

Pawn endgames

Pawns are the weaklings of the opening and middlegame, and remain fragile in the endgame. As the other pieces drop off the board, however, the importance of the lowly foot soldier increases as it becomes more and more possible for the pawn to march across the board and attain promotion to a more powerful piece.

You might think that pawn endgames are just a matter of counting, and in a sense that is true, but the calculations can be very complex and it is much easier to rely on a few fundamental guidelines built on the patterns you will see in the sections below. Pawn endgames require extreme accuracy, in most cases absolute perfection. A tiny error can turn victory into defeat. You'll see this happen many times in your own games, and even in the games of the world's greatest players.

The following sections discuss many different combinations of pawns, from positions with just a single pawn to endgames with seven pawns each! Among them you'll find almost all of the strategic and tactical tricks commonly found in these "simple" endgames. Study them carefully, because the art of endgame play often reduces to decisions about exchanging pieces leading to king and pawn endgames. In later chapters you will discover that mistakes are often made at these critical junctures. Usually these errors are not the result of short-term tactical oversights but of a failure to understand the true nature of the reduced endgame.

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1. King + 1 vs. King

When strong players compete, you don't see too many endgames with just a single pawn. Since both players know the inevitable result, the game is usually resigned or drawn before this stage is reached, or as soon as the king and pawn endgame is on the board. There are two basic concepts that must be remembered: the square of the king and the opposition.

The square of the king determines whether a pawn can be prevented from promoting when it races unassisted against an enemy king.

```
c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w O w D w D w D }
5 D w D w D w D w }
& w D w D w D w D }
3 D w D w D w D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
```

[1] Draw with either side to move.

There is no Black king in this diagram because the point is to measure the power of the White king against a pawn. We can draw a square around the b1-b6-g6-g1 squares. As long as the White king is inside the square, the pawn can be stopped. Using the rule of the square rather than counting can reduce errors.

The opposition is somewhat more abstract, but is essential to proper endgame play. The following discussion is adapted from my *Encyclopedia of Chess Wisdom*.

The opposition refers to the geometric relationship between the two kings. The kings act like sumo wrestlers, trying to get the enemy to move aside. The key position is the following:

```
c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D k D w D }
5 D w D w D w D w }
& w D w D K D w D }
3 D w D w D w D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
```

[2] Kings in opposition

White's goal is to make progress up the board. The mighty king will try to understand the concept of pawn promotion by reaching the 8th rank. The first step is to cross the meridian to the fifth rank. This can be accomplished here because it is Black's turn to move. White has the opposition, since any move by Black must give ground and allow the White king forward. If it were White to move, Black would have the opposition.

When the kings are close to each other, as in the previous diagram, this is fairly obvious. The same rule holds when the kings are far apart, but only when there are an odd number of squares between them.

```

c u u u u u u u u C
( w D w d w D w D }
7 D w D w i w d w }
6 w D w D w D w D }
5 D w d w d w D w }
& w D w D w D w D }
3 D w D w l w D w }
2 w d w D w D w d }
% D w D w D w D w }
, . / 9 E F J M
    
```

[3] Kings in opposition

With White to move, Black has the opposition. If White plays 1.Kd4, Black plays 1...Kd6. On 1.Ke4 there is 1...Ke5. !...Kf4 allows 1...Kf6. In each case we get the simple opposition position, with White to move. White can move along the third rank, but the Black king will still make progress, for example **1.Kf3 Kd6**. But not 1...Kf6?? 2.Kf4 when White has the opposition! **2.Ke4 Ke6!**

Moving White's king back another rank, the opposition magically returns to White! There are now an even number of squares, four, between the two kings.

```

c u u u u u u u u C
( w D w d w D w D }
7 D w D w i w d w }
6 w D w D w D w D }
5 D w d w d w D w }
& w D w D w D w D }
3 D w D w D w D w }
2 w d w D K D w d }
% D w D w D w D w }
, . / 9 E F J M
    
```

[4] Kings in opposition

If it is White's turn, then 1.Kd3 seizes the opposition. If Black plays **1...Kd6**, then **2.Kd4** reaches a simple opposition position. The same result follows 1...Ke6; 2.Ke4.

Unfortunately, most endgame battles do not take place on a single file. Long distance and short distance belly bumping can take place anywhere.

