

Chapter 32

Playing to reach a fixed goal

[In this chapter, we look at games where the aim is to occupy a specific location rather than to capture a particular man. There are two distinct classes: where each side is aiming for a separate goal which is usually deep in enemy territory, and where both sides are aiming for the same goal. A special case of the former is provided by football games, which are sufficiently distinctive to have been given a section to themselves.]

32.1 Fixed goals in enemy territory

Helwig's Military Chess, also known as **Estralography** (J. C. L. Helwig, 1780). One of the first war-games in which the board displayed terrain features. Pieces represented infantry, cavalry, artillery, transport, fortified camps, stores; object was to storm enemy fort. Later modified by M. C. F. Cranmer (1803). Helwig was Master of Pages to the Duke of Brunswick, who instructed him to evolve a game for the training of young men in the art of war. (Gizycki, also *Le Palamède*, September 1846) [This is the game given in the first edition as 'Military Chess (I)'. That edition also included a Helwig Chess on a 1414-square board, which I am taking to have been the same.]

Jeu de la Guerre [Giacometti] (François Giacommetti, 1793). Described in 1801 as the new game of chess. Giacommetti expresses surprise, not a little naively, that 'Whatever the origin of chess, it is astonishing that, ever since it has been played, nobody has thought of making any changes'. Dedicated to Napoleon Bonaparte. Board 9x17, central rank = river; 52 pieces a side (assorted military personnel, artillery and defences), object is to take the enemy citadel. Interestingly there were no fixed dispositions, the inventor observing that it was natural that a General should be free to deploy as he saw fit - an early if inflated example of randomized chess. (*Nouveau Jeu d'Echecs, ou Le Jeu de la Guerre*, 1801, also *Le Palamède*, 1837, pp 389-93)

Jeu des Drapeaux (F. Darbo, 1823). The two sides represent regiments whose aim is to

capture the opponent's flag, which is immobile, and return with it to base. Board dimensions unknown. Each player has 11 pieces in addition to the flag: 1 x Colonel, Major; 2 x Officers, Grenadiers; 5 x soldiers. Colonels and Majors move like a queen; officers one square forward, straight or diagonal, or one square straight back; grenadiers one square orthogonally and soldiers forward only one square, straight or diagonal. Capture by displacement. Array (centred): first rank OMFCO, second rank GSSSSSG. (Inventor's book *Jeu des Drapeaux*)

Croughton's Hexagonal Chess (Thomas Croughton, 1853). The first recorded variant on an hexagonal board. 61-cell hexagonal board; each player has 1 x General, 2 x Colonel, Captain, 6 x Infantry. The General moves as a Q, the Colonel likewise but up to two squares only, the Captain (a junior officer with enhanced powers!) like a rook along files or like a knight. Pawns (Infantry) move forward one cell in either direction with the option of two cells initially. A pawn promotes to 'a more valuable piece' which is placed on its start cell. No capture can be made backwards. Aim is to get the General to the opposing General's square. (Inventor's book *Hexagonal Chess*)

Jeu de la Guerre d'Orient (J. François Gilot, 1855). Based on the fall of Sebastopol (Crimean War) in which the allies (England, France, Turkey, Sardinia), who had carried out a 'double check' (double attack) on the town, inspired the unique 'double check' stipulation

for victory. Board 9x13 (a1 white); a total of 61 pieces plus two immovable 'capitals' - Paris and St. Petersburg (each valued at 1143 points, half the value of the respective armies) - whose capture 'with a double check' is the object of the game. The principal pieces are Heads of State and the senior commanders; the allies include Napoleon III (who moves up to four squares in any direction: value 72 points), Queen Victoria (who moves appropriately as a queen: 180 points), the Sultan of Turkey (up to three squares in any direction: 54 points), the Russians include the Emperor Alexander II (72 points) and the Empress (180 points). The points represent estimated strengths and have no influence on the game; the award of 1143 points to each of the immovable capitals is therefore something of a curiosity. Each side has 9 knights, the allies 9 pawns and the Russians 18, an apparent injustice rectified by the greater power of the allied knights (an alternative game allows balanced forces). Capture by displacement; pawn promotion to file piece. Chess terms adopted; for example, 'j'adoube', and an attack on the opponent's capital must be heralded by name ('Paris' = check). Frank Marshall was invited to take part in an exhibition game at the Marshall Chess Club, an event which may or may not have taken place. (Author's booklet *Jeu de la Guerre d'Orient*, 1856)

