**Double pawn when part of the king shelter**
1/2 higher penalty for doubling is indicated. However, when there is a fourth p in the king shelter, the additional penalty should not be considered, because just the doubling in terms of general positioning is felt, but not in terms of weakened shelter.

**Unopposed p into the enemy camp against the enemy king position**
+15 cps additionally to the bonus for an unopposed p

**Prospective passer into the enemy camp against the enemy king position**
+20 additionally to the bonus for a prospective passer (The difference between an unopposed p and a prospective passer is that an unopposed p is neutralised passer-wise by an enemy p, while a prospective passer is not, but enemy pieces and other factors prevent its becoming a full passer. In that sense, a prospective passer stays in between an unopposed p and a full passer.)

**Rook defending own p**
+2mps for each square in between

**Distance of bishop to an own p along an x-ray**
+3mps for each square in between

**Proximity of linear pieces to the enemy king**
When attacking the shelter zone, not only the squares attacked will be taken into consideration, but also the proximity of each piece to the king along a file, rank or diagonal. +15 cps if the piece is just 1 square away from the king; +10 cps if there are 2 squares in between, +5 if the squares in between are 3. Thus, it will be important not only to attack the king, but to attack it from close range. For attacking squares defended by the enemy king the rule will apply, but the bonus points will be half of the above.

**Blocking an enemy p to prevent it gaining space advantage**
Blocking an enemy p, if possible, to prevent it to gain space advantage by advancing further, would be indicated. Eg. A black piece on a5 with wpa4 would be a good choice. +1cps for such a move.

**Doing prospective passers in terms of ranks**
Prospective passers could be done for ranks, just as passers.

**Blocking prospective passers**
It would be wise to block a prospective passer, if possible. 1/2 the values for blocking a separate passer.

**Mobility versus piece positioning**
Do not consider variations where one of the factors for a given piece is extremely good, but the other might be unusually low. Such continuations would not be good. Usually this will be a centrally positioned piece with zero or minimum mobility, but it could also be a piece with relatively good mobility placed at the far end of the board. Interestingly, some engines are tricked by this.

**Bonus for backward p on 7th rank because of first move**
Fully backward and semi-backward ps on the 7th rank deserve a 1/15 lower penalty for backwardness because in a number of possible variations the p could go 2 moves ahead, forcing the enemy p, making it weak, not to capture it.

**Pawns of the immediate king shelter on initial positions**
A bonus is due if all 3 ps of the immediate king shelter are still on initial positions on the 2nd rank. +5cps

**2 knights blocking passer and a semi-passer**
Eg. bps c5,c3, wnc2, wnc4. This is just for the fun of it. It is not exactly clear which side has the upper hand.

**Proximity of attack for linear pieces**
When attacking, linear pieces (queen, rook and bishop) will get a bonus for being closer to the enemy piece or pawn attacked. The less the distance in between the attacker and the attacked piece or pawn, the better.
+20mps for no squares in between
+15mps for 1 square in between
+10mps for 2 squares in between
+5mps for 3 squares

**Double pawn when part of symmetrical structures**
When a double pawn is part of horizontal symmetrical structures (i.e. the black and white ps are on the same files), its penalty should be increased by 2/3, as chances are the double ps will be blocked (fixed), making them useless.

**Reinforcing the effect with further pins**
A second pin will score 1/3 higher, a third 1/2 higher and a fourth one - 2/3 higher.

**Fixing the more advanced double p**
+8cps for fixing the more advanced double p with an own p, as this would prevent definitively the undoubling of the pawns

**A single piece into the enemy camp**
A penalty of -15cps would be fine as there is a danger that the pawn will fall prey to the enemy forces

**Intersections of pawns and bishop**
+3cps for such an intersection, as the bishop could use the square to its benefit

**Pawn support for the knight**
+5cps for a single p supporting/defending the knight
+12cps when 2 own ps support/defend the knight

This is important, because the knight is a slower-moving piece than the linear pieces.

**Unopposed p defended by another pawn**
+5cps as this could help the pawn endure in its function for some time, if attacked by an enemy p

**Unopposed p defended by 2 own ps**
+12 cps as chances are great the pawn will endure in its function of an unopposed pawn for quite some time, if attacked by enemy ps

**Temporary backward-fated p**
Eg. wpsg4,e4, bpsf6, g5, h7 This would be a p that would cease being backward-fated, if an own p attacks one of the enemy ps making it backward and the latter could not be defended by another p. In the above case f6 is backward-fated, but the bph7 could attack g4, trying to undo its backwardness. 1/2 lower penalty for such a backward-fated p.

**Backward p leading to an isolated p**
Eg. wph4, bpsh5,g6 This would be a p that, if it moves forward and is captured by an enemy p, would leave another own p isolated. 1/5 higher penalty for such a p

**Backward p leading to 2 isolated ps**
Eg. wph4, bpsh5, g6, f5, no black p on the e file This would be a p that, if it moves forward and is captured by an enemy p, would leave 2 own ps isolated. 3/5 higher penalty for such a p

**Space advantage on both sides**
20 cps additional bonus when space advantage is achieved by ps on both sides, as this would make defence more difficult.

**Differentiation of blockers**
Main blockers are not equally suited for all roles of blocking. The knight would be the preferred choice when it comes to blocking horizontally isolated, double horizontally isolated, backward and backward-fated ps, as well as separate passers, but also when blocking a p that is part of a bigger fixed structure. The reason for this is that, as it is a slow-moving piece, the burden of blocking would not deprive it of much of its capabilities, while this would be true for the bishop and the other linear pieces.
The bishop would be an ideal blocker when it comes to blocking connected passers, because it would control the squares on which the ps advance.
The rook could be considered for blocking a horizontally isolated p (+10cps), or a separate passer (+5cps).
The only suitable blocking role for the queen would be blocking connected passers in tandem with the bishop (-20cps).

Specifications are rules of the type if and if, then, or even better if and if and if, then. Some of these rules might be essential, but others might not bring any real benefit. The good thing about specifications is that you do not need to tune much if at all, so they are easy to implement. But on the negative side, if you do 5 specifications, you might achieve 1 elo increase in strength, so you need to do many of those. There might be some 2 to 3 thousand specifications worthy of doing, and many more that would be pointless to do because of being too specific.

