

Own pawns controlling enemy weak spots

+10cps for such a p

Own ps controlling enemy unguarded (weak) squares on the 4th rank

+3cps for such a p

To change or not change

With less pieces on the board, the advantage in score of the stronger side becomes relatively less significant. Therefore, some penalty for changing material if being the stronger side is indicated. For the purpose, both ps and pieces are considered. With the disappearance from the board of 1 pawn worth of material $1/50$ of the plus score for the stronger side is subtracted. Thus, if a pair of ps is changed, the plus score for the stronger side should be decreased by $1/25$. If 2 queens are changed, the decrease in score should be $18/50$. If 2 bishops are exchanged, then the decrease is $3/25$, etc.

More than 3 own pieces on a single file, or more than 3 own pieces along a single diagonal - some penalty is indicated for the congestion. -2mps for each piece after the third.

Additional blockers

An additional blocker would be a piece placed behind an own blocker. (eg. wpb4, bnb5, bbb7 - bb7 would be such a blocker) +2mps for such a blocker. Obviously, the additional blocker does not exercise much influence in this respect for the time being, but its position could still have some repercussions on future developments if the main blocker is removed or perishes.

Double p when root p

If a double p is a root p, a penalty of 2mps is indicated.

Blocking double root p

+2mps for a piece blocking an enemy double root p

Pieces defending a root p

+3mps for a piece defending own root p

double that if the root pawn is a part of a fixed or semi-fixed chain

-2mps for a second piece placed on the same file in front on an own p. Obviously, this thwarts somewhat the possible advance of the p.

Penalties for weak spots in terms of centralisation

-7cps if the weak spot on the 3rd rank is on the d or e files (e3,d3), -5cps if the weak spot is on the c or f files (c3,f3), and -3cps for a weak spot on g3 or b3

Discriminate placements of ps with bigger fixed structures

With bigger fixed structures and when down in score, it would be wise to have own ps still not fixed on adjacent files horizontally connected (eg. bpsg5,h5), as this would help close the position further. Eg. - wps g3,h2 - white can do nothing to prevent further closing of files (if the f file is already with fixed ps) - actually this could be counted as a fixed structure for the weaker side.

+20cps for such an arrangement

Semi-backward-fated p

A semi-backward-fated would be one of the type wpsb5,d5, bpsd6,c7,b7 - c7 is such a pawn. this type of p stays somewhere in between a backward-fated p and a backward p. If black moves b6b7, c7 becomes backward-fated, and if both b ps are removed, we have the case of a backward p. The distinction to a backward p is that 2 enemy ps could capture it if trying to advance, while only one own p supports it. That makes the possible advance more difficult, and in any case this would require some extensive preparation. Some penalty is indicated for the p, maybe 1/2 the cumulative penalties for a backward-fated and a backward p.

The concept could be developed for ranks, with decreasing penalties as the p moves forward. I think it is important to do this type of p, because it occurs quite often.

Semi-connectedness of ps

For the purpose an own piece placed on a square where it would make a bunch of own ps a whole group if it were a p, is qualified for a full p. (eg. wpsa2,b2,c4, wnc3) When measuring the connectedness of a group, the piece will be scored 1/2 the standard value of a p. This could be useful in discerning certain patterns in advance. However, this will be applied only to ps disconnected vertically.

Pawn of the immediate king shelter when being a root p

When a p of the immediate king shelter is a root p at the same time, it should be penalised, by maybe 3cps, as this way of sheltering the king is usually awkward.

Pawns of the immediate king shelter connecting to a larger group of ps

A bonus is indicated, maybe +3cps, for each p of the larger group, connecting to the ps of the immediate shelter, as such ps restrict the activity of enemy pieces. (but maybe this should be done just for the first 2 ps)

Double ps with the more advanced p making an enemy p backward

The penalty for the enemy backward p should be somewhat, increased, by 1/5, because if the more advanced of the double ps perishes, its place could be taken by the second double p, maintaining the enemy p backward.

Controlling squares in front of enemy ps by own ps

For each square in front of an enemy p controlled by own p (for a possible move; i.e. the bpf5 controls the square in front of wpe2, but the opposite is not true) a bonus of 1mps is given. +5mps if the square in front of the enemy p controlled by the own p is not controlled by another enemy p.