Military Chess [Conder] (Proprietary game, Mead and Co; Charles Conder, 1871). Inspired by the Franco-German war of 1870. Board 12x12 of which two ranks formed a river crossed by a four-square bridge. Men 22 a side (various soldiers and artillery pieces). Capture of the enemy's standard or planting one's own in the enemy stronghold won the game. (Advertisement in the *Westminster Papers*, 1871)

Zodiac Chess (Proprietary game, Zodiac Games; 'Mercury in Virgo', late 19th Century). Round board 12x5 sectors; pieces are named after heavenly bodies: K=Sun, Q=Moon, Rs=Jupiter and Saturn; Ns and Bs the other planets (omitting Mercury and Neptune); Ps are satellites. The twelve sectors are named after the signs of the Zodiac. White wins if he gets a piece in Pisces, Black if in Aries. [The source is a book or other

document with reference '(BL) CUP 700g.1', which I presume to be a British Library shelfmark. The first edition included a second game from the same stable, **Copernican Chess**, which would appear to have used the same or a similar board but to have been different in detail: 'Obscure winning conditions'.]

Land and Water (Proprietary game, c.1890). 8x8 board; 24 pieces a side representing various land and sea forces which move and capture as draughtsmen but can only take a weaker or equal adversary; object is to occupy opponent's back rank or to block him so that he cannot move. (Manufacturer's rule sheet apparently found in the Bodleian Library) [Text revised]

The Jungle Game. Origins obscure; in the opinion of Bell, possibly a development of xiangqi. Sometimes called **Children's Chess** or **Oriental Chess**. Board 7x9 of which b4-b6/c4-c6 and e4-e6/f4-f6 are 'water'. Eight pieces a side, each a different animal. Displacement capture according to precedence. Object is to enter opponent's den (d1/d9). (Bell, *Board and Table Games from Many Civilizations*) [I have also met the name **Animal Chess**. 'Capture according to precedence' seems to be rarely employed in chess games, though Fourth Dimension (chapter 23) provides an exception. When writing about the Jungle Game in *Variant Chess* 40, I looked briefly at what might be called **Scissors, Paper, Stone Chess**, inspired by the childhood playground game (scissors cut paper, paper wraps stone, stone blunts scissors). A first essay (board 5x5, all men move as kings, each player has a king and three of each of the other pieces, a king can capture and be captured by anything, other men capture each other only in the cases given) suggested that the game was playable, and not without interest; a deeper investigation might come to an exactly opposite conclusion.]

Tugelia, also known as **The Relief of Ladysmith** (Proprietary game, T. and W. White, 1900). Marketed six months after the lifting of the siege. The Tugela (sic) is a river of Southern Africa on whose banks a number

of major engagements of the Boer War were fought. Board 16x16; each player has 15 men: 5 cavalry (move as knights), 8 infantry (one square diagonally), 3 artillery (one square orthogonally). Aim is to occupy opponent's citadel. 'Prisoners' taken by displacement. [There is no source material in David's Encyclopedia files, merely the name of a correspondent. The proprietors were not necessarily being careless when naming the game, since it is quite possible that the name under which the river appeared in contemporary news reports differed from that by which it is known today.]

Naval Chess (A. Teplov, 1908). Marine kriegsspiel on a lattice board. Pieces representing naval units move on intersections. Remote from chess. [Information presumably deriving from personal communication. There is no source material in David's 'Encyclopedia' files, merely a manuscript note 'Press-mark of the Leningrad library 38.45.5.985'. The placing of the game in this section is merely an inference from the word 'kriegsspiel'.]

The Game of War [Maxim] (Proprietary game, Drucke; Hudson Maxim, 1910). Board 10x10 (a1 black) plus four aircraft bases adjacent to and of the same colour as squares d1/d10 and g1/g10. The squares f1/f10 are Citadel squares and are appropriately marked. Each side has 20 men. These are (chess equivalents) 1 x King (K), General (Q), 2 x Mortar (R), Cannon (B), Cavalry (N), Aircraft (appropriately for the era, called 'flying machines') 10 x Trooper. Aircraft move only once in a game to any vacant square where they act as blocks to both sides (at that time, strategists saw the aircraft's primary role as that of reconnaissance). Troopers move and capture as pawns or draughtsmen. Captures are compulsory for troopers who, if they capture by leaping, must continue to capture in the same turn if further captures are possible. A trooper reaching the end rank becomes both inert and immune from capture, acting as a block precisely like an aircraft. Kings have no royal powers and the object of the game is to occupy the opponent's citadel square for one turn. The array parallels that of orthochess but with d1/d10, g1/g10 empty and aircraft on

bases adjoining these squares. Note that the Ks occupy the citadel squares. The game was sometimes played at the Marshall Chess Club and is pictured in *Marshall's Best Games of Chess*. (*Ye Faerie Chessman*)