**The positional check for pieces**

The idea would be to use 4 of the main factors of pieces' capabilities to heavily prune the search tree at a very early stage. As attacking, defending and intensity of interaction are strictly tactical in nature, they would not be suitable for the purpose, but one can use to good avail piece positioning, mobility, complementarity (optimal spread) and fanning-out. Piece positioning and mobility should be used in their collective format, i.e. for all pieces, and complementarity and fanning-out are collective factors by definition. In this way the margin of error would be much smaller than when checking a factor for a single piece.

It would be appropriate, starting from the 6th or 7th move onwards, when the pieces will have developed, not to consider any variation for which even one of the above factors is below a certain average value, or is considerably lower than the values for the enemy side (by more than 1.5 times). The risk of skipping any important variations would be very low, as it is highly improbable that any position with some of the above factors being improportionately low would deserve attention. And as those factors, although concerning pieces, are more or less of a positional nature, they are slower in changing values, and a factor of a certain value for all the pieces at move 7 will only slightly have changed at move 10.

In this way, as for each position you are checking not only 1 but 4 factors, it would be possible to cut at a very low risk huge portions of the tree.

Indeed, it would not be exaggerated to say that 90 % of all moves do not deserve any attention at all, because they are just losing something or being extremely bad positionally, and of the remaining 10% another 90% are too bad because of positional factors to be considered in earnest when the aim will be not to leave many losing continuations in your game. Thus, you will have to search deeper only about 1% of variations, and this could be achieved by using the positional check for pieces.


**Functionality of pieces**

Functionality of pieces will refer to the number of functions a piece performs and the area on the board where it performs it. The assumption will be that performing simultaneously more functions at wider areas of the board will have some added value not covered by measuring the separate factors.

For the purpose we will check for each piece the number of functions it performs, and the 4 functions of a piece are, of course, attacking, defending, blocking, and controlling squares.

If a piece performs just one function, it will get a bonus of 5mps.

If it performs 2 functions at the same time, the bonus will be 15mps.

For 3 functions 30mps will be assigned, and if a piece performs all 4 functions at the same time, the points will rise to 50mps.

The areas of the board where the piece performs its functions will also be checked. The 4 areas will consist of the 4 quadrants on the board (when the board is split vertically and horizontally in 2, we get the 4 quadrants): a1-a4-d4-d1, a5-a8-d8-d5, e8-h8-h5-e5 and e4-e1-h1-h4. For performing functions in each quadrant some bonus points will be assigned.

When the piece performs functions in just one quadrant, 5mps will be assigned.

When it performs its functions in 2 quadrants, it will get 15mps.

For performing functions in 3 quadrants, the bonus will be 30mps, and it will rise to 50mps when the piece performs functions in all 4 quadrants.

*Degrees of functionality*
The lowest degree for a certain piece will be 1 (performing a single function in just 1 quadrant) and the highest degree of functionality will be 8 (when the piece performs all 4 functions in all 4 quadrants). 2 will be when the piece performs one function in 2 quadrants or 2 functions in one quadrant.
Degrees of functionality may be used when deciding to change or not to change a certain piece. It would be unwise to change a piece with higher degree of functionality for a piece with lower degree, especially when the difference in degrees is bigger.


**The heavy pieces**
Heavy pieces on an open file
r on an open file  +30cps
2rs on an open file  +60cps
q and r on an open file with the r in front of the q in terms of the enemy camp  +40cps
q and r on an open file with the q in front of the r in terms of the enemy camp  +50cps
3 heavy pieces on an open file  +70cps
3 heavy pieces on an open file with the q in between the rs  +80cps

Heavy pieces on the 7th rank
r on the 7th rank  +30cps
2rs on the 7th rank  +60cps
q and r on the 7th file with the r in front of the q in terms of the enemy king position  +40cps
q and r on the 7th rank with the q in front of the r in terms of the enemy king position  +50cps
3 heavy pieces on the 7th rank  +70cps
3 heavy pieces on the 7th rank with the q in between the rs  +80cps

Heavy pieces on the 8th rank
r on the 8th rank  +15cps
2rs on the 8th rank  +30cps
q and r on the 8th file with r in front of the q in terms of the enemy king position  +20cps
q and r on the 8th file with q in front of the r in terms of the enemy king position  +25cps
3 heavy pieces on the 8th rank  +35cps
3 heavy pieces on the 8th rank with the q in between the rs  +40cps

Heavy pieces on an open file against the enemy king position
r on such a file  +50cps
2rs on such a file  +1p
q and r on such a file with the q in front of the r  +1.25ps
3 heavy pieces on such a file with the q in front of the rs  +1.40ps
3 heavy pieces on such a file with the q in between the rs  +1.50ps

*Heavy pieces on semi-open files*
For heavy pieces on semi-open files the above values might be halved, lowered by 1/3, 2/3, etc.

**Penalties for adjacency**

2 rooks on adjacent squares horizontally -1cp

king and queen on adjacent squares (middlegame) -2cps

**Weaknesses on both sides**
Weaknesses on both sides (weaknesses would mean isolated and double ps, backward ps and weak spots) would be penalised additionally by -10cps as this would make defending them more difficult.

**Blocking a protected passer when part of bigger fixed structures**
Blocking a protected passer when the latter is part of bigger fixed structures (eg. wpsd6,e5,f4, bpse6,f5, bnd7) would deserve a much bigger bonus (by 2/3) as the fixed structure makes it more difficult to attack and remove the blocker. In this case, not only the knight and bishop, but also the rook and even the queen could be considered for blocking purposes.

**Heavy pieces on open files in terms of centralisation and difficulty to open**
Differentiation for files for the heavy pieces in terms of centralisation and difficulty to open would be an asset.
e and d files would score 1/8 higher than c and f files
c and f files would score as high as a and h files
b and g files would score 1/8 lower than c and f files (this is because those files are most difficult to open)

**Heavy pieces on semi-open files in terms of centralisation**
Could follow more or less the same pattern as that for open files.

**Pawns of the king shelter fixing enemy pawns**
+2cps for each p of the king shelter fixing an enemy p, as that would help avoid opening files for the enemy pieces to attack the king

**2 connected passers against the enemy king position**
+1p additionally to other bonus points for passers, because the passers not only threaten to queen, but also help greatly in attacking the king

**A passer and an unopposed p against the enemy king position**
Eg. wpf2, bpsf3,g4,h5 - h5 is a passer and g4 is an unopposed p. +50cps additionally to other bonus points for the 2 ps, because the ps threaten to become 2 connected passers, as well as help greatly in attacking the king.

