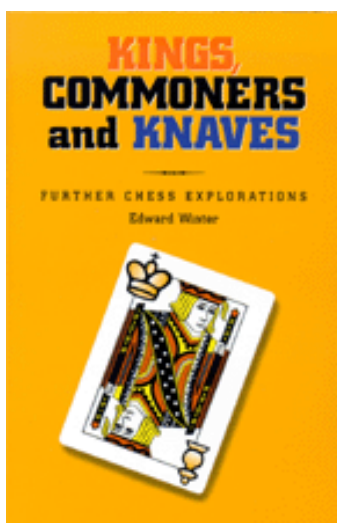




SKITTLES ROOM

From the Archives

Hosted by
Mark Donlan



Kings, Commoners and Knaves
by Edward Winter

From the Archives...

Since it came online over eight years ago, ChessCafe.com has presented literally thousands of articles, reviews, columns and the like for the enjoyment of its worldwide readership. The good news is that almost all of this high quality material remains available in the [Archives](#). The bad news is that this great collection of chess literature is now so large and extensive – and growing each week – that it is becoming increasingly difficult to navigate it effectively. We decided that the occasional selection from the archives posted publicly online might be a welcomed addition to the regular fare.

Watch for an item to be posted online at least once each week, usually on Thursday or Friday. We will update the [ChessCafe](#) home page whenever there has been a "new" item posted here. We hope you enjoy *From the Archives*...

Applying Steinitz' Laws

Dan Heisman

World Champion Wilhelm Steinitz founded many chess principles, which together can be loosely labeled "Steinitz' Laws."

For example, he said that in order to attack, you must have an advantage (which could be a local advantage in a particular part of the board); conversely, if you have the advantage, you must attack, or the advantage will dissipate.

I am always quick to add that "if you have the advantage, you must attack" applies to positions where the material is more or less even. What Steinitz is saying is that if you have an advantage of time (development), then you must use this advantage to take the initiative, else the opponent will catch up in development. There are two other important things to note about this "law:"

- If you have two pieces developed and your opponent only has one, this does not mean that you must start an attack with two pieces! The best (only?!) way to keep an advantage in that situation is to continue to develop pieces as fast as possible so that you still have more pieces developed. The reason, which I have never seen stated elsewhere, is simple: as those two pieces run up the board to attack, they are not only met by the one piece your opponent has developed, but by all his pieces

in that section of the board that remain undeveloped. Not only that, but since the play is on the opponent's side of the board, the opponent usually can call up reinforcements to that area more quickly (especially slow moving pieces like pawns, knights, and the king, which the attacker usually cannot). Thus the two pieces usually quickly find themselves outnumbered! Good players know that "A premature attack is doomed to failure." Note that sometimes chess principles seem to contradict, so you have to understand them, and not just memorize them!

- If you are up a large amount of material, then you don't have think about attacking at all, because this is not what Steinitz meant (very little chess material is written about large material differences, because all good players know how to win easily when up by that much; that is why their opponents resign. So when Steinitz wrote "If you have the advantage," he didn't mean that you were clearly up two pieces!). If you are up large amounts of material, you should "think defense first" in the sense that your opponent will not be able to get back into the game if you complete your development, put your king into safety, trade pieces sensibly, keep your pieces safe, and avoid unnecessary complications. That doesn't mean play passively, it just means that the player with a large material lead will always keep that lead if he is careful to first think about, and then neutralize, his opponent's threats. It is a bad beginner's mistake to think that just because you are up a piece or two, you should neglect your development and go around, willy-nilly, winning as many pawns as possible while your opponent gets more pieces developed. I would like to have \$5 for each time one of my students lost doing this.



White to Move: Is it Correct to Attack?

There are many positions like this in beginner's chess. White has won a piece but is slightly behind in development. Is it correct for him to "attack" because "You must attack when you have the advantage" or is it better for him to just forget about attack and complete his development? The answer is that White should just forget about attack for a while and just complete his development starting with a move like **1. Nc3**.

If he does so, he should find himself in an easily won middlegame where he primarily just needs to keep his pieces safe to stay a full piece ahead. Eventually any reasonable plan will win, as the power of White's extra piece will be the deciding factor. On the other hand, if White "attacks" with **1. Qxc7** (which a computer might play, but a beginning human player should not) or, even worse, with a move like **1. g4** to go after his opponent's uncastled king, he could find himself falling even further behind in development, and then he might soon find himself in real trouble.

The main point of this article concerns another "law" attributed to Steinitz, at least indirectly. It can be stated this way: "The dynamic evaluation of a position, as concluded after the analysis of the best move, should match the

static evaluation of the position performed before the analysis." (Note: static = without moving the pieces; dynamic = moving the pieces) In layman's terms, "You should be able to find a move which keeps your position about as good as you think it is." For example, if you think you are better, you should be able to find a move which leaves you better! It is just that simple, but this law contains some powerful implications.

