

Chapter 1:

Positional Play

Positional play is the Bogey-man of many chess players, who feel that it is beyond their understanding.

However, this subject isn't really hard to grasp if you break it down.

Positional play revolves around 3 key factors:

1. Pawn Structure
2. Squares
3. Piece Relationships

Pawn Structure

Much has been written on such things as doubled, backward or isolated pawns. Unfortunately, people have become so obsessed with never creating a pawn weakness, that, as GM Nigel Short says, they have forgotten that it is *checkmate* that ends the game.

These types of damage to your pawn structure are only valid as disadvantages if 4 key factors are present:

1. The weaknesses can be readily attacked by your opponent.
2. You have attained no active counter-play to compensate for the weakness.
3. The pawns are not mobile, and cannot be easily dissolved.

4. The pawns do not defend key squares in your position from their vantage point.

These factors are the guiding light to pawn play. If you can damage your opponent's pawn structure, and all 4 factors are present, then you can consider this a true positional advantage. Without them, things may not be as clear as you think.

Squares

This concept of positional play is the most neglected and least understood, although it shouldn't be.

Simply, any time you can control a *group* of squares it is good. The group might consist of a series of inter-connected diagonal squares (often controlled by bishops and/or queens), inter-connected squares on a rank or file (often controlled by queens and/or rooks), or squares in a color complex, such as controlling all of the white squares or all of the black squares in a position.

Any time you control several groups of squares, you will often have a positional advantage.

Piece Relationships

There are 3 types of piece relationships to consider:

1. How your pieces relate to the position.
2. How the opponent's pieces relate to the position.
3. How your pieces relate to your opponent's pieces.

The guiding rule in relationship # 1, is that every single one of your pieces should either be attacking something in the opponent's position, defending something in your own position, or both. No piece should ever be totally inactive, and ideally, no piece should ever be left on a square where it is not defended by some other piece. There is an old chess axiom that **if even one piece in your position is bad (not performing one of the functions mentioned, or inactive or undefended), your whole position might be bad.**

Relationship #2 is analogous to relationship #1. Your opponent labors under the same guidelines as you do.

Once several opening moves have been made, and opposing pieces begin to interact, the guiding rule of relationship #3 is **domination.**

Your pieces dominate those of your opponent's, when your pieces control more **key** squares (such as central squares, or those squares mentioned in the Squares section, or those squares that are important in the defense of your opponent's position) in the position, or severely limit the scope of your opponent's pieces (often by controlling the squares those pieces can move to).

When your pieces are dominant, you have a positional advantage.

All these factors and relationships are the cornerstone of positional play. If you study them and adhere to them, you will be a strong positional player.

Chapter 2: Tactical Play

The most popular approach to tactical play, according to just about everyone who has ever written a book on tactics, is to study and learn tactical patterns. At last count, these theorists were espousing a minimum of at least 15 patterns you had to learn and be familiar with.

This is all well and good, but I believe there is a simpler and more effective method. I call this method the *Theory of Interaction*.

The Theory of Interaction (TOI)

After your opponent moves, ask yourself, “What is the threat?” Threats must be calculated to see if the threat is real and must be met, or is not real and can be ignored.

If no threats are present then proceed with the following:

The TOI states that most tactical combinations are missed because the pattern is unfamiliar to the player, or in most cases, the player simply doesn’t consider the move at all!

The cure for this is to simply calculate *every* move that interacts with the opposing forces. I.e., any move that captures a piece or attacks a piece in the enemy camp.

The hierarchy of Calculation is implemented in the following order:

1. Moves that give check.
2. Moves that capture an opposing piece.
3. Moves that attack an opposing piece.

You will find, in calculating the points of interaction, that you can often dispense with most moves with a calculation depth of 2 or 3 moves, and that you will rarely have to consider any move sequence past a depth of 5 moves.

All calculation can end, if you find a combination that gives mate, or wins material without giving any compensation to the opponent (Don’t just win material if it is going to give your opponent an active position or strong attacking chances.).

Overall Mode of Play

70% of all tournament games are decided by tactics (Checkmate or the winning of material), therefore, tactics are king. Moves of a positional nature are considered only after the tactics of the position have been calculated.