Counter Chess (Karl O. Hill, 1960s). All men move and capture like kings except that a man may not capture a man taller than itself. Thus kings, which have no royal powers, can capture any man, but pawns can capture only pawns; the powers of the other pieces depend on the set being used. Either the array is randomized, the men being set up in opposite corners of the board, or a starting position is agreed. The object is to get any piece to the opposite corner square. (Originator's rule sheet)

Hexapawn was put forward by Martin Gardner in *The Unexpected Hanging* (1969 but largely repeating material which had appeared earlier in *Scientific American*) as a vehicle for the construction of an elementary artificial-intelligence machine (the game itself being described by Gardner as 'trivial'). Board 3x3; three white pawns face three black pawns, the object being (1) to advance a pawn to the third rank, or (2) to capture all three enemy pawns, or (3) to deliver stalemate. Jacobs and Meirovitz (*Brain Muscle Builders*) extended the game to 4x4 and 5x5 boards with extra pawns. [Reference to Gardner material added editorially]

Cu-Bono (A. E. Ball, 1969). Board 10x10. Described as 'a scientific mimicry of warfare' by its inventor. Each side has 20 pieces: 2 each of missiles, guns, tanks, airplanes and generals on the nearest rank, 10 flags on the next. Flags move like pawns with three-square initial option. Other pieces move either orthogonally or diagonally over different distances. Object is to occupy one of opponent's capital squares. Inventor's Diploma, Geneva 1971. Ex-President Nixon and Prince Charles were lucky recipients of sets. (*Games and Puzzles* 23)

Bombalot (Bruce Harper and Duncan Suttles, 1972). Board 8x8 with two additional squares at either end of the board centrally sited (d0/d9 and e0/e9). The object is to get any two pieces

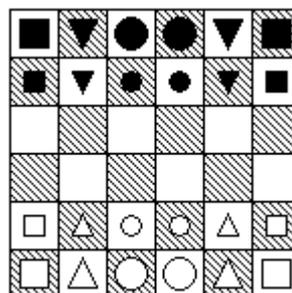
into the opponent's extra squares. A player cannot occupy his own extra squares. The usual men can be used (one rook must be inverted) but they have new roles with odd names and odder moves. Twekes (P) move as K but may leap in any direction as draughtsmen over own men and enemy Bomb, or over enemy men, which are captured. A tweke cannot jump friendly and enemy men in the same turn. Bishops (B) move exactly as twekes but can combine jumps. The Immobilizer (K) moves and leaps as bishop but does not capture. Any enemy piece next to it is immobilized. A tweke or bishop can capture an immobilizer provided it starts its move out of range. The Bomb (Q) moves like K, cannot capture or be captured, and may be detonated by the player at any time after moving it or instead of a move. The detonation destroys the piece and all men of either colour within two squares of it (it thus covers 24 squares in the middle of the board). The Detonator (N) moves as the immobilizer and has two functions. If it lands on the enemy bomb it immediately detonates it. Taking the detonators as co-pairs (see Co-Chess in chapter 12), any men on co-squares are destroyed and bombs detonated. The Tank (R) moves like a K, does not jump or capture, but pushes adjacent men in direction of movement. A piece pushed off the board is lost; a bomb explodes before it is pushed off. The Imitator (inverted R) copies the actions of the last enemy piece moved. A man that cannot move can commit suicide. Array (a1-h1/a8-h8 and inwards, centred) ID-BoI-DTa, BiTTTTBi, TTTT. The game has been played from Vancouver to Nova Scotia and also in Germany, but probably not often. (*Chess Federation of Canada Bulletin* 19, November 1976)

Advice (Proprietary game, Inquot Ltd; Alick Elithorn, 1976). Board 9x9; 13 men a side made up of 1 x Citizen, 4 x Lawyer, Psychiatrist, Priest. Object is to occupy opponent's corner. Less like chess than it seems. [Information presumably deriving from a set in David's game collection]

Pharaoh's Quest (Proprietary game, Protel Games, 1985). Design award winner; described as 'Pharaoh and invading king battle

over Nile's ancient riches', but components (abstract pieces, chequered board) belie the box-lid blurb. Board 44 squares in form of Z; 9 men a side. Pieces move as Q, R, N; object is to capture opponent's immovable towns. (*Die Pöppel-Revue*, March 1989)

Alapo (Johannes Tranelis, 1982). Board 6x6; men are squares, triangles, and circles, large and small.