Wherever the two kings are, draw an imaginary rectangle using the kings as the corners.

```

c u u u u u u u u C
( wDwd wDwd }
7 DwDwDwi w }
6 wDwDwd wD }
5 DwDwd wDw }
& wDwDwDwD }
3 DwI wDwDw }
2 wd wDwDwd }
% DwDwDwDw }
, . / 9 E F J M
    
```

[5] Diagonal Opposition

Imagine a line drawn from c3 to c7 to g7 to g3. That would form a square.

```

c u u u u u u u u C
( wDwd wDwd }
7 DwDwDwi w }
6 wDwDwd wD }
5 DwDwd wDw }
& wDwDwDwD }
3 DwI wDwDw }
2 wd wDwDwd }
% DwDwDwDw }
, . / 9 E F J M
    
```

[6] Square of opposition

When the shape is a square, whoever is not on the move has the opposition. If White is to move in the diagram above, then Black has the opposition, and vice versa.

There is even a more general rule: if the four corners of the rectangle are of the same color, then the side that is not on the move has the opposition. Since c3, c7, g7 and g3 are

all dark squares, the rule holds. The same would be true for a position with kings at c2, c6, e2 and e6. Try to picture that without a chess board. Are all the squares of the same color? If so, then wherever you put the kings, if it is White to move, Black has the opposition.

This rule is very important, especially when we get to king and pawn endgames. Let's look at one final example:.

```

c u u u u u u u u C
( wDwd wDwi }
7 DwDwDwd w }
6 wDwDwDwD }
5 DwDwd wDw }
& wDwDwDwD }
3 DwDwi wDw }
2 wd wDwDwd }
% DwDwDwDw }
, . / 9 E F J M
    
```

[7] Rectangle of opposition

White grabs the opposition with **1.Kf4!** If you are not convinced, set up the position on a chessboard and try it out. You can't give it to your chess computer, because technically the position is a draw according to the rules, and most chessplaying programs won't touch it!

Pinter vs. Georgiev

Recklinghausen, Germany, 1998

```

c u u u u u u u u c
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w D w D }
5 D w D w D w D w }
& w D w D w l w i }
3 D w D w D w D w }
2 w D w D w D P D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[8] Black to move

This is a classic winning position. The White king will move in front of the pawn on the g-file, securing the win. **74...Kh5; 75.Kf5 Kh6.** 75...Kh4; 76.g4 and the Black king is forced forward, and cannot keep up with the pawn. **76.g4 Kg7.** 76...Kh7; 77.Kf6 Kh8; 78.Kg6 Kg8; 79.g5 Kh8; 80.Kf7 Kh7; 81.g6+ Kh8; 82.g7+ Kh7; 83.g8Q+. **77.Kg5.**

```

c u u u u u u u u c
( w D w D w D w D }
7 D w D w D w i w }
6 w D w D w D w D }
5 D w D w D w l w }
& w D w D w D P D }
3 D w D w D w D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[9] Black to move

Once the king is in front of the pawn, the opposition is in his hands. **77...Kg8; 78.Kg6.** Black **resigned**. Whichever way the king steps, White moves in the opposite direction, seizes the 7th rank and then the pawn advances without interruption.

2. King + 1 vs. King + 1

When each side has one pawn, the opposition also comes into play. If the pawns are up against each other on the same file, then the opposition applies just as it did in the previous section. After all, your goal is to get at the enemy pawn, which is the square in front of your own pawn. That is the target when you have a pawn against a bare king, so the technique should be familiar. Once you win the pawn, you may or may not be in a winning endgame, depending on whether you can keep the opposition.

Comas Fabrego vs. Baburin

Capablanca Memorial, Havana, 1999

```

c u u u u u u u u c
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w D w D }
5 D w D w D p D w }
& w D w i w ) w D }
3 D w D w D w D K }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[10] Black to move

After **49...Ke4; 50.Kg3 Ke3; 51.Kg2 Kxf4; 52.Kf2** and the game was **agreed drawn**.

Analysis of Gulko vs. Yepishin

Chicago International, 1998

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w D w D }
5 D w D w D w D w }
& w D K D p D k D }
3 D w D w ) w D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[11] White to move

This is a win for White regardless of who is on the move. 14.Kd5 Kf3; 15.Kd4 would put Black in zugzwang immediately, but even when it is Black's turn defeat cannot be avoided. This maneuver is known as triangulation. Instead of moving to a square directly, the king makes a triangular journey (here Kc4-d4 via d5). Triangulation is only possible for the king and queen, but the mighty queen rarely needs to make use of it. In pawn endings, it is one of the principal weapons of combat.

13...Kg3. 13...Kf3; 14.Kd4 is the familiar zugzwang. **14.Kd5 Kf3; 15.Kd4.**

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w D w D }
5 D w D w D w D w }
& w D w l p D w D }
3 D w D w ) k D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[12] Black to move

The goal is reached. Black loses the pawn and the game. **15...Kg4; 16.Kxe4 Kg5; 17.Ke5** with a simple win.

Study by Richard Reti

1922

