Chapter 21

Miscellanea

[As in Part 1, there are games which do not fit easily into any other chapter but are too few in number to merit chapters to themselves.]

21.1 One-dimensional boards

Linear Chess (V. R. Parton, 1961). Linear board of 21 squares. Each side has seven pieces; 1 x King, Jumper, Runner; 2 x Hopper, Stepper. Steppers move a square at a time; hoppers move two squares leaping the intervening square whether occupied or not; runners move over any number of vacant squares; jumpers move by leaping over a man of either colour into the square immediately beyond. Pieces can only advance; capture by displacement. Array (1-7/21-15) KJRHHSS. Parton also suggests a 25-square or 27-square board an with additional jumper and runner on each side, which he suggests seems to be the 'natural form' of Linear Chess, 'but the game may, of course, be played on larger (longer) boards and with more pieces than those which have been mentioned so far'. (*Chess - Curiouser and Curiouser*)

One-Dimensional Chess [Glimne] (Dan Glimne, 1977). Linear board of 18 squares, square 1 black; array (1-7/18-12) KQRBBNP. Pawns move one square forward only but may move two initially. Knights move either two or three squares, leaping any intervening men. Bishops move on own colours ignoring men on opposite-coloured squares. Rooks move normally. Queens move as bishops or rooks. Kings move one or two squares. Castling (K and R exchange places) under orthochess restrictions. All men capture by displacement as they move. The inventor has a suspicion that White has a forced win. (Inventor's rule sheet)

One-Dimensional Chess [Gardner] (Martin Gardner, 1980). Described in the July 1980 issue of *Scientific American*. Linear board of 8 squares, array (1-3/8-6) KRN. K and R move as normal; N moves exactly two spaces and may jump. Clearly the first player can draw at once by RxR, but who wins? Another version adds a square between the forces so that the knights can threaten each other. **One-Dimensional Chess [Sackson]** (Sid Sackson, 1990) is an expanded version: 12-square board, array (1-5/12-8) RNKNR. To bring the back rook into the game. the K is allowed a modified castling move: the two pieces exchange places. This can be done at any time (i.e., after either or both have moved) and is never forced (castling is not obligatory to escape stalemate). Again there is a variation with an additional square between the forces so that the knights can threaten each other. (Personal communication)

[All this seems to pale into insignificance compared with what T. R. Dawson and others did in the problem field between 1925 and 1945 (see *Fairy Chess Review*, February 1939, December 1943, April, June, August, October, December 1944, and February 1945). The key to their fecundity was the use of what might be called '*n*-skippers', which skip along in hops of *n* squares ignoring anything on the squares skipped over (so Glimne's bishop is a 2-skipper). Some of the boards used to exploit these skippers would have been too large for practical play and there is a case for letting a skipper follow its skips with a one-step move so that it can change the set of squares on which it travels, but if one-dimensional boards are tried again this would seem to be the way to go.]

21.2 Games with hidden information

Chess In Disguise (origins unknown). Kings and pawns as normal array; other pieces are draughtsmen or numbered pieces of cardboard with their ranks on the underside. Players arrange their own pieces as they wish (but bishops on opposite-coloured squares) without revealing their identities. Play is normal except that check must be announced and a captured piece revealed. Castling permitted if rook in corner and usual conditions apply. Players deduce opposing pieces by the way they move. Agreed unorthodox pieces may be used instead of conventional ones. (Stone)

[A natural choice is to replace one knight and one rook by B+N and R+N, when the identity of the pieces can be kept hidden for a little longer. George Jelliss called this variation **Knighted Chess** in *Variant Chess* 1. I had used it in *Chessics* 4 as a vehicle for a trick problem, but I am not sure if anyone has ever tried to play it as a game.]

Mimikri (Proprietary game, 3M; Alex Randolph, 1970s). Board 8x8; each player has 16 cubes representing the usual chessmen. The piece symbol is on one side of the cube only, the reverse side depicting an arrow (with the exception of the king, whose symbol is on both faces), the remaining four sides of each cube being blank. All the men, with the exception of the two kings, are shuffled, arrows uppermost. Each player counts out eight pieces of the opponent's colour and passes them over. Both players now put their pieces, symbols face-down and unseen, along the second rank, and then place the kings, symbol uppermost, on any square of their first ranks. There are two distinct games, the Decoy game and the No game. In both games the aim is to mate the opponent's king.

In the Decoy game, each player arranges his men so that the arrows point towards him, then tilts them a quarter-turn away from him so that the symbols face him and the arrows face the opponent; thus each player knows his own pieces but not his opponent's (except the king). Pieces move normally but are only disclosed to the opponent when captured. Check must be announced. Bluff plays an important part.