Storming efficiency

For the purpose the distance in squares for each own p to the ps of the enemy pawn shelter is measured (for ps on the file on which the enemy king is placed and the 2 adjacent files). The distance will be measured to the point where the ps of both sides clash, either vertically, fixing each other, or diagonally, which case shall be weighted 3 times higher. Each square carries a penalty of 5cps. This will be repeated for all ps and we will sum the numbers. The bigger the overall number, the less efficient pawn storming is.

X-ray defence

Done in the same way as x-ray attacks, but for defence, and with the distinction that only own pieces in between the defending and the defended piece will be considered.

For defending squares of the shelter zone values will be double.

Double backward-fated p

This p will score a bigger penalty than usual backward-fated ps, by 1/3, because it makes the doubling even more compulsive.

Backward p when part of a larger group with ps on squares of same colour

A smaller penalty for the backward p is indicated, by 1/4, because the group is a solid whole.

+1mp for any piece controlling a square in front of an enemy p (including by x-ray, i.e. when there are one or more own ps and pieces in between)

A bonus for 2 ps on adjacent files if they have no counterparts when considering neutrality
When considering neutrality for passer status a bonus is indicated (maybe +20cps) for 2 own ps that have no counterparts (i.e. enemy ps on the same file), if the ps are on adjacent files. That would mean that the enemy neutralises those ps in terms of passer status with double ps of separate groups. Sooner or later a potential (prospective) passer might arise for one of the sides, which will lead to a potential passer for the other side too. Chances are that the side with 2 ps with no counterparts will create a potential passer that will be more advanced than the potential passer that will simultaneously appear for the other side. Hence the bonus.

One p controlling the square in front of double and horizontally isolated enemy ps

If one p controls the square in front of double (actually the square in front of the more advanced p) horizontally isolated ps, then a big penalty for the double ps is indicated. Cumulative value for the 2 double ps - 1.10cps, so the second p is worth some 10cps.

A horizontally isolated p when fixing an enemy p and making backward another p

When a horizontally isolated p fixes an enemy p and at the same time makes backward another enemy p (eg. wpa4, bpsa5,b6), the horizontal isolation of the p is felt less sharply, as usually it will be solidly defended. Therefore, the penalty for isolation might be reduced by 1/2.

A horizontally isolated p facing 2 double horizontally isolated enemy ps on the same file

If this type of p faces the 2 ps, but does not fix them, the cumulative value for the 2 double ps will be 1.25 ps.

If the p facing the 2 ps fixes them at the same time, then the penalty is bigger and the cumulative value for the 2 ps would be 1.15cps.

2 knights vs 2 bishops

+5 cps for the knights for each pair of fixed ps

Backward p with own knight on a more advanced rank on the same file

In that case, and if the knight is defended by 2 own ps and cannot be attacked by enemy ps, the penalty for the backward p should be decreased by 2/3 as it is very difficult to use the backwardness of the p.

Knight on 5th rank in relation to an enemy backward p

If we have a knight on the 5th rank, defended by 2 own ps, and the only enemy p being able to attack it being a backward p, then the n should receive an additional bonus of +15cps, as if changed for an enemy minor piece, the backward p would become backward-fated.

2 bishops and asymmetrical structures

When there are 2 bs on the board, asymmetrical structures would favour the bs. +5cps for each p that has no counterpart on the same file.

2 bishops and groups of ps

A larger number of groups of ps would favour the bs.

+4cps for each group of ps for either one of the sides (including isolated ps).

Penalty for vertically isolated passed p

When we have a vertically isolated passer, it should score 1/2 of the usual value as it is not exactly clear if the passer survives or not.

Bonus for neutralising enemy ps with ps on less advanced ranks

When checking passer status, and neutralising enemy ps with ps on adjacent ranks, the less advanced positioning of the p should be favoured. +6cps for own p on 2nd rank, and +3 for own p on 3rd rank.

A linear piece controlling more than one squares in front of enemy ps

If a linear piece (bishop, rook or queen) controls more than one square in front of enemy ps that are not controlled by enemy ps, some bonus is due; +7cps for each such square

Group of 4 ps with double ps in the middle

In the case of such a structure (eg. wpsc3,d3,e3,d4), when the double ps are in the middle with the 2 other ps on adjacent files on the same rank as the less advanced of the double ps, an additional penalty is due for the structure, -10cps, as it is very clumsy in moving forward.