Small square pieces move one square orthogonally in any direction, triangles one square diagonally, circles one square either orthogonally or diagonally (like a K). The large pieces move in the same manner but over any number of vacant squares (like R, B, Q respectively). Capture by displacement. The first side to move any piece to a square on the opponent's baseline where it is not immediately captured is the winner. (Koch, *Spiele für Zwei*)

Duell (Proprietary game, Parker Bros, 1984, first published in U.K. in 1975 as **Conquest**). Board 9x8; each side has eight dice arranged on rear ranks in addition to a king. Dice are rotated from square to square (and may change direction once during a move) according to number displayed. Win by capturing opponent's K or occupying its array square. (*Spielbox*, January 1985)

Artificial Intelligence (Proprietary game, Richard Hazlewood, 1986). Board 8x8, 16 men a side: 1 x A.I., 2 x Executive, 3 x Designer, 4 x Analyst, 6 x Programmer. Object is to get A.I. to opponent's A.I. cell without its being captured. Elementary and advanced games have boards 7x7 (11 men a side) and 9x9 (18 men). (Proprietor's rules leaflet)

Chess 2000 (Proprietary game, Catalfa House; T. Lezemore, 1986). Board 13x12, 26 men a side (1 x king, 2 x queen, rook, 4 x bishop, knight, 13 x P). Chessmen are black and white but have coloured bases. Board squares are in same pastel shades (six colours) arranged in a symmetrical pattern. A man of the same base colour as the square it stands on can only be captured by a piece of the same base colour. Game is unique in that king can be captured any number of times. Each time it is returned to its base square, the occupation of which by the opposing king wins the game. The king moves up to three squares in any direction and because it never leaves the board is a useful attacking piece. All other men move as in chess but no e.p. or castling. (Proprietor's press release)

Rugby Chess [Sekatsky] (Igor Sekatsky, 1986). The inventor, who is paralysed, invented the game during a night of insomnia. Board 10x10; 20 men a side, baseline (a1-j1/a10-j10) NKQRBBRQKN. The object is to pass (conduct) the pair of knights to adjacent squares on the opponent's first rank. Knights cannot capture or be captured; kings move only on squares of starting colour. Knights and bishops move only to adjacent diagonal squares, the difference between them being that bishops can capture. The queen moves as a bishop and the rook as a rook but only on the squares of the same colour. The pawns move as chess pawns and so are the only men that can change the colour of their square. Promotion is to bishop. Black draws if he can immediately match White's touch-down. (Manuscript notes presumably deriving from personal communication)

Military Affairs Chess (Proprietary game, David Games; Hoa Vinh Hua, 1987). The aim is to capture the opponent's castle, which, although concealed, cannot move. Little to do with chess. [Information presumably deriving from a set in David's game collection]

Admirals-Schach (Proprietary game, Reality Games GmbH, 1988). Naval strategy game with little resemblance to chess. [David's Encyclopedia files contain only a proprietor's publicity sheet, and the verdict presumably comes from a set he possessed or had seen.]

Ayanu (Proprietary game, Keller; Harald Germer, 1988). Board 9x9 plus small space at either end of e-file whose occupation is the aim of the game. Stronghold, akin to palace in xiangqi, covers six squares in either camp (d1-f2/d8-f9). Tolkien-like theme. Each side has 9 men (equivalents in parentheses): 3 x Essa (Q), 2 x Itta (B), 2 x Onnu (R), Ayanu (Q+N), Urum (a sort of dummy). Each man is in two parts, a base and a cap; the cap, which indicates length of move permitted, changes during play. There is a form of displacement capture. [Information presumably deriving from a set in David's game collection]

Galaxy Chess (Proprietary game, Reality Games; Constantino Parselli, 1988). Space board game with little relationship to chess. (Proprietor's publicity material)

Occupation (Julian Grafa, 1988). Board 8x8; each player has 1 x General, Colonel, Major, Captain, Lieutenant, 8 x Private; array (h1-e1/a8-d8 and inwards) GCPP, MC-P, --LP, PPPP. General as Q; Colonel as R+N; Major as R or one square diagonally; Captain as B or one square orthogonally; Lieutenant as N; P moves one square diagonally, captures one square orthogonally, both in any direction. On capturing an officer, a private is promoted to the rank of the piece captured or any below. Captured men may be exchanged; an exchanged prisoner is restored to its original square provided that this is vacant (a private is put back on any of the eight P squares). Object is to occupy, with any piece and for one move, any square of the opponent's Fortress (g2/h2/g1/h1, b7/a7/b8/a8). (Inventor's rules pamphlet)