In the No game, the pieces are arranged so that the arrows point towards the opponent and are then tilted a quarter turn towards the player so that the player sees his opponent's men but not his own. Each move is vetted by the opponent. A call of 'No' means an illegal move, and the player loses his turn. Captured pieces are not disclosed and check is not announced. Each move, a player discovers something about his own strengths and weaknesses. (Notes based on an actual set)
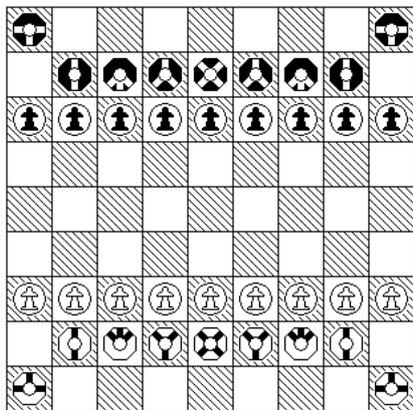
21.3 Directional pieces

Super Chess [Ginsberg] (Proprietary game, Super Chess Inc; Ed Ginsberg, 1984). Among *Games* magazine's top-ten strategy games of 1987; NOST correspondence tournament 1990 (US $1,000 prize fund!). Board 10x10; extra men are a Cyclops, an Archer and two Super Pawns. Baseline (a1-j1/a10-j10): RNBCKQABNR; White places his two SPs anywhere on his second rank; Black does likewise, and the remaining pawns are filled in on the empty squares of these ranks. The cyclops, having one eye, can move 1,2 or 3 squares only in the direction he is facing or in the opposite direction. Moving forward, it runs down enemy men in its path and can leap friendly men to do so; running backwards ('blind retreat') all men in its path are captured, including friendly men. At the end of its move the cyclops can rotate to face any direction, orthogonal or diagonal; it can also rotate on its square without moving but this counts as a turn. The archer has the knight's move and can also shoot (capture) an enemy man four squares away orthogonally; thus Aa1 moves/captures on b3/c2 and can also capture (without moving) on a5/e1. Super pawns can move two squares initially even if intervening square is occupied, and they can capture one or two squares diagonally ahead, leaping the intervening square if occupied. The e.p. rule is adjusted logically for SPs. Promotion (Ps and SPs) to any piece except king. In castling, king to c1/h1, rook d1/g1. Several thousand match games have been played. (*Nost-algia* 298/335)

Ploy (Proprietary game, 3M; Frank Thibault, 1973). Board 9x9; pieces carry directional indicators which govern the directions in which they can move and which also correspond to the number of spaces they move, the exception being the Commander (K) who can move in any of four directions but only one space at a time. Each side has 15 men: 1 x Commander, 3 x Shield, 5 x Probe, 6 x Lance. Shields can move and then rotate to change direction; all other pieces rotate at the expense of a move. Capture by displacement; object is to win opponent's commander. [Information presumably deriving from a set in David's game collection]

Rotary (Christiaan Freeling, 1981). An attempt to improve on Ploy. Board 9x9; pieces are octagonal in shape and carry directional indicators: King (four directions initially oriented diagonally), Rook (three directions, initially left, right, and straight forward), Axe (three, initially straight and diagonally forward), Trident (three, initially diagonally forward and straight back), Scythe (two, initially straight forward and straight back). Rooks initially on a/i1 and a9/i9, SATKTAS centred on ranks 2/8, 9xP on ranks 3/7:

Pieces can only move in a direction in which they are pointing. King moves one square and can then rotate if desired; scythe moves any distance and can then rotate; other pieces move one square with optional rotation afterwards, or more than one square without rotation. A piece may rotate without moving provided that at least one of its directions changes. Pawns move as in orthochess but no pawn-two, promote to queen (four directions) optionally on 7th or 8th rank, compulsorily on 9th. When a pawn promotes, the resulting queen may be rotated as the player wishes.

The object is checkmate. King can mate king; stalemate is impossible since if the king is not in check it can always rotate. [Information presumably deriving either from personal communication or from a set in David's game collection]

Tines and Barbs (Tony Berard, 1990). Board 8x8; usual array but pieces are octagonal, have new names and carry directional indicators. Each turn has an allocation of 5 points. Points are required to capture (5), move (3), promote (2) and rotate (1), so for example a player cannot capture and rotate in the same turn. Unused points do not carry forward. (Personal communication)

Centenniel Chess (John W. Brown, 1999). Board 10x10; extra pieces are Camels, Rotating Spearmen, Stewards, and Murray Lions. The Camel leaps as an extended N, 3-1 instead of 2-1. The Rotating Spearman points straight forward (its initial orientation) or 45 degrees to either side, and moves forwards or backwards on this line like a R or B; after on instead of moving, it may rotate 45 degrees to face in a new direction, but it cannot rotate before moving. It can capture on the advance but not on the retreat. The Steward is an all-round P, moving in any of the four orthogonal directions and capturing in any of the four diagonal. P and St may advance two squares forward on first move (St not sideways), but no e.p. The Murray Lion moves by leaping two squares orthogonally or diagonally, and captures as a K. Until he has made his first capture, a player moves two pieces each turn; a capture must be made on the first move of the turn. Array (a1-j1/a10-j10 and inwards) RCBLKQLBCR,   -SpN-StSt-NSp-,   10xP; castling by moving K to bishop's square, R to lion's. (Chess Variant Pages) [Text largely editorial.]

21.4 Other unorthodox pieces

Megasaur Chess (V. R. Parton, 1973). Outline game only. Board 10x10; pieces have names of prehistoric animals, Dinosaur (Q), Brontosaur (B), Hipposaur (N), Megasaur (Q+N), and move only to capture, as does the king; pawns are normal. No initial array specified. Capture opponent's king to win. (*Enduring Spirit of Dasapada*) [According to Anthony Dickins in *A Guide to Fairy Chess*, all apart from the Megasaur date back to J. de A. Almay (*Fairy Chess Review*, April 1940), and the identity of names suggests that either *GFC* or *FCR* must have been Parton's source.]

