## The endgame

The endgame is considered to be the most difficult part of the game. With kings involved the number of possible moves increases. Many players have difficulties orienting in endgames.
It is necessary to have knowledge of standard endgames. There are some standard King + 3 pieces versus 1 King +1 piece endgames that one should know. It's too difficult to find out how these endgames work if you have never studied them.
Studying the endgames will also give you a clue what is important to take care of if you have such an endgame on the board. One important rule is that one should protect his pieces well, something that is neglected many times also on high level.
To analyse the endgames we used the analysing program called Truus, programmed by the brilliant Stef Keetman. This program contains an endgame database of all positions with at most 6 pieces in total. This means that Truus is a perfect guide in complex endgames like King +3 pieces against king and 1 piece.
There are also endgames in which the majority player has already 2 kings, but has to conquer a diagonal that the opponent possesses. The most famous one is the Scouppe endgame.
We will also discuss three kings against one, which usually is a draw. You have to know some exceptions however and you should know several tricks, like amongst other the scissors.
The endgame of five kings against two kings is rare, but pretty complex. You will have to know some key positions!
The last chapter of this section is the most relaxed one. It's about the delicious kind of tricks that make the endgame pleasant to deal with.

1) Standard $4 \times 2$ endgames
2) The opponent has more than one piece ( $4 \times 3 \& 4 \times 4$ )
3) 3 kings against 1
4) 5 kings against 2
5) Tricks


Niek Smeitink is showing his tower building skills

## 1. Standard $4 \times 2$ endgames

By a standard $4 \times 2$ endgame we mean an endgame 1 king +3 pieces or 2 kings +2 pieces vs. 1 king +1 piece. These types of endgames are often very difficult. If the player with the majority loses a piece or a piece is exchanged the game will be drawn. To win the game you have to be able to get three kings while avoiding pieces to be lost.

We will discuss some very important endgames in which the black king controls the main diagonal and white has two kings. With only one king white will usually not be able to conquer the main diagonal and the game therefore is a draw.


This type of endgame, with black possessing the main diagonal with the 36 / 47 opposition is very practical. In many games this type of endgame has occurred.
White has to conquer possession of the main diagonal to be able to make a third king and win by dominance. In this case kings at $<1 \& 12>$ will do the job. The black king must go to $<5>$, otherwise (for example at $1 . .46-19$ ) $47-41$ ! follows with either $36 \times 4712-1847 \times 12$ and the king is captured or $19 \times 4638-3246 \times 121$ x $23 \mathrm{~W}+$.

$$
1 . . .46-52.12-18!
$$

The black king has no good move left.


This endgame has occurred numerous times in a game. White's free piece shouldn't be further developed than <29> otherwise he can't force a win. With kings at <45 \& 50> black best defends by going to $<14>$.

At $1 \ldots 46-10$ ? the key move $2.47-42$ ! follows, threatening 42-37\&50-28 catching the black king.

1) $2 \ldots 10-153.50-3315-44.42-374-9$ $5.37-31!36 \times 276.33-2227 \times 187.29-23$ $18 \times 298.45 \times 4 \mathrm{~W}+$.
2) $1 . . .10-42.42-374-153.50-3315-4$ $4.33-17$ ! and at the next move the black king is caught!

At $1 . .46-14(!)$ white should be patient and not hurry the 2.47-42? move: $14-20$ ! $3.50-3320$ $-34.33-283-205.28-3320-36.42-373$ - 26 and it's a draw.

Square 3 gives black the chance to attack at <26>. So white better delays playing 47-42 until black has moved to a less central square.

$$
1 . . .46-142.50-6!
$$

At the next move white does play $47-42$ and wins like shown after the immediate 1... 46-10. For example 2... $46-193.47-4219-84.6$ 28! $8-265.42-38$ etc. and since white now has the main diagonal in possession, he can race to a third king.


## Post Scouppe

If the extra pieces not at <29> but at <24 / 25 / 20 or $15>$, white can't win. This situation is called the post Scouppe. Black still has to take care not to fall victim to one of the several tricks, though. He can't go to any wild square (a square that is not at the edge of the board) except <37>, because in that case white uses piece 36 for a small combination introduced by 18 - 31. If black goes to <37> this isn't possible. $1.5-37$ ? would be a mistake however: after $2.18-27$ ! which creates the catching construction $16 / 27$, there is only one move left for black: 2... $37-463.24$ - 20! $3.46-37^{*} 4.20-15$ and black has no safe square left to go to with his king ( $37-4647-41$ $\mathrm{W}_{+}$)!
White to move should play $1 \ldots 5-46$ !
If white plays $2.18-27$ black is safe at $<37>$ : 46 - $37!=$. If white plays a waiting move like 2.18 22 black goes back to <5>: $2 . . .46-5$ etc.
You have to know this endgame very well, because it can be confusing and many players have lost it.
If white is to move and plays 1.24 - 20 the odds change. Black can't go to <46> because of $1 \ldots 5$ - 46? 2.18 - 27! $46-373.20-15$ W+. Black has to go to <37> in this case!
There is another trick you should know. Suppose the game goes $1 \ldots . .5-462.24-2046-53.20$ - 15 5-464.18-9 46-5 5.9-3 5-236.1649, then black should not go to <46>! 6... $23-$ 46 ? will result in a famous position already shown by the Spanish writer on draughts Torquemada, who invented the trick on the $8 \times 8$ board.


The king at <3> can also be at <25>. White forces a win playing $7.47-42!!$ with the idea 7 ... $46-238.42-38$ ! This threatens $15-10 \& 3-$ 14 while $23-29$ is met by $3-2049-3820 x$ $47 \mathrm{~W}+$. So, in that case black has to flee from the main diagonal and white becomes dominant after getting his third king. The alternative loses as well:

$$
\begin{gathered}
7.47-42!36-41 \\
8.49-3241-47 \\
9.32-5
\end{gathered}
$$

and at the next move 3-14 $\mathrm{W}+$ follows.


Ex 1.1 Try to find out how white has to play to win. Take care you don't give black the opportunity to flee in a post Scouppe endgame!


## J. van den Akker - A. Baliakin

Baliakin once wrote about these type of endgames (post-Scouppe): "People have always made mistakes in this endgame, they still make mistakes and they will be making mistakes forever." A funny and wise observation.

$$
84.46-5(?)
$$

The white king can move almost anywhere, except to this square... But the king at <49> should actually be at the $48 / 26$ diagonal to really win...

$$
\text { 84... } 4-9 \text { (!) } 85.15-10 ? ?
$$

Macadou N'Diaye did save the draw against Kees Thijssen in this situation (Brunssum 1996), by playing $5-28$ ! $9-1328-22$ ! and catching the king doesn't win the game for black... Shwarzman had to escape in the same way against Getmanski (Wch 2003)...

$$
85 \ldots 2-19!86.10-419-46
$$

and white resigned.


Leclerc

In this case there is no piece, but a king at $<47>$. This is the position you have to build. Piece 24 is covered by the king at <49>. White can chase away the black king from the main diagonal. He plays $1.47-38$ ! threatening $15-10 \& 24-19$ W+. If black leaves the main diagonal, for example with $23-12$, white simply plays $38-32$ taking the main diagonal, while piece $<24>$ is protected against an attack by king 49. If piece 24 is already at <20> white can't win, because in this case the piece can be attacked by $12-3=$.


