

Chapter 2

Games with concealed information

[In a normal game of chess, a player knows his opponent's position at all times. This chapter considers games where a player must move in partial or complete ignorance of what he is facing. There are two general classes: a player can see only his own men and he relies on an umpire to give him limited information about his opponent's (for example, to tell him whether a particular move is legal), or he can see the positions of his opponent's men but does not know their identities. The generic game of the first kind is 'Kriegspiel', though this term is also used for a class of table-top war games which we shall discuss briefly in the Appendix. Games in which the players set up their men secretly but then bring them together for normal open play are considered in the chapter on games with unorthodox initial arrays.]

2.1 Games with an umpire, both sides blind

Kriegspiel, also known as **Screen Chess**, **War-Chess** [**Kriegspiel**], and **Commando Chess** (Michael Henry Temple, 1899). Amongst the best-known and most popular of all variants. At the outset of the Boer War, members of the Knight Lights Club (who were also interested in acrostics, hence the name) at the Cock Tavern in Fleet Street, proposed playing a war game, whereon Temple suggested that this could be done with the chessmen, and Kriegspiel was born (*Chess Amateur* 1906). (The watering-hole was a favourite haunt of the Press: '...the Cock I used to know, where all good fellows were my friends a little while ago.') The first battles of the Boer War did not take place until October 1899; claims that the game was invented earlier have not been substantiated. What is certain is that its popularity was immediate. Kriegspiel was played at the Anniversary meeting of the Ladies' Chess Club (1902) and the following year the *BCM* reported the game being played blindfold. A booklet, *Kriegspiel, or War Chess* by H. Cayley, was published (1905) and when the *Chess Amateur* was launched (1906) early issues contained a regular Kriegspiel column. In 1907, a Kriegspiel tournament at Maidstone was won by A. C. Waterman (who incidentally first introduced Snakes & Ladders into the U.K. and was involved in a legal battle over the rights to a strategy game, Reversi, popular to this day as Othello). During World War I the game was briefly renamed War-Chess

(sometimes Screen Chess) in reaction to its Teutonic title. A War-Chess club opened in Fleet Street. *The Yearbook of Chess* (1913 and 1915/6) published major articles and the *Schweizerische Schachzeitung* devoted the whole of its December 1914 issue to the game. In 1915 the *Daily Mail* reported that 'the game has ... captured the chess clubs, humbled the pride of some of the cleverest chess players, and has started upon a devastating career in the suburbs'. Many famous players dabbled in the game. Lasker and Marshall suffered at the hands of the experts amongst whom was Kashdan. A regular Kriegspiel circle formed at the Gambit Chess Rooms, London, never to disband until the café closed its doors in the 1950s. The habitués developed a language of their own, akin to that of the Bingo halls; thus 'He's in your angle near the door' meant a capture on a8. Regular championships were held at the Gambit, that of 1925 attracting many leading players. It was won by A. Felber who had also won the previous year. Big matches were held at the National Chess Centre before it was destroyed in 1940. The decline in popularity of the game in later years can be attributed largely to the great rise in competitive chess but also, in the view of Eric Croker, to the demise of folding chessboards, which commonly served as the necessary screens.

The original rules of the game at the Knight Lights Club, framed largely by W. Ward, have been republished, differing only in details,

uncounted times and in many languages. A sound exposition, which includes other aspects of the game, is in *Games and Puzzles* 50. Kriegspiel requires two players, an umpire and three sets. The boards are normally placed in a line, pieces of one colour on the same side, with two screens to divide the boards. The players sit at the outside boards, one with the white pieces, the other with the black, with the umpire, usually on the white side, at the middle board. The players only see their own boards; the umpire monitors all three. The principle of the game is that each player moves normally but is not told the opponent's moves which he attempts to discover through judicious play. Each player may do as he pleases with the opponent's men on his own board. The umpire approves the players' moves, provides information as required by the rules, and maintains the actual game on his own board. It is often the umpire and spectators, appreciating the absurdities of position and play, who derive most pleasure from the game.