Exotic Chess (R. Wayne Schmittberger, 1986). Usual array, but a counter or draughtsman is placed under each man. Counters represent special powers, varying with the rank of the piece, which can be used once in a game. When a right is exercised, the counter is removed. Players agree powers beforehand. (*World Game Review* 10)

Mirrors [Nielsen] (Jens Nielsen, 1990). Both players start with two 'mirrors' each two squares long, placed vertically between the c/d and e/f files and across the 2nd and 3rd ranks. Mirrors block kings and pawns, alter the paths of the line pieces (diagonal pieces reflect at right angles, impacting orthogonal pieces are deflected at right angles to either side), but do not affect knights. Mirrors meeting at a corner prevent passage along the diagonal. A mirror may slide one or two units lengthwise, or may rotate about its centre, or move bodily one unit, provided that the cells are vacant. Mirrors are captured by placing two enemy pieces of the same kind next to them. A mirror may not capture another mirror, but may block its moves. (*Variant Chess* 6) [Text revised]

21.5 Twinned pieces

Gemini [Groman] (William Groman, 1981). A unique game that introduced the concept of twinned pieces. Board 8x10; each side has 1 x K, Q, 2 x twinned R, B, N, P, 4 x single P :
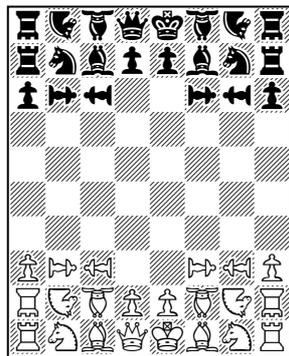
The six pairs of pieces on each side are twinned vertically (e.g. Ra1+Ra2), and the pawns on the b/c and f/g files are twinned horizontally. Single pawns a/h and twins can move 1 or 2 squares initially; pawns d/e 1, 2 or 3 squares. A single pawn promotes normally on 10th rank, a twin pawn to twinned R, B or N. No castling, but K has the right to move two or three squares, on the rank only, once in a game (subject to the usual castling restrictions). Twins move as a unit like their single-piece counterparts. No part of a twin may cross an occupied square. Capture by displacement. If a twinned pawn captures, the other moves diagonally with it. If one part of a twin is captured, the other becomes a single. Twinned R, B and N can also make orientation moves but not to capture. One rook can pivot 90 degrees round the other rook so that they are horizontally linked. Bishops can be linked horizontally and diagonally as well as vertically. This is achieved in a single move by pivoting one of the pair diagonally or orthogonally. Knights can change orientation similarly, one of the pair remaining unmoved, the other moving like a knight; for example, Nc3/c4 (vertical) can change to b2/c3, d2/c3, b5/c4 or d5/c4 (all diagonal) and from diagonal to horizontal or vertical. Knights cannot change from vertical to horizontal (or vice versa) in one move. (Author's rules pamphlet)

Invisible Chess (Bruce Trone, 1986). Each man ('mother unit') has an invisible counterpart ('invisible man'). The IM advances from the MU and must return before it can be deployed to another square. The

advance and the recall each require one turn. An IM can only be captured by another IM. All invisible men (including the IK) can check and mate even though they don't have the power to follow through. A mother unit with IM deployed has no power of movement nor can it give check, but it regains these powers when the IM returns or is captured. Capturing the MU also captures the IM whether deployed or not. A visible man (carrying its IM within) can pass through a square occupied by a deployed IM. (Inventor's rule sheet) [Text revised]

21.6   Men created during play

Creation Chess (Bruce Trone, 1991). If two pieces other than a K stand on the opponent's back rank with an odd number of empty squares between them, a new piece combining their powers is created halfway between them. Neither parent can then contribute to another offspring for three moves. (Personal communication)

21.7   Men belonging to both sides

Neutral Men (T. R. Dawson, 1912). On his turn, a player can regard a neutral man as his own and move it, or he can regard it as his opponent's and take it. Neutral pawns promote to neutral pieces. Invented for use in problems and of limited use in normal play, but suggested as a way of dealing with a mated player's men in a three-player game (see 'Hexanova' in chapter 37). A problem by Kurt Smulders, *Europe Echecs* 1970, has White Kh2, Rh7, Bc8, Nc7/b6, Pc5/a3 (7), Black Ka7, Ra5, Nb5, Pa4 (4), Neutral Pb7 (1), White to play and mate in 2. The solution is 1 Na6 waiting, after which 1...Rxa6 is met by capturing the neutral pawn and every other Black move by promoting it to a uniquely determined piece: 1...Kxa6 2 b8(N) (not R because Black could play 2...Rxc8/Rb7 and nullify the check, and not B/Q because this would put White's own king in check), 1...Nc7 2 b8(B) (not Q because Black could play 2...Qxc8), 1...Nd6 2 b8(Q) (not B because 2...Bc7 would remove both checks), and 1...Nd4/Nc3/Nxa3 2 b8(R) (not N because 2...Nd7 would stop the check). [Text editorial]

Neutral King Chess [Parton] (V. R. Parton, 1953). There are no queens, the king is shared, and each side has only six pawns; array (a1-d1/a8-d8 and inwards) RBNP, RBNP, 4xP