```

c u u u u u u u u C
( w D w D w D w l }
7 D w D w D w D w }
6 k D P D w D w D }
5 D w D w D w D p }
& w D w D w D w D }
3 D w D w D w D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[13] White to move

White cannot catch the advanced h-pawn. Therefore the only possible defense must involve the c-pawn. Black threatens to gobble it up after ...Kb6, and the king is too far away to help. So all seems lost. The solution involves bringing the

king to the d-file to protect the pawn, That takes four moves, which seems impossible.

1.Kg7. White's first move is obvious enough since 1.c7?? loses to Kb7. **1...h4.** 1...Kb6; 2.Kf6 transposes to the main line. **2.Kf6 Kb6.**

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w i P D w l w D }
5 D w D w D w D w }
& w D w D w D w O }
3 D w D w D w D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[14] Black to move

2...h3; 3.Ke7 h2 (3...Kb6; 4.Kd7 h2; 5.c7 h1Q; 6.c8Q is the same as the main line) 4.c7 Kb7; 5.Kd7 h1Q; 6.c8Q+ with a draw. **3.Ke5! h3.**

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w i P D w D w D }
5 D w D w l w D w }
& w D w D w D w D }
3 D w D w D w D p }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[15] White to move

3...Kxc6; 4.Kf4 h3; 5.Kg3 h2; 6.Kxh2 leaves the landscape bare. **4.Kd6!**

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w i P l w D w D }
5 D w D w D w D w }
& w D w D w D w D }
3 D w D w D w D p }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[16] Black to move

4...h2; 5.c7 h1Q; 6.c8Q and each side has a queen, with the result that the game should be drawn.

Adamson: "The Jailor"
Study, 1915

This study takes 20 moves to reach checkmate, with a lot of variations. Obviously trying to work this out by brute calculation at the board is very difficult. If you know which kingside configurations are a win and which draw, you can reduce the amount of effort considerable, since you only need to work out enough of the solution to reach one of the target positions you already know.

```

c u u u u u u u u C
( w D K D w D w D }
7 i w D w D w D w }
6 w D w D w D w O }
5 D w D w D w D w }
& w D w D w D w D }
3 D w D w D w D w }
2 w D w D w D P D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[17] White to move

A deceptively simple position. In fact, it is a very complex position. If the Black king becomes active, a draw is likely. White cannot just go running after the h-pawn, but must carefully keep the enemy monarch at the edge of the board. **1.Kc7!** 1.Kd7? Kb7; 2.Ke6 Kc6; 3.Kf6 Kd6; 4.Kg6 Ke5! and now White has to worry about ...Kf4-g3, but if 5.g4 then 5...Kf4 draws. **1...Ka6.** There is very little point in going to a8, which just loses time. 1...Ka8; 2.g4! Now the Black h-pawn cannot advance, and Black has only a single move. 2...Ka7 Here Black does not have the possibility in the note on 1.Kd7? and therefore White can win straightforwardly: 3.Kd6 Kb6; 4.Ke6 Kc7; 5.Kf6 Kd8; 6.Kg6 Ke8; 7.Kxh6 Kf8; 8.Kh7 and the g-pawn marches up the board.

1...h5? is never a good idea in such positions, because it brings the pawn closer to the White g-pawn. This theme is echoed below in a different form.

Black's hope of defense in the 1.Kd7 line relied on being able to bring the king close

enough to the g-pawn so that when the White king approaches the pawn at h5 it can slip in and go after the remaining pawn. White now wins with the direct 2.Kd6 Kb6; 3.Ke6 Kc6; 4.Kf5.

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D k D w D w D }
5 D w D w D K D p }
& w D w D w D w D }
3 D w D w D w D w }
2 w D w D w D P D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[18] Black to move

4...Kd5 (4...Kd7; 5.Kg5 Ke6; 6.Kxh5 Kf6; 7.g4 transposes.) 5.Kg5 Ke6; 6.Kxh5 Kf6; 7.g4 Kg7; 8.Kg5. White has the opposition and wins as follows: 8...Kf7; 9.Kh6 Kf8; 10.Kh7 Kf7; 11.g5 and the pawn cannot be stopped. **2.Kc6!**

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 k D K D w D w O }
5 D w D w D w D w }
& w D w D w D w D }
3 D w D w D w D w }
2 w D w D w D P D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[19] Black to move

This is a very important move. Black's king is not allowed to slip on to the b-file. The king cannot return to a7, because then it is too far from the g-pawn, so it must move to a5. Advancing the h-pawn loses by the same method as 1...h5? **2...Ka5**. 2...Ka7; 3.g4! and the White winds up with the opposition after. 3...Kb8; 4.Kd6 Kc8; 5.Ke6 Kd8; 6.Kf6 Ke8; 7.Kg6 Kf8; 8.Kxh6 Kg8; 9.g5 . The rest is forced. 9...Kh8 (9...Kf7; 10.Kh7) 10.g6 Kg8; 11.g7; **3.Kc5**. White escorts the Black king up the board. If Black retreats, the win is achieved by the same method as in the previous note. We must think in terms of strategy here, as the winning position still lies far in the future.

The plan now is to bring the Black king to the second rank, after which an eventual g4 will put the pawn far enough forward so that the enemy king cannot catch it. **3...Ka4; 4.Kc4 Ka3; 5.Kc3 Ka2; 6.Kc2**.