White starts and makes a move. The umpire repeats the move on his board and announces 'White has played', often abbreviated to 'Played'. (All the umpire's announcements must be audible to both players.) The same procedure is repeated for Black. White may now ask 'Any pawn captures?', abbreviated to 'Any?' and the umpire must reply 'No', or 'Try' (short for 'You may try'), implying that there is a pawn capture. In the latter event, White must make at least one attempt at a pawn capture but may also go on trying until a capture is effected. If either side attempts an illegal move the umpire announces 'No'. A legal move, once made, is binding. (The player does not normally let go of the piece until the umpire announces that he has moved.) For example, after 1 e4 d5 White might ask 'Any?' In response to 'Try' he might attempt exf5. The answer is 'No' so White knows that Black opened 1 ...d5. White would be wise to make this move on his own board to try to keep control of the position. Suppose White decides to move and not to capture. Black now asks 'Any?'. If the reply is 'No' he will know that White has a pawn on either c5 or e5 so he may try c5. The umpire announces 'Played' and Black then knows there is a white pawn at e5. Castling and pawn

promotion are treated like ordinary moves but in the case of promotion the player must indicate to the umpire which piece the pawn is being promoted to. Captures are announced by indicating the square on which a capture is made but not the identity of either man; thus 'White has played and captured on f7'. Black must remove the man he has on this square. Checks are announced according to the direction(s) of attack but not the square(s) occupied by the attacking piece(s). Directions are indicated as on the rank, on the file, on the short diagonal, on the long diagonal, or by a knight. The diagonal is determined by the position of the king: in the initial array, White's long diagonal is e1-a5 and the short diagonal e1-h4. An optional rule requires the umpire to say 'Impossible' or 'Nonsense' if a player deliberately attempts to deceive his opponent (for example, by asking 'Any?' when he has no pawns left). Another optional rule requires an e.p. capture to be announced as such.

It was the practice under the original rules to denote the man captured (in one version, only a queen capture was identified). Also, a player eliciting 'Try' in response to 'Any?' was obliged to make the pawn capture. Another version required that 'Any?' was a compulsory precedent to a pawn capture other than an immediate recapture. An American version (*Chess*, March 1953) had three changes: the umpire said whether a capture was of a piece or a pawn; the square on which a pawn capture could be made was indicated; and, most importantly, a player could at any time ask the umpire to reveal the number of pawns and the number of pieces the opponent had remaining. Many players considered these rules debased the game by giving too much away. At the other extreme, in *Discreet Kriegspiel* (Jacques Rotenberg, *Feenschach* 1981), no information on pawn captures is given, nor does the umpire announce check, the game being won by capturing the opponent's king.

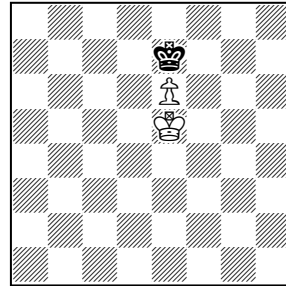
First impressions might suggest that both players are moving blindly with chance dictating events. This is often the case with beginners, but in fact the game is highly skilful and it is possible to minimise the effects of surprise by taking simple precautions. The chance factor is reduced by

collecting information on the opponent's position. This is done by attempting moves that are likely to be disallowed; for example, Ra1 attempts Ra8 ('No'), Ra7 ('No') and back to Ra3 ('No') establishing the existence of a hostile man on a2. Although it is usually impossible to interpret a middle-game position with any degree of accuracy, experienced players have an uncanny knack of arriving at the approximate if not precise position in the ending. It is essential to maintain a proper count of the opponent's forces: pawns have a nasty habit of slipping by to promotion. The cardinal rule is to remove an enemy man - any man - from one's board every time a capture is made. Here, and earlier in the game, the king can prove a useful decoy since a check gives information about the enemy. For example, a king can prevent the undetected advance of a pawn over three adjacent files, whilst a king on h1 and a rook, say on a1, can be used to snare a central pawn whose position is unknown. If the pawn promotes to queen or rook, announcing check on the rank, it will fall to the waiting rook. For this reason, underpromotion is not uncommon.