**Pieces in relation to the number of fixed ps**
+5cps for each pair of fixed ps for the knight
+3cps for each pair of fixed ps for the rook
-5cps for each pair of fixed ps for the queen
-7cps for each pair of fixed ps for the bishop, as such structures usually deprive the piece of part of its capabilities as diagonals are blocked

**Fixed horizontally isolated p on the 6th rank**
A fixed horizontally isolated p on the 6th rank (for black) will get 2/3 lower penalty than the same pawn on the 7th rank.
In terms of file placements, values could follow the pattern of a p on the 7th rank.

**Passer and semi-passer against the enemy king position**
A passer and semi-passer against the enemy king position would deserve an increase of their bonus points by 1/2 each, because they not only threaten to promote, but also assist in attacking the king.

**A piece in between 2 double horizontally isolated ps**
An own piece placed in between 2 double horizontally isolated ps would deserve a bonus (maybe 15mps), because the ps shelter it from attacks of linear pieces on the file where they are.

**Distance in between unopposed ps**
When one of the sides has more than one unopposed ps, the distance in files in between them would matter, as this could help in creating a passer.
1 file in between - bonus of 20mps
2 files in between - +15mps
3 files in between - +10mps

**Pieces covering access to the own king position**
A piece covering the access of an enemy linear piece to the own king position (shelter) is due some bonus points, 10 to 20 cps. Best examples would be a bishop or knight covering the access of an enemy rook on an open or semi-open file, or a knight covering the access of enemy diagonal pieces.

**Mighty attacking pawn**
Pawn on a weak spot in the enemy king position (f6,h6), defended by another p. 2/3 higher bonus for the p, as it will last there for quite some time.

**King on the 8th rank in between 2 rooks**
This position of the king is unfortunate and a penalty of at least 30cps is indicated.

**Diagonally connected group of ps spanning both sides**
Eg. bpse6,d5,c4. In the case of a diagonally connected group of ps, spanning both sides (consisting of at least 3 ps on a single diagonal, and it could also be part of a larger group), a bonus of at least 20cps is indicated, as the space advantage obtained by the p into the enemy camp is about to last. Moreover, such structures support the activity of own pieces, while restricting the activity of enemy pieces.
+7cps additionally, if the most advanced p of such a structure fixes an enemy p, as in this case it will be more difficult to attack it.

**Semi-weak spots**
Semi-weak spots make sense to be defined only in relation to the king shelter. A semi-weak spot will be a square on the third rank (for white) of the king shelter, defended by only one own pawn and attacked by an enemy p. Possibilities for using this disposition for successful attacks exist, and therefore some penalty for the spot is indicated. -5cps would be fine.

**2 horizontally adjacent ps on the 4th rank**
Those ps are about to gain space advantage, and they could also support each other. +5cps

## Firm pawn control of squares

2 ps controlling a square on the board that is not controlled by an enemy p deserve a bonus. +5cps

Of course, a square on the 3rd rank might be worth 3cps, while a square on the 7th rank could receive some 9cps.

## Diagonally connected ps facing an enemy bishop

2 diagonally connected ps facing an enemy bishop on the same diagonal (eg. wpsb2,c3, bbf6) would deserve some bonus points. +7cps

## Pieces controlling squares of penetration of enemy rooks

Pieces that control squares of penetration of enemy rooks on the 7th and 8th ranks are due some bonus points. +3cps

## Penalties for decentralisation of pieces

Pieces that are too far off from central squares on the board in terms of moves needed to go there would definitely deserve penalty. For the purpose we check in how many moves a piece can go from the square upon which it is placed to any square of the focal center (e4,d4,e5,d5) without being captured on its way. If all squares of the focal center are occupied, we will use any square of the wider center (c3-f3-f6-c6) instead. The number of moves needed for this transfer would serve as an indication to penalise or not the piece.

If the piece needs more than 2 moves for the transfer, then the penalty will be 10cps.

If it needs more than 3 moves, the penalty will rise to 20cps.

In the case of more than 4 moves necessary, the penalty will be 30cps.

For more than 5 moves, -50cps would be well-deserved.

## Mobility in terms of own and enemy camp

That would certainly be an important feature. Any square for which a piece is mobile into the enemy camp would score +5cps additionally.

## Rook lacking in defence of king shelter

The rook is an important defender. If an own rook is not to be found in the defence of the king shelter, -2cps would be assigned.

## Piece control of semi-weak spots

+2cps for each own or enemy piece controlling a semi-weak spot

## Queen on a weak spot of the king shelter

A queen on a weak spot of the king shelter will be assigned +30cps, as this is a perfect attacking position.

+50cps, if there is a second weak spot in the king shelter

## Connection between rooks on the 1st rank

+7cps, if the rooks on the 1st rank are connected

## Space advantage gained by a root pawn
In the case of 2 diagonally connected ps into the enemy camp, when the less advanced p is a root p, some penalty is due as both ps are more vulnerable. -4cps Eg. wpsb2,c3, bpsb3,c4, with c4 being a root p

## Semi-backward-fated p when part of the king shelter
When a semi-backward-fated p is part of the king shelter, it should be assigned much bigger penalty, by 3/5, because it seriously compromises the king position.

## Temporary root pawn
A temporary root p would be one that could be defended in a single move by another own p. In that case its root quality is not felt that much and 1/3 of the penalty for a root p could be subtracted.

## Lack of access to the 2nd rank for the king
In the case the king lacks access to the 2nd rank, because it is occupied by own ps and pieces, or because enemy ps and pieces control those squares, -10cps should be assigned. But the penalty will be valid only if there are enemy heavy pieces on the board.

## Continuous attacking line
A continuous attacking line would be the case when all adjacent squares in front of the enemy king are controlled by ps and minor pieces. (eg. wpd5, wnc4, bkd7) +20cps for such a construction are well-deserved.
In the case the enemy king is further apart, +10cps would still be necessary.


## Firm piece control in front of an enemy backward p
Firm piece control will be the case when 2 more own pieces are in control of the square in front of an enemy backward p (only fully backward ps will be considered). This situation makes of the p practically a backward-fated p, and therefore at least 10cps additional penalty is indicated.

## Pawns attacking the enemy king position in a single group
In the case when 3 ps are attacking the enemy king position in a single group, a bonus of 10cps could be dispensed.

## Control of squares on the 7th rank by a pawn
+10cps for each controlled square are indicated, as in this way own heavy pieces could penetrate the enemy camp, even if those squares are guarded by minors.

