A Primer in the Art of Chess Warfare: Direct Intentions

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Introduction

Most of the puzzles in chess tend to be relatively easy to learn, but not all of them. I tend to be weak on defense. I have major difficulty spotting opportunities, since I reason according to general rules, but when I don't know the rules, how am I going to apply them?

When it comes to a computer rated ELO-level, I got stuck somewhere between 1750 and 1800, which isn't a weak score, but based on a test with an ELO-meter in terms of puzzles, in reality I tend to score 250 points lower when you look at planning alone. This means that on average I'm a strong gambler.

I went up to a relatively high level making puzzles and in the end did see on a lower level what was going on, but it generally takes me a long time. I also didn't write what I found up as general rules and considerations, meaning that I didn't really take them in as such.

When I couldn't solve the expert-level puzzles properly, as in I couldn't pass the test, I decided to go back down to the beginning, and reestablish what I needed to do in order to defend my pieces. The rules aren't as obvious like with for instance a mate in one: with what piece do I threaten the king so that it can't move aside to any other square without it being able to escape.

I have to look at the most basic of puzzles to reestablish what the proper considerations are for defensive measures. My main question mainly becomes: what general considerations apply, when identifying a proper defensive strategy? When I've considered this question, I'll turn back to offense, and see what considerations come up there.

As soon as all considerations in terms of offense and defense have been written down, what you need to consider is that every other compound action is made up of an almost infinitesimal number of moves, that combine and recombine all of these general considerations into a much more complex stratagem.

The only other thing one needs to consider is statistical analysis and likelihood of winning, which does apply in chess very much.

Analyzing the Move

The board is made up of squares. It has pieces on it. Wonderful, right? So what types of actions are possible? All of the pieces have their own ways of moving around, move up, move up, and move down... Pretty wicked. But what can you do with such a move?

A simple action isn't a simple action in chess. There is no simple action without an intent. Before analyzing simple defensive and offensive actions, it's important to look at what moves can be used to engage in any action. Only when these moves have been considered, is it possible to go into the why you would make such a move.

One mistake I want to avoid is to look at the move from a point of view of advance and retreat. There is no forward or backward. There's the board and you're in every way able to pass your opponent, reversing roles completely continuously. To analyze what a move does, it always should be put in relation to your own or your opponent's pieces.

As one of many statistical general rules, what you on average want to do is establish weight in the middle of the board through *threats* and *occupations*. This already introduces two types of moves: a move that threatens and a move that occupies. Don't get me wrong, all pieces threaten squares through the moves they are allowed to make, but what's the intent?

One possible intent is to move a piece, that than simply *occupies a square*. This might be an intermediate step to a possible future development, without the intent, for now at least, to threaten or capture. The downside to this type of move is that it doesn't exert any kind of pressure on the opponent. Preferably if you can make a move that exerts pressure on the opponent, that's the move you want to make...

Unless of course, you want them to relax a little, to then slam dunk them with your next move that they hopefully don't see coming.

I should also note, that when you *capture* your opponent's piece, that's another way of doing it: occupying a square... This means that either you were already threatening the piece, or your opponent moved it to a square that you threatened, knowingly or uncaringly, and now you get to take your opponent's piece. Capture it, remove it from the board and as such now occupy the square.

But what happens to your piece as soon as you've occupied the square?

So next to occupying there's also threatening. What can you threaten? Two options: *pieces* and *squares*. This isn't really where we get into the full offense defense thing yet, not even when you threaten a piece, because whether it's an attack or a sacrifice also depends on the full move.

Don't forget, *one move*, as in a distance of one, comprises both a move by white ánd a move by black, with as an exception a move by white that immediately finishes the game. When white finishes the game, black isn't able to move any further or resigns or offers a draw that's accepted by white. There's one not always hypothetical exception: the fact that white realizes the last move was a mistake and resigns or tries to offer a draw.

The downside to reading chess manuals is that they fail to identify the definition of something as basic as a move. They do notice it and leave it up to you to figure it out. That's like, "So if I don't know what the hell you're saying that means I'm dumb?"

As a writer I have to point out that's not the case: you need to consider your audience when you're writing and if the audience doesn't get it, you got it wrong, not the audience.

What else do you need to consider? When you have a board, you've got yourself rows and columns, and by combining them: diagonals. In terms of the moves, some pieces move one

square at a time, others can move longer distances, knights jump. Then what? What do these moves do?

Okay, so you can *block* a line, by placing a piece in between. You can do this on a horizontal, vertical and diagonal line.

When a line is blocked, you can also open it up. By removing a piece, you *give way* to your opponent. Blocking and giving way can be related for instance to respectively the parries through opposition and ceding (or yielding) parries in fencing.

