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The Principle of Tactical Dominance

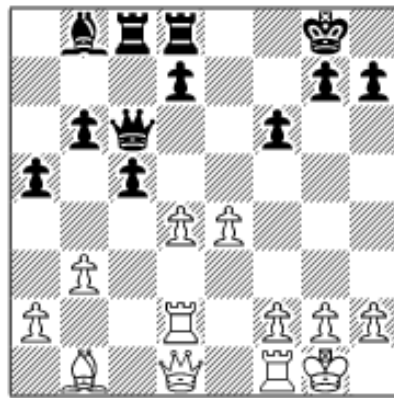
Quote of the Month: *Never apply tiebreak criteria to non-tiebreak positions.*

Weaker players often make the process of choosing certain moves far more difficult than it should be. For example, consider the following:

COLUMNISTS

Novice Nook

Dan Heisman



White plays 1.dxc5. How should Black recapture?

If Black plays 1...Qxc5? then White plays 2.Rxd7 winning a pawn. So Black should play **1...bxc5**, allowing the queen to continue protecting the d-pawn. Yet in a similar position, a student played 1...Qxc5? because he “didn’t want to get an isolated pawn on the a-file” (!) When I analyzed the position, I never got so far as to consider the isolated pawn; I did not

consider any positional features once I realized there was only one way of recapturing without losing a pawn.

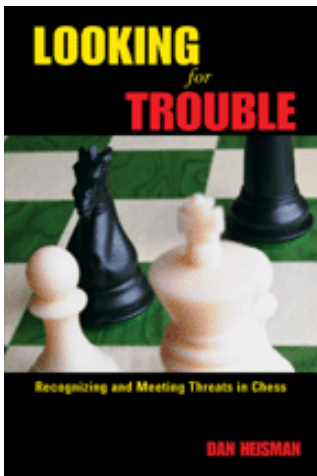
The student’s thought process is a good example of (mis)applying tiebreak criteria to non-tiebreak positions.

Tiebreak criteria is any single or set of minor, positional considerations. In IM Larry Kaufman’s excellent *Chess Life* article on isolated pawns, he stated that the single worst positional disadvantage was doubled isolated pawns on a semi-open file. Such a ruined pair of pawns was worth, on the average, only slightly more than one pawn – they had lost almost a full pawn in value. This is an interesting observation which allows us to draw an important and practical “powerful” conclusion:

The single *highest valued* positional factor is worth *slightly less* than the *least valued* tactical factor (a pawn). In other words, **tactics almost always takes precedence over a positional consideration** since even the smallest material loss may be more valuable than the largest positional one. We can even make this the...

Principle of Tactical Dominance

Tactical criteria dominate positional criteria. Therefore, use of positional criteria is almost always useless if there is a tactic that wins material or checkmates; decide tactics first and only apply positional criteria if no tactic exists.



In other words, *when considering candidate moves, first decide if there are any tactical considerations that cost either side a pawn or more. If there are no tactics that would conclusively indicate a particular move, then use strategic and positional considerations as a “tiebreak” to decide between the moves that involve no material gains or losses.*

This powerful knowledge makes many difficult-looking chess decisions easy and saves valuable clock time! For example, in the above position, a player can disregard whether the a-pawn becomes isolated in deciding how to capture since a tactical consideration – the loss of pawn – is involved! In other words, tactics decides – if there are no tactics then positional considerations are the tiebreak – they usually only decide if the tactics are absent or neutral. (Note: This idea is closely related to the principle: *When you are way ahead in material, don’t worry about the little things.* Because most little things are positional nuances, when one side gets far enough ahead these fractional values are secondary factors and needn’t be strongly considered.)

Let’s consider another example. Black has just played **1...g4**. What should White play?