## Control of squares on the 8th rank by a passer on the 7th rank
Squares on the 8th rank controlled by a passer are a precious commodity, because it is difficult to capture heavy pieces landing there, as the passer will queen. The bonus will be dispensed, however, only if there are heavy pieces on the board. Each such square will score:
+10cps, with only a pair of heavy pieces
+20cps, with 2 pairs of heavy pieces on the board
+30cps, if all heavy pieces are still active

**Prone to a fork**
Linear pieces positioned mutually in a way that they could be forked by an enemy knight, should get a penalty of -2cps for any pair of such mutually positioned pieces. But the penalty will be valid only if there is an enemy knight still active.
When one of the pieces is a king, the penalty should be double, because of its compulsiveness.

**Minor piece gaining space advantage on the 6th rank with bigger fixed structures**
When a bishop or a knight gain space advantage on the 6th rank, while being adjacent to bigger fixed structures, they would deserve much bigger bonus, by 1/2, because the larger fixed structures only accentuate this quality of theirs.

**Backward-fated p when part of bigger fixed structures**
When a backward-fated p is part of bigger fixed structures (eg. wpsd4,e5,f4,g5, bpsd5,e6,g6), it would deserve considerably bigger penalty, maybe double, because the enemy ps making it backward-fated are largely inaccessible, and the presence of the backward-fated p is almost not felt, if it moves forward, it will be lost.

**King attack with bigger fixed structures on the board**
When there are bigger fixed structures on the board, consisting of at least 3 pairs of ps, at least one of which is central, the side that is conducting the attack should get an additional bonus of +20cps, because even if nothing dangerous is observed at first glance, larger fixed structures are conducive to conducting a positional, long-term attack. Enemy weaknesses will only aggravate with time. That is why the defending side should avoid larger fixed structures, if possible. This is actually one of the weak spots of engines.

**Piece defence is to prefer**
If a square of the king shelter is attacked by enemy pieces, defending it with a piece is to prefer before moving a pawn, because this could create weak spots that are difficult to cover. +10cps

**Piece control in front of an unopposed pawn**
Pieces controlling the square in front of an unopposed p should get some bonus points, maybe +3mps.

**Unopposed ps in terms of ranks**
The more advanced an unopposed p is, the better. Bonus points should be a bit bigger than for a normal p. +3cps for an unopposed p on the 3rd rank and +6cps if such a p is on the 4th rank.

**Unopposed ps in terms of files**
The logic would be reverse to the logic for a normal pawn. The more central an unopposed p is, the more difficult it would be to use it in an attempt to create a passer. End-file unopposed ps are best suited for this.
1/5 higher bonus for an end-file a and h unopposed p in relation to a b or g unopposed p, which in turn will score 1/5 higher than semi-central c and f ps, etc.

**Unopposed ps when part of fixed structures**
Eg. wpsd3,c4,b5, bpsb6,c5 An unopposed p being part of fixed structures should get some bonus points, +5cps, because of its capacity to constructively influence the structures.

**Bonus for an unopposed p in terms of its ability to advance**
If an unopposed p is able to advance, it will get +10cps additional bonus points, as usually this is one of its main features. But this will not concern unopposed backward-fated ps (precisely the case not to be an unopposed p).


**Lead pawns**
The lead pawn will be the most advanced of a group of diagonally connected ps. Lead ps get their merit not so much because of being well-defended, but because in their capacity of lead ps they support the activity of own pieces while being a real bore for the enemy pieces. Lead ps are the exact opposite of root ps. Lead ps will be considered only for a single diagonal.
Lead ps will get the following bonus points:
Lead p of a group of 2 diagonally connected ps (leading just one p) +3cps
Lead p of a group of 3 diagonally connected ps (leading 2 ps) +6cps
Lead p of a group of 4 ps  +9cps
Lead p of a group of 5 ps  +12cps

If a lead p is leading ps along 2 diagonals, bonus points for both will be dispensed.

**Lead pawns in terms of files**
The more central a lead p is, the higher its role as a leader is, and consequently bigger bonus points should be assigned. Ps on e and d files should get 1/5 higher bonus than ps on c and f files, which in turn will get 1/5 higher bonus than b and g ps, etc.

**Lead pawns in terms of ranks**
Lead ps are possible from the 3rd through the 6th rank. The more advanced a lead p is, the better, accentuating its role as a bore.
+2cps for a lead p on the 3rd rank
+4cps for a lead p on the 4th rank
+6cps for a p on the 5th rank
and +8cps for a lead p on the 6th rank

**Lead pawns when part of fixed structures**
When lead ps are part of fixed structures, their specific functions are only accentuated. Therefore, 1/3 higher bonus for such ps is well-indicated.


**Root pawns in terms of files**
The more central a root p is, the more difficult its defence would be, because it could be attacked from all sides. But the difference could be really insignificant. 1/10 higher penalty for central e and d root ps in relation to c and f root ps, which in turn will score 1/10 higher penalty than b and g ps, etc.

**Root pawns in terms of ranks**
The situation is similar to horizontally isolated ps. Root ps are possible from the 2nd through the 6th ranks with penalties slightly increasing as the p advances, because being closer to the attacking potential of enemy pieces.
1/10 higher penalty for a root p on the 3rd rank in relation to a root p on the 2nd rank, a root p on the 4th rank will score 1/10 higher penalty than a root p on the 3rd rank, etc.

**Double ps with the more advanced being part of fixed structures and the less advanced p able to attack an enemy p**

Eg. wps e3,f4,e5, bps f5,e6 In this case attacking the enemy p part of the fixed structures would undouble the less advanced of the double ps, and therefore its penalty could be decreased by 1/2.

**Closeness of ps to the enemy king**

Pawns close to where the enemy king has found shelter might assist the pieces in attacking the king, although in subtler ways. Therefore, they should get some bonus points. Points will be dispensed in terms of the distance in squares in between the p and the enemy king. The p could span the distance going straight along a file, a diagonal, or taking one square aside and then using the straight line.

no squares in between (p and king adjacent) +20cps
1 square in between +15cps
2 squares in between +10cps
3 squares in between +5cps

**Lack of access of king to a single free square because of enemy control**

If enemy pieces control squares adjacent to where the king is placed, so that it does not have a single free square at its disposal, a big penalty is indicated. -50cps.

**A lead p on a weak spot of the enemy king position**

If a lead p is found on a weak spot of the enemy king position, a considerable bonus is due because the p will last there for quite some time. In the case that the lead p is leading 2 other ps, it could get at least 1/3 higher bonus than if it is leading just one p.

**Pins**

A pin is the case when a piece attacks an enemy piece with another enemy piece in between - the pinned piece (but it could also be a pawn), that is difficult or impossible to move, because the attacked piece will be destroyed. The attacking piece is also known as the pinner.