Bizarre opening play is the rule in Kriegspiel. Pawns are used to guard squares against incursions so that on a hostile advance the question 'Any?' will elicit a gratifying 'Try'. It is legitimate to attempt pawn captures without asking 'Any?', the object being to deceive the opponent into believing, in the event of a capture, that it was made by a piece. A player in check may attempt any plausible capture. Example: WKa1, Bg2. White is checked on the file. First try Kxa2, and if that fails, Bxa8. A sensible precaution is to move the queen early. An open line can be dangerous: 1 e4 d6 2 d4 Bg4 and a hasty move here will lose the queen. More subtle is 1 e4 d5 2 exd5 g5. White observes that Black does not recapture and suspects Bg4, so counters with 3 Qg4 but is disappointed when the umpire does not announce a capture. Now Black tries g4 and when the umpire says 'No' plays Bxg4. If the bishop is not recaptured, he will know he caught White's queen and not the g-pawn. This idea of enticing the opponent to make an imaginary capture and then striking is a common device. Another example: White is told 'No' by the umpire,

move after move, and Black suspects a fianchettoed bishop hopefully trying for Bxh8. So Black moves the rook and advances the g-pawn. If the umpire now says 'Played' instead of 'No' to White's move, Black can chance Rh8 hoping to catch the bishop.

Kriegspiel endings have received attention and are much more difficult than those in orthodox chess. Even basic king and pawn endings can lead into deep water. Suppose White has Ke5+Pe6 against a bare K :



He tries say Kd6, and on receiving 'No' he tempos with Kd5 ready to try again. Black routinely tries Ke6, Kd7, and Kf7, and on getting 'No' every time realises that he must retreat. Suppose first that he plays the normally drawing move Ke8. White plays Kd6 as intended; Black must guess between Kd8 and Kf8, with an even chance of getting it wrong; White tries Kd7, and if 'No' he can go back and try again. But will he do any better next time? Suppose Black plays the normally bad move Kd8 or Kf8 instead of Ke8. White still plays Kd6, but now Black can play Ke8 and White's probing Kd7 will always get 'No'; he can indeed go back and try again, but the same thing will happen again, and the normally bad defence seems suddenly to have become a good one. To make progress against this defence, White must sooner or later play Pe7 instead of retreating and trying again, and if Black has chosen this moment to revert to the normally drawing retreat Ke8 White finds that he has thrown away the win. White can make the probability of failure as small as he likes, but he can never reduce it to zero, and under the realistic practical rule that a game still unfinished after a given number of repetitions is abandoned as drawn Black can play to have a perceptible chance of survival (*Variant Chess* 53).

Once the pawn has promoted, K+Q v K is straightforward. K+R v K is not, but the win had been recognised by 1914 and a complete analysis by H. A. Adamson was published in the *Chess Amateur* in 1923. K+2B v K is normally won and has been claimed as always won, but Thomas Ferguson has pointed out that if all White's men are within the central 16 squares his first move outside this region must risk dropping a bishop or giving stalemate; as with K+P v K, the attacker cannot guarantee to win though he can play so as to make the probability of failure as small as he likes (*Variant Chess* 49). K+B+N v K was claimed as a win by a Los Angeles team in 1926 (*Chess Amateur*), but their analysis appears never to have been published and its validity has been questioned; a re-examination in 2005 of what appeared to be the key positions concluded that the claim was in fact justified (*Variant Chess* 49). Problems offer a rich and largely unexploited field.

[Treatment of endings revised. The rules of Kriegspiel, more than those of any other form of chess, seem to have spawned local and regional differences, and at meetings of problemists in France I have always played to a rule whereby the umpire automatically announces after each move whether a pawn capture is possible. David had apparently not encountered this, but the wording of the 'Scotch Kriegspiel' pamphlet referred to in the next paragraph suggests that Fred Galvin and his friends in Minneapolis and St Paul had adopted something similar in the 1960s.