If the black king controls the main diagonal with the opposition 26 / 36 against two white kings, the white piece can't be developed further than $<33>$. If the piece is at <29> or further, it isn't possible to chase the black king from the main diagonal. In this position white threatens to catch the black king: $1.48-31!26 \times 372.33-$ $2819 \times 323.16 \times 38 W+$. With black to move, after $1 . . .19-46$ white plays a waiting move: $2.48-42$ and the black king is caught at the next move.


## H. Jansen - T. Kooistra

White has just conquered the main diagonal. If piece 35 gets at <25> black isn't able to chase white from the main diagonal and it is a draw. Piece 21 is developed too far to be able to use
the catching construction from the last diagram. Therefore black stops piece 35 .

$$
\text { 58... } 49-43!59.23-37
$$

How should black continue? You have to know the key position you have to build. We show this position in the next diagram:


## Key position

The black pieces at 31 / 26 give shape to a catching construction. Therefore black can advance piece 15 , by playing $15-20$ because $28-33$ is met by $31-3733 \times 1525-2015 \times$ $2116 \times 37$ B+. Piece 20 can march on and black gets a second king. In the game however, black went wrong:
59... 21-27
60.37-28 27-31
61.28-41 31-36?

A strategic mistake. With the piece already at $<36>$ black can't conquer the main diagonal nor advance piece 15. The game was drawn...
You will have to know in advance what key position to build!

H. Wiersma - A. Gantwarg
52.33-28 17-21
$53.28 \times 19$ 18-22
$54.27 \times 1821$ - 27
$55.32 \times 2116 \times 27$
White thought for a long time and then offered a draw! He could have forced a winning endgame:

$$
\begin{gathered}
56.18-1327-31 \\
57.13-8!31 \times 42 \\
58.8-2
\end{gathered}
$$

Black can't go to king, while $34-30$ is a threat. Therefore he has to give back a piece.
58... 35-40
$59.34 \times 45!42-47$
60.19-14 47-33

Other possibilities:

1) 60 ... $26-3161.2-19$ ! etc.
2) $60 \ldots$.. $47-4161.14-926-3162.2-2431-$ 36 (31-379-4W+) 22-47 with the Leclerc endgame.

$$
61.44-4033-28
$$

61... 26 - $3162.2-19$ W+

$$
\begin{gathered}
62.14-926-3163.2-2431-36 \\
64.24-47
\end{gathered}
$$

White will be winning according to the Leclerc endgame.


Thijssen - Schwarzman
Ex 1.2 A) How should white to move proceed in order to hold a draw?

$$
65.23-41 ? 22-2766.41-5
$$

B) How did black finish off the game?


## H. Wiersma - A. Gantwarg

Both world champions showed not having (enough) knowledge of this theoretical endgame (which can be found on page 114 of J.F. Moser's endgame standard Strategie der honderd velden (Strategy of hundred fields).

$$
\text { 77... } 44-11 ? ~ 78.32-19 ?
$$

Black had to go to $<50,44,39$ or $6>$ to draw. In this case white can't conquer the 6/50 diagonal, with a draw. However going to <11> gives white the opportunity to force a win by playing 79.32 10 ! As a matter of fact a few moves later this situation arose. After 79... 11 - 44 (also after 11 33 or 11 - 39), white plays 80.37 - 32! threatening $32-28$ and if black goes back to $<6$ or $11>$ white catches the black king with $10-28$ $32-28 \mathrm{~W}+$. 80... $44-4981.10-19$ ! (or $10-$ 23) leaves black with no good moves: 81... 26 31 is met by $19-2-16 \mathrm{~W}+$.

$$
\text { 78... } 11-44
$$

79.19-14 44-11?
80.14-10(!)

White found the right square, but this turns out to be a only coincidence...

$$
80 . .11-1781.10-19 ?
$$

White now should have gone to <16> with his piece: $81.27-21$ ! $17-682.21-166-44$ $83.37-3244-3984.10-1539-4485.15$ 42 (preparing the $32-27$ move) $44-3986.32-$ $2739-2887.42-4828-3388.48-37$ (see the next diagram)


1) $88 \ldots 33-1789.37-1417-690.14-326-$ 31 (there are no other moves left) $91.3-2631$ x 2292.16 - $11 \mathrm{~W}+$
2) $88 \ldots 33-689.37-146-1790.14-3$ ! $17-$ $2191.36-31 \mathrm{~W}+$

If black defends this standard endgame correctly, the game can't be won. This is usually the case in these type of 4 against 2 endgames: if the minority player defends correctly the game is a draw, but the matter is very complicated however. Another example from a famous Wiersma - Gantwarg game should convince you of this issue...


## H. Wiersma - A. Gantwarg

This endgame from the world title match 1979 was analysed by T. Sijbrands and J. van der Wal and both world champions thought that white was winning in this position. However, three decades later computer databases proved the position to be a draw...

## 91... 8-2? 92.32-37?

White could have punished black's mistake playing $92.32-16$ ! and at the next move the black king is caught!

Black could have held a draw playing either $92 . .$. $8-30$ or $92 \ldots 8-24$.
We show the most important possibilities after 92... 8 - 30!

1) $93.22-1830-3594.32-49$ (threatening 23 $-19 \mathrm{~W}+) 35-2(35-8$ is a draw too)
1.1) $95.18-1226-31$ ! (the only move that draws) $96.36 \times 272-1397.27-2113-18=$ 1.2) $95.49-162-8$ ! $96.16-328-2$ because white can't control <16> he doesn't make progress and the game is a draw, for example $97.49-322-16!98.32-3716-2799.18-12$ $27-18=$
2) $93.32-3730-13$ ! $94.22-1713-4$ ! The 4 - 10 threat draws the game: 95.17 - 114 - 10 $96.37-2810-4$ ! (threatening $26-31=$ ) 97.28 - 374-10 and the moves are repeated with a draw.

Exercise 1.3 How does black force a draw after 93.22-17?


White needs subtle manoeuvring play to be able to get a second king. Playing 1.23-45 17-50 will not yield a positive result, for $2.25-20$ will be a draw after $50-17$ ! (20-14 17-28) =.
White has to use piece 4 as a combinational object to be able to advance piece 25.
White has to manoeuvre at the $36 / 4$ diagonal.

$$
1.23-1817-33
$$

Black takes care piece 25 can't advance. $25-20$ is met by $4-1015 \times 433 \times 15=$ now.

$$
2.18-27!
$$

White wants black to go to $<17>$. From there he can move on to the crucial square 13, as we'll see.

$$
2 \ldots . .33-39
$$

After $2 \ldots 33-283.25-20$ white reaches the key position immediately. Now white can't play $3.25-20$ because of $39-25=$.

$$
3.27-36!39-17
$$

Black can't stop piece 25 in another way. After $3 . .39-33$ white does play $4.25-20$ for $4-10$ $5.15 \times 433 \times 15$ is met by $6.36-47$ ! W+.

## $4.36-13!$

Black can't go to <33 or 39> anymore, stopping piece 25:

1) $4 \ldots 17-335.13-24 \mathrm{~W}+$
2) $4 \ldots .17-395.15-104 \times 156.25-2015 \mathrm{x}$ $247.13 \times 48 \mathrm{~W}+$

$$
4 . . .17-505.25-2050-286.13-27
$$

Threatening $20-14$ ! $28 \times 10(28 \times 515-10$ W+) $27-9 \mathrm{~W}+$. Black thus has to leave the main diagonal and piece 20 marches on to king.