Pins are of 2 main types: a normal pin is when the attacker (always a linear piece) is of a different capacity than the attacked piece (i.e. diagonal linear piece attacking a non-diagonal linear piece or a non-linear piece), and a double-edged pin is when the pinner and the attacked piece share capacities (bishop attacking queen or queen attacking rook). The second case is of a very tactical nature and deserves 1/3 lower bonus, because it all depends on a variety of additional factors, how well pieces are defended, subtle tactical motives, etc.

Below is a tentative system that could apply to pins:
Bishop pinners will score 20cps.
Rook pinners will score 15cps.
Queen pinners will score 10cps.

Bonus points will be dispensed also in terms of the distance of the attacker to the pinned piece or pawn - the smaller the distance, the better for the pinning side, because this will make intervention of enemy pieces more difficult.
no squares in between  1/2 higher bonus
1 square in between  1/3 higher bonus

2 squares in between  1/4 higher bonus
and 3 squares in between  1/5 higher bonus

The distance of the attacked piece to the pinned piece will also matter, with bigger distance beneficial to the pinned side, as own pieces could intervene.
no squares in between  1/2 higher bonus for the pinning side
1 square in between  1/3 higher bonus for the pinning side
2 squares in between  1/4 higher bonus
3 squares in between  1/5 higher bonus

The pinned piece will also be of importance.
If the attacker and the pinned piece (the pinned piece is always of equal value or lower value than the attacker, or otherwise it could easily be captured without much ado) are of equal value, 1/10 additional higher bonus will be dispensed (bishop pinning a knight).
If the attacker is of somewhat bigger value than the pinned piece (rook pinning a knight or bishop), the additional higher bonus will be 1/15.
When the attacker is of much bigger value than the pinned piece (queen pinning a rook or a bishop pinning a pawn), the additional bonus points will be just 1/20.

Pins with king being the attacked piece will deserve twice higher bonus, as the pinned piece absolutely cannot move until the king leaves opposition with the attacker.


### Control of squares
Control of squares is of 2 main types: specific control of squares, when squares are controlled for different purposes, in front of backward, isolated ps, weak spots, etc., and general control of squares, which concerns mobility of pieces, intensity of interaction, etc.

### *General control of squares*
The following system might apply:
For each square controlled pawns get 10mps.
Bishops and knights get +5mps, rooks get 3mps, and the queen just 1mps bonus.
The closeness of control will matter, because this will make intervention of enemy pieces more difficult.
no squares in between the linear piece and the square controlled  1/2 higher bonus is indicated
1 square in between the linear piece and the square controlled  1/3 higher bonus
2 squares in between the linear piece and the square controlled  1/4 higher bonus
3 squares in between  1/5 higher bonus
Knights will get a bonus for no squares in between.


### Defensive interference
Own piece controlling a square along the ray of action of an enemy linear piece attacking the own king position will get +2cps, as the possibility for intervention at some point exists.

### The neuralgic square h3
With short castling, h3 is a neuralgic square (just as a3 would be in the case of long castling), because it could possibly be defended by just one own p (while f3, for example, could enjoy the defence of 2 ps, e2 included).
+5cps for pieces defending this square (this could also be an x-ray defence, eg. wpg2, wbf1)

**Mobility in terms of piece positioning**
Mobile squares might score points in terms of their values for general piece positioning. And this will make sense, because it is always better for a piece to land on a square with higher value for positioning, where its tentative mobility moves ahead could only increase.

**Additional bonus points for attacking potential**
The number of attacked objects (enemy pawns and pieces) will have an added value of its own, when one of the sides attacks improportionately larger number of objects.
3 more objects attacked (same object attacked more times by different pieces will count) +20cps would be dispensed
4 more objects attacked  +40cps would be dispensed
5 more objects attacked  +60cps would be well-deserved


**The piece values**

This could be regarded as an alternative suggestion to that in the Grading of Pawns and Pieces section. It all depends on where your starting point is. What concerns the splitting in intervals for piece values, they could possibly be done using only pawns, but also the overall number of pawns and pieces, because usually the number of pawns and the number of pieces on the board are related. With the disappearance of more pawns, more pieces disappear too, although there are always exceptions, of course.
Piece values are always an abstraction. They depend on a variety of factors and change throughout the game depending primarily on the overall piece and pawn material on the board. So the best you can do is approximate. Some almost real values for the pieces could be obtained only under the supposition of an ideal environment where the mobility of a piece is not influenced in any way by intervening factors of whatever kind. This could be done by measuring the average mobile squares for each piece and the average pawn when there are not other pieces or pawns on the board.
We check the number of mobile squares (mobility) for each piece for each square on the board, and then divide the sum total for all squares by 64. Then we will have the average mobile squares for the pieces, which will be the closest possible approximation of strength. The values for the queen and the knight shall be multiplied by a factor of 1.5, in the case of the queen because on each move it has 2 alternative ways of moving, but can choose only one of them at a time, and in the case of the knight because of having access to squares to which linear pieces do not have access; half of the linear pieces might have, but the other half with different linear capacity will not have.
In the end we get the following values for the pieces:
Strength of the queen  34.125 average mobile squares
strength of the rook  14 average mobile squares
strength of the bishop  8.75 average mobile squares
strength of the knight  7.875 average mobile squares

Obviously, those values will be valid only for the very late endgame (0-4 pawns and pieces on the board).
To have approximate values for pieces for other stages of the game, we could do a division in intervals of 4 pawns and pieces (material present on the board): 5-8; 9-12; 13-16, etc., until we reach the initial position with 29-32 pawns and pieces.

Another thing that could be ascertained is that with bigger numbers of pawns and pieces on the board the knight gets relatively more mobile (stronger), while the linear pieces all get less mobile (less stronger), with the queen strength decreasing proportionately more than that of the rook, and the rook strength decreasing proportionately more than that of the bishop.

In that case we could gradually increase the strength of the knight, by 1/50 for each interval, while decreasing the strength of the linear pieces for the same intervals (1/50 would be a good starting point, but obviously experimenting is necessary). Thus we could have the closest possible values for what the real situation on the board demands. But, of course, piece values will depend also on other factors, such as fixed structures, available piece configurations, etc.

We could also find the average mobile squares (strength) for the average pawn. Taking into consideration that while most pawns have 3 options available for mobility at each move (in their advancing and capturing abilities), pawns on initial positions have a spare option, and end-file pawns have and option less, we get a value of 35/12 average mobile squares for the average pawn, or close to 2.91 average mobile squares.