In a similar position a student immediately played 2.Nd2, with the analysis: “If I play 2.Nh4 or 2.Ng1 then my knight is not well-placed – a knight on the rim and your future is dim – so I must play 2.Nd2.” But this overlooks the obvious – and much more important – fact that after 2.Nd2? Black can simply capture the pawn on d4 with 2...Qxd4, so the “bad” 2.Nh4 is correct (being much more active than the other rim move, 2.Ng1). By choosing the “centralizing” 2.Nd2?, this student was

erroneously applying tiebreak criteria in a non-tiebreak position.

I have found that many other students often play similar bad tactical moves after wasting several minutes agonizing over arcane strategic and positional factors. *These players can could save themselves from making a bad move, and quite a bit of time on the clock, if they **first** consider the question, “is my candidate move safe?” Or, more comprehensively, “Is my candidate move tactically justified?” and reject it if it allows a forcing reply that loses material.*

This failure to realize that tactics takes precedence over other considerations is an epidemic among *weaker players, who are filled with useless opening knowledge and over-weighted (for them!) positional information, but can’t count or calculate correctly.* Tactics – and careful analysis – are more important! The applicable phrase for their deliberations is: “Penny wise and pound foolish.” The result of this misguidance is that players rated below ~1400 often make decisions that look crazy to a stronger player because they would rather give up small amounts of material (a large concession since a clear pawn advantage is often enough to have a winning position!) rather than

make a tiny positional concession.

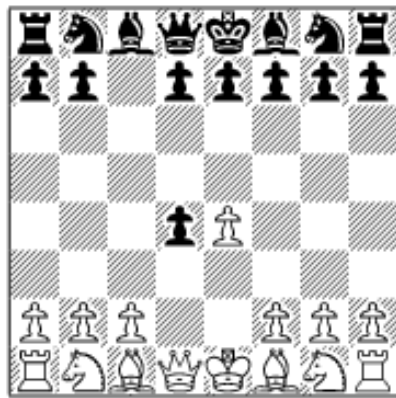


White to move

In this position White can save the attacked e-pawn in many ways. However, White chose to lose the pawn by playing 1.Nxc6? when after 1...Qxe4+ 2.Qe2 Qxe2+ 3.Bxe2 dxc6 the material was even. After the game I asked White, “Why not save the pawn with 1.f3?” 1.Nc3 is even better (but not 1.Qd3? Qb4+ 2.Qc3 Nxd4! 3.Qxb4 Nc2+ 4.Kd2 Nxb4 winning the knight), but I was curious as to why the

plausible 1.f3 had been rejected. Interestingly, White saw that 1.f3 was safe, but rejected it immediately because “it was better to give up the pawn than weaken the future castled kingside position with 1.f3” However, 1.f3 hardly weakens the future king position – Black no longer has a dark-square bishop and the only weakened square, e3, is not a problem. But just the fact that White *thought* that it was better to lose a pawn than create the “weakness” with f3 shows that White was unaware of the *Principle of Tactical Dominance*, and thus valued a minor positional weakness more than a pawn!

Suppose you stumble across the following position as White after **1.e4 c5 2.d4 cxd4** or even 1.d4 c5 2.e4 cxd4 without realizing what the “book” idea is to play the Morra Gambit with 3.c3:



White to move

With the assumption you don't know that 3.c3 is a decent gambit, you could play 3.Nf3. That's a very good move, especially if you know that after 3...e5?! you should play 4.c3! with a favorable Morra Gambit, but not 4.Nxe5?? which loses the knight to 4...Qa5+. But *if* you don't know that 3.c3 is the normal move, you probably also would not understand the nuances of 3.Nf3 either, so we can assume you should not

play 3.Nf3.

One of my students recently arrived at this position and thought: “OK, I can't take the pawn with the queen because then my queen is developed too early and Black will win a tempo after 3.Qxd4 Nc6.” So my student played 3.Nf3 e5 4.c4? (4.c3!) when if Black had simply played 4...Nc6 or 4...d6 or even 4...Nf6 (5.Nxe5? Qa5+ again wins the knight) he would already be ahead a protected passed pawn after four moves!