Thomas Ferguson has told me that West Coast Kriegspiel circles in America have abandoned the '50-move' rule, any situation in which a player can guarantee to win with a probability exceeding any given p less than 1 being declared a win for him. On the face of it, this would appear to be practicable only among sophisticated mathematicians capable of doing or at least of understanding the analysis, but perhaps some trusted person has drawn up a list. Apparently the Japanese Go Association has adopted a similar approach, declaring what the values of certain positions are so that the endgame does not need to be played out.]

There are a number of Kriegspiel variants of which perhaps the most rewarding

is **Progressive Kriegspiel**, also known as **Scotch Kriegspiel** (Fred Galvin, Don Neff, and Jim Seifert, 1962). This is Kriegspiel played to Progressive Chess rules. After each successful move (not just at the end of the turn), the umpire announces checks, captures, and the possibility of a capture by a pawn, and a check ends the turn. Faster than the parent game, and arguably more interesting. (*Nostalgia* 232, *Variant Chess* 47) [Text revised to take account of a document 'Scotch Kriegspiel' in the library of the British Chess Variants Society]

Partnership Kriegspiel is regular Kriegspiel but each player has an advisor who can see all three boards. A player whose turn it is to move can ask for 'any instructions'. The advisor can only answer 'Caution', 'Go on', or 'No instructions', but tone of voice and inflexion can convey plenty. Twice during the game an advisor may, after due warning, make a move on the player's board though not to give checkmate. Apparently much played at Liverpool C. C. in the 1950s. (Personal communication)

Nommenspiel. Kriegspiel variant in which the umpire announces the square to which a player moves but not the man moved. Captures and checks are not announced: the game is won by taking the king. A player whose man is on a square occupied by the opponent must remove it from the board. The opponent will not be aware of the capture. Played in Canada 1969-70. (*Nostalgia* 232)

Take-Back Kriegspiel (Ed Pegg, 1988). Orthodox Kriegspiel in which a player may take back a move that leaves a piece subject to a pawn capture. 'In Take-Back', claims the inventor, 'pawn captures are not rude surprises'. The theory is that development of pieces is consequently more aggressive. (*Nostalgia* 312)

Modern Kriegspiel (Bruce R. Trone, 1986). Normal Kriegspiel except that, on every turn, a player names seven squares the occupants of which the umpire must detail. (*World Game Review* 10)

Spy Chess [Kriegspiel] (originator unrecorded). A Kriegspiel variant in which the umpire tells a player who moves a knight the identities, but not the locations, of enemy men adjacent to it. The information may prove of greater value to the opponent. Alternatively,

the information can be passed in writing. (Supplement to *World Game Review*)

Darkness Chess (Torben Osted and Jens Nielsen, 1990). Kriegspiel with a touch of realism. After each move the occupants of all squares that the player's men can 'see' (attack, and, in the case of a P, move to) are passed by the umpire. For example, after 1 Nh3 d6 Black is told of the Nh3 as the B can 'see' it. No pawn-two or e.p. but castling permitted. Checks are not announced; win by capturing K. (*Eterosacco* 60) [Games requiring information as detailed as this are perhaps most conveniently played with a computer as umpire, and a similar variant, **Dark Chess** (Filip Rachunek, 2002), has proved very popular on the Internet.]

Tripod Chess (Jed Stone, 2000). A version of Kriegspiel designed for postal play. A player moves three men at each turn, and sends them to the umpire. The umpire then informs his opponent which moves of his own previous turn were successful, which kinds of men his opponent has just moved, whether there have been any checks or captures by either side, and which if any squares directly or diagonally in front of his pawns or orthogonally or diagonally adjacent to his knights are occupied. Special rules: a pawn may not capture a knight; a pawn may 'field promote' to a knight at any time, this promotion replacing a normal move; no player may have more than three knights at a time. (Originator's rules pamphlet) [Text editorial]

There are also Kriegspiel variants in which even the opponent's initial configuration is unknown. This would seem to be a natural development from ordinary Kriegspiel, but in fact only four games of this kind appear to have been developed and all had the same originator. We may note the spelling with a double 's'.

