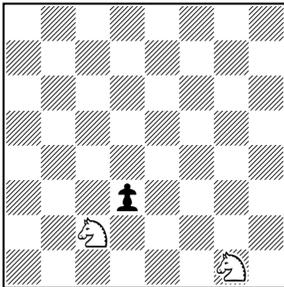


Chapter 4

Variant forms of chess

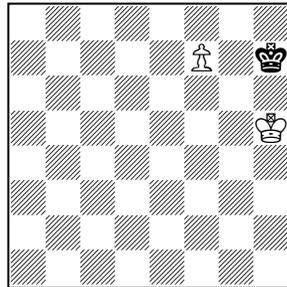
We now leave ordinary chess, and look at a few of the many variant forms that have been invented over the years. Some continue to use the ordinary board and men, some are played on different boards, some introduce new kinds of men.

4.1 (by Gyorgy Evseev, my version)



Losing (Giveaway) Chess
White to play and win

4.2

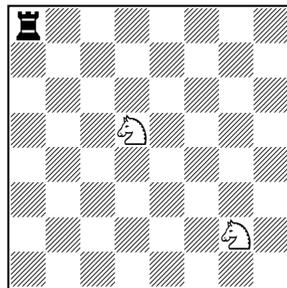


White to play and win
(a) ordinary chess, (b) Losing Chess

One of the most popular of all chess variants is Losing (Giveaway) Chess, in which capturing is compulsory and the object is to get rid of all your men. The king is an ordinary man and may be captured, and a pawn may promote to king. It is widely played among friends, it is a common choice at end-of-season “fun” meetings, and the endgame phase offers particular subtlety and delight. In *The Encyclopedia of Chess Variants*, David Pritchard described this as “the most appealing stage of the game, a garden of surprises”, and I think all who have explored it even superficially will endorse his verdict.

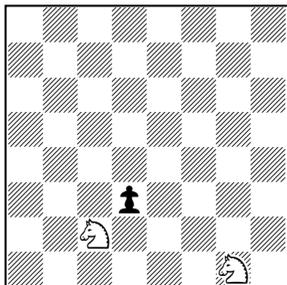
4.2 is a two-part study in ordinary and Losing Chess.

4.3



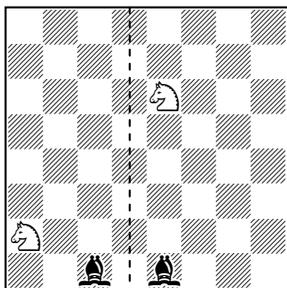
Losing (Giveaway) Chess
White to play and win

4.1 (by Gyorgy Evseev, my version)

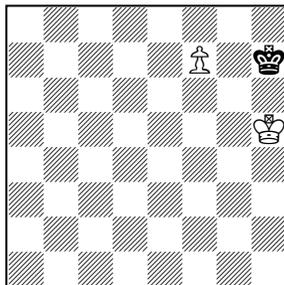


Losing (Giveaway) Chess
White to play and win

The answer to 4.1 is **1 Ne2**, offering Black a second capture. If now **1...dxc2** then **2 Nc3 c1B** (any other promotion loses at once) **3 Na2** (see the left-hand diagram below), after which the bishop must move away and the knight gives itself away on the square the bishop has just left. This doesn't work after **1...dxe2**, because after **2 Ne3 e1B** **3 Ng2** Black has **3...Bh4**, but White can play **2 Nd4 e1B** **3 Ne6** and the knight will have a giveaway wherever the bishop moves (see the right-hand diagram); and *this* doesn't work after **1...dxc2**, because after **2 Nd4 c1B** **3 Nc6** Black can escape by **3...Bh6**.