```

c u u u u u u u u c
( w d w d w d w d }
7 d w d w d w d w }
6 w d w d w d w o }
5 d w d w d w d w }
& w d w d w d w d }
3 d w d w d w d w }
2 k d k d w d p d }
% d w d w d w d w }
, . / 9 e f j m
    
```

[20] Black to move

Black is now on the horns of a dilemma. Retreating runs into a familiar scenario but

going into the corner loses because the king is too far away. **6...Ka3**. 6...Ka1; 7.g4 Ka2; 8.Kd3 Kb3; 9.Ke4 Kc4; 10.Kf5 Kd5; 11.Kg6 Ke6; 12.Kxh6 Kf7; 13.g5 Kg8; 14.Kg6! (14.g6?? Kh8; 15.g7+ Kg8; 16.Kg6 is stalemate.) 14...Kh8; 15.Kf7 Kh7; 16.g6+ and wins. **7.g3!** Precision is required! 7.g4? allows the king to get back and maintain the opposition. 7...Kb4; 8.Kd3 Kc5; 9.Ke4 Kd6; 10.Kf5.

```

c u u u u u u u u c
( w d w d w d w d }
7 d w d w d w d w }
6 w d w i w d w o }
5 d w d w d k d w }
& w d w d w d p d }
3 d w d w d w d w }
2 w d w d w d w d }
% d w d w d w d w }
, . / 9 e f j m
    
```

[21] Black to move

Things seem to be under control, but Black has a surprising resource! 10...h5! White can either push the pawn or capture.

11.g5 h4; 12.g6 (12.Kg4 Ke6; 13.Kxh4 Kf7; 14.Kh5 Kg7; 15.g6 Kg8; 16.Kh6 Kh8; 17.g7+ Kg8; 18.Kg6 is our stalemate again.) 12...h3; 13.g7 h2; 14.g8Q h1Q is a draw.

11.gxh5 also fails to win: 11...Ke7; 12.Kg6 Kf8; 13.Kh7 (13.h6 Kg8; 14.h7+ Kh8; 15.Kh6 with another stalemate.) 13...Kf7; 14.Kh8 Kf8 and the White king cannot get out of the corner.

7...Kb4. 7...Ka2 lets White win by advancing the g-pawn. 8.g4! Ka1 (8...Ka3; 9.Kd3 Kb3; 10.Ke4 Kc4; 11.Kf5 Kd5; 12.Kg6 Ke6; 13.Kxh6 Kf7; 14.g5 Kf8; 15.Kh7 should be familiar by now.) 9.Kd3

Kb2; 10.Ke4 Kc3; 11.Kf5 Kd4; 12.Kg6 Ke5; 13.Kxh6 Kf6; 14.g5+ Kf7; 15.Kh7 with the usual inevitable result. **8.Kd3**. Both sides move closer to the kingside. **8...Kc5; 9.Ke4 Kd6; 10.Kf5 Kd5**.