Forest Chess (Michael Schmahl, 1995). Board 8x8; extra pieces are Grand Druid (royal piece, moves as K), Bear (as Q), Ranger (as nightrider, chapter 16), Druid (as B+K), and Trees, which move together in parallel along Q-lines but need not move the same distance and cannot both capture in the same turn. No pawn-two, castling replaced by 'Pass-tree': if the G is adjacent to either tree, he may move to any unoccupied square orthogonally or diagonally adjacent to the other tree. Baseline (a1-h1/a8-h8) DRaTBeGTRaD. (Author's rules leaflet) [Text largely editorial]

with the king initially on h5 and the rest of the right-hand side empty. Both players can move the king, which is neutral. It may be moved freely to capture or to escape check; otherwise, it can only be moved along the rank or up the board by White, rank-wise or down the board by Black. A player may move it to capture a piece of either colour, but it is illegal to move it to a square attacked by either side. The K cannot be exposed to check from an opponent's piece, but a player may expose it to check by moving one of his own. In this event, the opponent, on moving, must get out of check. The object is to checkmate. The pawns move normally one square at a time, and promote only to R, B, N. (*Nouveaux Jeux d'Echecs Non-orthodoxes*) [Text revised. The 'neutral king' as used by problemists behaves quite differently; see for example Kurt Smulders's book *Sprookjesschaak*.]

Neuter Queen Chess (origins unknown). An extra queen (the 'blue queen') is placed at the start of the game on one of the four central squares (by agreement). The piece, which moves like a Q but has no powers and may not be captured and hence acts as a block, may be played by either player instead of a normal move. (Correspondence between John Gollon and Philip Cohen)

Knightmare Chess [Parton] (V. R. Parton, 1961). Certain pieces of disparate powers (for example, Q/N, R/B) have dual identities, one white, one black. Thus a piece might be used by White as a bishop and by Black as a knight, a knightmare for both players. A concept never formalised into a game though Parton did suggest what he described as a diluted Soup à la Knightmare: each player can move the opponent's king as a knight and may also capture with it or place it in check; however, it cannot be moved on the first two turns nor in successive moves. (*Chess - Curiouser and Curiouser*)

Carnivore Chess (quoted by C. Pickover, 1992). Standard set-up; an additional piece, the Carnivore, which captures but cannot be captured, is placed somewhere near the middle of the board. Before each move the player whose turn it is moves it one square in any direction. (*Mazes for the Mind*)

21.8 Walls and obstacles

Centigrade Chess (Proprietary game, Zodiac Games, late 19th century). Board 10x10, four central squares are forts. Usual set plus 2 Centurions and 2 pawns a side. Centurions command two squares in any direction. Piece occupying fort cannot be captured. No piece can cross over fort, even if unoccupied. Line pieces (Q, R, B) must first move into fort, then out again. Object: checkmate. (Note referring to Zodiac Games by 'Mercury in Virgo', published by Britten of Dudley)

Simmons' Game (Proprietary game, Samuel Simmons, 1899). Board 10x10; four central squares designated a sanctuary with forts d4, d7, g4, g7. Additional pieces are two generals (rooks) at e1/f1 and e10/f10 plus pawns. Win by checkmate or when sanctuary is occupied by king and three pieces of same colour and all forts are cleared of enemy. Pawns ignore sanctuary and do not check king when in it. (Note referring to 'Patent 24210 of 1899')

Merlin et Mat (Proprietary game, R.-P. Ragosa and P. Fauvet, 1995). Board 12x12 with eight squares (b7, c6, c7, d6, h7, i6, i7, j6) coloured red. Each player has the usual chessmen plus a Merlin and eight extra pawns. The M moves three squares in any direction or as a N. Pieces are orthodox, but pawns move one square straight forward or one square diagonally back. They capture and promote normally. Red squares may not be occupied or crossed. To start, a barrier is placed across the centre of the board and the players assemble their men in their own half except that no man may be entered on a rank that contains a red square and the M must be placed adjacent to the K. (Photocopy of rule booklet)

Chad (Christiaan Freeling, 1979). Board 12x12, with brick walls at b3-b5, c6-e6, f5-f3, e2-c2, and k10-k8 etc similarly. These walls create two 3x3 'castles'. The players sit cornerwise, each with a king and eight rooks which initially occupy his castle :
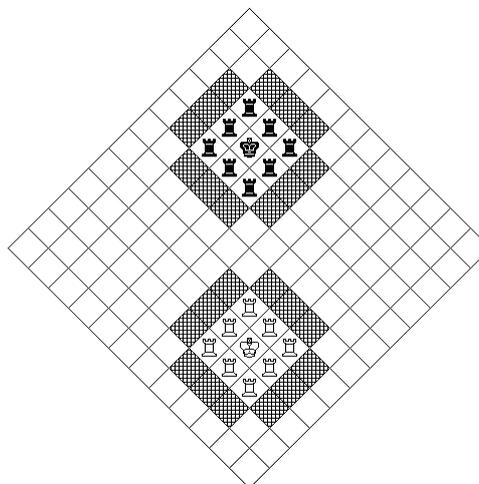

The aim of the inventor was to create a game of tactical and strategical depth that was both simple and elegant to express the concept of 'mate' - the 'pure' chess game.