Welbeck Kriegsspiel (Hubert Phillips, 1917). Invented under canvas at Welbeck Park in 1917 and described as a 'universal favourite'. Phillips claimed to have played or umpired hundreds of games over a period of 40 years. As in Kriegspiel, three boards and sets are required, one for each player and one for the umpire. Each player deploys his forces on the first four ranks of a board unseen by the opponent. There is only one rule: the bishops

must be on opposite-coloured squares. Pawns may be entered on the first rank. When both sides are ready the umpire sets up the position on his board and announces the squares on which the kings stand (if either king is in check it must be repositioned). Hereafter normal Kriegspiel rules apply. Pawns advance one square at a time only. (*Indoor Games for Two*)

Assassin Kriegsspiel (Hubert Phillips, 1930s?) The umpire must be armed with slips of paper marked with a 3x3 grid. Preliminaries and play as for Welbeck Kriegsspiel with two exceptions: (1) only the queen, known as the assassin, can mate the opposing king, and (2) knights are spies which cannot capture or give check. A player who delivers mate other than with an assassin loses the game. If both assassins are captured, the game is declared a draw, which suggests that pawns cannot promote to assassins (there is nothing in the rules about pawn promotion). When a spy moves to a vacant square, the umpire passes to the player a 3x3 grid indicating the position and identity of all enemy men on adjacent squares. The umpire must do this discreetly so that the player's opponent is not aware that a spy has moved. Kings can adopt adventurous roles, hoping to trigger an accidental mate; conversely, assassins must be protected until the enemy king has been cornered. Spies can be captured like other pieces so need to tread warily. (*Indoor Games for Two*)

Mafeking Kriegsspiel (Hubert Phillips, 1961). Again as Welbeck Kriegsspiel except that knights are Scouts. Scouts behave as ordinary knights but gather information each turn whether they move or not. The umpire requires a supply of 5x5 grids for this purpose. He fills in a grid and passes it to the player revealing which enemy men are within range and their locations relative to the scout. (This is time-consuming: it is suggested that an unmoved scout has no access to intelligence even though the umpire, in preparing and passing the grid, would betray the fact that a scout had moved.) (*Indoor Games for Two*)

Quantum Kriegsspiel (Hubert Phillips, c.1920). Each player has a king whose position is known to the adversary at the outset but who otherwise selects his forces and deploys them secretly in his own half of the

board. Pieces are valued, and each player disposes of 40 points. The point values are Q=9, R=5, N=4, B=3, P=1 (notice that a knight is prized above a bishop). The only restriction is that a player may not have more than 12 pawns. Two published games show

widely divergent forces: in one game, 7 knights and 12 pawns lost to a queen, 2 rooks, 3 knights and 9 pawns, and in the other 3 queens, 2 knights and 5 pawns crushed 3 rooks, 5 bishops (all on white squares) and 10 pawns. (*Indoor Games for Two*)

2.2 Games with an umpire, one side only blind

One-Eye and Pickle Pot (attributed to E. N. Frankenstein, 1903). One player plays Kriegspiel; the other plays normally but cedes the queen (One-Eye) or both rooks (Pickle Pot) together with both knights and one bishop (he must state which). (*British Chess Magazine*, September 1903) [The source says only 'Mr' Frankenstein; identification with the problemist E. N. Frankenstein is editorial.]

