



Beginner Misconceptions

Quote of the Month: *Never confuse knowledge with intelligence or ignorance with stupidity.*

One of my blessings – or curses – is that I remember what it was like to be a beginning chess player. Since I did not start serious play until I was sixteen years old, I still recall my early improvement ordeals.

Let's consider some of the misconceptions I had during my first few events:

a) You have to be smart to be a good player

There are many problems with this misconception. For example, how do you define “smart”? Does it mean you are good with deductive logic? Have a good memory? Good spatial perception? Suppose you are good at the first two, but less than average on the third; can you still be an expert player? What about other “intelligence” attributes that are not “IQ-dependent,” such as the all-important ability to learn from your mistakes and not repeat them, perseverance, determination, patience, finding chess “work” fun, the ability to tolerate losses, etc? (For a more complete list of positive chess traits, see [Traits of a Good Chess Player](#) and [Chess, Learning, and Fun](#))

It turns out that no one is great at every aspect and no one is terrible at all of them. In that sense the person with an “average” IQ can, with the appropriate work and time, be a great chess player if they love chess and have many of the “non-IQ” traits that help you become a good player. Sure, it helps to be “smart” (one key aspect being the ability to process information efficiently and come to new conclusions), but it also helps to be knowledgeable and have many of those other positive traits as well.

b) If you lose a tempo in the opening it's no big deal

I used to think “If I lose a tempo, so what? When my opponent finishes his development I will just have six pieces out when he has seven, and I will get out the final piece on the next move.” Wrong!

Once I started playing against strong competition, I quickly learned if you fall behind in development, your opponent will complete his development first and will start making threats with his entire army. You, on the other hand, will have a smaller active force to defend with, will have to start meeting threats rather than quietly completing your development, and thus will likely never be able to satisfactorily get all your pieces into play. This became crystal clear!

I primarily started suffering from this “development deficit” when I played opponents rated about 1900 or so. These players would consistently and efficiently get *all* their pieces out and if I did not follow suit, they would prevent me from doing so. From then on, I made sure to be as efficient as possible at getting *all* my pieces in the game no matter what the rating of my opponent (and it became easier to beat lower rated players!). It is not a coincidence that high rated players consistently develop all their pieces, while weaker players often start playing the middlegame before all their pieces are in play, and consequently get bad positions against stronger players.

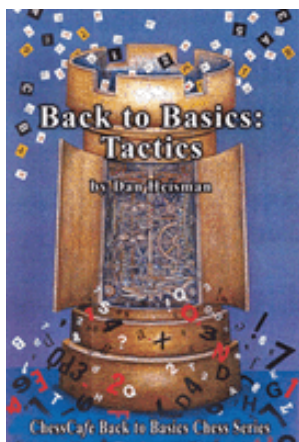
c) The winner is the one who best solves the opponent's threats

This would be great except for one thing: it is very easy to make threats that cannot be met! Therefore, if you wait until your opponent makes a threat to see what you can do

COLUMNISTS

Novice Nook

Dan Heisman



(“Hope Chess!”), and if that threat cannot be met, the game may be over right there. So you must make sure that your move is safe – meaning it cannot be defeated by an opponent’s check, capture, or threat – *before* you make the move, or you will never play high level chess.

I would have to say this was my biggest misconception when I started. After I got clobbered in my first three OTB tournaments – I did not win more than one game in any of these Swiss events – I said to myself: “I think I am a pretty smart guy, but I am clearly terrible at this game. There must be something more to chess than just ‘brains.’”

Of that I was correct. One concept I missed was that you have to treat each and every move as if it might be the one that costs you the game. Therefore, on every move where there is any conflict between the armies, you have to take time to see if each candidate can be refuted. Especially when one doesn’t yet have good board vision and good tactical vision (I did not). Performing that single step consistently and correctly just eats up your time.