I would be remiss if I did not let the reader know that there is a relevant rule in mathematical game theory which says that, "In all games of full knowledge and choice (tic-tac-toe, chess, checkers, go, etc.), your position cannot be better after you make your move than it was before." The reason/proof is simple: before you move, your position is exactly as good as your best move can make it – make anything less than your best move and your position is not as good. For example, it would not make any sense to say that "Anand is up a knight against Kasparov, but Kasparov is winning because Anand will blunder and put his queen en prise!" – Evaluation of positions always assume "with best play," so if one makes the best play, that evaluation must stay the same!

I have had people argue that this mathematical theorem is untrue(!). They reason that White's position after 1. e4 is "better" than it was before 1. e4 because of the extra center control and mobility for the queen and bishop. But this argument does not hold water, because in the initial position White can always play 1. e4 if he thinks that is the best move, so his position is at least as good as 1. e4 would make it. That extra mobility one gets from playing e4 does not make White's position "better"; they do not realize that there is a counterbalancing "cost": it costs the tempo that was used to play e4 – it is no longer White's move!

The Steinitz law about dynamic analysis matching static analysis is really just a practical way of interpreting the mathematical theorem! What Steinitz is saying is that if we understand how to statically evaluate a position correctly, then in order to match that evaluation there should be a "best move," found by dynamic analysis, that preserves that evaluation. Therefore, Steinitz is just really restating the "best move preserves the evaluation" theorem.

What practical use it that to us? More than you might think!

When you are solving a problem from a chess book, you are given a goal: White to play and win or Black to play and mate in six. But when you are analyzing a position during a real chess game, your goals are not so well defined. However, you can make use of Steinitz' law to set a goal.

For example, suppose you look at the position and say to yourself, "Here are my weaknesses and strengths, and here are my opponent's weaknesses and strengths; based upon these factors, I would judge my position to be superior by X amount." Therefore, you should be able to find a move that is "X good" – that is your goal!

Moreover, it is important to note that the above process of evaluating strengths and weaknesses should help point out your proper plan – it almost always has something to do with moves that:

- Take advantage of your strengths and/or your opponent's weaknesses; or
- Try to negate/eliminate your weaknesses and/or your opponent's strengths.

The following is an example of using Steinitz' law. I had a friend who was an expert level player who was aware of the static vs. dynamic law. I gave him the following "White to play and find the best move" position from Adrian deGroot's wonderful *Thought and Choice in Chess* (deGroot's book explaining how he performed one of the best scientific studies on how chessplayers think).



DeGroot Position "A": White to Move.

My friend statically evaluated the position as better for White. However, once he started selecting candidate moves and analyzing them, he could not find a continuation that matched his static evaluation – i.e., he could not find a position where White was ahead as much as he thought White should be. At this point he could have done one of three things:

- Realized his static evaluation was too high, and lowered his expectations. However, to justify this he should find a reason why he over-evaluated his position;
- Realized that he hadn't found the best move, and play an inferior move because his clock is running and it isn't worth the extra time to try and find the better move; or
- Kept searching until he found a move which matched his static evaluation.

Well, since my friend was not playing a real game with a clock, he certainly didn't do #2! Instead, he stated out loud (I was tape recording his evaluation) that he was convinced that his static evaluation was correct and that he just hadn't found the right continuation yet ("There must be a better move!"). He continued to search until, *mirabile dictu!*, he finally found the continuation that made him satisfied (and according to deGroot and future computer analysis, it was the right move! – For those of you who want the answer, the best move is **1. Bxd5!**).

So, what does this mean? It means that your intuition as to how good your position is can set your expectation for your search. If you are losing, you should not expect to find a move that wins. If you suspect that you are better by a certain amount, you should be able to find a move that evaluates, after analysis, to be as good by about that same amount.

Of course, we are only human and make mistakes – as do our opponents! There are many positions which "look bad," but are actually good because they

contain a good continuation. And your opponent can make a subtle mistake in what was a winning position that will let you have a draw or even a win, just through tactical (and no apparent positional) means. However, pick up any book that has many "play and win" problems and most of the positions will look "good" to you. That means that your evaluation capability is working correctly: the position looks good; it is now up to you to find the continuation that justifies that "goodness." Of course, occasionally the author is able to throw in some problems where the situation "looks bad," but there is a tactical continuation that saves the day.

One should not get too carried away with this new found knowledge. Being aware of this Steinitz' law is theoretically important, but sometimes in practice it is not as much use as we would like it to be. As John Watson points out in his great book, *Secrets of Modern Chess Strategy*, the best modern players primarily evaluate the position on what their dynamic evaluation tells them, and are not held back by fears of static drawbacks. In other words, "If it works, play it!"



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