You can also *shut down* a square or line by threatening the square or line. For instance by threatening with the bishop, you shut down the diagonals.

The pawns are really important, because they tend to be strong in limiting the movement of knights. You can use all pieces, but the pawns are your primary line of defense and usually not so much offense, but development on the board.

There are three special moves you need to consider.

The first is the *en passant*. That means that the opponent advances a pawn with a two square first move, so it ends up right beside your pawn. If you respond immediately with a capture as if the opponent only advanced one square, then you're allowed to do that, but you have to do this immediately when it's your turn, and you're not allowed to wait one more turn to do it.

Please note! Are you unable to solve the chess puzzle? The one thing you probably didn't see, is the fact that the opponent's pawn just jumped forward two squares! This is the key ingredient to solving "unsolvable" chess puzzles.

Essentially the fact that you need to consider the movement of your opponent's pieces is relevant, because you don't know whether it is or isn't possible to make an en passant, without seeing the move before that.

Every puzzle is a part of the larger dynamics of the chess board, so if the puzzle doesn't include the dynamics, that isn't the fault of the person making the puzzle. It's the fault of the person creating it in the first place.

It's also like, when you tell people they're allowed to, it's a little bit like, "No, shit. I'm allowed to make an en passant? Okay." and then it would be too easy, right? Whatever.

You find this wasn't the solution? Keep reading. We'll get to castling soon enough.

The second top-secret because it's in the rulebook move is the *promotion*. This happens when you're pawn reaches the other side, as in the highest rank on the other side of the board. You now have to replace it with any of the other types of pieces, meaning that you might now for instance get two queens in total.

The third super-duper move is the *rochade* or *castling*. Your king, rook, or any of the intermediate squares that all need to be empty aren't allowed to be threatened when involved with the move, and neither king nor rook are allowed to have moved already.

When you castle king side, you move your king two squares toward the king side rook, and the rook jumps over the king to the adjacent square. When you castle queen side, you

move your king two squares to the queen side rook, and the queen side rook jumps over the king to the directly adjacent square.

These are all of the basic moves you can make on a board, with the exception of three endmoves.

The first endmove is the biggest letdown to a game: you captured all of your opponents pieces and your opponent captured all of your pieces, to the extent that it's impossible to mate your opponent - it's the last capture that makes sure that only two kings remain on the board and maybe a bishop or a knight, leading to a draw (both players get a half point: 1/2-1/2).

The second endmove, although favorable when you're in a weak position and have no other option, is the move where a king ends up in a position where it can't move to any other square, isn't threatened, and there's no option to move any other piece. This is called a *stalemate*, which is a draw, and if you were moving in on the preferred endmove, meaning you're not the one that escaped through a draw, this is probably the biggest ballbuster in town when it comes to chess.

The third and preferred endmove, is when a king is threatened, there's no option to take away the threat by eliminating the threatening piece or blocking its threat, and the king can't escape to an adjacent square either. This ends in a clear winner and a loser (point for: 1-0, or against: 0-1).

Those are all the moves there are. When you make them you're either on the *offense*, *defense* or *unknown*. One of the first things you need to learn, is that when you're not forced into defense, you need to pick whether you'll play offensively, defensively or by the unknown.

The remainder of this essay focuses mostly on defensive considerations. When it comes to direct offensive considerations, like capturing an unprotected piece, these consideration have mostly been noted previously in this essay. The offense focuses on the capturing of pieces or the checkmate. The check is really only a way to keep the pressure on the opponent in order to get the opponent to do something else, like sacrifice pieces.

Before continuing with first intention defensive considerations, first let's take a short look at the unknown. After these and the defensive considerations have come into play, I'll shortly go into basic position play, and then you should have plenty to at least get you started playing chess.

Moving Into the Unknown

When you consider the unknown, which is an important part of chess in terms of *gambling*, meaning that you don't know what's going to happen, but you need to make a move anyway, the key focus is development. In poker there are two ways of bluffing: straight-up bluffing, meaning that you don't have anything, and semi-bluffing, meaning you don't have anything yet, but it might develop into something.

When you straight up bluff in chess, this basically means you offer up your pieces for the grabs. The opponent gets to take a piece without suffering any repercussions. This is the one thing you want to avoid when playing chess.

When you semi-bluff in chess, this means that you always have something to back either your pieces or your sacrifices up, meaning that you either gain weight or momentum on the chess board.

Offering up the piece, will *create an opening* to follow through with an attack and possible checkmate in a different direction, or it allows you to gain weight indirectly.