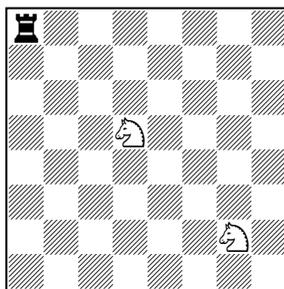
4.2



White to play and win
(a) ordinary chess, (b) Losing Chess

In ordinary chess, **1 f8R**, as known for many years. In Losing Chess, the same only different: **1 Kh6 Kxh6** **2 f8R!**

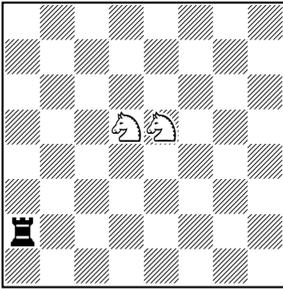
4.3



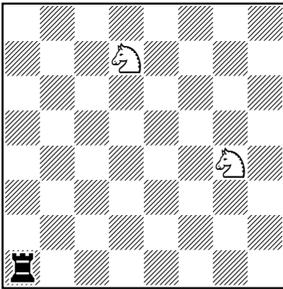
Losing (Giveaway) Chess
White to play and win

4.1 and 4.2 were discovered by normal exploration with board and men. 4.3 was thrown up by a definitive computer analysis.

Black to play would have to allow two immediate giveaways. White to play starts **1 Ngf4** (or **Nge3** by symmetry) **Ra1** **2 Ng6 Ra2** **3 Ne5** :

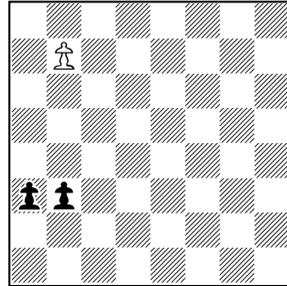


Black now has three moves. If 3...Rh2 then 4 Nb6 Rh1 5 Nbc4 Rh8 6 Nb2, and we have a left-to-right reflection of 4.3 but with Black to play. If 3...Ra1 then 4 Nf6 Ra2 (4...Rb1 is equivalent) 5 Nfd7, and if 5...Rh2 then 6 Nb6 transposing into the previous line; if instead 5...Ra1 then 6 Ng4, with another position where Black to play must allow two immediate giveaways :



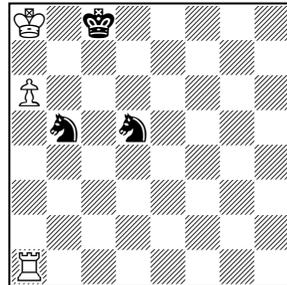
At the top of the page, this leaves 3...Ra8, met by 4 Ng4 Ra1 5 Ngf6 Ra2 6 Ng8 Ra1 7 Nge7 Ra2 (7...Rh1 8 Nb4 with a left-to-right reflection of the position above) 8 Ng6 Ra1 9 Ngf4 Ra8 10 Ng2 and we are back at 4.3 but with Black to play. Moving only a knight, White has managed to transfer the move to his opponent.

4.4



Losing (Giveaway) Chess
White to play and win

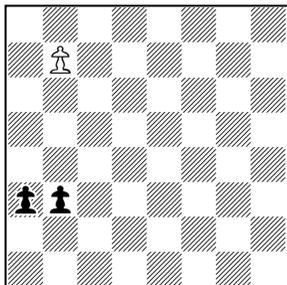
4.5



Optional Replacement Chess
White to play and hold the draw

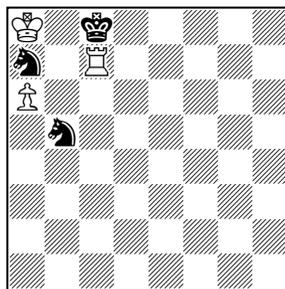
4.4 completes our brief Losing Chess selection. 4.5 features Optional Replacement Chess, where a player may put a captured man back on the board on any vacant square (a pawn not on the first or last rank, a bishop only on a square of the same colour). In ordinary chess, Black would play to reach a standard win with a lone knight (1 Rc1+ Ndc7+ 2 Rxc7+ Nxc7+ 3 Ka7 Nd5 etc). How can putting a captured knight back on the board help White?

4.4



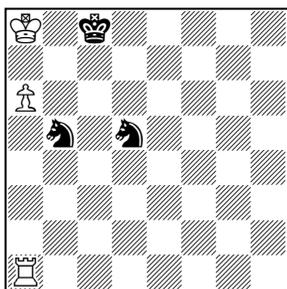
Losing (Giveaway) Chess
White to play and win

1 b8Q! Not 1 b8R, when 1...a2 2 Rxb3 a1N 3 R~ Nb3 wins for Black; but after 1 b8Q and the same, White has 3 Qc2. This is the simplest Losing Chess position I know where a promotion to queen is needed in order to win.