So this is a case where the *Principle of Tactical Dominance* clearly held again. White's position is **much** better after 3.Qxd4 Nc6 than it is after 3.Nf3 e5 4.c4? Nc6. 3.Qxd4 is *not* better than 3.Nf3, but it *is* better to win back the pawn with an even game than to lose a pawn. My student clearly gave too

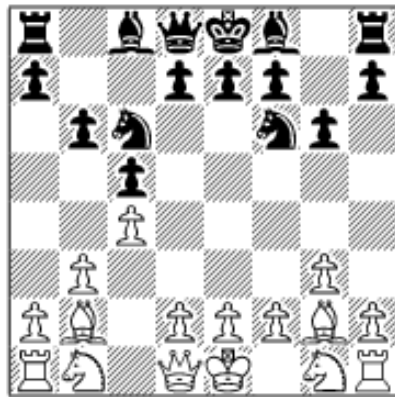
much “evaluation weight” to losing a tempo after 3.Qxd4 Nc6 compared to the much bigger problem of being down a pawn for nothing. So, once again, we find a weak player regarding minor positional considerations as being worth more than a pawn.

To some extent, this under-evaluation of a pawn’s value by less experienced players *is* understandable.

When you first start playing, your opponents are also weak, and losing a pawn is no big deal since more valuable pieces are so loosely tossed around. Moreover, getting your queen out early and having it kicked about can often lead to quick and devastating losses, so no wonder a beginner might conclude that bringing their queen out to a square where it might be attacked *could* be worse than losing a pawn. But eventually, as you and your competition improve, your respect for an extra healthy pawn starts to grow in proportion to you and your opponent’s ability to win with it. At the start of the game, *before the opposing forces clash*, a tempo is usually worth about • of a pawn, so regaining a “free” pawn at this early stage is clearly superior to saving a tempo.

OK, the *Principle of Tactical Dominance* is only a principle – a guideline, and not a rule. There *is* a material advantage that can result from a mini-tactic that is worth less than a pawn: the bishop pair. The bishop pair (the full terminology is “the advantage of the bishop pair”, meaning one side has two bishops and the other does not), is a material value, but only worth about ½ pawn, on the average. Therefore any “tactic” winning the bishop pair might easily be outweighed by positional values. Consider the following opening:

1.g3 c5 2.Bg2 Nc6 3.c4 Nf6 4.b3 b6 5.Bb2 g6



White to move

Here, with the golden opportunity to permanently weaken the d5- and d6-squares and dominate d5, White gladly gives up the bishop pair with **6.Bxf6! exf6** and Black can no longer guard the d5- or d6-squares with a pawn since the e-pawn has moved to the f-file and the c-pawn has already advanced. After **7.Nc3** the domination – and eventual occupation – of

the important d5-square is worth *more* than the bishop pair.

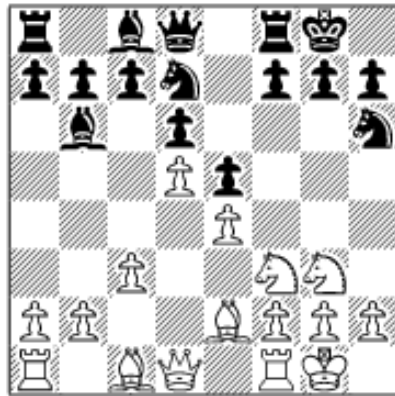


Black to move

Keep in mind, however, that *most positional features are worth less than half a pawn* as well, so winning the bishop pair is a “mini-tactic” that takes precedence over most positional features (as discussed in previous Novice Nooks).

Moreover, there are times when a single positional weakness creates long-term

tactical opportunities. For example, suppose the queens are still on the board and you can weaken a square or pawn in front of the opponent’s king. In these cases it is not just the compensation of the positional weaknesses that allows one to sacrifice material (say the bishop pair, a pawn, or possibly in rarer cases even a piece!), but rather the additional longer-term tactical opportunities to create a mating attack.