The king moves as a king or knight but may not leave the castle. The rooks move normally and are unhindered by castles or walls. A rook that completes its move on a square in the opponent's castle promotes to queen. Capture is by displacement but may only be made if the capturing piece is on the opponent's wall and its victim within his castle or vice versa, otherwise the pieces act as blocks. It follows that a queen within the opponent's castle can

only be captured by the king. A king in the corner of a castle does not control the squares in the other three corners, and if at the side of a castle, does not control the square directly opposite. It is these weaknesses that are best exploited by sacrificial attacks aimed at forcing the king out of the centre.

Chad was played for many years at the Fanaat games club in the Netherlands. It was the subject of a feature article (*The Gamer* 6).

21.9   Square-swallowing

Sjakti (Christiaan Freeling, 1982). Board 7x7; tiles (counters will do) are placed on all 49 squares. Each player has a king and two men, initially set at d2/6 (kings) and b2/6, f2/6 (men) :
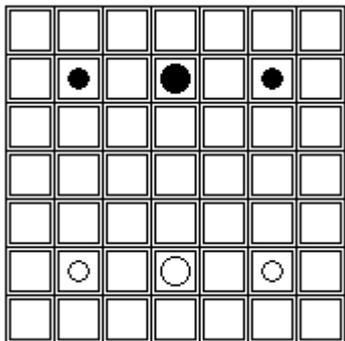
The aim is checkmate. A man may move to the first tile he encounters in any direction (i.e., like a queen) provided it is vacant. If the next tile beyond it is also vacant, the man may move there instead, removing the first tile. The king moves in the same manner with two exceptions: it can only move to the first vacant tile encountered and, if in check, can only move to an adjacent empty tile. No moves may be made to empty squares. A king can capture a man provided that it is both adjacent and undefended. The two kings cannot stand on the same line if there are no tiles between them. Notice that if a king and an opposing man stand on the same line with a vacant tile between them the king is not in check since the tile he occupies does not fulfill the vacancy condition. Sacrifices are common both in a mating attack and to achieve stalemate (when almost invariably both men are sacrificed). (Manuscript notes presumably deriving from personal communication)

Caissa (Christiaan Freeling, 1982) has many similarities with Sjakti. The game uses a 7x7 board, a queen (Caissa), rook, bishop and knight on each side and 49 counters, one on each square. Caissa has also been played on other boards.

The first player arranges the initial position (in which neither queen must be in check) and the second player chooses sides or elects to play first. The pieces move as in chess but with a number of modifications. It is an inviolate rule that no piece may make a move if, on completion of its move, any counter or group of counters is isolated from the remainder. The object of the game is to checkmate the queen, who moves and captures undefended pieces normally but can only move one square when in check (hence pieces checking from a distance need not be guarded). Queens cannot face each other directly however many squares there are between them. When a queen moves, the counter on the square she was occupying is removed from the board. Empty squares can be passed over but never occupied, hence the playing area is gradually diminished.

The other pieces move normally but do not capture one another. They have two additional powers: a piece can move with its counter to an empty square (thereby of course leaving empty the square it occupied) and a piece can change places with a piece of either colour provided it can legally move to the square occupied by that piece (in this way bishops are able to change their colour-complex provided the move is initiated by a rook or knight). Some beautiful combinations are possible and no draw has so far been recorded. (Manuscript notes presumably deriving from personal communication)

Magician Chess (Jonathon Whittle, 1999). Board 7x7 with holes initially at a3/4/5, g3/4/5, and d2/4/6; men are KRNP and Magician; array (a1-g1/a7-g7 and inwards) RNMKMNR, PPP~PPP. Magician moves one square orthogonally or leaps two squares diagonally, and can cast a spell on a hole at a

distance one square diagonally or two orthogonally; this spell causes a square orthogonally adjacent to the hole to slide across and cover it, leaving a new hole in its place. The magician chooses which square is to slide, and whether any occupant (of either colour) is to slide with the square or to be left behind to fall into the new hole (a magician cannot capture normally). Suppose 1 Mbd3 Ncd5 2 Mc3; White's magician is now threatening to cast a spell on d4 and to cause the square d5 to slide from under the knight to fill it, leaving Black a knight down.

Rooks and pawns may not move across holes. Pawn-two allowed from first or second rank even if the pawn has moved previously, e.p. permitted. Pawns promote to composite pieces, R+N or R+M or N+M. Castling permitted. (Chess Variant Pages) [Text editorial]

21.10 Use of the intersection points

Simo Pieces (David Moeser, 1971) move on the intersections rather than on the squares of the chessboard. They have their usual names preceded by 'S', thus Sking etc. **Simochess** is played with nothing but simopieces (and hence is simply a 9x9 game with ordinary men); the interest comes from combining using the two on the same board. Pieces moving on the ranks and files are unaffected except that they can be pinned by simo as well as by diagonal-moving pieces. Diagonal movers (K, Q, B, P when capturing) can elect to move normally or to an intersection where they are invulnerable from Rs and Ns, thereby becoming simopieces. The diagonals of Qs and Bs can be blocked by simopieces. Regular diagonal movers can capture simopieces and convert to simopieces and simopieces can similarly capture orthochess diagonal movers and convert to regular pieces. In **Schess** (Moeser, 1973), the ordinary K, Q, B, and P when capturing are allowed simodiagonal movement. **Simoco** (Moeser, 1973) is a further development in which the midpoints of the square edges can be used as well. Pieces using these points have the prefix 'Co', thus Coking etc. (*Neue Chess* 6)