Therefore, it is *the prevention of threats that is most important!* At the lower levels of play, the player who allows a threat that cannot be met often just loses. At the higher levels of play, both players do their best to ensure that threats are not allowed, and only then does the game usually go to the better strategic player.

d) Memorizing many opening lines is important

It didn’t take me long to realize that this cannot be so. First of all, many of the players who were much better than I did not know much more than I did about the opening, so clearly there was not a high correlation with opening knowledge and playing ability (one is just a specific knowledge, the other utilizes a set of skills and knowledge). Secondly, once I learned the key opening principles and was able to follow them consistently, I was no longer afraid of being “out of book” and I could play a reasonable opening against almost anyone, so it was clear that memorizing moves – which takes an enormous amount of time – was not the most efficient path to playing the opening (see [Learning Opening Lines and Ideas](#) and [Opening Principles](#)).

Finally, there are so many reasonable opening moves that spending an inordinate amount of time will not make a dent in the total number of possibilities, so just pure memorization was going to be relatively futile. Memorizing a book like *Modern Chess Openings-14 (MCO)* is nearly an impossible task, but that pales in comparison to memorizing all plausible moves an opponent might play!

e) Players who take a lot of time on one move are just in trouble and don’t know what to do

This misconception existed because I really did not understand what good players were doing with their time. Shortly thereafter, I began to realize what was noted above in “c” – that you have to take time to make sure that each candidate move is safe – that the opponent has no check, capture or threat which can defeat that move. That takes time, and is chronicled in several Novice Nooks, notably [Real Chess, Time Management, and Care: Putting it All Together](#).

Also, one conclusion I have reached from giving hundreds of players the de Groot “think out loud” exercise is that strong players take a lot of time in certain positions comparing two or more lines and asking themselves two questions:

- “How forcing are these lines – are there any possibilities I have overlooked?” and
- “If I do get to position A* after move A (and after any forced replies), and I get to position B* after move B (and subsequent forced replies), then am I sure which position I like better?”

These two questions often take plenty of time to answer! On the other hand, weaker players, if they consider the consequences of a move at all, usually think “If I do A, then

he will do A1” without really asking how forced A1 is. As for the evaluation part, they rarely reach positions A* and B* and, if they do, they even more rarely take time to carefully weigh the pros and cons. Instead, they usually just say to themselves “I’ll make move A” even if the pros and cons of A* and B* are not easily weighed!

f) If you castle you might lose a tempo for your attack

While this is occasionally true, it is much more often the case that castling *gains* you a tempo for the attack. The reason for this is simple: a premature attack is doomed to failure. What is a premature attack? Attacking when either your forces are not yet ready, or attacking before you have an advantage in the area where you wish to attack. Since one of the main ways your forces are not ready is that your king is vulnerable in the center and your rooks are not participating, castling is the indicated course of action. Not only that, castling is the only move where you get to place two of your pieces into better positions, thus “gaining a tempo” over other preparatory moves. So in a weird sense, castling is the only move that may gain a tempo for your attack!

g) If I read the right (or enough) chess books then I can become a good player

Yes, this *would* be true if three other things were, also:

- If knowledge and chess skill were one and the same,
- If, when a player is in a rut (see [Breaking a Slump](#)), the *sole* reason is a lack of knowledge, and not because of failing to correct one’s mistakes, and
- If an improving player had the ability to identify, find, and efficiently absorb exactly that information which is needed to get to the next level.

Unfortunately, *none* of these is true. If reading books alone made you a better chess player, then the person who read the most books would be the best player and, if you wanted to get better, all you would have to do is read another book or, to be more accurate, read an appropriate book for your level of play. Yet you probably have dozens of chess friends who exemplify the fact that this does not work!

Of course chess books are helpful and good books, read at the appropriate stage of your development, are a key part of improvement (see [Chess Books and Prerequisites](#)). But they are not a be-all and end-all panacea.

Instead, you have a whole series of Novice Nook columns on how to become a better player. Of course, we could make them into a book...

h) Being a pawn down is no big deal

In some situations this is true, but more often than not one pawn is exactly the material lead necessary for a good player to win the game. Most endgames where you are a clear pawn ahead for no compensation are winning. It is true that when you first start to play, you and your opponents are generally so weak that an extra pawn here or there is not relevant to the outcome of the game. However, as you and your opposition improve, it should be obvious that losing just one pawn – especially a pawn that performs a meaningful function – can have a detrimental affect on your game. Conversely, winning an important pawn often gives you more than one pawn of value, as you not only have the material, but also the extra protection and control that the pawn affords.

