Contents

Symbols	5
Foreword by GM Hjörvar Steinn Gretarsson	6
Introduction	8
1 Starting from the Beginning	14
Piece Values	14
Interpreting Chess Rules and Ideas Taught to Beginners	26
The Allure of Genius and Glamorizing the Past (Tal Syndrome)	40
What Should You Be Trying to Do When You Play Chess?	44
What Should You Ask Yourself During a Game?	45
2 Levels of Chess Skill	51
What are the Main Stages of Chess Improvement?	51
General Improvement	59
3 Prioritizing Your Chess Undertakings	66
Playing	66
Analysis of Your Games	69
Training	70
4 Elements of Chess Strength	84
Concrete Knowledge	85
Pattern Recognition	85
Calculation	87
Candidate Moves	91
Positional Understanding	102
Logic	103
5 Different Types of Training	106
Tactics	106
Endgames	107
Historical Games and Keeping Up with Chess 'Culture'	117
Blitz	120
Books	122
Analysing and the 'Most Obvious Move' Principle	128
What Should I Walk Away from My Games With?	131
What Should I Use a Coach For?	131

6	An Approach to Evaluating Positions	137
What is an Advantage?		137
Ad	lvantages for Free	149
Conditional Equality		154
Co	mpensation and Complicated Cases	160
7	Is Chess a Logical Game?	176
8	Engines in Chess	182
An	alysing Positions with Computers	194
9	Analysing Your Games and Self-Improvement	200
10	Metagame Opening Strategy	225
Metagame Thought		225
Planning an Opening Repertoire Opening Questions to Ask		233
		250
Str	uctures and Openings	253
11	Losing Consistency	269
12	Critical Moments	284
13	Sports Psychology in Chess	295
14	Theory in Practice	307
Conclusions and Recommendations		315
Ind	lex of Names	318

4

6 An Approach to Evaluating Positions

"Should I be evaluating the position every 5 moves? Or every 10 moves? Or how often?" is a question I have frequently been asked in some form or another. The simple truth is that we are making judgements on every move and we must keep the evaluation of the position in mind in every position. At all times you should be aware of the objective evaluation of the position and how we stand. After all, you want to choose a move that you evaluate as superior to another move. If we evaluate the position as losing, we want to look for the move that gives us the best chance of drawing. If we believe we have a slight advantage, then we need to consider moves that we think will maintain this advantage. Chess is a logical game and the evaluation of every position always comes about as the understandable result of the previous play. Ideally our advantages from the opening will last and we will be able to build on them. First, it is important to discuss what having an advantage really means.

What is an Advantage?

An advantage in chess is either short-term (dynamic) or long-term (static) in nature, and it makes sense always to distinguish between the two when assessing that one side is better. As a matter of clarity and personal preference, I usually try to avoid claiming an advantage (presenting myself with a burden of proof) which is based on weak positional fundamentals. By fundamentals, I am referring to basic aspects of the position that are of a relatively permanent nature. An example of a weak fundamental can be a position in which one side has a slight initiative, but does not actually have a better pawnstructure or any major static advantages. Frequently in these cases, best play does not lead to an actual static edge, so we cannot call it a real advantage. A real advantage has permanency

and a lasting nature to it. If it fades away instantly, it is not a real advantage.

Under a microscope, one can claim an advantage in chess in two main instances:

a) one has a better pawn-structure and the opponent has specific weaknesses that can potentially be exploited;

b) one has more material for insufficient compensation.

As a counterexample to the value of material, doubled f-pawns in a rook endgame are rarely exploitable. I will group examples of one side having an advantage due to an exposed king into the category of having a worse pawn-structure, because in those cases, the defending side suffers due to lack of pawn-cover, which is a key role played by your pawn-structure. If one side has a very weak king, it is almost always related to the pawns around his king position not defending the king sufficiently, which ties in to the 'better pawn-structure' statement. I believe we should strip away all of the pieces in many instances to look purely at pawn-structures and talk about pawn-structures in plain and simple language to give ourselves a clearer idea of the fundamental workings of the position.

"When you have the advantage, you must attack" is a popular saying. Unfortunately, this is vague and not particularly descriptive, so it is worth breaking it down. This is of great importance, because it is a frequently misunderstood topic for club players. With an objective advantage, in many instances, you have time to play slowly and exploit multiple weaknesses in your opponent's camp because your advantage is not temporary and going away any time soon. In positions of pure paralysis for the opponent as well, more often than not, keeping your bind is the best way to play. By the same token, in many endgames, playing for zugzwang is the only way to win, whereas playing for an attack will throw away your advantage right away.