```

c u u u u u u u u c
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w D w O }
5 D w D k D K D w }
& w D w D w D w D }
3 D w D w D w ) w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[22] White to move

White is winning, but must not be hasty. Going directly after the h-pawn allows Black to slip away with a draw. **11.g4!** 11.Kg6 Ke4! 12.g4 (12.Kxh6 Kf3) 12...Kf4; 13.Kh5 Kg3 with a draw. **11...Kd6; 12.Kg6 Ke6; 13.Kxh6 Kf7; 14.g5**.

```

c u u u u u u u u c
( w D w D w D w D }
7 D w D w D k D w }
6 w D w D w D w I }
5 D w D w D w ) w }
& w D w D w D w D }
3 D w D w D w D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[23] Black to move

White has achieved the goal, and the pawn cannot be stopped. **14...Kg8; 15.Kg6 Kh8; 16.Kf7 Kh7; 17.g6+ Kh8; 18.g7+ Kh7; 19.g8Q+ Kh6; 20.Qg6#**.

3. King + 2 vs. King + 1

It is hard to generalize about endgames with two pawns against one, because much depends on where the pawn are. The side with the extra pawn would like to have the pawns as far apart as possible, making it harder for the enemy king to advance. Since pawns cannot move horizontally, a player is pretty much restricted to playing the cards that are on the table. The main skill required is knowing which king and pawn vs. bare king endgames are winning, so that a pair of pawns can be exchanged appropriately.

Kurajica vs. Cifuentes Parada
 Malaga Open, Spain, 1998

```

c u u u u u u u u C
( w i w D w D w D }
7 O w D w D w D w }
6 K D w D w D w D }
5 D w D w D w D w }
& w ) w D w D w D }
3 D w D w D w D w }
2 P D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[24] Black to move

73...Ka8; 74.b5 Kb8; 75.a3! It is important for White to insure that the Black king is on a8 when the breakthrough at b6 takes place. 75.a4 Ka8; 76.a5 Kb8; 77.b6 Ka8! 78.Kb5 (78.b7+ is stalemate.) 78...Kb7; 79.a6+ Kb8; 80.b7 Kc7; 81.Kc5 Kb8 is a draw. 82.Kc6 is stalemate. **75...Ka8; 76.a4 Kb8; 77.a5 Ka8; 78.b6 axb6.** 78...Kb8; 79.b7 Kc7; 80.Kxa7 is also hopeless. **79.axb6 Kb8.** Black **resigned.** 80.b7 would have ended matters. The significance of White's 75th move is now clear. Stalemate was avoided and the win was preserved.

Continuation of Topalov vs. Short
 Madrid International, Spain, 1997

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w d w D }
5 D w D w D P i p }
& w D w D K D w d }
3 D w D w D P D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[25] White to move

White has doubled pawns, which usually increase in value as other pieces and pawns leave the board. Although a double pawn is weak, it still performs useful functions, for example defending squares. In addition, the rear pawn can take over the main duties of the forward pawn should it be necessary to sacrifice it.

67.Ke5! h4; 68.f6 Kg6; 69.Ke6.

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D K ) k D }
5 D w D w D w D w }
& w D w D w D w O }
3 D w D w D P D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[26] Black to move

Black **resigned.** 69...h3; 70.f7 h2; 71.f8Q wins because of 71...h1Q; 72.Qg8+ Kh5; 73.Qh7+.

Analysis of Gulko vs. Yepishin

Chicago International, 1998

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w D w D }
5 D w D w D w i w }
& w D p D p D w D }
3 D w D w ) w D w }
2 w D w l w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[27] White to move

12.Kc3 is the obvious move, and it is correct. Black has two replies. We'll examine 12...Kf5 here, since 12...Kg4; 13.Kxc4 leads to an important king and pawn endgame. (#11). **13.Kxc4 Ke5; 14.Kc5 Ke6; 15.Kd4 Kf5; 16.Kd5.**

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w D w D }
5 D w D K D k D w }
& w D w D p D w D }
3 D w D w ) w D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[28] Black to move

White wins the pawn. **16...Kf6; 17.Kxe4 Ke6.**

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D k D w D }
5 D w D w D w D w }
& w D w D K D w D }
3 D w D w ) w D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[29] White to move

A crucial king and pawn endgame position. White cannot take the opposition and cannot make progress. **18.Kd4.** 18.Kf4 is a mirror of 18.Kd4, while 18.Kf3 Kf5; 19.e4+ Ke6; 20.Kf4 Kf6 is similar. **18...Kd6; 19.e4 Ke6; 20.e5 Kd7; 21.Kd5 Ke7; 22.e6 Ke8; 23.Kd6 Kd8; 24.e7+ Ke8; 25.Ke6** with stalemate.