Structure with knight fixing an enemy p

In the case of such a structure (eg. wnd4, wpe5, bpsd5,e6), when the knight is fixing an enemy p and is part of a larger fixed pawn chain with diagonally connected ps, a bonus is due for the knight, a decent +20.

Mobility in terms of centralisation

When calculating mobility, more central squares will give a bigger bonus than less central ones. If the board is split in 4 square shapes in terms of centralisation (see general piece positioning in terms of centralisation), then controlling a square of the most centralised shape will score 1/4 higher than if the square was within the second shape in degree of centralisation, which in turn will score 1/4 higher in relation to controlling a square within the 3rd shape, etc.

I think this might be very useful as some squares for mobility are really far better than other ones.

Penalty for more than 3 own ps on the same rank

A penalty is indicated for more than 3 own ps positioned on one and the same rank (apart from the 2nd); -3cps for a fourth p, and the same for possible further ps

Backward p when part of the king shelter

If a backward p is part of the king shelter, the penalty should be increased by 1/3.

Backward-fated p when part of the king shelter

If a backward-fated p is part of the king shelter, the penalty should be increased by 1/4.

Weak spot controlled by 2 enemy ps

In that case the weak spot should carry much bigger penalty, -25cps, as there could land enemy pieces with tremendous effect.

Vertically isolated p more than 2 squares apart from closest own p

In that case a penalty of -7 might be well-deserved.

Control of square next to one of two fixed ps on 4th and 5th ranks

If there are 2 fixed ps on the 4th and 5th ranks, a bonus of 4mps for controlling the square next to the enemy p (i.e. the square horizontally adjacent to the enemy p), if it is not controlled by another enemy p as there can land advantageously an own piece.

Double horizontally isolated backward-fated p

That would be a double p that is horizontally isolated with the additional disadvantage that the square in front of the more advanced p is controlled by an enemy, and by more enemy pieces than own for the side with the double p. That would make the double ps backward-fated in practice, and therefore a decent penalty in addition to other due penalties for the double ps should be dispensed; -10cps

Rook on a file with one own and one enemy p

+5cps for each square separating the rook from the own p

Doubling heavy pieces on a semi-open file

For doubling 2 rooks on a semi-open file 1/2 the value for doubling 2 rs on an open file
For doubling q and r on a semi-open file 1/2 the value for doubling those on an open file

Doubling heavy pieces on an x-ray against the king

+10 for doubling 2 rs on an x-ray against the king
+15 for doubling q and r on an x-ray against the king

Penalty for doubling diagonal pieces with own p of same colour

-1 for doubling q and b on a diagonal, when there is an own p on it, fixed by an enemy p

Scoring passers in terms of rank placements

Passer on the 7th rank will score 1/4 higher than passer on 6th rank, which in turn will score 1/4 higher than passer on 5th, etc.
Passers on 4th, 3rd and 2nd ranks will score additionally 1/2 of those values.

3 passers when connected in a group

When connected in a group, 3 passers will score an additional +1.25 to already assigned bonus points for passed pawns.

A piece on a square in front of an enemy backward-fated p

This is an ideal square for the piece as it is solidly defended and cannot be attacked by enemy ps; +5mps for such placement

Intersections for the rooks

+15mps for a square of intersection for the 2 rooks, as they could double there

Low mobility rook

Endgame

-30cps for a zero mobility r

-20 for a r with just one free available square

Solid pawn control in front of an enemy pawn

+4mps for 2 ps controlling a square in front of an enemy p (for a possible move)

Continuous control of squares

Continuous control of squares by diagonal pieces

+3 for 2 bs on diagonals next to each other

+1 for q and b on diagonals next to each other

Continuous control of squares by heavy pieces

+10 for q and 2 rs positioned on files next to each other (eg. c,d and e)

+5 for q and 2 rs positioned on ranks next to each other (eg. 3rd, 4th and 5th ranks)

Horizontally isolated p in terms of rank placement

Horizontally isolated ps will score penalties in terms of the rank they are placed on.

The less advanced the rank, the more vulnerable the p is.