In all of the cases referenced in the previous paragraph, 'attacking' for a direct win would not be the strongest option. So the general rule about attacking with an advantage does not help players develop any kind of deep understanding of what an advantage is. What players should learn is that when our advantages are fading, positions become critical, and we need to play accurately and devote more time than usual to these kinds of positions. This is important to point out, because it is different from merely thinking that you need to attack when you have an advantage. Rather, you need to play concretely and fight to keep your advantage if it is slipping away. Similarly, if your opponent's defences are falling apart, in many cases we should look for a direct win and play aggressively. If we have a large advantage and the opponent has a direct threat, then we also usually have to react to it. Thus, the main cases when we need to play concretely and very accurately with an advantage are when your advantage is slipping away, when your opponent's defences are dramatically weakening, and when the opponent has a threat that may dramatically change the evaluation of the position.

Thinking you must attack with an advantage has almost no value as a general rule, unless your advantage is purely in dynamic factors like development. If you have an advantage in economy of force that is temporary, obviously you need to exploit that before the opponent has time to defend properly. That's rather what the rule and overall takeaway should be. I never quite understood the 'you must' part of this phrase. If the advantage is static, why must we attack? The initiative is a dynamic advantage that may turn into a real, objective advantage later. Certainly having the initiative for free is better than having no initiative at all, but it is not the same as a real, tangible objective advantage.

A position is equal if one side has no logical reason to be better. A lot of players don't realize that chess has a tendency towards draws and equality unless there is a genuinely clear reason why one side is better. Partially in view of this, the game is extremely logical in the sense that every advantage has clear explanations for it. In essence you just try to understand the reasons for why some positions are good for White or Black and constantly build upon these observations to improve your intuition for how you quickly evaluate positions. It is a never-ending process developing your positional understanding and evaluative skills. This is why it is very interesting to work with a stronger player or hear how strong players think about positions that are not immediately obvious to you. They almost always express some comments about the position that are evaluative in nature besides raw moves.

It is disheartening to hear players say something vague along the lines of, "I am better here because my bishop is a little better than my opponent's". In my experience, such a line of thinking only confuses them, causes them to focus on the wrong aspects of the position, and even causes them to misevaluate positions completely and overfocus on things that do not directly influence the evaluation of the position.

For the sake of simplicity, in this book, my views will not differ much from how engines evaluate the importance of an advantage in terms of how likely it will be in leading to a win. =, \pm , \mp , \pm , \mp , +- and -+ are the most common terms used to evaluate a position. When a position is approximately equal (=), it means that one side has no prominent and clear objective reason to be better. Engines give positions with an advantage below +.30 as equal and between +.30 and +.70 as \pm (or \mp if that advantage is for Black). This means that one side has a slight advantage. At the upper end it is debatable and depends on the exact features of the position, because many +.60 positions are in fact positionally won for the stronger side. Positions between +.70 and +1.20 are given as \pm (or \mp if that advantage is for Black), meaning that one side is nearly winning (or positionally winning, which very often converts to a win with objectively best play). An exception is often in pure endgames with a small number of pieces on the board, when you need a bigger advantage to demonstrate a clear win. With a total of ten pieces or fewer on the board, if an engine (assuming 6-man tablebases are in use) does not find a huge advantage, there is very likely

not going to be an objective win. Anything above 1.20 is referred to by the computer as winning (+- or -+). I will be using human judgement to make all of my evaluations in this book, yet this is a good rough outline for the value of an advantage and the likelihood that it will turn into a win. For engines, trends are clearly important here, and some scores are likely to change heavily in one direction or another with more moves included. These statements are assuming rough stability in the scores.

Players often have little idea about the meaning of computer evaluations, so here are some guidelines on how to interpret engine scores. A +.50 advantage (with no tablebase hits) is an objective win a little less than 50% of the time, while a +1.00 advantage wins objectively nearly 80% of the time. +2.00 is closer to 95%, and +3 should be winning in well over 99% of objective cases excluding a major engine error. Hence, +.50 usually refers to a meaningful but nondecisive advantage for White (\pm) , while a position that is \pm is at least 70% likely to be objectively winning. In practical games between titled players, if a player obtains a \pm position (often these positions are strategically winning if the reason for the advantage is structural) and can maintain it, the defending side very rarely manages to defend perfectly and hold the position, if it is at all possible.

Here is a simple and clear example demonstrating a major space advantage that leaves the opponent significantly worse: 1 d4 c5 2 d5 e5 3 e4 d6 4 c4 Df6 5 Dc3 Be7 6 Bd3 Dbd7 7 Dge2 Df8 8 Dg3 Dg6 9 Df5 0-0 10 g3 (*D*). The space advantage matters a lot here because it is not going away at any point, White can build on it with future pawn-breaks, and Black has a terribly cramped position. If a space advantage can disappear quickly, it can hardly be called a real space advantage. If you cannot make anything of the space or pursue a plan making use of it, your space also has very limited value. In this case though, White will keep his pluses and build on them, effectively refuting Black's set-up.