Instructional Position

```

c u u u u u u u u C
( w D w D w D w D }
7 D p D k D w D w }
6 w ) w D w D w D }
5 D w ) K D w D w }
& w D w D w D w D }
3 D w D w D w D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[30] White to move

1.Ke5! 1.c6+ Kc8! 2.Kd6 Kb8; 3.c7+ Kc8 is a draw. **1...Kc6.** 1...Ke7; 2.c6! bxc6; 3.b7 gains a new queen. **2.Kd4 Kd7; 3.Kd5.**

```

c u u u u u u u u C
( w D w D w D w D }
7 D p D k D w D w }
6 w ) w D w D w D }
5 D w ) K D w D w }
& w D w D w D w D }
3 D w D w D w D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[31] Black to move

3...Kc8; 4.Ke6 Kd8. Necessary, as the corner is not safe. 4...Kb8; 5.Kd7 transposes. **5.Kd6 Kc8; 6.Ke7 Kb8; 7.Kd7 Ka8.**

```

c u u u u u u u u C
( k D w D w D w D }
7 D p D K D w D w }
6 w ) w D w D w D }
5 D w ) w D w D w }
& w D w D w D w D }
3 D w D w D w D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[32] White to move

8.c6 bxc6; 9.Kc7! White steps in front of the Black pawn in order to get to b7.

```

c u u u u u u u u C
( k D w D w D w D }
7 D w l w D w D w }
6 w ) p D w D w D }
5 D w D w D w D w }
& w D w D w D w D }
3 D w D w D w D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[33] Black to move

9...c5; 10.b7+ Ka7; 11.b8Q+ Ka6; 12.Qb6#.

4. King + 2 vs. King + 2

There are no general principles that pertain specifically to positions with two pawns (or more) each. When pawns block each other, you can sometimes think of the endgames in terms of simpler endgames without the blocked pawns, but the pawns usually do have a role to play, if only as occupiers of territory that must be crossed. Concentrate on exchanges, and evaluate the resulting single-pawn endings carefully. Just try to promote a pawn, that's what pawn endgames are all about!

Kurajica vs. Cifuentes Parada

Malaga Open, Spain, 1998

```
c u u u u u u u u C
( w D w D w D w D }
7 O p D w D w D w }
6 w D w D w D w D }
5 D w D w D w D w }
& w D w D w D w D }
3 D P D K D w D w }
2 P D w D w D w D }
% D w D w D w D k }
, . / 9 E F J M
```

[34] White to move

In king and pawn endgames with all pawns on one side, the closer king usually wins. It is important to watch out for potential rook pawn draws, however. White wins cleanly in the present example.

64.Kd4 Kg2; 65.Kd5 Kf3; 66.Kd6 Ke4.

Black has been keeping pace, but the White king takes the initiative by attacking Black pawns. **67.Kc7 b5; 68.Kc6 b4; 69.Kc5 Ke5.** 69...a5; 70.Kb5 Kd4; 71.Kxa5 Kc3; 72.Ka4 forces the Black king to abandon the remaining pawn. **70.Kxb4 Kd6; 71.Kb5 Kc7; 72.Ka6 Kb8; 73.b4.**

```
c u u u u u u u u C
( w i w D w D w D }
7 O w D w D w D w }
6 K D w D w D w D }
5 D w D w D w D w }
& w ) w D w D w D }
3 D w D w D w D w }
2 P D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
```

[35] Black to move

We now have the classic winning method for rim pawns vs. a single defender. (#24).

5. King + 3 vs. King + 1

Usually three pawns against one is enough to win, provided that the weaker side doesn't promote first. In that case, the stronger side requires shelter from enemy checks. While two pawns are insufficient, three connected pawns, even if two are doubled, do provide the necessary refuge.

Analysis of Shirov vs. Almasi

Tilburg, 1996

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w D K D }
5 D p O w D w ) w }
& w D p D w D w D }
3 D w i w D w D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[36] White to move