For a black p the 7th rank will score a penalty 1/8 higher than for a p on the 6th, which in turn will score 1/8 higher penalty than if the p was on the 5th rank.

When the p moves to the 4th rank (the last possible for this type of p), the penalty will decrease by 1/4 in relation to what it was for the 5th.

Additional penalties for double ps in terms of advancement

When the double ps are part of a group, it is the less advanced p that will suffer more because it is less mobile. -5cps for it

When the double ps are horizontally isolated, it is the more advanced p that will suffer more, because the enemy pieces are closer to it.

Backward ps in terms of file placements

Penalties for backward ps should be calculated in respect of the file they are on. The more central the file placement of the p, the bigger the penalty, simply because the p is more important, and its forward movement is thwarted. Placements on central e and d files will carry 1/8 higher penalty than for ps on semi-central c and f files, which in turn will carry 1/8 higher penalty than for ps on g and b files. The same will apply to a and b ps.

The rule could be applied also to backward-fated and semi-backward ps.

Horizontally isolated central p

This is a p on a central e or d file (usually on d). Such p should receive some additional penalty, -10, because its position right in the center of the board makes it much more vulnerable to enemy piece attacks.

Additional +15 for blocking such a p (apart from other blocking bonus points).

Horizontally isolated pair of ps

In the case of 2 ps connected horizontally, and isolated horizontally from other own ps (usually the ps are on the 3rd or 4th ranks, eg. wpsc3,d3, bpsb5,e5; or wpsc4,d4, bpsb6,e6), the scoring will depend on the ability of the ps to advance forward.

+15 for the pair if the ps are on the 4th rank

-15 for the pair if the ps are on the 3rd rank

+6 for 2 rs on files next to each other

+4 for q and r on files next to each other

Rook on semi-open file in terms of distance to enemy p

For a r on semi-open file the distance to the enemy p will be measured.

+2cps for each square in between

Rule for different piece configurations

When different piece configurations arise on the board (eg. q vs 2rs, q vs 3 minors, 2 rs vs 3 minors, q and ps vs r and 2 minors, r and ps vs 2 minors, etc.), the most important factor to check is intensity of interaction. In that case it should be weighted 1.5 times higher, double that in endgame, because on it will depend the well-being of the one or the other side. The side with the more and less strong pieces will need good values for intensity of interaction, and that will mean that its pieces are well-coordinated, probably offering it the upper hand. If values for intensity of interaction are low for this side, the side with less, but stronger pieces might very well prevail. Therefore, it is necessary to check this factor in such positions.

Fanning quality of pieces

The fanning quality of pieces (i.e. when pieces fan out across the board) is similar to complementarity (optimal spread), but while optimal spread refers more or less to mobility, fanning has a direct bearing on the positioning of pieces and simultaneous control of central squares. The proposition is that the more wide apart pieces are from each other, the better for the general welfare of the position.

For the purpose we will measure the distance in squares between every two pieces on the board on files, ranks and diagonals. (Kings are excluded from this) Squares in between the pieces (squares on which the pieces are do not count in) will be counted empty if there are enemy ps and pieces or other own ps and pieces. Each square between the pieces will give 5mps. We will check this for every 2 pieces on the board. In the end, we will have some

number, and the bigger the number, the better. This will mean that the overall placement of pieces to each other is reassuring. Placement of pieces in a way that they cover a wider area on the board will be stimulated. This might have a decisive effect for some types of positions.

Do not consider positions with overall fanning quality for own pieces more than 1.5 times lower than overall fanning quality for the enemy pieces.

Passers when part of bigger fixed chains

Those will be passers of the type wpsb4,c5,d6, bpsb5,c6, or wpsb4,c5,d6,e6, bpsb5,c6. When part of bigger fixed chains, passers deserve an additional bonus, because they could be destroyed only at the cost of further positional concessions. 1/3 higher bonus than that for a protected passer in the first case, and 1/3 higher bonus than that for a pair of connected passers in the second case. That might help a more precise evaluation of the position and, in the second case, try out an exchange sacrifice of a minor piece for 2 ps with considerable winning chances.

Double ps could not be done in terms of rank placements, because this is very cumbersome and possibly counterproductive.

Double ps in terms of file placements

In distinction to horizontally isolated ps, double ps are more difficult to do in terms of file placements. Still, some patterns could be discerned.