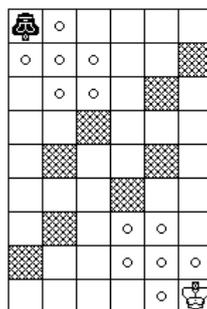
Trinome (Proprietary game, Jocus S.A.; J. F. Augey, 1988). Described as 'between draughts and chess'. Board 11x11; 15 men a side; 3 Circles (move two squares in any direction, no leaping), 6 Squares (one square orthogonally), 6 Triangles (one square diagonally). Capture by displacement. Object is to get one of each type of piece in enemy's camp (efg1/efg11). The game has won three silver medals at exhibitions. (Manufacturer's rule sheet)

Chafits (Proprietary game, Rostherne Games; David Watts, 1990). The most exotic of all the chess-draughts hybrids. Board 7x10, a1 black. Each side has 7 draughtsmen, 6 cones, and a set of six chess cards representing the different chessmen. White places his draughtsmen on black squares of first two ranks with a cone on each except the man d2. Black does likewise but on the white squares (no cone e9). Each player arrays his six cards in front of him. Draughtsmen move diagonally forward only and the object is to get one onto the opponent's back row and retain it there unchallenged for one turn. Notice that since the two sides start on opposite-coloured squares, the draughtsmen can never threaten or block one another. Cones move like chessmen as described below. A turn consists of three parts, taken in strict rotation: (1) Select a card from those available (initially six); (2) Move a cone like the chessman the card depicts; (3) Move a draughtsman (if possible). The card is then put aside and when all six are exhausted they are taken up and again arrayed in front of the player; thus every six turns a player has a choice of moving like any chessman. Cones can move freely on and off draughtsmen of either colour. A cone can 'capture' another cone by changing places with it but a cone not on a draughtsman cannot capture one that is. Draughtsmen cannot be captured. [Information presumably deriving from a set in David's game collection]

Riga Chess (Eduard Riekstins, 1990). Standard set-up but K is Gentleman, Q is Lady. Neither can capture or be captured and they have identical moves: like a king but not to the square directly ahead. The object, inspired by Sekatsky's Rugby Chess above, is to conduct the G and L to adjacent squares on the end rank. Pieces of the same colour can unite and disperse at will. Combined pieces have identities: R+N = Count; B+N = Horseman; Q+N = Amazon. White starts with one move; thereafter players make two moves a turn but the win must be achieved by a single move. [Information presumably deriving from personal communication; no source material in David's Encyclopedia files]

Chessence (Jim Winslow, 1990). Board 6x9; immobile kings (in effect, citadels) at f1/a9,

'starting squares' at d2 etc, blocks at a2 etc. Each side has nine identical men. Six men on each side are placed on the starting squares, the remaining three being kept as reserves.



A turn consists of moving a man or introducing a reserve on one of the player's unoccupied starting squares. The object is to mate the opposing king (in effect, to reach his citadel). How a piece can move depends on its relationship to another piece of the same colour. If a piece is orthogonally adjacent to another, either may move like a rook; if diagonally adjacent, like a bishop; and if a knight's move apart, like a knight. If it has none of these powers, it cannot be moved. Kings are ignored for the purpose of determining the powers of adjacent men. Capture is by displacement. A player unable to move loses the game. Blocked squares may not be landed on, nor crossed except by a knight's move. When moving, it is etiquette to announce the role of the piece moved. (Originator's rules leaflet)

Isis (Proprietary game, Adam Godfroy, 1993). Board 12x12; eight squares in each half are designated energy zones, two in each of four colours; each player has eight pieces, again two in each of four colours; object is to occupy opponent's energy zones with pieces of the appropriate colour. (*Variant Chess* 22) [Text editorial]

Hexabeast, also known as **Liu Chu** (Ivan Derzhanski, 2000). 70-cell hex board as in Shafran's game. Each side has 3 x Boar, Bull, Cock, Dog, Horse, Ram. Complicated rules governing movement; objective is to occupy opponent's home hex or to stalemate him. (Chess Variant Pages) [Text editorial]

Invasion (J.-L. Cazaux, 2001). Board 10x10 with centre 4x4 squares prohibited; play from corner to corner; military pieces with slight

chess connections. Object is to checkmate or stalemate opposing HQ or occupy his home corner. (Chess Variant Pages) [Text editorial]

32.2 Fixed goals in neutral territory

Jesõn Mor. Mongol game (literally ‘Nine Horses’). Board 9x9; each player has nine knights arranged on respective first ranks. Object is to be the first to occupy the central square (e5); usual displacement capture. Presumably a player would have to occupy the square for one turn in order to win. (Assia Popova, *Jeux de Calculs Mongols*, 1974)