Semi-Kriegspiel (David Silverman, 1971). White pieces are set up normally: Black has

only king and queen which he may place on any legal squares. White, moving first, plays blind while Black shares the master board with the umpire who advises White whenever he makes an illegal move or when check is given or a capture made by either side. Direction of checks and potential pawn captures are not announced. Clearly White is impregnable if he elects to move a knight back and forth. His main danger is giving stalemate which counts as a moral victory for Black. (*Your Move*)

2.3 Games without an umpire

Declaration Chess (Stasch Mlotkowski, 1917). White opens normally. Black conceals (writes down) his reply. White now either conceals his second move or looks at Black's move. If he conceals, White then looks at Black's move and plays it on the board. If White's concealed move gives check he must now play it openly when Black replies openly. If it is illegal, he must declare it and openly move the same man but not to capture or give check (but can discover check). If the man cannot move legally, White must move his king but again not to capture. If the K cannot move, the opponent chooses the man to be moved without further restriction. Play continues in this fashion. If a player exercises the privilege to see the opponent's last move he must reply openly and either capture or give check or, failing either, move his king. If he can do none of these the opponent chooses the man to be moved. When 16 or fewer men remain, either player, immediately on concealing a move, may declare an open game. The non-declarer conceals a move in reply or exercises his option to see opponent's move subject to the restriction above. Thereafter all moves are made openly. (*British Chess Magazine*, October 1917)

Liar Chess [Cleaton-Solomon] (Terry Cleaton, 1970, developed by Eric Solomon). In addition to the normal chessmen, 32 covers are needed, each capable of concealing the largest of the men. The covers have ordinary chess symbols on the front (the side facing the opponent), and have openings to the rear so that a player can see his own men. At the start of the game, each player sets up his covers so that the symbols conform to the normal chess array, and then secretly puts his men under them without regard to the symbols thereon.

A covered man, together with its cover, may be moved in the manner of any chessman. The move may correspond with the symbol shown on the cover, or the man beneath it, or both, or neither. Subsequently the man may be moved like a different chessman. The object is to capture the opponent's king. Checks are not announced, and there is no castling.

After any move by a covered man, the opponent may issue a Challenge. The man moved is now uncovered. If the challenge is vindicated (the move just made was illegal for the hidden man), the man is put back on the square it came from, still without its cover, and the turn passes to the challenger. If the challenge fails (the move just made was legal), the move stands, the challenger loses his turn,

and the player who has just moved moves again. In either case, the man uncovered henceforward moves normally. A challenge can only relate to the move just made; any previous illegal moves which passed unchallenged are ignored.

A player intending a capture by a covered man must announce his intention and allow his opponent to challenge. If there is no challenge, or the challenge fails, the player makes the capture. A player who captures a covered man may examine what he has captured.

An uncovered pawn promotes in the normal way. A covered man that reaches the back rank may be announced as a pawn. If there is no challenge, the player removes the man without revealing it and replaces it with a piece of paper, still under cover, on which the name of the promoted piece is written. If the challenge fails, the same procedure is followed. A king may not promote.

The only function of the symbols on the covers is as a prop to memory, to keep track of what is moved where. The game is largely one of bluff but several fundamental chess tenets (control of centre, pieces guarded) are valid. Over-protecting the king may only serve to reveal its whereabouts. Advancing a pawn as a rook to the seventh rank as a prelude to promotion is one of several tactical ploys.

The game was first played using toilet roll cores as covers, and was originally named accordingly. (Personal communication) [Text partly editorial]

Ghostrider Chess (Ralph Betza, 1978). Knights are invisible and are called Ghostriders. When a G is moved this is announced, also a check, but not the square moved to unless a capture is made. Pieces of either side may pass over squares occupied by Gs, even to castle. A G is captured in the same way as other men and the owner must concede the capture. The location of a G may be revealed at any time, the purpose being to stop the opponent moving through that square. Gs do not capture each other unless one player announces the square that they both occupy. A player in check from a G may attempt to capture it but a failed attempt loses the game. (*Nost-algia* 216)

Special Move Chess (quoted by Stephen Addison, 1983). Players write secretly the name of one of their pieces on a piece of paper. They then agree on a 'special move'. At any time during play a player may on turn reveal the name of his piece and make the special move with it. (*100 Other Games to Play on a Chessboard*)