In a Clerc - Wesselink game white had forgotten how to build the key position and played many senseless moves. At a certain moment the same position was on the board for the third time. But Wesselink didn't claim the draw at the right moment. You should remember that you always have to claim the draw in your own time! So, if after your move the same position with your opponent to move will emerge, you shouldn't make the move and press the clock! Instead you should claim the draw without playing the move at all. You should call the referee and tell that after the move you plan the position with your opponent to move will emerge for the third time. The referee should check this claim using the notation. If your claim is right, the game is drawn. This is a logical rule: If the claim isn't correct it should cost the one who made the incorrect claim time.


Ex 1.4 Try to find the key position white has to build to chase black away from the main diagonal.


## J. Adema - V. Doumesh

White can win but very precise play is needed. Piece 32 is vulnerable for an attack by the black king. In the game white went wrong by playing 53.11-6 39-4454.6-1 44-50 and with his pieces behind the trictrac-zone white can't win. After 53.11 - 6 black could also go to <48>: 53... $39-4354.6-143-4855.27-2148-25$ $56.21-1625-1457.32-2714-958.27-21$ $9-3$ and white has no good reply to $8-12=$. The only right way to play is:

### 53.11-7!

1) $53 . . .39-4354.27-21$ !!

White must race with his pieces before they are attacked by 43-48-25-14 etc. =.
54... $43-4855.21$ - 16! 48 - $2556.7-2!8-12$ 57.16 - 11 and white has broken through while his piece at $<32>$ is protected. $\mathrm{W}_{+}$
2) $53 . . .39-4454.7-2$ ! $8-1255.2-30$ !

The first variation was strategic, in this line white uses nice tactics to win. Black can't go to <49>
now because of $30-43$ ! $W_{+}$
$55 \ldots 44-5056.30-3412-1757.34-45$ ! $50-$ $3358.45-5033-2459.50 \times 1124-1960.11$ $-2819-1361.27-2113-2762.28-44$ ! $27 x$ $4063.35 \times 44 \mathrm{~W}+$

J. Kos - G. Willemsen

Exercise 1.4 How could white have forced a win?
Hint: You have to force piece 27 to go to the awkward $<38>$ blocking his own king.


## R. Clerc - A. Scholma

White has a winning endgame, but has to play very precise.

$$
54.37-32
$$

54.38 - 33 would allow black to force a draw:
54... 49 - $4455.33-2944-4056.29-2440-$ 23 57.47-41 23-18!
Threatening 18-36=. At 58.26-316-21! (18 -36 ? 3-20-15W+) $59.3 \times 2618-36=$ follows.
58.41 - $3618-1359.24-2013-960.20-15$ $9-3$ !
The 26 / 3 diagonal is strategically crucial in this
endgame. Black is threatening 16-21 now. The white king must block his own piece at <37>.
$61.26-313-14=$

## 54... 49 - 35

$54 . . .49-44$ would be met by $26-17$ ! $44 \times 632$ $-286 \times 4247 \times 38$ with opposition. Taking the 44 / 6 diagonal wouldn't work for black anyhow, because with the help of 27 / 36 white chases the black king away from this diagonal and gets a second king.
$55.38-33 ?$
$55.32-28$ is the right move, keeping the $38 / 49$ catching construction, so piece 28 can advance. Black now has three replies, all failing:

1) $55 \ldots 35-40 ? 26-12$ the king is caught again.
2) $55 \ldots .35-1356.28-23$ ! $13-2757.38-33$ $27-1358.33-29$ the white pieces can't be stopped anymore.
3) $55 \ldots 35-4956.38-3349-4057.28-22$ is winning for white. In order to chase black away from the $1 / 45$ diagonal he should transport the king to <38> and pieces to <17 \& 22> with the 17 - 1222 - 18 threat.

## 55... $35-40$ ?

Black should have defended this position by playing 55... $35-13$ !! (see the next diagram)


1) $56.33-2813-9$ !
1.1) $57.26-39-18$ ! This position is winning with black to move, but a draw with white to move. There is no good waiting move: 58.47 -41 (58.3-26 $18-9$ and the moves are repeated) $18-3659.41-3716-2160.3 x$ $2636-31=$
1.2) $57.26-429-18$ and if white doesn't go back to <26> piece 16 gets into play...
1.3) $57.28-239-358.26-42$ (at $26-48$ black simply attacks $3-21-17=) 58 \ldots 3-$ $2659.42-2916-21$ (the $21 / 32$ tag is too annoying for white, he can't parry all threats of attacking and changing the piece.) 60.29 $-4526-48$ ! 61.45-50 (61.23-19 is met by the repeated attack $48-43-39-30-$ 19 =) 61... $48-43$ ! (after 61... $48-2662.50$ - 22 the tag is neutralized and white wins!) $62.32-2821-2763.23-1943-4864.28$ $-2348-34=$
2) $56.32-2813-18$ ! $57.26-318-1358.28-$ $2313-2459.33-2824-13$. White now has to weaken his position. If he plays with his king 13 - 9 follows, threatening to take the crucial 26 / 3 diagonal and activating piece 16 , which will advance to the kingsrow. This means double trouble for white and leads to a draw.
$60.47-41$ will put too many pieces at the middle of the board, so black can force a draw, for example $13-3661.41-3736-2762.23-19$ $16-21$ ! $63.3 \times 2627-32=$.
3) $56.33-2913-19$ ! $57.26-37^{*} 19-1358.32$ - 28 16-21 and white can't win, for example $59.37-2621-2760.26-3713-261.28-23$ $2-7$ and black's king is blocking white's pieces. White can't advance his pieces without black making a draw.

As you see, it's very complicated to defend this position. You could easily go wrong during a game. On the other hand, it is still good to know that you can still hope for a defence when having the minority. Furthermore, you will have to keep in mind that when having the majority, you have to proceed very cautiously!

> Never underestimate the drawing chances of the minority player in a D + 3 versus $D+1$ endgame!


## J. Bastiaannet - J. Van der Wal

Because white can't go to king immediately, he has to sacrifice a piece first. The endgame can still be defended by white because black's pieces are all in the middle of the board.

$$
53.36-3126 \times 3754.9-4 ?
$$


J. Bastiaannet \& J. van der Wal after Jannes had won the world title in 1983.
$54.9-3!8-1355.3-20$ ! is the right defence.

White threatens to attack piece 13.
55... 49 - $1656.20-3322-2757.35-3016$ -258.33-15!

The only move that doesn't lose, threatening 15 - 4 =.
$58 \ldots 2-1159.30-2413-1860.24-19$ etc. $=$

$$
54 \ldots 22-28 ?
$$

54... $49-27$ ! $55.4-1522-28$ ! protecting piece 22 , is winning.

$$
55.4-1049-3256.10-19 ?
$$

Black could still have claimed the draw: 56.10 14 ! $28-3357.14-38-1358.3-2637-41$ $59.26-42$ !
59.26-31? 41-4760.31 x $432-10 B+$ 59... $33-39$
$59 \ldots 32-3860.42-3113-1961.31-22=$ $60.42-3113-1961.31-3732-2362.32 x$ $4639-4463.35-30=$

$$
\text { 56... 8-12 57.19-30 } 28-33
$$

Now white is definitely lost. The game went $58.30-2537-4259.25-312-1860.3-918$ $-2361.35-3042-4762.30-2447-3663.9$ - 323 - $2864.24-1932-4165.19-1436$ - 4 $66.3-2633-38$ and after two more useless moves white surrendered.


## A. Georgiev - A. Chizhov

In this complicated endgame black can hold a draw with precise play, but under pressure one can easily make a mistake: 69... 19-23?

Ex 1.5 How did white punish this mistake?