Hexagonia (Proprietary game, John Jaques and Son). Published in 1860 according to van der Linde, and allegedly awarded two prize medals in 1862, the game was in fact published on 23 September 1864 and registered at Stationers’ Hall the following January. 127-cell hexagonal board, central cell distinguished. Each player has 1 x King, 2 x Cannon (artillery), 4 x Knight (cavalry), 8 x Pawn (infantry). The moves of the pieces are not recorded. The object was to get one’s K safely to the central cell. (Photocopy of what appears to be a game box cover, also manuscript notes possibly from a library visit)

The Game of Coronation (George Mumby, 1870). In an article (*Westminster Papers*, 1 December 1870), the unnamed writer (Mumby himself?) refers to earlier chess variants noting that ‘as the only novelty introduced was the additional intricacy, they soon fell into merited oblivion’. The Game of Coronation, he goes on, ‘although to some extent based upon Chess, is ... far superior to the imitations referred to’. The board is composed of eight concentric circles, the centre one containing the Crown. The circles are divided by radial lines to form spaces which are chequered. Each side has a 1 x Prince, General, 2 x Colonel, Major, Captain, 8 x Soldier. The Prince (=king) must reach the crown to win.

Kastellet (Proprietary game, Henry Smith, 1892). 61-cell hexagonal board arranged so that adjacent hexes abut left, right, and 30 degrees either side of forwards and backwards. The central hex is known as the point and

cannot be occupied. The aim of the game is curious: to maintain a guard (‘cover’) of the point. A player, none of whose pieces could in theory occupy the point, and who cannot, on his next turn, move a piece to cover it, loses the game. Each side has 12 pieces which, with their moves, are 5 x Flag (one hex diagonally forward), 4 x Mace (to any adjacent hex), 3 x Lance (to any of the six nearby hexes of the same colour, assuming a normal three-colour chequering). In addition, when a flag reaches the end rank it promotes to a Bar which the player puts on any vacant hex; thereafter neither player may cross or occupy that hex. (U.S. Patent 521,737 of 1894) [Text revised. The game had apparently been previously patented in England, patent 13,662 of 1892.]

Krona (originator not noted, 1894). Board 9x9, each side having 8 Esquires, 8 Knights and a Prince arranged in two ranks. Object is to get the Prince (moves as king, immune from capture) to the central square. Esquires move and capture as pawns but with no two-square jump or promotion, knights move and capture one square diagonally. (U.K. patent 3,022 of 1894)

Primrose Dames (Lewis Waterman, 1899). Board 16x16, each side having 16 Dames (bishops), 6 Knights and 4 Members (kings). The object is to get all of one’s members into the ‘house’ (the eight central squares g-j/8-9). Members do not capture, and if captured are returned to their start squares. (U.K. patent 20,874 of 1899)

Chessword (Proprietary game, Waddingtons; Walter Blady, 1960s, published 1972). Board 8x14; a letter of the alphabet is printed on 40 of the squares. Each side has the usual chess pieces (no pawns) which move and capture as in orthochess except that the king has no special powers. Array (White): Ke2, Qc2, Rb1/h1, Bd1/f1, Na2/g2. Black has the same array (ranks 13/14) on the same-coloured squares as White but with king on left of

queen. Players agree beforehand on a word and the first player to spell out the word by landing on the appropriate squares in correct order wins the game. A letter is only gained if the player's piece stays on the square for one move - i.e., if it is not at once captured, when the same one-move requirement applies to the capturing piece. If the next letter required is occupied by a friendly piece, the letter cannot be claimed until the piece moves away and it or another piece moves back on, or another square with the same letter is occupied. 'The most imaginative and refreshing - if no, the only - new way to play chess since the game's invention' claimed the publishers! (Manufacturer's rule sheet, photocopy of board)

Stakato (Proprietary game, Lukesch Spiele; Robert Lukesch, 1987). Board 8x8 tiered with a1 lowest, rising a step at a time along ranks and files to h8 highest (14 steps above a1). Pieces are two kings and 8 cubic chess dice. Object is to mount the throne (h8) with one's own king or trap the opponent's king. Each side has four dice depicting, initially and respectively, Q, R, B, N uppermost, but they can change (by rotating) during play. Each die has two blank faces. There is no capturing, but a die can be temporarily deactivated in certain circumstances by exposing one of these faces. The pieces exert influence according to their powers of movement effectively erecting barriers which the opposing king cannot cross. There is some complex strategy. (Manufacturer's publicity leaflets)