Double ps when horizontally isolated

These are very similar to horizontally isolated ps and central files should carry a bigger penalty, as it is easier for the enemy pieces to attack them there. 1/10 higher penalty for ps on d or e files in relation to ps on c or f files, which in turn will score 1/10 higher penalty than b and g files, and the same holds true for the end a and h files.

Double ps when part of a group

When double ps are part of a larger group, the logic will be reversed as it is not easy for enemy pieces to attack them, and what counts will be the intrinsically more valuable placements on central files. 1/10 higher penalty for ps on end a and h files in relation to ps on b and g files, which in turn will score 1/10 higher penalty than ps on semi-central c or f files. The same will be true for d and e files.

Horizontally isolated ps in terms of file placements

Ps on central files will carry a bigger penalty, since they are more easily attacked. 1/8 bigger penalty for a p on d or e files in relation to a p on c or f files, which in turn carries 1/8 bigger penalty than b and g files, and the same holds true for the end files.

Rook on 3rd rank against the enemy king position +20cps

Rook on a semi-open file with p attacked defended by another p

Some penalty should be assigned for the r when it is on a semi-open file and attacks an enemy p, that is defended by another p, as this is not a very wise placement; -2cps

Useless surplus passers

Those are usually end-file a or h separate passers, or b or g protected passers, with large fixed structures on the board. Even if one of the sides has a surplus passer of this type, but it is not possible for its pieces to land on penetration points in the enemy position, then the game is drawn as an advance of the passer would lead to its demise.

2 protected passers defended by one and the same pawn

When 2 protected passers are supported by one and the same p, the bonus for protected passer status should be somewhat decreased, maybe by 1/3, as those passers are more vulnerable in one way or another.

Bonus points for distance between passers

With 2 or more separate passers on the board, or 2 groups of passers, bonus points will be assigned for the number of files in between the separate passers or the groups (or between a separate passer and a group, for that reason). The larger the number of files in between, the better for the side with the passers, as they are more difficult to contain that way.

6 files in between - bonus of +25cps

5 files in between - +20 cps

4 files - +15

3 files - +10

2 files - +5 cps

Just one file in between will carry no bonus.

Rook on a semi-open file against an enemy horizontally isolated p
+7cps for the r

Queen on a semi-open file against an enemy horizontally isolated p
+3cps for the q

Horizontally isolated p when part of a fixed structure

Eg. wpsb4,c5, bpc6. When a horizontally isolated p is a part of a fixed structure, its isolation is further aggravated. 2/5 higher penalty for isolation is indicated.

Pieces fixing the pawn structure

Pieces being part of the fixed pawn structure (i.e. in diagonal connection with other own ps and fixed by enemy ps; eg. wnc3, wpd4, bpsc4,d5, or wnd4, wpc3, bpsc4,d5) is a paradoxical concept at first glance, but not all pieces are unsuited for such a function. Queen and rook should not be considered, but the minors should. The knight is a perfect fixer, because it retains good mobility and is usually well-placed, while the bishop not much so, because this would lower considerably its mobility, but still such a placement for the b might sometimes be useful.

+15cps for n fixing the pawn structure

-10 for b fixing the pawn structure

Bishop fixing the pawn structure to prevent penetration

Although the bishop is not the best fixer, when the b side is the weaker side and fixing the structure would prevent penetration of enemy pieces, this is the appropriate option to choose. +20 for such a move

Bonus for passers in terms of distance to the enemy ps

When considering this, we should check the number of files in between the passer and the enemy ps or groups of ps. Enemy ps could be just on one side of the passer, or on both sides. +3cps for each file separating the passer from the enemy ps. The less removed the passer is from enemy ps, the more easily would it be to contain it, because enemy ps usually support pieces trying to stop its movement forward.

Bonus points for backward ps when part of a group

When backward ps are part of a larger group of ps, their penalties should be somewhat decreased, by maybe just 1/10, because groups usually make weaknesses more difficult to attack. This concerns also semi-backward, backward-fated and other types of backward pawns.

Protected passer defended by 2 ps

In the case that a protected passer is defended by 2 own ps (eg. wpsd4,e5,f4, bpsd5,f5), the bonus for a protected passer should be somewhat increased, by 1/4, as it is solid like a rock and will endure a long time.