## E. Brunsman - A. Schotanus

White has only one piece that is a bit vulnerable, piece 34. White should protect this piece first. In the game he went wrong: 1.29-1? 49-27 and now 2.34-29 is met by $2 . . .25-303.29-2330$ - 344.1 - 634 - 40 (or $27-13$ ) 5.23-19 40-456.6-5027-9 and with his king bound to piece 45 white can't advance safely to second king: 7.48-429-20 8.42-37 20-3! 9.1913 (9.37-31 is met by $3-26-37-31=) 3-$ 26

1) $10.37-3226-2111.32-2821-1712.28-$ $2317-1213.23-1912-314.36-313-26$ $15.31-2726-37=$.
2) $10.36-3126-3$ (or 26-12)
2.1) $11.31-263-1412.37-3114$ -

10 ! and $10-4$ at the next move draws the game.
2.2) $12.37-323-2613.31-2726-3$ $14.32-283-1415.28-2214-3$ 16.22-18

If white begins with 12.31-27 black can force the same position. White is close to a second king but just in time the black king can rob a piece attacking from behind!
16... 3-25 (or 3-20) 17.13-8 $25-43$ $18.27-2243-3419.18-1334-18=$

In the game white played the slow 2.1-12 and couldn't win either.

Ex 1.6 How should white have played (from the diagram) to protect piece 34 in order to advance to a second king safely?

It is important to protect your pieces in $D+3$ versus $D+1$ endgames!


## Koopmanschap - Wirny

Wirny played 38-43? after which white could have held a draw.

Ex 1.7 Which two moves would have secured the win?


## J. Bastiaannet - A. van Tilborg

There is a big difference between $42-37 \& 42-$ 38. White played
$49.42-38 ?$
Black continued 49... $34-40$ ? $50.44-3940-$ $4551.38-33$ ! $35-4052.16-11$ and black resigned, for $45-5053.33-2850 \times 3354.28 \times$ $3940-4555.11-645-5056.22-17$ loses. Black could still have made a draw by playing $49 \ldots 34-39$ ! $50.44 \times 3335-40$ and the 4 pieces can't win analytically.

White can't go to king: $51.16-1140-44$ (threatening 44-49) 52.38-32 44-4953.32 -$2849-1654.11-616-2$ White's pieces in the centre are too vulnerable. White has to protect piece 33.

1) $55.6-12-2456.1-2924-1957.29-23$
$19-24$ repeating the moves $=$
2) $55.28-232-2456.33-2824-1357.22-$ $1713-858.17-118-2=$
From all attempts for white to win we discuss one more: 51.33-2840-4452.38-3244-50
53.16 - $1150-4554.27-21$

Otherwise 45-7-16 follows.
54... $45-34$

Threatening 34-43=.
$55.27-2134-2556.28-2325-4357.21$ -$1643-3958.22-1739-3459.23-1934$ -$3060.19-1430-8=$

White could have prevented all these problems by playing $49.42-37!$ ! Now 49... $34-40$ loses the same way as in the game, while after $49 . .$. $34-3950.44 \times 3335-40$ piece 37 is at a much better position on the board than at $<38>$ ! Now white can race to king $51.16-1140-4452.11$ $-644-4953.6-1$ and all white's pieces are protected.

## A single king can often make a draw against 4 pieces



White can hold a draw in this famous position from 1881.

$$
1.23-32
$$

1) $1 \ldots 35-402.32-4330-353.43-25$ !
$3.43-30$ ? would lose to $15-20-24 B+$

Black can't stop the 25-20-25 threat, for 24 29 is met by $25-34=$.
2) $1 . . .30-342.32-4324-303.43-3834-$ $394.38-2715-20(39-4427-43$ is a draw, as well as $30-3422-1835-4018-2239-$ $4322-39=) 5.27-3820-256.38-29$ and black can't chase the black king away from the 1 / 45 diagonal.
3) $1 . . .24-292.32-4329-343.43-38$ etc.
(See second variation) =
As a matter of fact white can also start playing $1.23-1424-292.14-32$ ! etc. $=$


## W. van der Kooij - S. Winkel

Ex 1.8 White can choose from 6 moves, of which only two are winning. Which two moves are that?


Ex 1.9 How did Zoja Golubeva win the game with white to move?


Ex 1.10 The pieces at $<40$ \& 44> are vulnerable, but white can use tactics to force a victory!

A. van Wel - D. de Jong

Ex 1.11 A) How can white force a draw?
B) How can black force the win after the played

46-41?

D. de Jong - D. Cremer

Ex 1.12 How did white win?

## 2. The opponent has more than one piece ( $4 \times 3$ or $4 \times 4$ )



Key position
If the opponent has both a king at the main diagonal and a piece at $<45>$, you need two kings to chase black away from the main diagonal. We have seen the key position already in the second part of $A$ course in draughts.


## Sargin

Having an extra piece at <36> makes things more complicated. White now needs three kings and the piece should be located at $<50>$. If the piece is at $<47>$ and a king at $<50>$, it's a draw.

$$
\begin{aligned}
& 1.48-3946-10 \\
& 2.39-4410-14 \\
& 3.47-3814-37
\end{aligned}
$$

At 3... 14-46 4.38-29 follows. Now the black king can't go to any wild square because of 29 40 \& 39 - 44. After the obliged $4 \ldots 46-5$ white plays 5.29 - 33 with the key position of this endgame. The king has no safe square anymore and $36-41$ loses due to $44-4045 \times 3433-39$ $34 \times 4349 \times 46 \mathrm{~W}+$.

White wants to reach this position with black to move. He can change the odds by playing like this:

$$
\begin{gathered}
5.33-295-46 \\
6.44-3346-5 \\
7.33-395-46 \\
8.39-4446-5 \\
9.29-33
\end{gathered}
$$

Endgames in which the defending side has more than one piece are even more complicated and less standard than the $4 \times 2$ endgames covered in the previous paragraph. The outcome of this kind of endgame depends (amongst other things) on how active the pieces of the minority player are.


## K. Overes - C. van Dusseldorp

Having two pieces (instead of one) gives white more resources, but she has to force a draw quickly, for black's second king is near.
White can draw the game by playing 61.6-33. Black can't advance piece 37 then: 61... $37-41$ $62.26-21!16 \times 2763.33-3827-3164.38-$ $42=$.
The alternative 61... $36-4$ is met by $62.33-20$ (giving piece 25 more space) 14-1963.20-47 and black has no good remedy against $47-36$ with the $26-21$ threat, for example 4-1847-$3618-1225-20=$.

$$
61.6-39 ? 36-4!
$$

62.39-33

White spoilt a temp. Now black could have won using tactics:
62... 37 - 41
63.33-47 41-46

```
64.47-36 46-37!!
65.26-21 16 x 27
66.36 x 20 4-15
```

catching the king at the next move.


## T. Sijbrands - W. Milshin

The black pieces 14 / 15 / 20 aren't active, but also not entirely passive, as the game shows.

$$
61.11-7 ?
$$

Eliminating the 20-24 threat, but still wrong.

$$
\begin{gathered}
61 . .20-2562.35-214-20 \\
63.7-125-46
\end{gathered}
$$

Now white's problem is clear. He will never get a third king, because advancing piece 40 is impossible. $40-34$ is always met by $25-30=$.
White should have seen this coming and advance piece 40 as quickly as possible: $61.35-2$ (avoiding the $20-24$ threat) $20-25$ $62.40-3414-2063.34-29$ ! The next steps are getting a second king and playing it to $<40$ > . Black must then leave the main diagonal and piece 29 can be advanced. With some patience, the piece can march on to king, and eventually white will become dominant.


