

# Chess Variants

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September 27, 2015

## 1 Introduction

These two variants of chess were created for the exercise “Fog of Strategy” in Chapter 8 of *Challenges for Game Designers* by Brenda Brathwaite & Ian Schreiber. The challenge given was:

For this challenge, choose an entirely skill-based, non-digital game with no elements of chance at all, such as *Connect Four*, *Chess*, or *Go*. To adapt the game for less competitive players, you’re going to add some chance. Specifically, add “fog of war”: your opponent’s pieces are hidden from you (and vice versa) except under certain conditions.

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## 2 Luft Chess

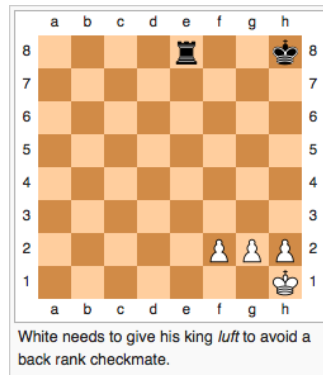


Figure 1: Example of luft, *Wikipedia*.

*Luft* (German for air, space or breath) is a chess term which denotes “a space left by a pawn move into which a castled king may move”. In other words, it refers to intentionally leaving spaces open for the king to move into in the event of a back row check.

In this variant of chess, the king himself is made of air, and is thus invisible to the opposing player.

## 2.1 Materials

A standard chess set, two pieces of paper and two pens.

## 2.2 Rules

*Luft Chess* is played with standard chess rules, with the following changes:

- The pieces are set up in the standard positions, except with blank spaces left for each player's invisible king. The king follows all the standard rules despite not being visible on the board (except as indicated below).
- Players must tell their opponent when they move their king, but do not indicate where the king has moved. Each player secretly tracks the movement of their king on a separate piece of paper (for verification after the game, if necessary.)
- Players may move their pieces through their own king, but may not place another piece at the same position.
- If the opponent's move places your king in check or checkmate, you must tell them. However, you do not need to indicate the position of your king, nor which pieces are threatening it. If the opposing player moves a piece to the same position as your king, then the king is considered captured.
- A king may not capture an opposing king, and a king is never considered threatened by an opposing king. Both players' kings may knowingly or unknowingly occupy the same position on the board.

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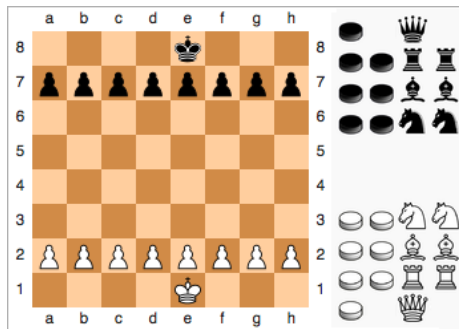
## 3 Reverse Schrödinger's Chess

When I began mulling over the “Fog of Strategy” challenge, my first idea was to create a variant of chess where players would secretly deploy their back line pieces at the beginning of the game, then gradually reveal those pieces as the game played out. Unfortunately, I discovered that this variant of chess already exists (*Schrödinger's Chess* by Darren Provine).

However, this led me to consider a modification of this variant. What if you secretly deployed your opponent's back row pieces, then revealed your own unknown pieces as the game played out?

### 3.1 Materials

In addition to a standard chess set, players will need 7 black tokens and 7 white tokens. These tokens should indicate one of the seven available pieces on one side (2 knights, 2 bishops, 2 rooks, 1 queen) and be blank on the other. These pieces will be flipped over or substituted for the real pieces as the game progresses.



### 3.2 Rules

*Reverse Schrödinger's Chess* is played with standard chess rules, with the following changes:

- Rooks, bishops, knights and queens begin the game concealed. The six concealed pieces go in the usual locations, but are secretly rearranged by the **opposing** player at the start of the game.
- Neither player may look at a concealed piece after the initial setup, until that piece is revealed.
- When a player captures an opponent's piece, they must choose one of their own concealed pieces on the board and reveal it, if possible. Once revealed, a piece moves according to the traditional rules.

It also inherits the following rules from standard *Schrödinger's Chess*:

- While concealed, pieces can move and capture one or two squares in any direction.
- If a piece is captured while still concealed, it remains concealed until the game is over.
- A concealed piece is considered "concealed", even if the other five concealed pieces have been revealed and there is no longer any doubt about what it is.
- To castle, a rook must be uncovered and must be in either A or H.