White to move

In this position White should seriously consider giving up the bishop (and thus the bishop pair) with 1.Bxh6. But it is not just the doubled isolated h-pawns that are the compensation; his other minor pieces are well-placed to support a kingside attack.

On the other hand, after **1.e4 e6 2.d4 d5 3.e5 c5 4.c3 Nc6 5.Nf3 Qb6 6.Be2** IM John Watson suggests **6...Nh6** as a main

line.



White to move

Here, in comparison to the previous position, with the Black bishop on f8 and Black’s king in the center, **7.Bxh6** is certainly a reasonable move, but hardly a killer. Both sides have chances – and Black may even castle kingside in many lines after ...Bg7!

Earlier we suggested that before the pieces clash, a tempo is only worth about • of a pawn (after they clash a tempo can be worth a piece or more!). But that is less than the ½ pawn value of the bishop pair. Therefore, *near the start of the game it is usually correct to preserve the bishop pair at the cost of a tempo*. For example, in the King’s Indian Defense, after **1.d4 Nf6 2.c4 g6 3.Nc3 Bg7 4.e4 d6 5.Be2 O-O 6.Nf3 Nbd7 6...e5** is the main line **7.O-O e5 8.Be3 Ng4**



White to move

...the correct move is not to guard the bishop with a developing move such as 9.Qd2, allowing 9...Nxe3, but instead preserve it with **9.Bg5**. Similarly, in the Najdorf Sicilian, after **1.e4 c5 2.Nf3 d6 3.d4 cxd4 4.Nxd4 Nf6 5.Nc3 a6 6.Be3 Ng4**



White to move

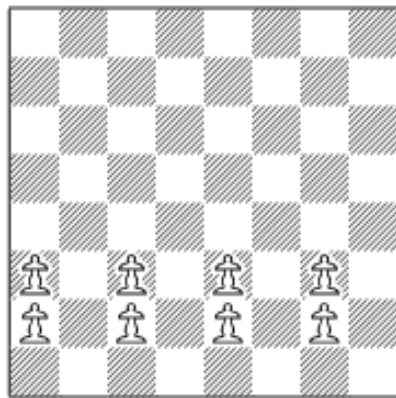
...the main line is **7.Bg5** preserving the bishop pair.

Although a pawn is almost always worth more than a *single* positional feature, it could be worth less than *multiple* positional features. It is possible that multiple positional considerations can add up to more than one pawn's worth of

value, so of course it is possible to sacrifice a pawn (or more!) for positional considerations. It is important to note that it is more likely one would sacrifice a pawn for your army's *piece activity* (as you do in most opening gambits) or to weaken your opponent's *king safety*, which are different issues.

Since multiple positional criteria can have larger value, we can state an exception to the *Principle*: **If more than one positional criterion is affected, it is possible, although unlikely, that the total value could add up to more than one pawn, so it may be possible to "win" a pawn, but at too great a positional cost.** But, although this exception can occur frequently in practice, the percent the Principle does apply is so high that weaker players can – and should – forget about balancing positional factors against material loss until they achieve at least intermediate status.

As an *ad absurdum* example, suppose White initially has a perfect pawn structure, but in the course of his combination (several moves) to win a black pawn, has to accept the doubling and isolation of *all* white pawns:



In almost all cases, such a disaster would be worth far more than a single pawn, so White would not even consider accepting such a tradeoff.

Nevertheless, this general domination of positional features by tactics helps explain why someone's playing strength – especially for players rated less than 2000 – is closely related to their ability to analyze. Since tactics is the most important component of analysis, other factors such

as planning and evaluation become “tiebreaks” to playing strength, only when analytical and tactical ability is similar (as we see in many players rated 2000+). For most players rated below 2000, the better the analyst, the better the player. Therefore, *it is possible for players with high analytical ability to have a higher playing ability than far more experienced players with more “chess knowledge.”* The verdict: study tactics (refer to archived Novice Nooks such as [A Different Approach to Studying Tactics](#) and strive to improve your analytical ability: [Improving Analysis Skills](#)).

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

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