Brinkmanship (Barry Foster, 1988). Board chequered, base 11x11 (a1 black) forming a regular pyramid; summit square (f6) has distinctive markings. Military pieces 16 a side: 1 x General (with flag), 2 x Artillery, Commando, Paratrooper, Tank, 7 x Infantry. Object of game is to occupy f6 with the general (flag) or to take hostile general (there is no checking). Capture is by displacement; no piece may cross the summit square and only a general may occupy it. Movement: G as king; A as rook but on same level, can change levels by moving up or down either orthogonally or diagonally to an adjacent square; C four squares orthogonally changing direction if desired, commando operates on

white squares only; P as queen and may leap other pieces of either colour (only piece able to do so); T as bishop and hence changes level with every step, operates on black squares only; I moves one or two squares at a time either straight or diagonally, but cannot move down levels; moves only one square to capture. Array (b1-j1/b11-j11) ATCPGPCTA, (c2-i2/c10-i10) 7 x infantry. Paratroopers attack each other in initial position but first player cannot eliminate both as opponent can recapture with second and take it out of range. (Inventor's rule sheets, also manuscript notes presumably deriving from a set in David's game collection)

Logitac (Proprietary game, Indice S.A.; Ghislaine and Daniel Siguier, 1988). Board 3-D; four levels, 12x12, 8x8, 5x5, 1x1. A total of nine black squares are replaced by orifices: (level 1) d4, d9, i4, i9, (level 2) c3, c6, f3, f6, (level 3) c3. Players begin with one each of Pyramid (K), Cube (R), Cylinder (B) (chess equivalents in parentheses) and 12 pawns. In addition, each player holds in reserve 33 pawns and one double pawn (N). Object is to get one's pyramid to the top. Pieces ascend to next level after a certain number of captures, descend (via the chimneys) optionally. A pawn's power is increased as it ascends. The double-pawn and extra pawns are brought into play one at a time on any vacant square on back rank of first level instead of a move. Array (d1-h1/d12-h12) PCyPyCuP, (b2-k2/b11-k11) 10xP. (Proprietor's rules pamphlet)

Monarch [de Poël] (Proprietary game, Historien Spieleverlag; Jean de Poël, 1990). Hex board of 37 cells in regular array. Each side has 12 men; 1 x Duke (moves like K), 2 x Horseman (1 or 2 cells, captures on 2nd cell only), 2 x Paladin (moves like K, captures like N), 1 x Marshal (1, 2 or 3 cells, captures on 3rd cell only), 4 x Pawn (moves as K). Object is to get duke (which has no royal powers) to central cell and to stay there for one move. The starting position (a number are suggested) is agreed between the players. Win (2 points) if duke attains centre or if opponent resigns; win (1 point) if duke captured; draw 1 point each. Points only applicable if a series of games is played. (Notes deriving from a set in David's game collection)

32.3 Football games

Chess and football (soccer) are familiar bedfellows: 'Football Chess is popular amongst Oxford University undergraduates' (*Chess*, June 1973). Because moves in a football boardgame are likely to replicate those of K, Q, R, and B at least, and such games are very common (Boyer, writing in the 1950s, refers to a dozen or so in France), it is difficult to rule on which are and which are not chess variants. Those mentioned here have been acclaimed by chess players and have enjoyed a measure of support.

Football Chess [Boissier] (Henri Boissier, 1940). Board 17x23; goals are five squares wide (g1-k1/g23-k23). Apart from the goalkeepers, who can move within their goals, the play is confined to a field b2-b22-p22-p2-b2. Each player has a team of 11, a goalkeeper, 2 backs, 3 half-backs and 5 forwards (strikers and sweepers had not been born) and predictably there is a ball. The line-up (White) is i1; g4, k4; f7, i7, l7; b11, h11, ill, j11, p11. Black mirrors this and the ball is on i12. The line-up is assumed at the start of a game, on resumption (second half), and when a goal is scored. The ball can move (subject to it being kicked) like a queen and play is quite sophisticated. Full rules are given by Boyer (*Nouveaux Jeux d'Echecs Non-orthodoxes*). Described as 'very popular in Switzerland where the inventor supplies regular problems to the papers' (*Chess*, October 1950); the game was also popular in Germany.