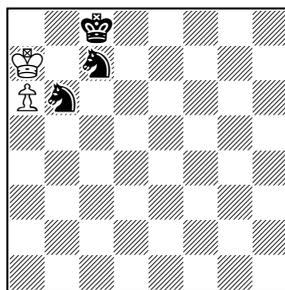
Black naturally continues **2...Nxc7+**, taking the White rook off, and White captures the knight and puts it back a second time, **3 Kxa7 (Nb6)** :

4.5



Optional Replacement Chess
White to play and hold the draw

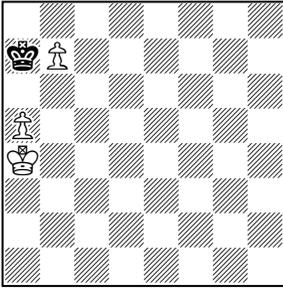
1 Rc1+, and if 1...Nbc7+ then 2 Ka7 and Black must let the White king out. **1...Ndc7+**, therefore, and we have the first capture and replacement, **2 Rxc7+ (Na7)** :



If there were no knight on b6, Black would win by 3...Nd5. As it is, White threatens to capture this knight for the third time, this time finally taking it off the board, and if Black moves it or defends it he gives stalemate.

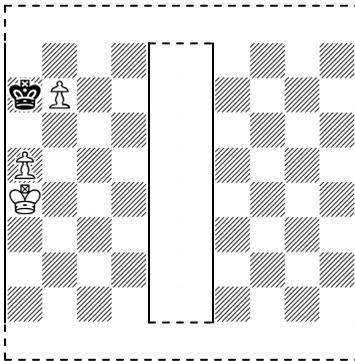
White cannot put the knight on b6 at move 2 because he would be putting his own king in check, so he must do it in two steps. If he tries 2 Rxc7+ (Nb7), hoping for axb7+ next move, Black has 2...Nxc7 (Ra7) mate. If he tries 3 Kxa7 (Nb7) with the same idea, Black can reply 3...Nc5 4 Kb6 N7xa6 (Pc4), and play out the book win with 2N v P.

4.6



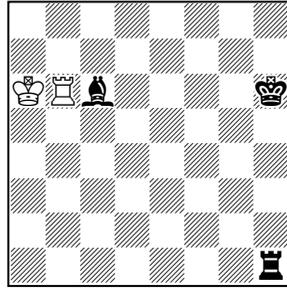
White to play and win
(a) ordinary chess, (b) Cylindrical Chess, (c) Circular Chess (see below)

In Cylindrical Chess, the a and h files are contiguous (so, from the normal game array, 1 g3 pins Black's d-pawn). Circular Chess is played on a board comprising four 16-cell rings shown below in diagrammatic form :



Imagine the two sides made semicircular and joined so that a1-a8-h8-h1-a1 forms a continuous ring, likewise b1-b8-g8-g1-b1 and so on. Men start in their normal positions, and promotion is on ranks 1 and 8 as usual.

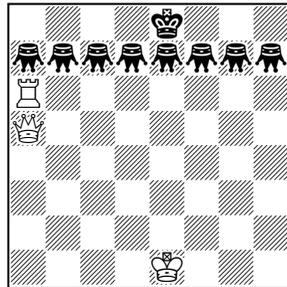
4.7 (after J. E. H. Creed)



Maximummer
(a) as set, selfmate in six
(b) White P on b6, selfmate in seven

In a maximummer, Black always plays his longest legal move (0-0 counts as 4, 0-0-0 as 5), but checks are normal. Black to move here would play ...Ra1, which would be mate even though ...Bh1 would be longer than ...RxK.

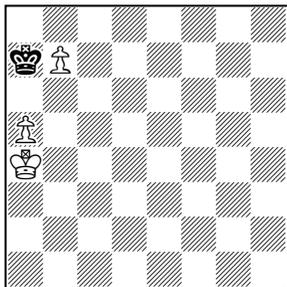
4.8



Grasshopper a7-h7; mate in four

A grasshopper moves along Q-lines, but must jump one man and land on the square beyond (so Rxa7 can be met by ...Gc7xa7). Black to move could play ...Ga7xa5, and if Ra8+ then ...Ga5-d8.