Pieces obstructing the advance of an own passer

If a piece obstructs (stays in the way to promotion) the advance of an own passer, then it should be penalised minimally, by 2mps.

Unopposed pawns

That will be a pawn that does not have an enemy counterpart on the same file. This might not be a passer, it might not even be a potential passer (because double enemy ps on an adjacent file neutralise it), but the quality of being unopposed confers upon it a bigger influence on the board for the time being and good prospects for future development. That is why such ps are to be preferred and should receive a decent bonus. +8cps for any such a p

Connected unopposed ps

Those will be 2 unopposed ps on adjacent files. They will be neutralised by ps of different enemy groups. These ps deserve much bigger bonus, and they are really much more dangerous; +20

Double unopposed ps

That will be a double p with no enemy counterpart on the same file. Bonus points might be decreased minimally. +6cps for each of the ps.

Unopposed p on the 5th rank

When this type of p is on the 5th rank, it is much more dangerous, therefore its bonus should be increased, 1.5 times.

Unwise attacks

It would be unwise to attack a piece of equal value (this concerns especially the minors), if capturing it would decrease your score. -2cps for such attacks

Fixed ps on the 7th rank

Endgame

Such ps are bad, of course, and should be avoided. Eg. wpa6, bpa7. And it would not matter much if the fixed p is horizontally isolated, or a part of a larger fixed structure. Soon the enemy p that fixes it could become a passer very close to promotion square. The closer the p to the center of the board, the smaller the penalty, as central ps of this type are easier to defend.

Fixed p on an end a or h file - penalty of -40cps

Fixed p on b or g files - -15cps

P on c or f files - -10cps

P on d or e files - -5cps

Own pawns making enemy ps weak when part of a larger group

When own ps that make enemy ps weak (fixing an enemy isolated p or making an enemy p backward) are part of a larger group, the penalty for the enemy pawns' weaknesses should be increased, by maybe 1/4, because the group only amplifies such weaknesses.

Blocking an unopposed pawn

If possible, that would make sense in almost any situation. But as the factor is relatively unimportant, millipawns are assigned. +5mps for such a move

Double horizontally isolated ps on 7th and 6th ranks fixed by an enemy p

Eg. wpd5, bpsd6,d7. Such a structure is not only ugly, but it is very damaging for the side with the double ps, because it is conducive to the development of enemy pieces while thwarting the development of own pieces. Penalties for double ps and fixing isolated ps might be increased significantly, even more so if the enemy p is part of a larger group.

Space advantage for pawns in terms of fixed and unfixed ps

It makes sense to distinguish between space advantage for ps when the ps are fixed and when they are not fixed. The second case occurs only with ps on the 5th rank, so space advantage of fixed ps might be taken as the standard. For ps that are not fixed the bonus might be decreased by 1/3, because such ps will not perform exactly the same function for a long time, while fixed ps tend to last.

Bonus for ps on squares of alternating colours

When placed on squares of alternating colour (black and white), ps will get some bonus points for a perfect 50-50 split, and penalties in all other cases. (When the number of ps is odd, a 3-2 or 4-3 split will count for a perfect split.)

+20 cps for a perfect split

Penalties will be as follows:

8 ps of same colour on the board - -30cps

7 ps of same colour - -25

6 ps of same colour or 7-1 split - -20

5 ps of same colour or 6-1 split - -15

4 ps of same colour or 5-1 split - -10

3 ps of same colour or 4-1 split - -5

Control of a single open file

Control of a single open file will carry a higher bonus than the bonus points for a r, 2rs, q and r and a triplet controlling an open file. +15 additionally

Control of open ranks

An open rank will be a rank on which there are no own or enemy ps. This will concern only rooks and the queen, and is important, because it might help the pieces transferring to an appropriate location.

+10 for r controlling an open rank

+5 for the queen

Blocking protected passers

Blocking protected passers deserves higher bonus than blocking a separate passer, simply because the passer is more valuable.