In this way, in the very late stage of the game (the 0-4 interval) a queen will be worth more than 10 pawns, and the values for the pieces would be the following:
Queen 34.125/2.91 pawns
rook 14/2.91 pawns
bishop 8.75/2.91 pawns
and knight 7.875/2.91 pawns

**The king as a blocking piece**
The king could be considered for blocking purposes in very limited situations.

*King blocking when part of bigger fixed structures*
The king could take on a blocking role in this case, because when it fixes the structure, it frees up other own pieces for different activities. +15cps  But this should be considered only when the blocking king is on the defending side and there are not many other options to avoid opening the game.

*King blocking a separate passer*
In simple endgames, the king is also a good blocker, but only for separate passers. +10cps

**Additional bonus for rook on the 7th rank**
The rook will get +5cps for any free square on the 7th rank.

**Defence before all**
I would score defence-related factors (pawn shelter, pieces defending the shelter, etc.) 10% higher, because in chess you are supposed not to lose, but are not supposed to win at any cost.

**Pawn of the king shelter on the 4th rank when part of bigger fixed structures**
Eg. wps f2,g3,h4, bps h5, g4, f3 In this case the penalty for a p of the shelter on the 4th rank could be halved, as it is more difficult to open files.

**Lasting space advantage**
+5cps when a p gaining space advantage is defended by another p, +3cps if such a p could be defended by another own p in a single move.

**2 root ps defending another own p**
In that case the penalty for the root ps could be halved, as even if one of the ps perishes, the structure as a whole will survive.

**Blocking in terms of files**
The more centralised a blocking piece is, the better, as it is more actively placed and usually its functionality is growing.
1/10 higher bonus for blocking on d and e files in relation to c and f files, which in turn will get 1/10 higher bonus than b and g files, etc.

**Repeated moves in the opening**
Repeated moves with the same piece or pawn in the opening (up till move 6 or 7) are usually bad, they are a waste of time and stand in the way of development.
-20cps for a repeated move with a piece
-10cps for a repeated move with a pawn

**Access of rook to both sides**
+15cps in the case that a rook has access to squares of both the king and the queen side, or if it is placed on a square of one of the sides and has access to squares of the other side. This helps mobility and functionality of the piece greatly.

**Blocking a lead pawn**
Blocking a lead p is a positive development, as this could help in attacking the diagonal connection of ps as a whole.
+8cps for such a piece

**The diagonal connection**
The diagonal connection will be a group of diagonally connected ps on the same diagonal. The main features of the diagonal connection are, of course, the lead p and the root p.

**Attacking a lead p**
+5cps for attacking a lead p with an own p is indicated, as this will threaten the diagonal structure as a whole.

**Fixing a lead p**
Fixing an enemy lead p with an own p is always a positive development, as this will make attacking the lead p, and the diagonal connection as a whole, easier.
+3cps

**Pieces controlling squares of the capturing capacity of a lead p**
Own and enemy pieces controlling squares diagonally in front of a lead p would deserve some bonus points, as they could help in attacking the p or preventing an enemy attack on the p.
+2cps

**An artificially backward p**
An artificially backward p would be the case when 2 more enemy pieces control the square in front of the p than pieces for the pawn side. In this way the pawn cannot move forward without being lost and it is practically a backward one.

+10cps in such case; But this will be considered only when the enemy minor pieces are at least an equal number to the pieces for the p side.

**Backward passer**
This seems as a contradiction in terms, but actually is not. When 2 more own pieces control the square in front of an enemy passer, its bonus points could be halved, as practically it cannot advance without being lost.
But this should be considered only if the number of the own minor pieces controlling the square is not lower than the number of enemy minor pieces controlling it.

**Connected backward passers**
This could occur by opposite colour bishops. When the tandem of a queen and bishop control the squares in front of enemy connected passers, it is very difficult or impossible for the ps to advance. Bonus points for the passers could reasonably be halved. The number of connected passers could be 2, 3 or more.

**Piece positioning in terms of file placements**
E and d files will get a bonus of 50mps, c and f files will get +30mps, and b and g files will get +15mps.

**Adjusting piece values for the opening stage**
The opening stage (up till moves 6 or 7) is a peculiar one, because some pieces are more difficult to develop than others and their real values are different from the default ones.
10% lower value for this stage for the queen as its development is not easy at all
15% lower value for the rook, because this piece is even more difficult to develop

**Root ps in terms of the size of the group**
The bigger the diagonal connection of ps, the bigger the penalty for the root p, because more own ps will depend on its well-being.
1/10 higher penalty with each additional pawn in the group (a group of 2 could be the default).

**Piece positioning in terms of space advantage and the existence of a shelter**
Bonus points for pieces in terms of space advantage should be dispensed only as long as pawn shelters exist on the board. Without shelters such bonus points are meaningless.

**Attacking the king shelter from behind**
Pieces attacking the king shelter from behind should get higher bonus points (+50%). This way of attacking the shelter is very efficient. The attacking piece could not only be on a more advanced rank than the enemy king itself, but could be on the same rank (7th for example). But in this case the increase should be smaller, by 30%.

**King mobility**
Mobility for the king will be considered only in the endgame.
The king will get +15cps for any adjacent square it has access to. Squares behind the king could get 10% lower value, squares in front of the king could get 10% higher value, and squares on the same rank where the king is could get the mean value.

**2 queens on the board**
Two queens on the board have a combined quality that is not to be matched by other pieces. Therefore, 5% higher value for each queen is indicated. In the case that there are 3 queens on the board, their material strength values could be increased by 10% each.

**Right to move with 2 queens on the board**
In many situations, the right to move with 2 queens on the board each side is decisive. +1.5ps for the side that has the right to move.

**Artificial piece shelter**
When there are no more pawn shelters in later stages of the game, building an artificial shelter of pieces around the own king is essential with enough piece material on the board.
+15cps for a minor piece occupying a square immediately adjacent to the own king
+10cps for a rook occupying such a square

+5cps for a minor piece keeping control of a square immediately adjacent to the own king
+3cps for a rook keeping control of such a square

**Piece communication between sides**

Communication between pieces on both the queen and king side is definitely an important element.
+5mps for any square of intersection of 2 own pieces placed on different sides
+5mps for any own piece placed on one of the sides defending another own piece placed at the other side
If piece communication between sides is low, this could be an indication of upcoming problems.

**2 bishops on squares adjacent to the own king**
This is an advantage. +3cps as the bishops are an excellent piece shelter, while possibly developing activity at longer range.