## H. Meijer - A. Getmanski

It looks like white can't evade a draw. Black will play $10-14$ with the $14-20$ threat. But white overlooked a beautiful, winning plan!

$$
63.2-11!10-1464.29-45!
$$

White eliminates the $14-20$ possibility by occupying the trictrac-zone! We look at the remaining lines:

1) $64 \ldots 5-1065.11-2$ !
1.1) $65 \ldots 10-566.33-29!5-1067.2-19$ ! W+
1.2) $65 . . .10-466.2-244-3667.33-29$ !

And the black king has no safe haven anymore!
2) $64 . . .14-1965.45-50$ !
2.1) $65 \ldots 19-23(19-2411-2 W+) 66.11-$ $28!!23 \times 3267.25-2015 \times 2468.33-2924 \times$ $3369.50 \times 46 \mathrm{~W}+$
2.2) $65 . .5-1466.11-219-2367.2-7$ etc. W+

Ex 2.1 Show how white wins after 64... $15-20$.


## R. Heusdens - P. Meurs

51.32-27!

Since 51... $26-3152.37 \times 2636-41$ fails to 53.44 - 40 !! $35 \times 3154.26 \times 46$ black has to give an extra piece to break through.

## 51... 16-21

$52.27 \times 16 \quad 26-31$
$53.37 \times 2636-41$
54.16-11 41-46
55.28-22 $46 \times 14$
56.11-7 14-25
57.22-1725 x 48?

Black could have held a draw by playing 57... 25 x 4358.7-1 (see the next analysis diagram).

58... $43-32$ !

White can't get a second king. 17-11 is stopped by $32-28=$.
59.1-45 $32-5$ !

Black can also play 59... $32-46$. The point is white still can't advance piece 17 because of the sacrifice $60.17-1135-40$ ! $61.45 \times 45-28=$. $60.45-505-2361.17-119-1362.11-623$ $-163.26-2113-19$ and white's problem is clear, he can't use his king anymore. After 64.21 $-1719-2465.17-1124-30$ he has run out of moves to go on.

$$
\begin{array}{ll}
58.7-1 & 48-37 \\
59.26-21 & 37-26
\end{array}
$$

White can break the blocking of pieces $21 / 17$.

$$
\begin{gathered}
60.1-459-14 \\
61.45-50
\end{gathered}
$$

Because of the 17-1144-39 threat the black king has to leave <26>.
61... 26 - 48
62.17-11 48-43

$$
63.21-17!
$$

63... $21-16$ ? $43-3464.50-4534-1$ doesn't win, as $65.44-39$ is met by $35-4066.45 \times 51$ $-6=$.

$$
\text { 63... } 43-3464.50-45!
$$

Well played by white, for $34-1$ can be met by 44 - 39! now.
64... $34-43$ 65.11-7

Black resigned.


## A. Gantwarg - T. Sijbrands

White resigned in this position, but he could have held a draw! After 56.26 - 21! Black can't get a second king safely.

$$
\begin{gathered}
56.26-21!34-40 \\
57.27-31!
\end{gathered}
$$

At 57.27-367-12 wins for black, but now $57 . .$. $7-12$ is met by $58.31-26!12-18^{*} 59.26-31$ with a repeated attack on the loose piece, for example: 18-23 31-3723-29 37-426-33 $42-47=$.
Ex 2.2 A) How does white force a draw after 56.26-21 6-50?
B) How can white force a draw after 56.26-21 6 - 39 ?


## A. Cordier - A. Baliakin

Black has three pieces more than white, Baliakin still couldn't find the right strategy to win! In this position he was close to victory however...

Ex 2.3 Can you find the way to victory for black to move?

H. Meijer - K. Thijssen

## 57.7-1 27-32 <br> 58.8-3?

Too greedy! White should have first taken care that the pieces $6 \& 16$ are bound to their spots: 58.1 - 12! $32 \times 4659.8-3$ which would have won the piece anyway. 59... $46-3760.3 \times 2537$ - $2661.12-23$ is no problem: white gets the main diagonal and races to a third king.
If black stays at the main diagonal it can go like this: 59... 46-37 60.3 x $2537-2861.24-20$ $28-3762.12-2637-1963.36-3119-23$ ( $19-1320-1413 \times 3626-31 \mathrm{~W}+$ ) 64.31-27 threatening $20-14 \& 25-14) 23-720-14$ etc. $\mathrm{W}+$.


Kees Thijssen during the Dutch championship 1994


## H. Jansen - W. Chogoliev

Ex 2.4 Black to move won quickly, How?


Watjeislav Chogoliev

## 3 Kings against 1

The endgame of three kings against one king seems an easy draw. One must never forget however two important things:
Three kings have a tremendous power.
Experience shows that people rarely have any problem to make mistakes! Therefore it is worthwhile trying to win the game. One rule in this type of endgame is important:

In a situation of three pieces of which at least one is a king against one king the game is a draw after 16 mutual moves.

A. Ivanov - E. Zile

Black attacked piece 29 and white raced to king by playing 69.29-24? overlooking that the black king could be caught in a tactical web!
69.5-23!! $7-11$
69... $7-270.49-35!2-1671.23-716 \times 2$ 72.29-24 W+ 69... $7-1670.23-1$ ! $16-271.49-35$ etc. $W+$

$$
70.23-1!
$$

A key move, threatening 49-441-6, so black has to leave the trictrac zone.

$$
\text { 70... } 11-1671.29-2316-272.49-35
$$

At the next move the black king is caught.


## C. Plug - H. Risselada

Black to move can make a draw playing 61... 48 - 42! 62.20-159-14 changing 14-20 at the next move with an escape in the $3 \times 1$ endgame. Black chose another way to go to a $3 \times 1$ endgame, but this gave his opponent the chance to win nicely!

$$
\text { 61... } 9-13 ? 62.20-1548-25
$$

Piece 23 couldn't be attacked. Now it looks like a draw: white can't do anything against the $13-19$ exchange, can he?
$63.15-10!13-1964.23 \times 1425 \times 9$
The players agreed on a draw at this very moment! White should have played 65.9 - 4 ! catching the king, for example 65... $9-2566.4-$ $925 \times 3$ 67.6-17 W+.

R. Rentmeester - S. Rijgersberg

Black can't play 57... $40-12$ ? for her king will be caught by $25-48 \& 36-31 \mathrm{~W}+$. She should stay with her king at the 1 / 45 line, or play 11 -1621-17 first.

$$
\text { 57... } 40-49 ?
$$

White could have won by playing 58.21-17! and the $3 \times 1$ black reaches after 58... $49-44$ $59.17 \times 644 \times 17$ turns out to be lost: $60.25-3$ ! $17-2661.6-1!26-4862.36-3148 \times 26$ 63.1 - $12 \mathrm{~W}+$.

G. Schoenmakers - M. van Gortel

Ex 3.1 How can black force the win?


## Scissors ( $\ll$ )

Catching the king with $36-9 \& 35-8$ is called the pair of scissors, or just scissors. We use the notation: 36-9 8< 35-8 W+.

We show a famous composition from 1802 in which the three white kings work together perfectly to catch the black king in a tactical web. White uses the scissors to cut the black king from the board.


Huguenin
1.37-19!