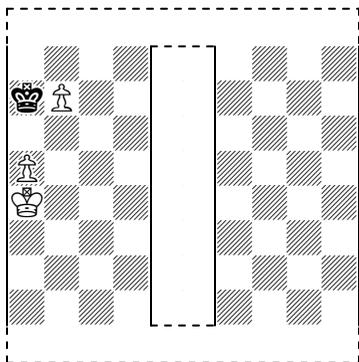
4.6



White to play and win
 (a) ordinary chess, (b) Cylindrical Chess, (c) Circular Chess

In ordinary chess, **1 a6**, with **1...Kxa6** **2 b8R** since b8Q would be stalemate.

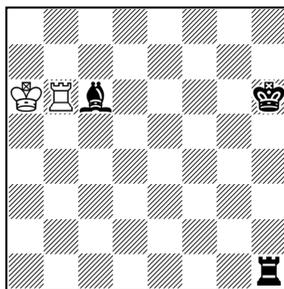
This doesn't work in Cylindrical Chess because $K + R \checkmark K$ isn't a win, but **2 b8Q** is now possible because there is no stalemate.



Neither works in Circular Chess because $K + R \checkmark K$ is still not a win and **2 b8Q** is again stalemate, but now there is no need to save the b-pawn; $K + P \checkmark K$ is a win even with a side pawn, because there is no stalemate

defence. So the move **1 a6**, needed to win in ordinary and Cylindrical Chess, is the only move *not* to win in Circular!

4.7 (after J. E. H. Creed)

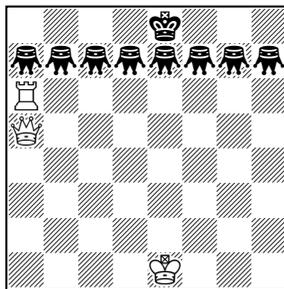


Maximummer

- (a) as set, selfmate in six
- (b) White P on b6, selfmate in seven

As set, **1 Rb8 Ra1+ 2 Kb6 Bh1 3 Kb5 Ba8 4 Rb7 Rh1 5 Rb6+ Bc6+ 6 Ka6 Ra1**. With a pawn on b6, **1 Ka5 Ra1+ 2 Kb4 Bh1 3 Kb5 Ba8 4 b7 Rh1 5 b8R Bg2 6 Rb6+** and the same.

4.8

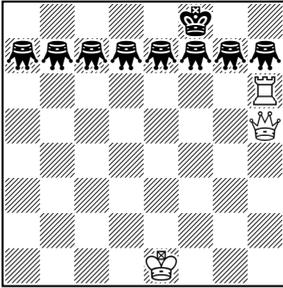


Grasshoppers a7-h7; mate in four

The concentration on a7 is a snare and a delusion, and the breakthrough will

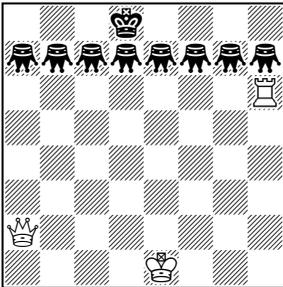
come on the other wing: **1 Rh6**. Either **1...Gh5** or **1...Ga4** will allow immediate mate, so Black must move his king.

If **1...Kf8** then **2 Qh5** :



If now **2...Kg8** then **3 Rxf7**, and if **3...Gxf7** then **4 Qe8**; if **2...Ke8** then again **3 Rxf7**, and the Gf7 is pinned.

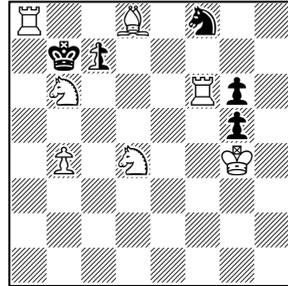
If instead **1...Kd8** then **2 Qa2** :



Again both king moves can be met by **3 Rxf7**, and if **3...Gxf7** then **4 Qg8**; and if **2...Gh5** then **3 Rxf5**.