Chesquerque (George R. Dekle Sr, 1986). Board 9x9 points. Movement along marked lines between points. All points are joined orthogonally but alternate points only are linked diagonally (a1, c1, ... b2, d2 ... etc). Usual pieces plus Archbishop (B+N); baseline (a1-i1/a1-i9) RNBQABNR. Rooks can also move one point diagonally and bishops one point orthogonally. Pawns move and capture one point diagonally forward or straight forward and have initial two-point option (e.p. allowed). King moves three points when castling. (*World Game Review* 10)

Echecs + (Proprietary game, TLM création; Yvon Picard, 1991). Board 12x10 with the 20 intersection points between files b/c, d/e, f/g, h/i, j/k and ranks 2/3, 4/5, 6/7, 8/9 marked with small circles. Each side has two Jacks, which leap two squares in any direction, plus two extra bishops; baseline (a1-l1/a10-l10) RBJNBQKBNJBR. In addition, each side has two Bishop Blocks, which start the game on the two intersections in front of the K and Q and subsequently move only from circle to circle. A BB blocks the path of an adverse bishop along the two diagonals through the intersection on which it stands; it cannot capture nor be captured, and it has no effect on men other than the Bs (not the Q). The game won a bronze medal at the 1991 Salon International de l'Invention de Paris. [There is a photocopy of the award certificate in David's 'Encyclopedia' files; the remaining information presumably comes from a set in his games collection]

21.11 Games on two or more boards

Duel Chess (Erez Schatz, 2003). Two boards, 5x7 missing central square and 3x3; extra piece is Dabbabah which leaps two squares orthogonally. All men start on the larger (main) board, baseline (a1-e1/a7-e7) DNKBR; smaller (reserve) board initially empty. Pawns do not promote; a lone king on the main board loses. When a man is captured, it is placed on the reserve board by the player who made the capture. When both players have at least one

man on the small board, a player can elect to move on it instead of the main board. A piece captured there is removed from play and the capturing piece is returned to the main board, but may not be dropped to give check. If a capture is made on the main board when the small board is full, the captured piece replaces one of the same colour on the reserve board. The main board may be enlarged and additional men used, but the reserve board should always be 3x3. (Chess Variant Pages)

Sub-Chess (Alexander Chebotaryov, 1988). There are two branches of the game, Chess-112 and Chess-M-48, each based on the same simple and original concept of an 8x8 board within which the 16 central squares are each subdivided into four small squares. This has the effect of creating two 8x8 boards, the large one (L) subsuming the small (S) :
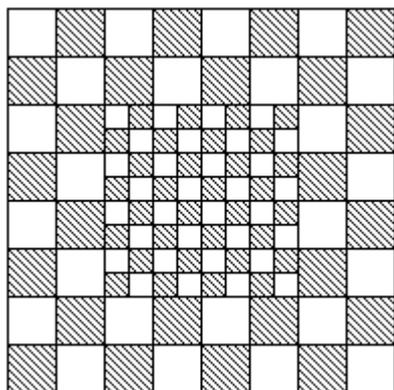
We denote the squares on L by La1-Lh8 and subsquares on S by Sa1-Sh8; the subsquares Sa1, Sa2, Sb1, and Sb2 all form part of Lc3.

Chess-112. The normal array is set up on L, S being initially empty. When a move is made from L to S, the player must nominate the subsquare (which must be vacant) on which the man is to be placed. Suppose White opens Nc3; he must nominate one of the subsquares Sa1, Sa2, Sb1, and Sb2 to receive the knight. Let us suppose that he chooses Sb2.

The knight now stands simultaneously on L and S. On its next move, it can move on L to e2, d1, b1, a2, a4, or b5, and also to d5 or e4 though in these last two cases he must again choose a specific destination subsquare on S (so moves such as Sb2-d6 or even Sa1-d6,

being played as c3-d5 on L, are valid knight moves on S). Alternatively, it can move on S to Sa4, Sc4, Sd3, or Sd1. Notice that in each of these three cases the knight has effectively moved to an adjacent square on L. And as a third option, it can move to another vacant subsquare without changing its L square, so from Sb2 it can move to Sa1, Sa2, or Sb1 (if these subsquares are free). These same rules hold for all pieces (including K) and pawns. Moves on L outside S, and moves from S to L, are normal. A man moving on L to a subdivided square captures all enemy men on its destination; thus our move Nb1-c3 (Sb2 chosen), if played later in the game, would capture any enemy men standing on Sa1, Sa2, or Sb1. A diagonal move from L across a square forming part of S is treated as going along a white diagonal in S if moving NW/SE and a black diagonal if moving NE/SW. Suppose 1 Nb1-c3 (Sb2) e7-e5 (Se5) 2 d2-d4 (Sd3) Bf8-b4. This is check, since the knight at Sb2 is off the line of movement of the bishop, and if White wants to play c2-c3 to block the check he must choose Sa2 or Sb1; Sa1 would not do. An orthogonal move from L across a square forming part of S is treated as a move along the central line dividing the subsquares; it ignores single men on adjacent subsquares, but is blocked by two men standing side by side. Suppose 1 e2-e4 (Se4) e7-e5 (Sf6) 2 Se4-e5 Qd8-e7; this is check, but if Black's first move had chosen Sf5 instead of Sf6 it would not be.

