value, let's say at most 20-30%. So for the sake of argument, let's say an isolated pawn is

worth $\frac{3}{4}$ of a pawn.

But that means that giving up the Bishop pair just to isolate a pawn is, on the average, a bad deal because you give up $\frac{1}{2}$ pawn to get $\frac{1}{4}$ pawn! So I say to my students:

DH: “Would you rob the Federal Reserve Bank?”

Student: “No.”

DH: “Why not?”

Student: “Because it is wrong and besides, I might get caught and go to jail.”

DH: “Good! I would hope not. Well, would you rob the Corner Store?”

Student: “No, for the same reasons.”

DH: “Good! Well, in that case would you give up your Queen for nothing?”

Student: “No, of course not!” (usually more emphatic than when denying they would rob the bank!?)...

DH: “Then would you give up the Bishop Pair for nothing?”...

The analogy is you would not give up your Queen for nothing, so you should be just as careful about giving up the Bishop pair – it is a different *amount* of material, just like it is a different amount of money and risk for robbing a Corner Store, **but you would not do that, either**. So the chess principle for large and small amounts the same: DON'T GIVE UP SOMETHING FOR LESS THAN ITS VALUE (the one exception is when you are way ahead and what is left on the board after the “sacrifice” is an even easier win than before).

Misunderstanding how much the exchange is worth can lead to bad habits. In IM Larry Kaufman's article he rated the exchange at

about 1.75 pawns (some good players rate it even less, but it is certainly not the 2 pawns you would get from subtracting 5-3 using “traditional” values). Since a Knight or Bishop is worth about 3.25 and a Rook about 5, the easiest way is to think of the “Exchange-Piece-Rook” values as a 1-2-3 ratio: A piece is worth about twice the exchange, and a Rook by definition is worth (exactly) the exchange and a piece. These piece values are important for evaluating exchanges and safety, which is why I introduced them in my initial Novice Nook column.

This brings up another important point: many beginners count material in a difficult way, such as adding the pawn values of all the pieces (and the counting unit is not the abstract “points”! – pawns are real parts of the game!). The most effective way is to *compare each player’s pieces left on the board, and see what the difference is*. For example, if White has a Queen, a Rook, two Bishops, a Knight and 6 pawns, and Black has a Queen, two Rooks, a Bishop, a Knight, and five pawns, then Black has “a Rook for a Bishop and pawn (or “the exchange for a pawn”), with White also possessing the Bishop pair.” Who is ahead in material? Well, a Rook is worth about 5 pawns, while a Bishop and pawn are worth about 4.25, but with a bonus of .5 for the Bishop Pair results in a total of 4.75. So Black is slightly ahead, but by such a small fraction that other, positional considerations may well leave White with an advantage.

By the way, never count the pieces off the board! There are many reasons for this, but suffice it to say that one of my students once saw that he had less pieces off the board, concluded he was ahead, and offered to trade, and then later found out his opponent was juggling in his hands with some of the pieces he (the opponent) had captured!

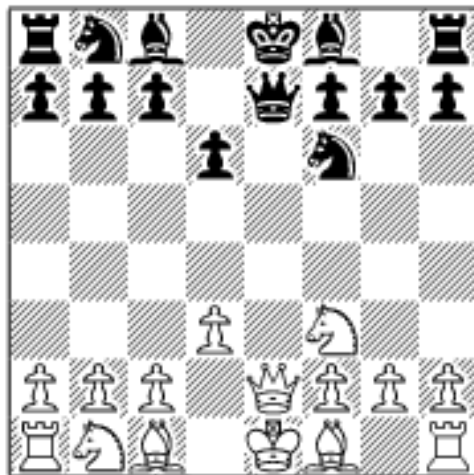
Tempo Count

One thing you can do in the opening is just count how many pieces (non-pawns) you have moved, assuming each has been reasonably developed. You would likely *not* count, for example, a King that had to move to get out of check. We can call this technique the *Piece Count*. If you are White, then in the opening you should always attempt to have at least one more piece out after your move than Black has. Of course, in many “book” openings this is not possible, but it is still a helpful technique to know! Another slightly more accurate method is to do a *Tempo Count*, a technique shown

to me many years ago by one of the stronger members of the Main Line Chess Club here in the Philadelphia area.

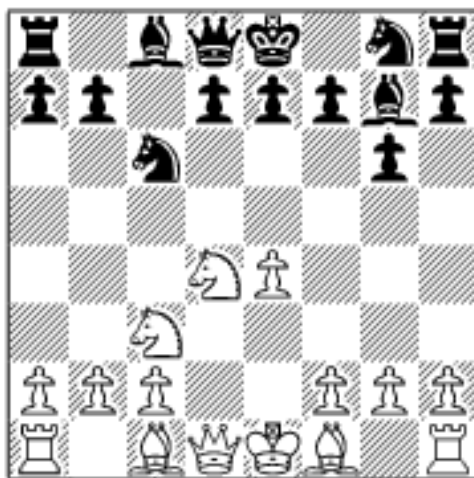
To find the *Tempo Count* during the opening, look at all the pieces and pawns remaining on the board for each side and count how many tempos it would require for those pieces (not the captured ones) to get to their current positions.

The *Tempo Count*, like the piece count, is not always perfectly accurate (bad pawn moves are probably best not counted), but serves as a decent guide in open positions. For example, consider the following position, which occurs after the innocuous sequence in the Petroff's Defense: **1.e4 e5 2.Nf3 Nf6 3.Nxe5 d6** (the old beginner's trap is 3...Nxe4? 4.Qe2 when most Black players are not even able to find how to only lose a pawn) **4.Nf3 Nxe4 5.Qe2** (5.d4 is the normal move played by almost all strong players although 5.d3, transposing into an Exchange French, is possible) **Qe7** (forced) **6.d3 Nf6**:



Here the *Tempo Count* is 3 for each player: one each for the d-pawn, Queen, and developed Knight. But in this position White, a student, played **7.Qxe7+(?)**. This capture is a minor mistake (the game is pretty equal anyway). It is clearly not best, since after **7...Bxe7** he reached a position where, after 7 moves for both players, White's tempo count is only 2 and Black's 3. In other words, Black is now "playing White" since he is in a symmetric position with an extra piece developed. That means White had to have done something wrong, and it was 7.Qe7+. Therefore, a developing move like 7.Bg5, putting White temporarily up 4-3 in the *Tempo Count*, was more logical.

Another example occurred in a student game after **1.e4 c5 2.Nf3 d6 3.d4 cxd4 4.Nxd4 g6** (the Accelerated Dragon variation of the Sicilian) **5.Nc3 Bg7**:



Here the *Tempo Count* is 4 for White (two tempos to get the Knight to d4, one for the Knight on c3, and one for the pawn on e4) to 3 for Black (one for the g-pawn, one for the Bishop, and one for the Knight on c6). Even though it is White's move, his extra *Tempo Count* is modified somewhat by his moving the Knight twice (less efficient), trading the center d-pawn for the c-pawn, and having to

meet the threat on his Knight on d4.

White played **6.Nxc6?**, solving his Knight safety problem but causing other problems after **6...bxc6** (capture toward the center!). By trading his Knight, which has moved three times for one that has only moved only once, he is no longer up in the *Tempo Count* – he is down 3-2! Moreover he has brought Black's b-pawn toward the center on c6. No wonder 6.Nxc6 is considered bad and the tempo-retaining 6.Be3 is the common book move, leaving White with a 5-3 *Tempo Count* advantage.

So next time you are looking to efficiently develop your pieces and you are not sure which move to make, consider both the Piece Count and the *Tempo Count* and see if they help.

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