Blocking a simple protected passer

1/3 higher bonus than the standard (eg. wpsc4,d5, bpc5,bbd6)

Blocking a protected passer defended by 2 ps

2/5 higher bonus, not only because of the relatively bigger value of this passer, but mainly for the reason that the square in front of the passer is an excellent position for blocking, being part of larger fixed structures. (eg. wpsd4,e5,f4, bpsd5,f5,bne6)

Controlling the square in front of an enemy horizontally isolated p

Controlling the square in front of an enemy horizontally isolated p when the p controlling it is part of a bigger group is a good decision. (eg. wpd5, bpse7,f7,g6) +5cps for a p on e7

Blocking the square in front of an enemy horizontally isolated p

Blocking the square in front of an enemy horizontally isolated p, when there is an own p controlling that square that is part of a larger group, is well advised. +15 for such a move

Minors on open files

+5 for a minor piece on an open file, if the piece is defended by a p (as this could prevent enemy heavy pieces from penetrating).

Funny knights

That would be knights on adjacent squares, either vertically, horizontally or diagonally. This is not an optimal positioning, because the knights control a rather small area, and besides they often stay in the way of other own pieces.

-3cps for such a positioning

Bishop on an open diagonal

That will more or less follow the pattern of rooks on open files, but while the rooks dominate 4 minors, and are therefore much more important, the bishops dominate nothing. That is why the bonus should be much smaller.

An open diagonal would be a diagonal with no own or enemy ps. For the purpose only diagonals, consisting of 5 squares or more, are taken into account. A placement on an open diagonal would be conducive to transferring to an appropriate location.

+7cps for a bishop on an open diagonal

Bonus for unopposed ps in smaller groups

Unopposed ps, when part of a smaller group, would deserve a bigger bonus than when part of a larger group. That is so because smaller groups advance more quickly than larger groups, and therefore the status of an unopposed pawn could be exploited more easily for gaining positional advantages.

Unopposed p in a group of 2 ps - +6cps

Unopposed p in a group of 3 ps - +4cps

Unopposed p in a group of 4 ps - +2cps

Pieces controlling the square in front of an enemy unopposed p

+3mps for such a piece

(That would take into account the squares for a possible move, i.e. if the p is on e7, e6 and e5 would be considered)

Relative importance of tactical and positional factors

If pieces are responsible for tactics on the board, and pawns are responsible for positional play, there is not a reason not to believe that the relative importance of the two factors is what the relative material strength of the two factors is. In my view pieces would account for an overall material strength of 30ps, and pawns would account for 8ps. That would make a ratio of 15 to 4, which is about 4 to 1. If we take into consideration blocking, where pieces perform positional roles, then we could more or less round up the ratio to 4 to 1. That would mean that tactical factors are 4 times more important than positional ones.

And when pawn structure is exhausted (i.e. factors like backward, isolated, double ps, passers, etc.), I think this will be quicker to come, there will still remain the difficult task of optimising tactical factors like mobility, attacks, complementarity and intensity of interaction.

Subsplitting of positional factors

The 6 most important positional factors would be passers, backward ps, isolated ps, double ps, unopposed ps and blocking.

I might more or less suggest the following would be true about interrelation of the factors:

Passers would account for 1/2 of what backward ps (all types) account for.

Blocking would account for what passers account for. (1 to 1 relationship)

Double ps would be twice as important as isolated ps.

Double ps would account for 1/5 of what backward ps account for.

Unopposed ps would account for 1/3 of what passers account for.

In the end we will have an interrelation of positional factors as follows:

Backward ps to passers to blocking to double ps to unopposed ps to isolated ps -
2:1:1:2/5:1/3:1/5

Subsplitting of tactical factors

The 6 most important tactical factors would be mobility, piece positioning, attacks, defence potential, complementarity and intensity of interaction.

I think the following might more or less be true about the interrelation of the factors:
Mobility would be as important as piece positioning (1 to 1 relationship)
Attacks would account for 1/2 of what mobility account for.
Defence potential would account for 2/3 of what attacks account for.
Complementarity would account for 1/3 of what mobility accounts for.
Intensity of interaction would account for 1/2 of what defence potential accounts for.

In the end we will have an interrelation of tactical factors along the following lines:
Mobility to piece positioning to attacks to defence potential to complementarity to intensity of interaction - 1 to 1 to 1/2 to 1/3 to 1/3 to 1/6.

Of course, we should bear in mind that these numbers would be different for specific positions, but the overall pattern could fit a large variety of positions.

In the endgame positional factors should be increased and tactical decreased.