59.Kh5! As usual, accuracy is essential. 59.Kf5 b4; 60.g6 b3; 61.g7 b2; 62.g8Q b1Q+ won't work. 59.Kf6 b4; 60.g6 b3; 61.g7 b2; 62.g8Q b1Q; 63.Qg3+ Qd3; 64.Qe1+ Kb3 No more checks! **59...Kb3.** 59...b4; 60.g6 b3; 61.g7 b2; 62.g8Q b1Q; 63.Qg7+ Kb3; 64.Qb7+ Kc2; 65.Qe4+ Kb2; 66.Qb7+ Ka1; 67.Qa7+ Qa2; 68.Qxc5 is difficult, even with the White king so far away. **60.g6 c3; 61.g7 c2; 62.g8Q+.**

```

c u u u u u u u u C
( w D w D w D Q D }
7 D w D w D w D w }
6 w D w D w D w D }
5 D p O w D w D K }
& w D w D w D w D }
3 D k D w D w D w }
2 w D p D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[37] Black to move

The three pawns cannot provide enough counterplay to earn more than a draw. **62...Kb2.** Or 62...c4; 63.Qg5! Kc3; 64.Kg4 b4; 65.Qe5+ Kd3; 66.Qe1 c3; 67.Kf3 b3; 68.Qe4+ Kd2; 69.Qe3+ Kd1; 70.Kf2! with checkmate at e1 or e2. **63.Qg7+ Kb1; 64.Qg6 b4; 65.Qe4 b3; 66.Qd3 Kb2; 67.Qd2 Kb1; 68.Qd3 Ka2; 69.Qc3 c4; 70.Qxc4 Kb2; 71.Qe2 Kb1; 72.Qd3 Kb2; 73.Qd4+ Kb1; 74.Qe3 b2.** 74...c1Q? allows 75.Qxb3+. **75.Qd3 Kc1 .76.Qa3 Kb1; 77.Qd3 Ka1; 78.Qa3+ Kb1** draws.

6. King + 3 vs. King + 2

The basic winning technique for converting a 3-2 pawn kingside majority is to drive back the enemy king. Often the extra pawn is used to win a tempo. The only danger White must avoid is falling in to a drawn king and pawn endgame.

Avrukh vs. Gurevich

Lost Boys Open, Antwerp, 1998

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w D w D }
5 D w D w D k O p }
& w D w D w D w D }
3 D w D K D w D P }
2 w D w D w ) P D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[38] White to move

51.Ke3. The king takes up a position which guards the entry squares e4 and f4. Trying to circle around the back would not succeed. 51.Kd4 Kf4; 52.Kd5 g4; 53.h4 g3; 54.f3 Ke3 or 53.hxg4 hxg4; 54.Ke6 g3; 55.f3 Ke3; 56.Ke5 Kf2; 57.f4 Kxg2; 58.f5 Kh1; 59.f6 g2; 60.f7 g1Q; 61.f8Q. **51...Ke5.** No better is 51...g4; 52.hxg4+ when both recaptures lose: 52...Kxg4; 53.Ke4 h4; 54.Ke5 h3; 55.gxh3+ Kxh3; 56.f4 or 52...hxg4; 53.f4 gxf3; 54.Kxf3 Kg5; 55.Kg3 Kf5; 56.Kh4 Kg6; 57.Kg4; **52.g4!**

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w D w D }
5 D w D w i w O p }
& w D w D w D P D }
3 D w D w l w D P }
2 w D w D w ) w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[39] Black to move

52...h4. There is no hope in 52...hxg4; 53.hxg4 Kf6; 54.Ke4 Ke6; 55.f3; **53.f3.**

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w D w D }
5 D w D w i w O w }
& w D w D w D P O }
3 D w D w l P D P }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[40] Black to move

53...Kf6; 54.Kd4!

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w i w D }
5 D w D w D w O w }
& w D w i w D P O }
3 D w D w D P D P }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[41] Black to move

Black **resigned**. Control of the opposition gives White an easy win. For example, 54.Kd4 Ke6; 55.K e4 Kf6; 56.Kd5 Kf7; 57.Ke5 Kg6; 58.Ke6 Kg7; 59.Kf5 Kh6; 60.Kf6 .

Topalov vs. Short

Madrid International, Spain, 1997

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w D p D }
5 D w D k D w D p }
& w D w D w ) w ) }
3 D w D w D P D K }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[42] White to move

This is not a simple endgame. Black's king is in position to get to f5. White must control that square in order to advance the pawn. **59.Kg3 Ke6; 60.Kf2 Kf6.**

A fascinating variant is 60...Kf5; 61.Ke3 Kf6; 62.Ke4 Ke6.

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D k D p D }
5 D w D w D w D p }
& w D w D K ) w ) }
3 D w D w D P D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[42] White to move

White gives up a pawn to gain a winning position. 63.f5+! gxf5+ 64.Kd4! (64.Kf4? Kf6 is a draw.) 64...Kd6; 65.f4! Black must allow the king to get around to the f-pawn. 65...Ke6; 66.Kc5 Ke7; 67.Kd5 Kf6; 68.Kd6 Kf7; 69.Ke5 Kg6; 70.Ke6 etc. **61.Ke2 Ke6; 62.Kd3.**

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D k D p D }
5 D w D w D w D p }
& w D w D w ) w ) }
3 D w D K D P D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[43] Black to move

62...Kd5. 62...Kd6; 63.Ke4 Ke6; 64.f5+ gxf5+ 65.Kd4 transposes to the previous note.

62...Kf5; 63.Ke3 Kf6; 64.Ke4 Ke6; 65.f5+ reaches the same position we have seen above. **63.Ke3 Ke6** Black must give up the e4-square. **64.Ke4 Kf6; 65.f5.**