When you don't offer it up, this means that you back up your piece with more pieces, meaning that you either don't lose weight through a direct repeated *tac-au-tac* exchange of pieces or gain weight through an exchange of pieces, with you capturing more weight in pieces than your opponent.

On Considerations

My main problem with chess is that I tend to focus on general rules and most manuals focus on what you can do, but they don't ask you what you need to think about. A lot of people are happy enough to know that they need to threaten the center and they have their own way of analyzing the board, in that they get a "in this situation you need to do this"-kind of feel.

Essentially there are three ways of thinking, of which interestingly enough, Emanuel Lasker seems to have only identified two. The three ways of thinking are practical, methodical, and analytical.

Practical means that you just need to gain experience, walking every branche of the decision tree. According to Lasker there are people that just play a great many games and as such develop a general feel for chess and become masters in their own right in that way.

I suspect Lasker was a methodical kind of guy. Methodical people need to learn every branch of the tree by heart separately, until the tree disappears and they get a general feel for the game in that way. The one thing they seem to be good at is write things up in general rules, that you don't always stick to. Lasker, honest enough, did illustrate that these are statistical rules: situations you want to avoid, but can't always avoid.

I'm an analytical kind of guy, in that I need to know what makes the tree branch in order to get how I need to approach the game. I reason according to general rulesets that hold at all time, disregarding the statistics.

So instead of going like, "Okay, I need to occupy and threaten the center!" I go like, "Okay, when I'm working the center of the board, it's easier to maintain weight and defense there, because I can threaten and occupy the center at all sides, giving me the advantage, but when it comes to the flanks, the pieces that occupy the flanks themselves are more difficult to defend, because they can't be defended from all sides."

This automatically generates the statistics that Lasker would stick to, but I need to understand it to be able to work with it.

You can also relate the above consideration to *The Art of Warfare* by Sun-Tzu.

The flanks of the board offer relatively little room to maneuver, since you can't move past the edges of the board. You can't maneuver in all directions, meaning that space is narrow and you need to move fast.

In the middle there's more room to maneuver in all directions, so in most cases, when not under direct threat by a heavier congregation of your opponent's pieces, you can take it a bit more slowly.

First Intention Defensive Considerations

When you're on the defense, this means that you either need to defend a piece or square. When you *defend a piece*, this means that you need to prevent it from being taken. When you

defend a square, this means that you need to establish that the threat the particular square can offer when the opponent moves a piece to occupy it be removed.

This section focuses on *first intention* defensive considerations, meaning the considerations that lead to a single move made by you. The number of intentions employed is the same as the *distance* covered by a sequence of moves or, as defined by Lasker and others, the number of moves *to be made*. (Not the number of moves made, because this is about thinking up front.)

Please note! In order to get to these intentions, what you need to ask students is, "How did you get to making this move? What did you consider? Can you write down what you considered, rather than the move that was appropriate?"

Getting them to make a lot of puzzles on the same level will make them realize these things also, but then you need to be able to afford those puzzles, and when you get them to consider what they consider, you only need a few puzzles to illustrate every point. The rest they should be able to learn from experience.

If all else fails in terms of opportunity, think Harvard! Don't go like, "This is the right solution and you just have to apply it!" Go like, "Okay, let's analyze this! What does it mean to find the right solution and how do we get to that point with minimal resources?"

You have to consider a couple of questions. Before you can solve the problem, you need to establish what the problem is. Then there are just a couple of things you can <u>either</u> go over methodically <u>or</u> that you can establish as general rules allowing you to see it.

- 1. Is it possible, if the opponent were allowed to move now, for the opponent to checkmate in a direct move? If so, what causes it?
 - a. What piece when moved causes the checkmate with a threat?
 - b. What piece or pieces make sure that that threat can't be removed?
- 2. If a checkmate isn't imminent, then what piece is being threatened with a capture?
- 3. Once you've identified the problem, consider the following approaches for prevention...
 - a. *Possible checkmate* or *capture*: Can you move your *to be threatened king* or *threatened piece* to an adjacent square so when threatened it gains room to escape?
 - b. *Possible checkmate*: Can you move your *to be threatened king* to an adjacent square so it's able to capture a possibly checking piece due to a lack of cover for it when moved to check?
 - c. *Possible checkmate*: If you can't move your king, is it possible to with one of your other pieces capture any of the pieces that disallow your king to move, so you can move it to an adjacent square instead of being checkmated?
 - d. *Possible checkmate* or *capture*: Is it possible to check the opponent's king in order to force the opponent's threatening pieces into a vulnerable position, so they can be captured?