**Rook having mobility just on the 1st rank**
If a rook has free mobility squares just on the 1st rank, this could indicate some problem. -2cps

**Double rooks in terms of closeness to enemy king**
If there are 2 pairs of double rooks on the board, the pair which is closer to the enemy king should get some bonus points as such closeness is a welcome attacking element.
+10cps for such a pair
But this will be considered only with castling on the same side.

**Rook facing an enemy unopposed pawn**
A rook placed on the same file and in front of an enemy unopposed p deserves some bonus points, as it controls not only the square immediately in front of the p, but also all squares along the path of the p forward.
+2cps

**Pieces controlling squares from behind**
Pieces controlling squares from behind (applicable just to specific control of squares, in front of backward, unopposed ps., etc.) should get higher bonus because it is more difficult for enemy pieces to intervene to make the piece abandon control.
10% higher value for such pieces (from behind means being on a more advanced rank than the square itself)

**Queen attacking objects frontally, laterally and from behind**
Queen attacking objects (pawns and pieces) from behind should get 5% higher value than when attacking frontally, because enemy pieces and ps have difficulty to intervene. At the same time it could get a bit displaced.
When attacking objects frontally (on a file or diagonal when placed on a less advanced rank than the object attacked), the queen could get the standard value.
And attacking laterally (from the side, meaning being placed on the same rank as the object attacked) should get 10% higher value, because it is difficult for enemy pieces and ps to intervene, while the queen is not displaced with this type of attacking.

**Rook attacking objects frontally, laterally and from behind**
Rook attacking objects from behind is the best choice, followed by lateral attacks and frontal attacks.
+10% for attacking objects from behind, if attacking frontally gets the standard value
 +5% for attacking objects laterally

**Serial piece defence**
Serial piece defence is the case when an own piece defends another own piece that in turn defends a third own piece, etc.
There is an added value to such type of defence, because if a medium piece in the series (the second one in the case of 3 pieces) is attacked by an enemy piece, it is not compelled to flee or seak the defence of another own piece, while maintaining the defence of the next own piece in the series.
+15mps for each piece in the series

**Ps attacking enemy root ps**
+2cps for a pawn attacking an enemy root p as this helps to dismantle the diagonal connection

**Mate is difficult to recognize**
There is a special type of position that engines have difficulty with. Eg. wqh6, wng5, bkg8, bpsh7, g6, f7, bnf6. The queen is on a weak spot and a neuralgic square at the same time. Black could easily be mated if it were not for the nf6. Mate could come on h7, f7 or h8.
+3.5ps for this position for the attacking side; +2ps additionally for a piece or p attacking the bnf6.
Although it might seems there is nothing to fear, the black king is in danger. Capturing enemy material for the defending side might prove suicidal, even if the capture is solid.
This might help find sacrificial combinations earlier.

**Fixing an enemy root pawn**
Fixing an enemy root p with an own p is a welcome development, as the root p becomes an easier target.

**Defending own ps attacking enemy ps**
+5mps for an own p defending another own p attacking an enemy p, as this could have some implications on the outcome of the clash.

**Cutting access of the enemy king to less advanced ranks**
Controlling all squares the enemy king could have access to on a less advanced rank (from the point of view of the king) with pieces should get some solid bonus as this helps creating a mating net.
+75cps for such a development

**Firm piece control in front of enemy passer and semi-passer**
2 more own pieces controlling the square in front of an enemy passer than enemy pieces (in the case of a separate passer and at least an equal number of minors controlling the square) would mean that not only the passer, but also the semi-passer is stopped in its advance. Therefore, both ps should get their values halved.

**Space advantage for n and b on the 6th rank in terms of enemy objects**
The knight and bishop on the 6th rank could have their bonus points graded in terms of the number of enemy objects (ps and pieces) placed on more advanced ranks (from the point of view of the minors).
10% higher value for each enemy object after the 5th fulfilling the above conditions

**Minors gaining space advantage separating the enemy sides**
When the knight and bishop gaining space advantage on the 6th rank are placed on central d or e files, they fulfill also the important function of separating the enemy queen and king sides. Therefore, some special bonus for this is due.
30% higher value for such minors

**Pawns separating the enemy sides**
Central d and e ps on the 5th and 6th ranks should get a special bonus for separating the enemy king and queen sides. The bonus will be due if there is an enemy p fixing the own p, because communication between the sides becomes more difficult (eg. wpd5,bpd6).
+20cps for this case additionally to other bonus points for the p
The purpose of an object separating the enemy sides could be served also by an own passer on the 6th or 7th ranks, if it is on a central file.
+20cps for such passers additionally to other bonus points due

**Queen and bishop on squares of different colour**
+2cps for such an arrangement, as the pieces complement each other perfectly

**Number of separate passers for both sides**
One of the sides having 2 separate passers and the other 1 would be preferable to one of the sides having just 1 separate passer and the other none, because the 2 passers are more difficult to contain.
+10cps


**Knight on a weak spot of the enemy king shelter, defended by a p that is not central**
Eg. wnf6, wpg5 The knight and pawn complement each other perfectly and would deserve +15cps. A small force in strength creates serious attacking possibilities. Bringing in reinforcements might prove decisive.


**Pawn attacking an enemy root p that is fixed**
Pawn attacking an enemy root p that is fixed by another own p would deserve +2cps additionally as this type of attack is even more compulsive.


**Pieces defending an own pawn gaining space advantage**
+10mps for such pieces


**Permanently backward pawn**
Eg. wpa5, bpb7 B7 is a permanently backward p as it cannot move forward not only because it would be captured, but also because of the possibility for creating a far advanced passer (a6). Therefore, at least -30cps are indicated for this p. In the event of the p being captured, the passer will forcefully move forward. That is why the penalty is bigger in distinction to a usual backward p (wpa5, bpb7, bpa6).
Such ps could be done only for the 7th rank.


**Rook neutralised by the tandem of a minor piece and a pawn**
A rook on an open file will get some penalty in the case that an enemy minor piece, defended by a p, occupies a square on a more advanced rank than the rook. -15mps It is about time that the rook looks for a more appropriate location, as he cannot penetrate on this file. (eg. wrb1, bbb4, bpa5)


**Pawn fixing an enemy p on the neuralgic square h3**
A pawn fixing an enemy p on the neuralgic square h3 would deserve some bonus points, as this could only be useful in trying to open files for attack.
+2cps for such a p (bph4 in this instance)


**Attacking ps fixing all 3 ps of the enemy king shelter with two of them on initial positions**
Eg. wpsf6,g5,h6, bpsf7,g6,h7 This would not be a welcome development for the attacking side, as it is impossible to open files for attack on this side and the enemy king is pretty much safe. Bonus points for space advantage for the ps could be halved.