Black can't put his king on the 48 / 25 diagonal anymore, for example 25-39 42-33 W+.

$$
\text { 1... } 25-9
$$

1... $25-32.48-263-253.26-3$ ! At the next move the pair of scissors cut the king of the board. $19-30 \&<47-20 \mathrm{~W}+$.

$$
2.41-369-25
$$

After $2 \ldots 9-33.42-263-25$ the pair of scissors cut the king from the board $36-98<19$ - $8 \mathrm{~W}+$.

$$
\begin{gathered}
3.42-48 \quad 25-20 \\
4.36-47 \quad 20-3 \\
5.47-203 \times 25 \\
6.19-30 \mathrm{~W}+
\end{gathered}
$$



## F. Hermelink

This great composition shows several useful ideas for the endgame.

## $1.15-10!!4 \times 15$

$1 \ldots 14 \times 52.20-1536 \times 473.16-1147 \times 20$ $4.25 \times 36 \times 175.3 \times 38$ with a beautiful ending: 23-28 6.38-20 $28-32$
$6 \ldots 5-10$ is met by $7.20-9!4 \times 138.15 \times 413$ - 199.4 - 15 etc. $W_{+}$
7.20-42 4-9
7... 5-10 8.42-20! (threatening 20-9!) 10 $149.20 \times 9!4 \times 1310.15-1013-1811.10-4$ 18-2312.4-15 W+
$8.42-26$ !
Threatening 26-3 \& 15-10
8 ... $9-139.26-48$ !! $32-3810.48-2513-$
19* $11.25-3!5-10^{*} 12.15 \times 438-43$
12... 38-42 13.3-14 W+
$13.4-1319 \times 814.3 \times 49$ W+Wow!

## $2.33-2836 \times 473.28 \times 1015 \times 4$ $4.20-1547 \times 205.25 \times 3$

Because of the $16-11$ threat black has to sacrifice piece 6.

$$
5 \ldots 6-116.16 \times 732-38
$$

$6 \ldots 32-377.7-24-10$ * $8.15 \times 437-419.3-$ $14!41-4710.14-418<11.2-13 W+$

$$
7.7-24-10^{\star} 8.15 \times 4
$$

Because of the 3-9 threat black had to give up his last piece. The apotheosis is near...


Black can go to $<47,48$ or $49>$ but in all cases his king is cut from the board by a pair of scissors...

1) $8 \ldots 38-429.4-15$ ! $42-4810.2-308<$ $11.15-20 \mathrm{~W}+$
2) $8.38-439.2-1643-4810.4-318<11.16$ -21 W+

## A brilliant composition by Hermelink!



## F. van Sterkenburg

$$
1.38-3229-38
$$

White has to lose a piece, but catches the black king in a tactical web.

## $2.43-4938 \times 16$ <br> $3.50-45$

$3.6-1$ is also good: $35-404.1 \times 45$ ! $16-2$ $5.49-352-166.45-3416-27.34-392-7$ $8.50-457-29.35-492-1610.45-4016-$ $711.39-347-1112.34-111-213.40-342$ $-1614.34-2916-215.49-352-1616.1-$ $716 \times 217.29-24 \mathrm{~W}+$
3... 16-7
3... 16-2 4.6-1 $35-405.45 \times 34$ ! (threatening $34-308<1-40) 2-16(2-1149-44 \& 1-6$ $W+) 6.34-2916-27.49-35$ and $2-78<29$ -24 at the next move $W_{+}$

$$
4.6-17-25.1-6
$$

Black's space to play is severely reduced. He can't play at $<8,13,19,24,30>$ because of $45-$ $40 \mathrm{~W}+\mathrm{c} 2-16$ is met by $49-438<6-44 \mathrm{~W}+$. $5 . . .35-406.45 \times 34$ leads to the same system as in the main line.

$$
5 . . .2-76.6-39!
$$

After 6... 7-2 7.39-50 black has to sacrifice his piece with the same win as in the main line.
6... $35-40$
$7.49 \times 357-2$
$7 \ldots 7-168.35-4916-29.39-302 \times 35$
$10.45-40 W+$.

$$
8.35-49
$$

Threatening $39-30 \& 45-40$.

$$
\begin{gathered}
8 \ldots 2-16 \\
9.45-4016-7 \\
10.39-347-11 \\
11.34-1!
\end{gathered}
$$

A crucial move for taking control over the trictraczone, threatening 49-441-6 W+

$$
11 . .11-2
$$

12.40-34 2-16
13.34-29 16-2
14.49-35 2-16
15.1-7 $16 \times 2$
16.29 - 24 W+

The endgame of three kings against a king and a piece can be very complicated. The extra piece often doesn't help the single king at all, so he should get rid of it to simplify things. We show some rare examples of a king and a piece not being able to escape from three kings.

T. Goedemoed - M. Gresiak

$$
1.5-3233-392.16-11
$$

White can't stop black from getting a king, but the king will have little space to play. White advances piece 16 in order to prevent black from going to <50>, while at the same time getting a second king himself.

$$
\begin{gathered}
2 \ldots 39-44 \\
3.11-6 \quad 44-49 \\
4.32-16 \\
5.6-10-24 \\
5.6-1 \\
6.1-6
\end{gathered} 15-30
$$

$$
7.22-1820-25
$$

The only chance for black is to reduce white's number of men (kings and pieces) to 3. It looks like he is escaping with a draw. But the black king can't escape the tactical web after the sacrifice...

$$
\begin{gathered}
8.18-1235-40 \\
9.45 \times 3430 \times 39 \\
10.6 \times 50
\end{gathered}
$$



The black king can't escape the 2 / 35 / 49 / 16 quadrant, and black's piece also can't move on to the kingsrow: 10... 25-30 11.12-7 30-34 $12.50-33!34-39(49-4033-39 W+; 49-$ $3533-24 \mathrm{~W}+$; $34-4033-38 \mathrm{~W}+$ ) $13.33 \times 50$ $49-3514.7-235-4015.50-4440 \times 4916.2$ $-35 \mathrm{~W}+$.

$$
10 . . .49-3511.50-45
$$

Threatening $12-88<45-7 \mathrm{~W}+$.
$11 . .25-30$ is met by $12.12-730-3413.45 x$ 12! (threatening $12-8$ ) $35-4414.12-45$ ! (threatening $16-11 \& 45-50$ ) $44-3515.7-2$ $35-4416.45-4044 \times 3517.16-49$ and black is locked up in the quadrant again.

$$
11 \ldots 35-4412.12-7
$$

Threatening $16-11 \& 45-50+$.

$$
12 \ldots 25-3013.7-1
$$

Reactivating the $16-1145-50$ threat. So there's only one move left for black.

$$
\begin{gathered}
13 \ldots 44-49 \\
14.45-40!49 \times 35 \\
15.16-49
\end{gathered}
$$

A nice ending!


Ex 3.2 White must lose a piece but can catch the black king in the 2 / 35 / 49 / 16 quadrant. Try to find out how!