If **1 Qh5** then **1...Kd8** (not **1...Ga5**, when White plays **2 Ra8+ Gd8 3 Qa5** and Black must allow a mate on d8). If **1 Qa2** then **1...Kf8**, and if further **2 Qh2** hoping for a reflection of the play after **1...Kd8 2 Rxf7** then **2...Kg8 3 Rxa7 Gh1!**

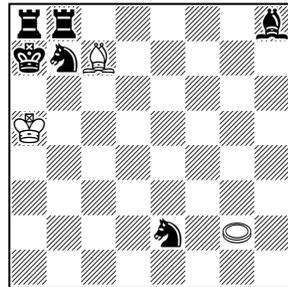
4.9 (by Kurt Smulders, my version)



Neutral pawn c7; mate in two

A player may move a neutral man as if it were his own, or capture it as if it were his opponent's. Neutral pawns promote to neutral pieces. White can play c8R, but c8Q would check his own king. Smulders's original is overleaf and many will prefer it, but the version has a property which I like.

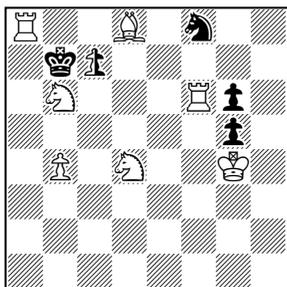
4.10 (after J. E. H. Creed)



Imitator g2; mate in two

An imitator copies each move, and a move can be made only if the imitator can copy it. **1 Kb6 (1h3)** is legal (Black cannot play **KxK**) and check (White can). The answer: **1...Bf6 (1f1)!**

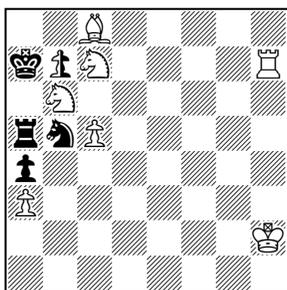
4.9 (by Kurt Smulders, my version)



Neutral pawn c7; mate in two

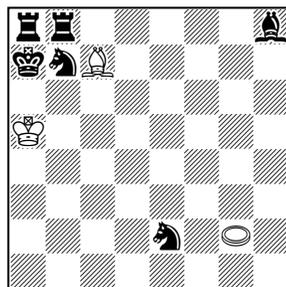
1 **Rf7** gives a flight square and makes no threat, and Black has four moves. **1...Kxb6** 2 **c8N** (not c8R, when Black has 2...Rxd8/Rc7). **1...Nd7** 2 **c8B** (not c8Q, when Black can move the queen away). **1...Ne6** 2 **c8Q** (2 c8B Bd7). **1...Nh7** 2 **c8R** (2 c8N Ne7). Four Black moves, four different promotions.

Smulders's original setting



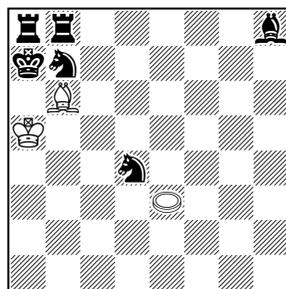
yields to 1 **Na6**, with similar play and an extra line **1...Rxa6** 2 **Rxb7** where the neutral pawn is captured. Many will think the version unjustified, but "four Black moves, four different mates" is a property I like in a two-mover, and it seems particularly appropriate here.

4.10 (after J. E. H. Creed)



Imitator g2; mate in two

1 **Bb6 (If1)** is not check because the Black knight blocks the imitator, but it restricts Black to moves by this knight because anything else will bring the imitator out into the open. Again Black has four moves, and again White has four different mates in reply. Three of them are king moves: **1...Nc3 (Id2)** 2 **Kb4 (Ie1)**, **1...Nf4+ (Ig3)** 2 **Kb5 (Ih3)**, and **1...Ng3 (Ih2)** 2 **Ka4 (Ih1)**. This leaves **1...Nd4+ (Ie3)**, after which no king move works :



The answer is 2 **Bxd4 (Ig1)**, a mating retreat along the line of check quite unlike anything that can happen in ordinary chess.