Of course, in many situations you can be down a pawn without being lost or even having a bad game. Sacrificing a pawn in the opening for development is standard gambit fare. In many positions you can trade a pawn for other compensation: a more active army is the most common, but it could be a weakened opponent’s king or a badly wrecked pawn structure, or even to get a rook or two onto a vulnerable seventh rank. In fact, while most king and pawn endgames are won if you are a clear pawn ahead, that same pawn is rarely enough in opposite-colored bishop endgames, and even being ahead a pawn in a rook and pawn endgame can be difficult if not impossible to win.

The bottom line is that losing a pawn *for nothing* is an enormous deficit and, against a

strong opponent, it may be enough to lose. So be careful, from the opening, to not carelessly lose the little critters.

i) Chess masters are good because they can see twenty moves ahead

This was disproved in Adrian de Groot's monumental work *Thought and Choice in Chess*, where he clearly shows that the depth of search for both grandmasters and experts was about equal. And by reading those same grandmaster protocols (thought processes), it became clear to me that no grandmaster was looking anywhere near twenty moves (forty ply) ahead. Ask any two grandmasters how many moves ahead they see, and you are likely to get two completely opposite answers.

As explained in prior Novice Nooks, the need to "look ahead" is highly dependent upon the need for analysis in the position. Many positions, where there is no clash of forces, can be decided with a little "look ahead" based on general principles involving positional play, strategy and planning. On the other hand, when the pieces are in conflict (there are many checks, captures, and/or threats possible), then careful analysis is often required. How far ahead do you need to look in such situations? Well, *at least three ply*: you need to examine your candidate move, your opponent's possible checks, captures, and threats in reply, and then your ability to meet each safely on the next move.

Finally, there are the forcing, "long-tree" endgame positions where you need to accurately look far ahead. For example, suppose you are in a king and pawn endgame and have to calculate whether your king can go the opposite way of your opponent's king and get into a promotion race. Whenever you race, you need to accurately count the number of moves each side will take to promote. In these situations you often do need to look ten moves ahead. But the reason why this is possible is that there are usually very few branches to the analytical tree, so the number of variations is very small.

Therefore, in a "normal" analytical position you might look at many branches but only three or more ply deep; in an endgame race you might look at only one or two branches but twenty ply or more. The total number of moves examined during those two "thinks" may be similar but, since the number of branches differs greatly, the depth of analysis does as well.

But if chess masters are not good because they look twenty moves ahead, what are the differences between those players and average ones? The moves masters do consider are more pertinent to what actually might happen, they have better board vision and tactical vision, and they consistently play safe moves that are also strategically reasonable. So knowledge, logic, visual acuity, speed, accuracy, and strategic incisiveness each play a bigger part than depth.

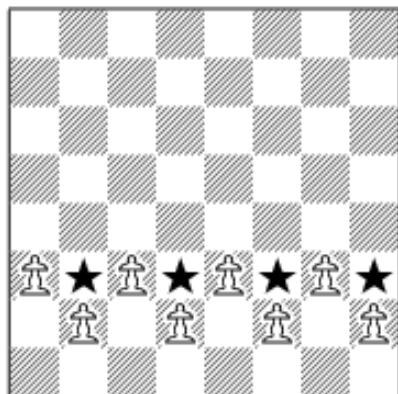
j) To be a good chess player you have to be a good chess strategist.

This is clearly not necessary. To be a *great* chess player you need to be a very good chess strategist. To be a good chess player – let's say an above average tournament player – you "simply" need to be able to keep your pieces safe (and know when your opponent's pieces are not) and keep *all* your pieces active. Ordinary strategy, following basic principles, is probably sufficient unless you want to elevate to the titled levels such as expert and above. It's that simple. Too many players make chess too difficult: they read advanced grandmaster games and positional text and then proceed to play the opening as if it is the middlegame, try for grandiose plans and attacks when simple ones will do, and so on. But one thing is clear: If you can consistently keep your pieces safe and active, then you are well on your way to becoming a good chess player, and will be able to beat almost any grand strategist who makes basic tactical mistakes (see [The Principle of Tactical Dominance](#)).

k) Putting all your pawns on the same color allows them to guard each other

Ugh! Silly rabbit ... If you put *all* your pawns on the same color it makes the squares of the opposite color terribly weak. (A weak square is one that is unoccupied and can *no longer* be guarded by a pawn. It is *not* a square where there is a vulnerable pawn or piece.)