```

c u u u u u u u u c
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w i p D }
5 D w D w D P D p }
& w D w D K D w ) }
3 D w D w D P D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[44] Black to move

If Black captures the pawn White gets the king to d5 and then e5, so there is only one move. **65...g5; 66.hxg5+ Kxg5.**

```

c u u u u u u u u c
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w d w D }
5 D w D w D P i p }
& w D w D K D w d }
3 D w D w D P D w }
2 w D w D w D w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[45] White to move

The King+ 2 vs. King + 1 endgame is a win for White, as seen in [\(#25\)](#).

7. King + 3 vs. King + 3

When each side has three pawns the play is similar to previous situations but some odd considerations can come into play. For example, if you imagine sets of blocked pawns at b4/b5, e4/e5 and g4/g5 you realize that with each king on its own side of the board, the game must be drawn as there is no way to cross the meridian. This feature will be seen more often in the positions with large numbers of pawns, as we'll see later.

Continuation of Nogueiras vs. Hjartarson

Biel Intezonal, 1993

```

c u u u u u u u u c
( w D w D w D w D }
7 D w D w D w D p }
6 w D w D w D w i }
5 D p D w D w D w }
& w D p D w D w D }
3 D w ) w D w ) w }
2 w ) w D w l w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[46] Black to move

The king and pawn endgame is winning for Black, but it takes deep calculation. **40...Kh5!** The only way to win. 40...Kg5; 41.Kf3 h6; 42.g4 Kh4; 43.Kf4 Kh3 and now 44.Kf3? is incorrect, because of 44...Kh2! 45.Kf4 Kg2; 46.Ke5 Kg3; 47.Kf5 Kf3. 44.g5 is best, for example 44...hxg5+ 45.Kxg5 Kg3; 46.Kf5 Kf3; 47.Ke5 Ke3; 48.Kd5 Kd3; 49.Kc5 Kc2; 50.Kxb5 Kxb2; 51.Kxc4 with a simple win.

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D p }
6 w D w D w D w d }
5 D p D w D w D k }
& w D p D w D w D }
3 D w ) w D w ) w }
2 w ) w D w l w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[47] White to move

41.Kf3. The alternatives are not attractive:

41.Kg2 Kg4; 42.Kh2 Kf3; 43.Kh3 h5; 44.Kh4 Kg2; 45.g4 hxg4; 46.Kxg4 Kf2 in contrast to the 40...Kg5 line, Black is on the move and wins the race. 47.Kf4 Ke2; 48.Ke4 Kd2; 49.Kd4 Kc2; 50.Kc5 Kxb2; 51.Kb4 Kc2; 52.Kxb5 Kxc3 etc.

41.Ke3 Kg4; 42.Kd4 Kxg3; 43.Kc5 is much too slow. 43...h5; 44.Kxb5 h4; 45.Kxc4 h3; 46.b4 h2; 47.b5 h1Q etc. **41...Kg5; 42.Kf2.** 42.g4 Kh4; 43.Kf4 h6; 44.Kf3 Kh3; 45.Kf4 Kg2; 46.Kf5 (46.Ke5 Kg3; 47.Kf5 Kf3! transposes.) 46...Kf3; 47.Kg6 Kxg4; 48.Kxh6 Kf5 wins quickly.

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D p }
6 w D w D w D w d }
5 D p D w D w i w }
& w D p D w D w D }
3 D w ) w D w ) w }
2 w ) w D w l w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[48] Black to move

42...Kg4; 43.Kg2 h6. 43...h5; 44.Kh2 Kf3; 45.Kh3 Kf2; 46.Kh4 Kg2; 47.g4 hxg4; 48.Kxg4 see the 41.Kg2 line. **44.Kf2.** 44.Kh2 Kf3; 45.Kh3 h5; 46.Kh2 Kf2; 47.Kh3 Kg1 is another path to a familiar position. After 48.Kh4 Kg2 Black wins whichever move White chooses. **44...Kh3; 45.Kf3 h5.**

```

c u u u u u u u u C
( w D w D w D w D }
7 D w D w D w D w }
6 w D w D w D w O }
5 D p D w D w D w }
& w D p D w D w D }
3 D w ) w D K ) k }
2 w ) w D w d w D }
% D w D w D w D w }
, . / 9 E F J M
    
```

[49] White to move

White **resigned**, realizing that transposition to one of the losing lines given above is inevitable.