“Tactics is knowing what to do when there is something to do. Strategy is knowing what to do when there is nothing to do.”

– Tartakower

You will find that, with practice, you will be able to calculate all points of interaction in well under 2 minutes, which is the average length of time you are given per move in a tournament game (40 moves in 2 hours, 20 moves in 1 hour....etc).

The Theory of Interaction is actually somewhat similar to the modes of calculation suggested by Kotov, in his classic, *Think Like a Grandmaster*, in which he espouses the calculation of all “important” variations to the point of a complete solution. However, the Theory of Interaction is more precise, and less ambiguous than Kotov, in specifying exactly, the moves to be calculated, and to what depth you should be calculating them.

By utilizing the Theory of Interaction, you will rarely miss a tactical shot.

Chapter 3: Piece Imbalances and Valuation

Valuation of Imbalances¹

Bishop vs. Knight

An unpaired bishop and knight are of equal value. Positional considerations will decide which piece is better. Knights are better with 12 or more pawns on the board. Bishops are better with 8 pawns or less on the board. The bishop is a bit better than the knight when fighting against a rook or against multiple pawns in an end-game.

The Bishop Pair

The bishop pair has an value of an additional half a pawn (more when the opponent has no minor pieces to exchange for one of the bishops).

It is worth losing a tempo to save the bishop pair, but it is reasonable to give up the bishop pair if you can gain two tempi by doing so.

If you have the bishop pair, and your opponent's bishop is hemmed in by his own pawns, you already have compensation for a pawn. If most of your opponent's pawns are fixed on one color and you both still have both bishops, it is worth losing a pawn to trade a knight for his "good" bishop.

Bishop or Knight Versus 3 Pawns

As long as there are other pieces on the board (so minimum mating material is not a major issue), the minor piece is worth about $3\frac{1}{4}$ pawns.

Winning the Exchange

Now let's move on to discuss the exchange of a rook for knight or unpaired bishop. Research puts its average value squarely at $1\frac{3}{4}$ pawns for the side that is up the exchange.

When the side down the exchange has the bishop pair, the exchange is worth 1.15 pawns.

The value of winning the exchange is influenced by two factors. First of all, the presence of more major pieces on the board favors the minor piece. In general, with no major pieces traded, the exchange value drops to $1\frac{1}{2}$ pawns, and if the minor side has the bishop pair just one pawn makes things even.

But with queens and a pair of rooks gone, the exchange is worth slightly more than its nominal value of two pawns, or about $1\frac{1}{2}$ when opposed by the bishop pair. Also important is the number of pawns on the board, especially when the minor piece is the knight. With most of the pawns on the board the exchange is worth less; each pawn trade 1 As analyzed by GM Larry helps the rook. Rooks need open files!

If you have a rook for a knight and two pawns, even though you are nominally a quarter pawn behind in material, you should try very hard to exchange major pieces.

Two Minor Pieces versus Rook and Pawns

All of the above applies with even more force to the case of two minor pieces vs. rook and pawns; the side with the rook should trade major pieces, even if he is a bit behind in material.

Rook + 2 pawns vs. a bishop pair is equal. Rook + 1 pawn vs. other minor piece pairs is + 1 ½ pawns.

The Queen

When not opposed by the bishop pair, the queen is worth rook, minor piece, and 1½ pawns.

The side without the queen wants to keep the extra rooks if possible.

Queen versus Two Rooks

With two or more minor pieces each, the queen needs no pawns to equal two rooks.

Queen versus 3 Minor Pieces

3 minor pieces versus a queen are worth a half-pawn more than the queen, unless the 3 minors does not include the bishop pair, in which case, things are even.

Piece Relationships to Pawns

Rooks gain in value with every pawn exchange because rooks need open files to be effective. Knights lose relative value with each pawn exchange, as their value diminishes in open positions.

Average Piece Valuation:

Pawn = 1

Bishop pair = + ½ pawn

Rook = 5

Bishop = 3 ¼

Knight = 3 ¼

Queen = 9 ¾