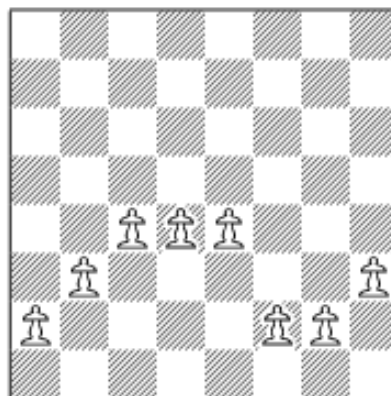
The pawns on the third rank are guarded but the light squares are very weak (denoted by a star):



When I see this diagram today, instead of seeing “safety” I see “ugly, weak squares” in-between!

It is good to have your pawns connected, but it is often better to have at least a pawn duo (two pawns side by side) at the lead, rather than have a diagonal chain where the pawns just guard each other. In the following diagram White has three pawns in the lead on the same rank, even better:

A smoother pawn structure with more space:

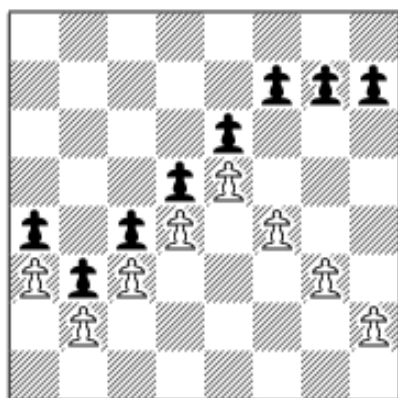


Notice in the above diagram the only squares that can be thought of as possibly weak are c3 and d3, and

these are both *behind* the pawns, so they are relatively inaccessible and therefore not as weak or vulnerable. For example, these two squares are easily guarded by rooks but not easily attacked by the opponent’s rooks.

The exception to the “squares are weak when all the pawns are on the same color” principle occurs when there is an opposing chain of pawns locked to it. In that case, the opponent has the mirror situation and neither can occupy the squares in front of the pawns:

White pawns are all on the same color but the light squares are not a problem:



In this position Black has blocked all the weak squares on the queenside and White controls more space on the kingside – plus White’s kingside pawns are mobile and the light squares on the kingside are less accessible to Black’s pieces. Therefore, White’s light squares are not that weak. If you are able to recognize the difference between this position and the first diagram, then you are on your way to a better understanding of weak square complexes.

I. All principles and guidelines are “weak”: they often don’t apply or have too many exceptions. If not, they would be rules.

This is not true; depending upon the state of the game (see [The Six Common Chess States](#)), guidelines become more or less strong. In some types of positions, certain guidelines become very strong; much closer to rules. Other guidelines are weak and, under certain conditions, any guideline might fail to apply and may be dismissed for the remainder of the game. But one thing is clear: if you are not a strong player and Lasker, Capablanca, Fischer, and Kasparov all agree on a guideline then, *if* you are applying it correctly and

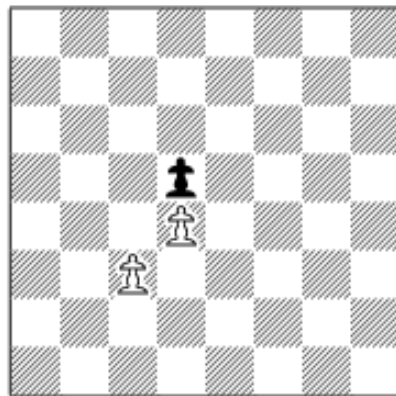
there is no opposing principle nor overriding tactic (see [The Theory of Tactical Dominance](#)), you can probably save yourself effort just by following it and not spending much time deciding if your position is an exception. At first I did not know many guidelines, but later I spent too much time looking for “exceptions.” I would have played better and faster just by learning as many principles as possible and following them the best I could (quickly reading annotated master games that are written for instruction is a great source). It is more efficient to wait until you are good enough to understand the issues better, before looking for exceptions.