Football Chess [Tylor] (Chris Tylor, c.1950) Board 8x8; standard set-up. For problem composers or for a skittles game, the starting position could consist of any required set of pieces and pawns on their initial squares with the ball on any convenient square. A man plays the ball by moving to the square occupied by it and kicking it to an occupied or unoccupied square to which the kicking piece could itself move. For pawns, a kick to an occupied square is made as a pawn capture in orthochess, to an unoccupied square as a pawn move. In the course of a single turn the ball can be passed to any number of men of either colour, the kick being at the choice of the player with whom the ball rests. A move ends

when the ball is kicked to an unoccupied square. The two players move alternately regardless of who last kicked the ball. There is no capturing, the king has no royal powers and there is no castling; a pawn may promote to king. The object is to kick the ball into the opponent's goal (goals are d1/e1 and d8/e8). A piece occupying the goal does not save. A goal may not be scored from kick-off. Tylor suggests the game is best played with pieces only and ball at d4. As with the field game, possession is everything. (Inventor's rule sheet)

Football Chess [Boyer] (J. Boyer, 1951). Board 9x9; the eight pieces in usual sequence a1-d1, f1-i1 and a9-d9, f9-i9; no pawns. Notice all bishops on black squares. Goals are e1/e9; ball on e5. No captures, no checks; king is ordinary piece. Pieces move as in orthochess but cannot occupy goals. A piece can kick the ball if adjacent to it. The kick is executed in the same manner as the piece moves and must be directly away from the kicking piece. In the case of a knight (a powerful piece in this game), the ball can be kicked to any square a knight's move away but not to a square next to it. If the ball is kicked to a square adjacent to another friendly piece, this is a 'pass' and the ball can be kicked again, and so on. The ball may not be kicked into or across the goal from the 1st or 9th ranks. (*Jeux d'Echecs Non-orthodoxes*)

Chessball [Kamzalov] (U. N. Kamzolov, 1957). Board 5x8 (a1 black); each side has three Attackers (bcd3/6), three Defenders (bcd2/7), one Goalkeeper (c1/8). The ball starts on c4. White kicks off; a goal is scored when a ball reaches an end rank (1/8). Only goalkeepers allowed on end ranks. The ball is kicked when player in adjacent square: attacker occupies square and moves ball any number of vacant squares orthogonally; defender likewise but only ahead (diagonally or along file). Goalkeepers move any number of squares along rank only; they block but cannot kick. Other men move as queens when not kicking. (Author's certificate of invention 112730)

Football Chess [Stone] (Jed Stone, 1982). Usual set-up, moves and captures but the king is an ordinary piece. Ball starts on one of the four central squares at White's choice. The ball is kicked by a man landing on its square. King kicks the ball one square in any direction, pawn, which may move diagonally to kick, one square likewise. Rook kicks along ranks or files or one square diagonally, bishop along diagonals or one square orthogonally, queen in any direction, knight chips the ball a knight's move away. The ball may be 'intercepted' on any square it passes through on its way to the goal. The ball travels until it reaches an unoccupied square or the board edge except that a kick along a diagonal rebounds off the board edge in the manner of Billiards Chess. Pieces can move over the ball. Each player is allowed up to three consecutive moves. The first may be an orthochess move, but the second and third must move the ball. If the ball reaches the back rank (opponent's first) on the first or second move, the player's turn ends. A ball anywhere on the end ranks is a goal unless it is cleared by the defence immediately. (Inventor's rule sheet)

Waje's Football Chess (Proprietary game, Schwanenburg Verlag, date not known). Board 17x24, 11 men a side. Player kicking off puts man with ball on centre spot, players then place men alternately. At each turn, each player writes down three intended moves which must be disclosed on demand. Men move like queens, up to 3 squares with the ball and up to 5 without it. (Proprietor's rules pamphlet) [Text revised]

Chess Football [Arbogast] (Porter Arbogast, 1982). American football. Board 8x8 and usual men with addition of die, score pad and imaginary ball. The piece in contact with the imaginary football is the ball carrier. A series of moves constitutes a down. A capture constitutes a block, the blocked piece is removed from play but may be brought back later onto an unoccupied square on the player's baseline though not onto a square occupied by the imaginary football. Pawns move only one square at a time. All pieces are eligible ball carriers but pawns are not except for fumbles, interceptions and at kick-offs. Only a king may kick the ball. One pawn (the d-pawn unless the player specifies otherwise) is designated the center. The center puts the ball in play via the hike to any square directly behind it nominated by the offense. A tackle takes place when an opposing man occupies the ball carrier's square; the square on which this occurs determines the yardage which is recorded in a table. The ball stays with the ball carrier until the offense declares a pass, lateral or a kick. A pass is a forward movement in any direction (one pass a down is allowed), a lateral is movement of the ball to the side or rear. The ball carrier must pass or lateral in the direction it moves. Play is complex with scrimmage line, huddles, runback, interception, loose balls, punts, blocked kick, touchdown etc. A special game clock is introduced to maintain the pace associated with the field game. Chess Football is a realistic simulation playable at four levels from beginners to advance. (Inventor's rules booklet)