**Specifying values for attacking squares of the immediate king shelter**
Not all squares of the immediate shelter zone should get equal bonus points when enemy pieces attack them.
With king on g1, the square immediately in front of the king (g2) could get 10% higher value, squares diagonally in front of the king (h2 and f2) could get the mean value, and squares laterally adjacent (f1 and h1) could get 10% lower value.

With king on h1, the square diagonally in front of the king (g2) could get 10% higher value, the square immediately in front of the king (h2) could get the mean value, and the square laterally adjacent (g1) could get 10% lower value.

**Scoring weaknesses with opposite colour bishops**
With opposite colour bishops, double, isolated and root pawns could score 1/2 lower penalties. But that will not be considered if there are other pieces on the board, like knights and rooks.

**Enemy pawns attacking any pawn of the diagonal connection**
Enemy ps attacking any p of the diagonal connection (apart from the lead and root ps) is a welcome development, as this constitutes an attempt to at least shorten the connection. +15mps

**Fixing any pawn of the diagonal connection**
Ps fixing any p of the diagonal connection (apart from the lead and root ps) is a positive sign, as ps of the connection become easier targets.
+10mps

**Attacking squares of the king position (shelter) in terms of attacking pieces**

Of course, it will all depend on a variety of factors, but still it pays to make a distinction between the attacking pieces, because of their specificities.

We will accept that a piece attacking the square the enemy king is placed at will get 1/10 of its value, so that the queen will get 90cps.
The following table might apply for a king on g1:

| Piece | Queen | Rook | Bishop | Knight |
|---|---|---|---|---|
| **Square** | | | | |
| g1 | 90 | 45 | 30 | 30 |
| g2 | 70 | 40 | 28 | 28 |
| h2 | 65 | 28 | 26 | 26 |
| f2 | 60 | 26 | 24 | 24 |
| h1 | 60 | 35 | 25 | 22 |
| f1 | 55 | 30 | 22 | 20 |
| g3 | 45 | 25 | 18 | 10 |
| h3 | 35 | 20 | 14 | 12 |

| | | | | |
|---|---|---|---|---|
| f3 | 40 | 15 | 16 | 15 |
| e3 | 42 | 10 | 20 | 8 |
| e2 | 30 | 15 | 10 | 10 |
| e1 | 45 | 20 | 12 | 5 |

**Attacking pawns of the king shelter**
Attacking ps of the king shelter will get 5 times higher value than attacking a usual pawn, as with the disappearance of such a p the shelter becomes much more vulnerable.

**Attacking pieces of the king shelter**
Attacking pieces, part of the enemy king shelter, will get 2 times higher value, as with the disappearance of such pieces the shelter becomes more vulnerable.

**Controlling squares in front of an own pawn**
Pieces controlling squares in front of an own pawn will get +3mps, as this makes moving forward easier.
Possible moves will be considered, i.e. the e3 and e4 squares for a p on e2.

**Permanently semi-backward-fated pawn**
Eg. wps a5,c5, bps b7,c7 - b7 is such a p. In distinction to a semi-backward-fated p (eg. wps a5,c5, bps b7,c7,a6), this variety is more unwelcome, because the weak p cannot move forward not only because of the possibility of being captured, but also because a dangerous enemy passer could appear (a6). That is why the penalty should be bigger, by 1/5.

**Fixing pawns that have gained space advantage**
+2cps for fixing an enemy p that has gained space advantage with an own p. That would prevent the enemy p from advancing further. (That would concern ps on the 5th rank, of course.)

**Pieces controlling the square in front of a p that has gained space advantage**
+5mps for such pieces (both own and enemy). On such control could depend if the pawn (on the 5th rank) will advance further.

**Pieces controlling the square in front of an enemy p**
This would concern all ps. +2mps for such pieces, as this could prevent the p moving forward.

**Pieces controlling the square in front of a p that could gain space advantage**
+3mps for a piece controlling the square in front of a p that could gain space advantage on the next move, as on this could depend if the p advances on a cherished square. This would concern both own and enemy pieces.

**Magical shapes of pieces**
4 own pieces placed at the 4 ends of a square shape of board squares, 4 squares each side, would deserve +20cps bonus, as no matter what the particular pieces at the 4 ends are, they

seem to communicate in an uncannily coordinated way. Half of those points might be dispensed just for a beautiful setting.


**Intensity of interaction for the king shelter**
Intensity of interaction for pieces having intersections on squares of the enemy king shelter could be done using the values for different pieces attacking the specific squares of the shelter. Calculations in this way would be much more precise.


**Pieces blocking pawns of the enemy king shelter**
+15 cps for such pieces. This would concern mainly blocking ps of the shelter on initial positions. The bonus is due because such pieces could narrow defending possibilities for the shelter zone. It should be dispensed additionally to other bonus points for the attacking pieces. A rook in this function could get +20cps, while other pieces could get just +10cps.


**Pieces controlling squares linking to the king shelter**
Pieces controlling squares from where they would attack the enemy king shelter are due some bonus points, as this could influence attacking developments.
+15mps for each square controlled


**Lines of squares opening access to the enemy king shelter**
Such lines would be the 2 vertical and 2 horizontal lines of squares in front of the king shelter. For a king on g8, these lines would be squares along d8-d5 and d5-h5, and c8-c4 and c4-h4 for the more distant line.
Own pieces (white in this case) attacking the squares along these lines would be due some bonus points, as this could certainly have an influence on future attacking developments.
+5 cps for attacking squares along the lines immediately in front of the king shelter
+3 cps for attacking squares along the more distant lines


**Parts of fixed structures**
Parts of fixed structures would be the case with at least one pair of fixed ps, but when one of the sides has 1 or 2 ps more on the diagonal connection that are not fixed by enemy ps. Eg. wps e3,d4,c5, bpd5, or wps e3,d4,c5, bps c6,d5. In the case that one of the sides has 2 spare ps, they should be at both ends of the diagonal connection.
+15 mps for the spare ps of the part of a fixed structure, as their advance could precipitate structural changes in the part of a fixed structure.

**Pieces controlling the squares in front of the spare ps of a part of a fixed structure**
Both own and enemy pieces would deserve some bonus points, +5mps, as on this could depend if the spare ps advance and force changes in the structure.