The following game features a crystal-clear strategic advantage for White in the early middlegame that is easy to evaluate and serves as a good mental anchor to be aware of when thinking about pawn-structures and space advantages. Petrosian pressed his structural advantage home effortlessly against one of the greatest positional players of all time.

Petrosian – Botvinnik

World Ch (7), Moscow 1963

When amateur players say "study positional chess" to other players at chess tournaments, they often do not clearly understand what they are saying. They are rarely referring to active study such as doing positional exercises, or comparing and contrasting various pawn-breaks in complex pawn-structures. What they usually mean is "Study one-sided games where one player had no counterplay and lost without a fight due to being statically worse right from the opening, even though most modern 2400 players do not easily grant such advantages to the stronger side." Some of those games are certainly useful for illustrating the basic point about what constitutes an advantage. In the current game, Botvinnik essentially loses without a fight due to his inferior structure that came about from bad opening play. Most modern titled players can handle a simple, superior position with a clear, basic plan from the white side, but amateur players should at least be aware of some of these classic games.

1 c4 g6 2 ⁽²)f3 ⁽²/₂g7 3 ⁽²⁾c3

3 d4 c5 4 d5 f5 is an interesting fighting variation.

В



3...e5 (D)

3...c5 4 d4 cxd4 5 🖄 xd4 🖄 c6 is a common modern move-order choice that avoids the Maroczy Bind because White lacks the time to play e4 and âe3 due to the immediate pressure on d4.



4 g3

White does not have any real reason to delay playing d4. 4 d4 exd4 5 $2 \times d4$ $2 \times c6$ 6 $2 \times c6$ bxc6 7 g3 gives White the best chances of obtaining a slight structural edge from the opening.

4...∕⊇e7

4...²C6 is more flexible if Black intends to put the knight here anyway.

5 違g2 (D)

5 h4!? would have been the most awkward response for Black to counter.





5... bc6 6 d3 d6 7 0-0 a5 is also a typical way to play.

6 d4

6 h4!? h5 7 0-0 Dbc6 8 d3 d6 is a modern handling of the position.

6...exd4 7 🖄 xd4 🖄 bc6 8 🖏 xc6 (D)



8....[©]xc6?

Black did not appreciate that he would be strategically worse in this pawn-structure, which is similar to a Maroczy Bind, in that the c4-pawn restricts ...d5 and Black has no obvious breaks of any kind.

8...dxc6! blunts White's g2-bishop and prevents him from using d5 as an outpost for the knight, while also accelerating Black's development. All this more than compensates for the structural damage caused by the doubled pawns. 9 營xd8 鼍xd8 10 拿d2 谷f5 is completely fine for Black.

White intends to play $\exists c1$ on the next move and ask Black what he is doing in the face of White's simple and natural improvement.

10... ĝg4 11 h3 ĝe6 12 b3

This is the simplest way to cover c4 and also b2, in case White plays $\exists c1$ and $\langle b d5$.

12....鬯d7 13 含h2 (D)

White is able to play extremely simply here to increase his advantage because structurally he is better, has more space, and has a useful plan of action with pawn-breaks available on the queenside. Black has no apparent pawnbreaks to go for and has to sit back and wait. Recall that in closed and semi-closed positions,

140



pawn-breaks are often of great importance. Here Black cannot get any pawn-breaks in and has no real counterplay. It is important to understand that there are different categories of space advantages. The most important space advantages are ones in which you have a definite structural advantage *and* the opponent has no way of changing that any time soon. That is indeed a static advantage. Things are less clear when the side with the worse structure has counterplay or things to attack, or when one side has less space, but his structure is not necessarily inferior.

13....\ae8 14 \arrowc13

White is almost done with his development now, and will soon move the d2-bishop so that his queen can occupy that square.

14...f5

This looks natural, at least feigning some threats on the kingside. 14...\$f5 15 \$f4 b6 16\$ $dd = 17 @d2 \pm$.

15 🖓 d5

15 &e3 b6 16 $\$ d2 is another good way to bring White's pieces naturally into the game.

15....🔄h8 (D)

Black should have tried 15... 265!, trying to gambit a pawn for clear activity on the kingside. This was his only chance in the game to go for something. 16 264 67 and now:

a) 17 &xb7!? g5! 18 @g2 &h5 19 f3 c6 20 &a6 f4! 21 gxf4 gxf4 22 \overline{a}g1! (22 @xf4 @xf3+ 23 exf3 &e5 =; 22 &xf4 @xf3+ 23 \overline{a}xf3 &xf3 24 exf3 \overline{a}xf4 25 @xf4 &e5 =) 22...&h8 and a sharp battle rages on.

b) 17 h4! (White intends the simple &c3 to improve his bishop) 17... $\textcircled{2}g4+18 \&g1 \pm$.