Conclusion

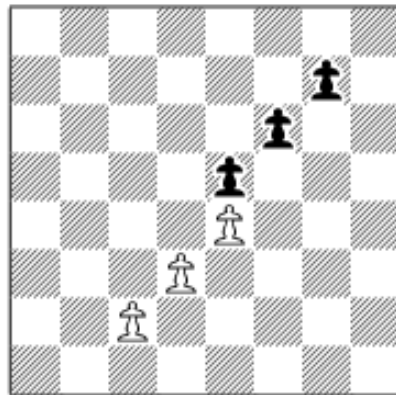
Now that I know more about these misconceptions, clearing up these issues has made me a better player and, hopefully, it will for you, too.

Bonus 1: Common definition misconceptions

1) “Backward pawn” – a pawn is backward if it can advance, but cannot safely do so without (eventually) losing material to an opponent’s *pawn*. It is *not* the rear pawn in a pawn structure (which could even be a passed pawn, and a passed pawn is never backward, by definition).



The c-pawn is backward



The c-pawn is not backward

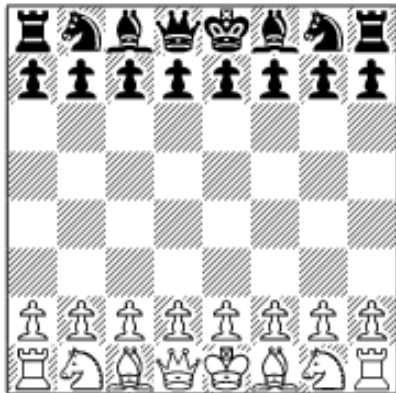
See [A Positional Primer](#) for more positional definitions.

2) “Stalemate” – A stalemate is a type of draw that occurs when it is a player’s move, he is not in check, and has no legal moves. It is *not* when a king cannot move (like at the start of a game!) or when neither player has won – that is called a draw. There are many types of draws, of which stalemate is one. Others include the fifty-move rule, three-fold repetition of position, agreed draw, lack of mating material, insufficient losing chances, etc. To refer to all draws as “stalemates” is like calling all animals “cows.”

Neither king can move and the game is about equal, but it’s not a draw nor a stalemate:



3) “The exchange” – Trading a knight *or* bishop

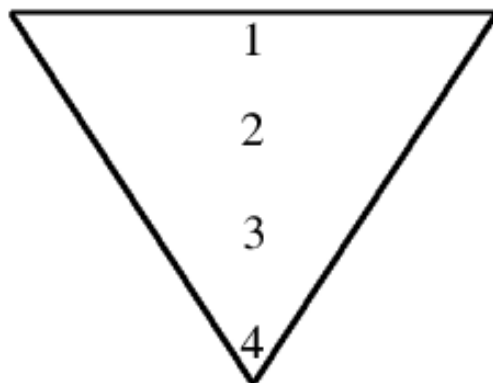


for a rook. Thus “winning the exchange” is trading a knight or bishop for a rook and “losing the exchange” is losing a rook for a knight or a bishop. On the average, the value of winning the exchange is slightly more than half a piece (bishop or knight) or about $1\frac{3}{4}$ pawns. However, coming out ahead on a trade otherwise is *not* called winning the exchange, at least inside the chess world. So if you win a queen for a bishop that is certainly coming out ahead on a trade, but you are not “winning the exchange” – you are, even better, winning a “queen for a bishop.”

4) “Barely adequately guarded” vs. “inadequately guarded” – A piece that is guarded as much as it is attacked (so that currently any trade would come out even) is barely adequately guarded. You can double-attack a piece that is not guarded at all, and you can just as easily double-attack a piece that is guarded, but already attacked as many times as it is guarded. Therefore, barely adequately guarded pieces are vulnerable.

A piece that is inadequately guarded is guarded, but not as much as it is attacked and is not safe.

Bonus 2: Inverted triangle representing the narrowing of move selection during the thought process



- 1 All Legal Moves
- 2 All moves that do something positive
= Initial Candidates
- 3 All safe candidates = Final Candidates
 (“Safe” means you don’t lose material on any square affected by the move, nor via carry-over safety issues from previous moves)
- 4 The move played (“best move found given the time constraint”)

Dan welcomes readers’ questions; he is a full-time instructor on the ICC as Phillytutor.