## W. IJzerman - A. de Graaf

Although white can't prevent black from changing $24-30$ reducing the number of black pieces to 3 , white can force a tactical web, helped by the extra black piece.

$$
\begin{aligned}
& 1.1-6!24-30 \\
& 2.25 \times 248 \times 35
\end{aligned}
$$

2... $8 \times 303.7-230-34(30-482-3025 x$ $3416-43 \mathrm{~W}+$ ) $4.6-134-455.2-745-50$ 6.1-6 25-30 7-12 W+

$$
3.7-2
$$

White even can use another system to win: 3.6 17 (threatening 17 - 8) $35-494.16$ - 11 (threatening $17-21 \& 7-2$; $49-35$ is met by $17-8 \& 11-16) 49-4017-50$ (the fastest way to win) $40 \times 150-45 \mathrm{~W}+$

## 3... 35-40

After 3... $25-30$ white has plenty winning moves, for example 2-13 30-34 16-2 W+.
3... 40-49 26-21\&6-11 W+
$4.2-3025 \times 34$
$5.6-3934 \times 43$
$6.16 \times 35$


## P. Pippel - Schaafsma

Black is not safe until he can sacrifice his piece at <25>. But he has to evade the 5-41 $21-27$ threat first. He should go to <29 or 33>. 1... $47-$ 42? loses due to $4-152.42-48(42-265-$ $14 \mathrm{~W}+$ ) $21-43 \& 15-20 \mathrm{~W}+$.

$$
\text { 1... } 47-24 ?
$$

$$
2.4-1524-2
$$

The black king can't go to a wild square because of $15-20$.
2... $24-353.21-1635-2(25-3015-33$ etc.) $4.16-49$ results in the same position as in the game.

$$
\begin{aligned}
& 3.21-492-35 \\
& 4.15-3325-30
\end{aligned}
$$

$$
\text { 4... } 35-25.33-118<5-32 W+.
$$

$$
5.33-29
$$

And black's king is trapped between a rock and a hard place.

We will show some beautiful positions that will show the tricks you need to know playing three kings against one.

1.46-28!

And black can choose how to loose:

1) $1 . .43-492.13-2$ with a double scissors threat $12-40 \ll 28-19 \& 12-21 \ll 28-11$ W+
2) $1 . . .43-482.12-3$ with a double scissors threat $13-30<28-14 \& 13-31<28-17$

1.14-32! 43-48
1... 43 - 49 2.9-27! and the king is caught at the next move ( $49-3532-19 \mathrm{~W}+$ )

$$
\text { 2. } 9-25!48-26
$$

2... 48 - $423.36-4742-264.47-42$ 8< 5.32 - 43 W+

## $3.25-48$

Catching the king at the next move with $32-21$ s< 36 - $31 \mathrm{~W}+$.

1.1-29! 43-48
1... 43 - $492.29-38 \mathrm{~W}+$

$$
2.29-4248-253.37-41
$$

The famous position of Huguenin (after 1.32 19!) has emerged on the board. We already showed how white won using the scissors.


Ex 3.3 White can force the Huguenin endgame!


$$
1.12-2643-48
$$

1... 43 - 492.40 - 7 !! Creating the so-called Zeppelin. White threatens to play $26-21 \& 7-2$ while $49-35$ is met by $26-8 \& 11-16 \mathrm{~W}+$.

## $2.40-29!$

A beautiful move, allowing black to go to 3 different spots, though all losing:

1) $48-4311-16$ followed by $16-438<29-$ 42 W+.
2) $48-2526-48$ followed by $29-208<11-$ 39 W+
3) $48-3011-16!$ !


Magic Triangle
White built the magic triangle. Black loses due to the double scissors $16-438<29-42 \& 26-8$ $8<29-7 W+$.


Ex 3.4 How can white force a win? You will need the Magic Triangle here!

Exercises 3.5-3.8 White forces a win!


Ex. 3.5


Ex. 3.6


Ex. 3.7


Ex. 3.8

## 4. 5 Kings against 2 kings

The endgame of five kings against two kings is very complicated. You have to know at least two key positions. If the opponent has two kings at the trictrac-lines, white should build this construction:


White to move can just wait for black to move, playing $1.46-5$. Black then can't have go to a wild square, and his other options are also parried: 1 ... $50-6$ is met by $2.5-286 \times 423.47$ x $2945 \times 314.36 \times 27 \mathrm{~W}+$, while $1 \ldots .45-1$ is met by $2.5-231 \times 423.47 \times 33 \mathrm{~W}+$.

If black has two kings at the main diagonal the key position is like this:


Black to move has no safe squares for his kings. 1 ... $46-14$ is met by $2.47-2014 \times 253.4-10$ $5 \times 174.6 \times 3925 \times 435.48 \times 39 \mathrm{~W}+$.

If black has one king at the main diagonal and one elsewhere, you can also win with five kings: often the key is then to catch one of the kings while simultaneously trapping the other in a $8<$.


White waits a move until $48-25$ is played:

$$
1.16-4948-25
$$

$1 \ldots 46-5$ is met by $2.4-105 \times 173.6 \times 33$ and the black king is cut from the board by $49-43$ $8<33-42$ at the next move.

```
2.26-48 25-3
3.4-9 3 x 25
4.49-32 46 x 17
5.6 x 39 25 x 43
    6.48 x 39
```

The endgame of four kings and a piece at < 15> against two kings is also winning, but too complicated to address here. If you think you should know this, this endgame (attributed to Van Kesteren) is treated in the book 5 tegen 2, eindspelen van vijf stukken tegen twee dammen (5 against 2, endgames of 5 men against 2 kings) by G. L. de Bruijn.


## L. Ferrazzino - I. Gedance

Ex 4.1 How did black catch both kings?

M. Faal - W. Chogoliev

Ex 4.2 Black to play won in a tricky way!

A. van Tilborg - H. Macaux

Ex 4.3 A) How did white win after 4 - 9 ?
B) How would white have won after 4-36 ?

B. Bies - A. Scholma

If you have to defend this type of endgames, usually it is not a good idea to go to a wild square with one of your two kings.

Ex 4.4 How did black win after 107.50 - 11 ?


## G. Jansen - H. Meijer

Black to move had to sacrifice his extra piece at $<36>$ leaving a theoretical win for white.

Ex 4.5 How does white win after 6-50?


Gérard Jansen

## 5. Tricks

All kind of tricks play an important role in the endgame. In part I we saw a trick called the ambush.


## P. Stevelmans - N. Verjans

White thought the game was drawn, but missed the ambush he could have laid:

$$
\begin{gathered}
1.26-1739-43 \\
2.41-37
\end{gathered}
$$

And no either:
2... 43-483.17-26 W+
2... 43 - $493.17-44 W_{+}$


Bunzo - DIOS
In a game between two computer programs white showed a beautiful win:

$$
\begin{gathered}
1.16-11 \\
2.11-7 \\
3.7 \\
3.7-28 \\
4.2-11 \\
4.24-29 \\
5.11 \times 50-27
\end{gathered}
$$

White goes to <50> in order to be able to attack
if black goes to <34>. 30-3450-45 34-39 45
-50 etc. W+

$$
\begin{gathered}
5 \ldots 27-31 \\
6.50-3931-36 \\
7.25-2036-41 \\
8.39-28 \\
8 .
\end{gathered}
$$

It is clear black loses if he goes to king, but 29 33 seems to save him...

$$
\begin{gathered}
9.38 \times 29!41-47 \\
10.29-2447-36 \\
11.32-4136 \times 47 \\
12.10-1547 \times 20 \\
13.15 \times 24
\end{gathered}
$$



## J. Kos - G. Willemsen

Here white could have locked the future black king in the trictrac-zone.

$$
\begin{gathered}
1.2-1140-45 \\
2.11-618-22^{*} \\
3.6 \times 28!!
\end{gathered}
$$

White deliberately loses a temp in order to be able to lock the black king.

$$
\begin{gathered}
3 \ldots .45-50 \\
4.28-3350-45 \\
5.39-3445-50 \\
6.33-650-45 \\
7.6-50
\end{gathered}
$$



P. Bergsma-B. Bies

Black to move played 37-42?
Ex 5.9 How did white win?

B. Derkx - S. Bilosheyev

Ex 5.10 How does white to move force the win?