Chess-M-48. The array on L (a1-h1/a8-h8 and inwards) is RNBQKBNR, PPNBBNPP, with 8xP on the 1st and 8th ranks of S. The rules differ from Chess-112 in that men do not have the option of changing sub-squares within an L square, and that pawns when within S cannot elect to move as if in L. The effect of this is that men of opposite colour can occupy the same L square. Pawns can move one or two squares if starting their move in their own half of the board. (Personal communication) [Text revised]

Orbichess (Proprietary game, D. E. de Vries, 1975). Board 8x8, each square subdivided into four coloured 'fundamental squares'. Light squares are composed of light colours (including a white 'basic square'), dark squares of dark colours (basic square red).

Each dark square has its corresponding light square, thus in effect four chessboards are interlocked. The normal game is played on the basic squares on which the men stand in the initial array. The other squares are called orbital squares and may be occupied by any piece except kings and pawns. Pieces on orbital squares can neither take nor be taken. By entering an orbital square a piece has a number of paths open to it. This enables it to enter play via a basic square at a propitious moment. (Proprietor's rules leaflet)

21.12 Other games

Philidor and Stamma's 140-square Game. According to Anthony Dickins in *A Short History of Fairy Chess*, Philidor and Stamma played matches "which Philidor always won, even when they played on a 14x10 board with a number of 'new' pieces (probably Muslim in origin)". [Name editorial]

Flammhorst's Game (N. N. Flammhorst, 1833). A war game elaborately argued but much closer to chess than to kriegsspiel (the author concludes that chess is a good representation of classic warfare). Board 9x9, 22 men each side: '1 Roi, 2 Connétables, 1 Sénéschal, 2 Maréchaux, 2 Grands-Maîtres, 2 Partisans, 2 Châtelains, 2 Chevaliers, 2 Gonfaloniers, 2 Bannerets, 2 Trompetoniers et 2 Piconiciers' (*Le Palamède*, September 1846, citing Flammhorst's book of 1833). Involved rules permitting mobilisation, securing the king in a fortress etc. (Faidutti)

Gérard Chess, also known as **Jeu de Batailles** (E. Gérard, 1860). An attempt to create a simple game in harmony with then-current military realism. The close relationship with chess was emphasized. The game ran to several editions and one Ladislas Maczuski offered lessons. Board irregular octagon, 256 squares; each side had 28 chessmen in 12 tasteful designs. King as orthochess; Great Cavalry (Q); Cavalry (N); Riflemen (B); Escorts (R); Reserves move as K, capture as N; Infantry move as K, capture one square diagonally. In addition there were Artillery, Ordnance, Engineers, Defences and Victuals. Array predetermined on first three ranks. The players then positioned squares representing terrain features, which in turn affected movement, in their respective halves of the board. Each player nominated an HQ square on the 6th rank which, if occupied by an opposing man, allowed a captured piece to be reborn. Main aim was to checkmate opposing king but players could agree lesser victories (e.g., capture all artillery). (*Règles des Echecs-Gérard*)

Neuschach [Ernst] (Proprietary game, C. Abel-Klinger; Hugo Ernst, 1901). 144-square board, 25 men a side including 1 kaiser, 2 kings, 2 queens, and some new men with new moves. Ernst, of Buenos Aires, wanted the game to replace chess, an ambition not unknown amongst variant inventors. (*Deutsche Schachzeitung*, October 1901) [The source gives no further information, and David appears not to have possessed a set.]

Super Chess [Fort] (Charles Fort, 1930). Game of seemingly daunting complexity by the famous collector of the mystical and strange in science and nature. A photograph of the period shows the auther 'relaxing' at a board of many thousand squares dotted with scores of chessmen. (Mitchell and Richard, *Living Wonders, Mysteries and Curiosities of the Animal World*, 1982)

***MAD*'s Modern Chess** (*MAD* magazine; c 1963 by E.C. Publications Inc.) (Quote) 'Note terrified, neurotic pawns on brink of cracking up. Note one thing hasn't changed: pawns are still in front rows and have to take most of the beating. *MAD*'s pieces are not limited to special moves. In fact, each move is completely unpredictable. Cunning, trickery, accident, sneakiness, surprise, anxiety, fear ... any of these could play a vital part in the game. Strategy is limited to each player waiting for the other to make the first move. End of game is followed by deathly silence. Unlike old-fashioned chess, there is no winner' (unquote). A diagram shows a board with baseline Fallout Shelter, Air Raid Siren, Anti-Missile Missile, A-Bomb, H-Bomb, ICBM Missile (*sic*), Radar, Fallout Shelter, plus 8xP as usual. (*Chess*, 22 August 1966)

Warp Chess (quoted by Don Miller in 1974). The third and fourth ranks of the board exist simultaneously with the corresponding ranks as viewed by the opponent; thus a man on b3 is simultaneously on g6 (and d4 on e5 etc) and can be captured on either square. (*Kittle Pitchering Hubble de Shuff* 10)

Fantasy Chess (Proprietary game, Little Soldier Games, 1975). Board 8x8; usual array but men are redesignated (chessmen in brackets): 1 x King (K), Wizard (Q); 2 x Archer (R); 4 x Rider (B/N); 8 x Spearman (P). The two sides are Good (W) v. Evil. [Information presumably taken from a set in David's game collection. His index sheet has a note 'Different movements' and so I have put the game into this part of the book, but he was sometimes given permission to describe proprietary games only in very general terms and no further details are to hand.]