- e. *Possible checkmate* or *capture*: Does an opponent's piece block your defense and can you capture it opening your defensive lines up?
- f. *Possible checkmate*: Can you with your king capture the piece that threatens the square that allows another piece to checkmate your king, so your opponent can't checkmate your king anymore?
- g. *Possible checkmate*: Can you capture the piece that threatens the square that allows another piece to checkmate your king with another one of your pieces, so your opponent can't checkmate your king anymore?
- h. *Possible checkmate*: Can you capture the to be checkmating piece, so it can't move to the square where it checkmates your king?
- i. *Possible checkmate* or *capture*: Can you block the line the opponent must follow in such a way that the *to be checkmating piece* or *to be capturing piece* be sacrificed, when it still continues on this line, capturing the now blocking piece, meaning that the to be blocking piece receives cover by another one of your pieces?
- j. *Possible checkmate*: Can you yourself establish a threat with a piece other than your king on the square where the when to be placed on that square than checkmating piece can be captured, removing the threat and opportunity to checkmate?
- 4. With no other option, when faced with a possible checkmate, can you take up a position that allows you to reach a stalemate and as such draw, instead of a checkmate, losing, meaning that overall you minimize the damage?

Position Play

Position play focuses on four things:

- 1. Ways of threatening your opponent that allow you to capture.
- 2. Ways of threatening your opponent that make sure they can't move and as such quite possibly capture pieces.
- 3. Ways to avoid captures, and...
- 4. Ways to prevent threats.

Let's get back to Sun-Tzu again. The five criteria you need to consider for a successful strategy are: the climate, the terrain, the command, the prescriptions, and the way.

The climate is always the same on the chessboard, although some chess players may simply refuse to play you outside in the rain. The terrain is an eight by eight checkered board. The command, that's you and possibly your seconds - chess players that help you analyze the position you find yourself in on the board to determine the next move.

The prescriptions are formed by the rules of chess: for instance whether you're allowed to castle or not, or whether you're allowed to capture with an en passant or not, or whether you need to move a pawn, because otherwise any other move will lead to a draw; and the rules of tactics.

The way focuses on what sequence of chess pieces be moved to establish your goal and quite possibly force the opponent to make the moves you want your opponent to make.

If you want to capture a piece, you can use a *fork*. A fork means that using one piece you threaten two or more pieces at the same time. This is especially a strong move when you

threaten the opponent's king and one or more pieces, like a queen or a rook. When the opponent is unable to capture the forking piece without sacrificing the piece of choice, this leads to an imminent capture of the piece of choice.

A *charge* means that you threaten the opponent's king from such a line, that after it steps aside, this allows you to capture the piece that was originally behind it, meaning that now it couldn't get away.

A *pin* means that you threaten a piece that blocks the line in which, hadn't that piece been there, you would have threatened the opponent's king. The opponent can't move that piece, because this would lead to a revealed check of the opponent's own king, which is an illegal move.

Repeated threats to the opponent's king may force the opponent's king into such a position that the opportunity arrises for you to fork, charge, or pin.

Although there are many positions that are statistically considered to be unfavorable, these positions can be strengthened through for instance *circular cover*. Consider for instance the position with two pawns right on top of each other in a column. Statistically this is a losing position, because they can impossibly cover for each other and defend each other, but you might also get something like this:



I've found myself in this position once and found it quite favorable. It does two things: you avoid capture of any of your pieces, because the pawns are all covered and even the knights cover each other, and it prevents a threat to your king, because any direct threat to the king leads to an imminent capture of the queen.

It's pretty obvious you're able to win here due to a combination of a stronghold and a now imminent majority of pieces. With a bit of luck, you can promote your pawn, or capture the queen and promote one of the other pawns.

Farewell

I can by no means conclude anything, but as a primer into chess tactics, you should be able to make use of a couple of these things to solve the basic puzzles. Hopefully it will do two things: get you past the beginner-level and get you to think in terms of how you need to think about chess. Don't think in moves, think in terms of considerations. Look at the

considerations I came up with and look at what considerations you need to come up with to establish what you need to do in case of compound actions.

Essentially, you literally need to analyze the board in terms of what piece covers what, or you need to consider all of the options in terms of getting you out of a situation into a more favorable situation. That's what you need to learn to get you started beyond the most basic of beginnings. Once you've made that first step, it should help you, like it should help me to discover how to be a better chess player.

I'm of the opinion currently that the rules I provide here although in the right direction and largely correct, most probably are still imperfect, but provide good reason to think and analyze for yourself. I also believe that compound actions require different additional rules, perhaps by applying the same kinds of actions as illustrated, but then in a different context.

I hope you enjoy playing chess.

Literature

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