W. Wesselink - O. Verpoest

Ex 5.11 What's the winning move for white?


## F. Zegelink - L. Steijntjes

Ex 5.12 In the game the players here agreed to a draw, but black to move can actually win! Try to find out how.

J. van der Wal - R. Biagianti

Ex 5.13 Black played 41 - 47? How did white win?

I. Kirzner - N. Gulyaev

Ex 5.15 White could have caught the black king in a web. How?

## Solutions

1.1 White shouldn't play $29-24$ because of 15 $20=$ (post Scouppe). White wants to get the diagram position with black to move. In that case he can always play $29-24$ at the next move! White therefore has to change the odds: $35-44$ (not allowing black to go to a wild square because of a $25-20$ shot) $46-525-35-46$ 3-946-59-255-4644-35 and white can play $29-24$ at the next move, without the possibility for the $15-20$ sacrifice for black. Black thus has to leave the main diagonal after white has built a double catching construction with 29 - 24 . White will then get his third king and will eventually become dominant.
$1.293 .22-1726-3194.36 \times 2730-1395.27$ $-2113-27=$
1.2 A) $36-3148 \times 2623-19$ white holding the main diagonal. Piece 22 is developed (one square) too far (see Leclerc endgame).
B) $48-375 \times 4615-2025 \times 1427-3136 \times$ $2716 \times 5$ B+
$1.334-3025-2030-25$ builds a double catching construction.
$1.43-17!27-3217-2832-3828-3947-$ 42 39-48 42-47 23-19 W+
$1.527-22$ (27-21 is also good) $23 \times 4522-$ $1712 \times 216-1$ W+
$1.61 .29-33!49-272.33-50!27-133.50-$ 45 (most safe) $13-4$ and now the piece is protected well and black has to take care for the $34-30$ shot, so white can advance a piece: 4.48 - 42! 4-135.42-37 etc. (although one should stay concentrated till the end...)
1.722-18 (25-312-73-127-112x45 22-18) W+ and 27-21 W+
$1.827-2126 \times 1733-4750 \times 2247-36 W_{+}$
$1.912-747-337-133 \times 505-3235 \times 44$ $32-4950-4549 \times 40 \mathrm{~W}+$
1.10 A) 47-36 22-27 46-41 and at the next move $41-37=$.
B) $46-4131-3722-2747-2437-4136 x$ $4732-3824 \times 4226 \times 48$ B+
$1.1124-2025 \times 1429-235-1023-1914 x$
$2334-2923 \times 3445 \times 5 \mathrm{~W}+$

## Lesson 2: $4 \times 3$ \& $4 \times 4$ endgames

$2.165 .33-295-1011-2$ (29-23 also wins) 10-15 (10-4-13 W+) 29-23 etc. W+
2.2 A) 57.21-43 34-4058.16-117x 2743 x 21 (or $43 \times 16$ ) =
B) $27-4$ (or $27-36$ with the same idea, threatening $16-11) 7-12(39-64-27$ repeats the moves; 39-114-18=) 4-3139-$631-2612-1826-31$ etc. With a repeated attack (18-23 31-3723-29 37-426-33 $42-47=$.
2.3 1... 16 - $2146-19(46-4131-3741 \times 6$ $21-176 \times 3126 \times 37 B+) 31-3719 \times 4121-$ 1641-46 (41-4722-28 etc. B+) $22-2846$ $\times 54-105 \times 2116 \times 32 B+$
$2.43-8$ winning the piece, for $19-14$ is punished by $8-1914 \times 3246 \times 45$ B+

## Lesson 3: 3 Kings against 1

$3.130-347-134 \times 451 \times 3437-4834-25$ 45-5024-315-20 $\ll 50-33 B+$
$3.27-2$ (you can also start with $34-43$ ) 19 x 35 34-43 35-4050-45 40-44 45-40 44x 3543-4925-302-7 W+
$3.324-1943-4820-4248-2537-41$ Huguenin W+
3.4 37-48 26-8(26-21 44-49 followed by 49-21 8< 18-31 W+; 26-3 48-26 followed by $18-98<44-17 \mathrm{~W}+$ ) $44-49$ Magic Triangle) with double scissors $49-218<18-$ $31 \& 48-308<18-40 W+$
3.59-3 43-48(43-498-3549-32 3-21 $32 \times 1635-49 \mathrm{~W}+) 8-2648-432-3043 \times$ 25-26-48 W+
$3.639-30$ threatening both $30-820-14 \& 20$ - $4230-34$ W+
$3.736-4720-25$ (or $20-347-38$ with the same idea of the Zeppelin) 47-38 (Zeppelin) threatening $38-4331-26$ while $25-3$ is met by $43-2137-48 \mathrm{~W}_{+}$
$3.814-326-48(26-3115-4$ followed by 4 $-318<23-12) 3-25$ followed by $15-428<$

23-34W+

## Lesson 4: 5 Kings against 2 kings

$4.136-4146 \times 324-1028 \times 525-145 \times 40$ $45 \times 46$ B+
$4.225-2047 \times 1536-4746-5$ (if the king goes to a wild square $47-20$ follows) $4-105 x$ $116 \times 33$ B+
4.3 A) $29-2319 \times 4612-2346 \times 3035 \times 4$ W+
B) $29-1836 \times 3035 \times 19 \mathrm{~W}+$
$4.445-3448 \times 2529-2025 \times 3746 \times 6$ B+
$4.55-231 \times 4247 \times 3350 \times 3126 \times 37 W+$

## Lesson 5: Tricks

$5.17-2(7-1 ? 31-37=) 31-37(34-392-$ $3039-4430-3944 \times 3341-37 \mathrm{~W}+$ ) $41 \times 32$ $34-392-3039-4430-3944 \times 3332-28$ $33 \times 2247-42 \mathrm{~W}+$
$5.29-425-3048 \times 2538-4246-4136 \times$ $4725-4847-3648 \times 31 \mathrm{~W}+$
$5.324-3523-2942 \times 245-46^{*} 25-20$ W+
$5.415-4741-466-2835-4028-39 \& 39$ $-34 W+$
$5.550-4523-2843-3828 \times 3945-5039-$ $4350 \times 1143 \times 3211-16$
$5.626-2117 \times 269-326-31(29-343-25$ $34-4025-3940-4539-626-3132-27$ $31 \times 226 \times 50 \mathrm{~W}+$ ) $32-2731 \times 223-922-28$ 9-14 $28-3314-20$ etc.. W+
$5.720-418-23(18-224 \times 36$ etc. $) 4-3639$ - $4342-38$ W+
$5.826-1734-4044-3940-4539-3445-$ $5017-6$ W+
$5.943-3842 \times 3324-2025 \times 149-314-$ $193-819-238-1223-2812-1728-32$ $17 \times 3932-3739-2837-4228-3742 \times 31$ $36 \times 27 \mathrm{~W}+$
$5.1035-3024 \times 3517-1134-40(7-1211$ $-634-4038-3240 \times 496-1 W+) 11 \times 240$ x 49 16-11 W+
$5.1144-3912-176-130-351 \times 3435 x$ $3334-4317-2232-16 \mathrm{~W}+$
$5.1224-2935-3029-3430-2534 \times 4322$

- $1812 \times 2325-2043-49$ (or $43-48-31-$

4) $20-1549-2715-1027-410-54-10$ B+
$5.1341-472-1647 \times 2434-2924 \times 2716 \times$ 5 W+
$5.1435-30(7-127-32=) 34 \times 257-118-$ 221-6 etc. W+

## Sources:

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