Shogun (Proprietary game, Ravensburger, 1979). Board 8x8 uncoloured; each side has a Shogun (king) and seven identical pieces. Shogun moves one or two squares, all other pieces between one and four squares depending on the action of a magnetic dial which indicates number of squares to be moved. The magnets only affect the man played. Capture by displacement; 'Shogun' (check) must be announced. Win by capturing shogun or reducing opponent to shogun and one piece. (*Pergioco* 3)

Chaos [Kensek] (Ron Kensek, 1980s). A game devised chiefly to mystify spectators (especially effective with a 5-minute time limit). A king (Monarch) moves as a K but can also leap an adjacent man to capture. A pawn (Butterfly) moves as N but forward only. It may move to a square occupied by a butterfly of the same colour, which must then make a knight's move backwards. If this move lands on another butterfly of the same colour, this in turn must move forward as N, and so on. A butterfly on reaching the 8th rank promotes to a Monarch Butterfly, equivalent to a monarch. A rook (Row-runner) makes one or two R moves at player's option; one or both may capture. A knight (Triangle) makes three consecutive K moves, not necessarily in the same direction. The first two may be to

occupied squares, but not to capture. A queen (Juggernaut) makes a series of one-square orthogonal moves in two perpendicular directions (e.g. up and right), capturing as it goes. It need not stop until it meets a friendly man or the board edge. A bishop (Switcher) moves as a B or K, or by a series of B moves over vacant squares. A player castles by exchanging the positions of a monarch and a row-runner with which it has not previously castled provided both are on the same rank or file with the squares between them vacant. A player can uncastle on the following move by restoring the pieces to their original squares and then moving one of them. A triangle within range of a friendly monarch can change places with it ('geometrize'). No move is legal that leaves the position unchanged. The game is won by an unstoppable threat to capture the opponent's (remaining) monarch. A player who is stalemated also wins. A book on strategy is awaited. [Source material missing from David's Encyclopedia files]

Conversion [Mazas] (Proprietary game, Mazas Editions, 1986). Large chequered board of irregular shape but regular design. Each side has 18 pieces, God, High Priest, Priests, Prophets, Monks, Missionaries, and Devotees, with various moves. Two men are moved each turn. Object is to 'convert' (capture) opponent's God. (*Jeux et Stratégie* 38)

Stealth (Proprietary game, Falcon Games; Michael Gilano, 1986). Board 9x8 with corner squares removed. Men are starship (king), guardians and drones; first two move as queens, drones have various powers and can be stacked. Win by capturing or immobilizing starship or capturing all drones. (Photocopy of rules pamphlet)

Pole Chess (Piers Anthony, 1988). An account of a game, Pole Chess, in which board and pieces are made of ice, is given by Piers Anthony in his *Robot Adept*. The usual pieces are transformed into Goblins (Ps), Dragons (Rs), Trolls (Bs), Griffins (Ns), Ogress (Q), and Demon (K). 'But this was Pole Chess, so there was one additional set of pieces: the poles. When all the other pieces were set up, the white and black poles stood to either side, just off the board, centred.' A pole could move

directly to any empty square; it could not be captured and served only as a block. 'Some players swore that Pole Chess was the best variant ever; others condemned it as a decadent offshoot.' Further on, Anthony describes **Huffdraw**. 'A device that had come into play in the last few centuries because too many tournaments were being stymied by frequent draws. There were several applications, depending on the type of draw that was threatened. But the basic element was the removal of "dead" pieces; those that hadn't moved in some time.'

Excalibor (Proprietary game, Franjeux, 1989). The Knights of the Round Table replace the usual chess pieces but retain their moves. The sword Excalibur moves as Q. If captured, it is plunged into a 'lake', from where it can only be rescued by King Arthur. Elaborate rules. (*Jeux et Stratégie* 7)

Supers Echecs (Proprietary game, SEI, 1994). Board 9x9; extra pieces are a Prince and a Mage. Pawns include a traitor and a plague-carrier, and the game also features a treasury. (Photocopy of a notice in *Science et Vie*, December 1994)

Ruddigore Chess Peter Aronson (2002) Board 8x8; usual men and array except that Ks replaced by Baronets (move as K, capture as K or N, can capture friendly as well as enemy men) and Ns by Gentlemen (can make one or more knight moves in a straight line, but if two steps from the edge of the board can only move one and if three steps from the edge can only move two). Pawns may move two squares at any time, no e.p. Captured pieces may subsequently be dropped back into play; promoted pawns retain their rank. On each even turn (2, 4, 6 etc) each player must capture a man, either an opponent's or a friendly man with the Baronet (the captured piece is kept in hand), or move and give up a man either on the board or in hand. Inspired by the Gilbert & Sullivan operetta. (Chess Variant Pages) [Text revised]

Tigerchess (Glenn Nicholls, 2003). Standard board and array but with additional squares, extra pieces, and elaborate rules. Win by checkmating opposing Q (not K) or occupying opposing palace. (Chess Variant Pages)