Black tries to hold his position together by solid means, but essentially loses the game without a fight. 17...b6 18 Ξ fd1 0e5 19 0c3 0d8 20 0b5 a6 21 0d4 \pm .

18 🖺 fd1 🖗 e6 19 🖄 f4!

White begins targeting the queenside by concrete means.

19...④xf4 20 巢xf4

When you have less space, it is generally a good idea to trade pieces. In this case, exchanging pieces does not help Black because in the resulting position White has direct and easy play and Black is still very cramped.

20...灣c8 21 h4! 邕e7 (D)



22 **≜f**3!

I hesitate to put exclamation marks on some of White's moves here because Black is so helpless and White can so easily improve his position. Black's helplessness comes from a lack of targets and a lack of pawn-breaks, while White has straightforward play on the queenside.

22....皇f7 23 營a5! 皇e8?

Black misses White's threat. 23... \Bar{b}8 24 c5 b6 25 cxb6 axb6 26 \Bar{b}d2 ±.

24 c5! d5 25 象d6! 響d7 26 象xe7 響xe7 27 罩xd5

Being a pawn and the exchange up, the conversion should be quite simple.

27...f4 28 ₩d2

Even more accurate is 28 \equiv cd1 fxg3+ 29 fxg3 +-.

28... \$c6 29 \[d3 \$b5 (D)



30 邕d4! fxg3+ 31 fxg3 皇xd4 32 豐xd4+ 豐g7 33 豐xg7+

33 邕d1 響xd4 34 邕xd4 當g7 35 g4 would be similar to the game, but slightly more accurate.

White calmly brings his king over to guard e2.

35... \$f6 36 \$f2 \$c6?

This makes the win too easy. 36... & a6 37 b4 \blacksquare e7 38 a4 c6 39 \blacksquare d2 & c4 40 \blacksquare d6+ \Leftrightarrow e5 41 a5 a6 42 e4 ± is good for White, but there is no clear way forward.

Now the win is simple due to White's active pieces and better structure. 38... $\Xi a8$ 39 $\Xi a4$ a6 $40 \ \text{@f3} \ \text{@e6} \ 41 \ \Xi e4 + \ \text{@d7} \ 42 \ g4 +-.$

39 Ξa4 Ξa8 40 Ξa6 ἑd5 41 b4 ἑc4 42 a3 ἑb5 43 Ξa5+ ἑc4 44 ἑe3 a6 45 ἑf4 ἑd5 46 · 솔g5 프e8 47 프xa6 프xe2 48 프a7 프e5+ 49 솔f4 프e7 50 프b7

Now White's a-pawn is too strong. 50...\$e6 50...h6 51 \$f3 g5 52 hxg5 hxg5 53 \$g4 +−. 51 a4 \$d7 52 \$Eb8 1-0

The next example features another very simple position to evaluate from the opening, in which White has much more central control and a very easy position to play. Black was trying to create an attack, but had no positional basis to do so and merely weakened his own position. The game is also interesting because White did absolutely nothing special to obtain a large advantage against a relatively strong and experienced grandmaster.

B. Schneider – Van den Doel Bundesliga 2013/14

1 c4 e5 2 g3 h5?!

This move can be regarded as somewhat dubious because it gives White a small advantage in a couple of different ways. Main lines like 2...④f6 are objectively much more likely to equalize.

3 h4!?

This is actually the main line in human games. $3 \textcircled{2} f 3 \textcircled{2} c 6 4 \textcircled{2} c 3 g 6 5 d 4 exd 4 6 \textcircled{2} x d 4 \textcircled{2} g 7 7 \textcircled{2} f 3 \pm.$

3...@f6

3...d5 4 cxd5 響xd5 5 创f3 创c6 6 创c3 響d6 7 拿g2 拿g4 8 d3 grants White a small but safe advantage.

4 **≜g2** ⁽²)c6 (D)

4...d5 5 cxd5 ∅xd5 6 ∅c3 ∅b6 7 d3 ≩e7 8 ∅f3 gives White a clearly improved version over a standard English Opening.

5 🖄 f 3

White intends 2c3 followed by d4, but 5 $2c3 \ge c5 6 2f3$ is a more accurate move-order. 5... $\ge c5$

After 5...d5 6 cxd5 $2xd57 2c3 2b68 d3! \pm$ White benefits from not castling (avoiding ideas like 8 0-0 2g49 2bh2?! g5), and can expand on the queenside by a3 and b4 without the slightest risk.

6 🖄 c3 a6