

Chapter 35

Games using non-rectangular boards

[Although partnership and team games can be played on square or rectangular boards, the board corners tend to be under-used, and many such games use boards specially designed to accommodate more than two players.]

35.1 Games using a normal 8x8 board with extensions

Four-Handed Chess is loosely any variant for four players. More specifically, it is generally understood to be a partnership game played with two sets on a standard board with four extensions, one on each side, usually of 8x3 squares (arguably the best arrangement) but sometimes 8x2 or 8x4, on which the pieces are set up in the normal array positions.

The four-handed game dates from the 18th century and enjoyed considerable popularity, particularly in Germany but also in England - *The Philidorian* reported (1838) 'The game of chess for four is advancing daily in fashion and favour with the British Public'. The year before it had been described as coming from Germany, 'the only country where it is practised'. During the half-century 1825-1875, numerous booklets appeared, mostly in the U.K. but also in Europe and America, giving basic rules for four-player chess. Almost all of these, some little more than pamphlets, carried only the name of the publisher. The game was dismissed as 'a kind of whist' (*Le Palamède*). Another theory has the game originating in Russia. Later (1881) Verney declared ecstatically: 'The electric light and Four-handed chess now throw their luminous rays on a hitherto dark and dreary world'. Not everyone waxed lyrical however. In an article in *Chess Player's Magazine* (1847) the author remarked that 'Irascible or ill-tempered people are advised to let this game alone' (adding that those who could control their tempers would find it extremely interesting) to which the editor added 'We heartily concur in the advice thus offered by our contributor; and although the class of person legitimately included in his recommendation ... is without doubt exceedingly large, yet we could still wish that he had extended it so far as to include all

those, who have either taste or discernment, enabling them to appreciate the beauties of the ancient and patriarchal game, and to detect the absurdities of this modern innovation and perversion'. A poetaster (*Chess Monthly*, 1891) drew attention to a congenial aspect of the game:

The boards, too, lend their aid
In forging friendship's links
By having corners blank
On which to place the drinks.

The game enjoyed a considerable following until the end of the 19th century (the White collection has a score of books on it) after which support slowly declined. The Ulyanov family, including Vladimir Ilyich (Lenin) is alleged to have played it 'passionately into the night' (Machatscheck, *Zug um Zug*). There was a four-handed club in London until World War II and tournaments in America up until at least 1961, the year B. H. Wood reported enthusiasm for the game in the Faroes, but today it is very little played except in commercial versions.

The present section describes a procession of games that have been promoted, often with extravagant claims, at frequent intervals over the past 200 years. Partners sit opposite one another and play alternates between the partnerships, passing either clockwise or counter-clockwise round the board. The object of the game is to mate both of the opponents' kings; if one is mated and the other stalemated the game is drawn. If a player is mated, his pieces are immobile and he passes his turn. He resumes play if he is released from the mate. The pieces move as in orthochess. No move may be made that puts the partner's king in

check and a player must respond to a check, he cannot leave it for his ally to counter. Almost all the games can also be played by two or three players ('a marvellous double-dummy game' according to C. H. O'D. Alexander). Differences between games occur principally in extension size, placement of the kings and queens, and behaviour of the pawns.

Four-handed Chess is not chess played by four people, but a very different game. All stages of the game are quite unlike their equivalents in orthochess and the values of the pieces differ considerably; the queens dominate the board, bishops are about equal to rooks, while the usefulness of the knights, and particularly the pawns, is diminished. The pawns pose a special problem. It was early appreciated that blocks would occur when allied pawns met. Most games of German origin overcame this situation by allowing either pawn to move diagonally forward one square, then back to its original file when it moved again. The English games, from Sherwin onwards, permitted this in a single movement - in effect, a vertical leap to the vacant square immediately beyond. Most games only allow pawn promotion on the rear rank of an opponent. Since this involves between three and six captures on the ordinary board, it may be considered academic. In all games, allied kings can stand adjacent to one another and usually also to an opponent's mated king. Kings normally face queens in the initial array, giving two fundamentally different arrangements. For play, two contra-distinguished sets (usually by colour) are necessary. The rules of the Verney and Hughes versions, the most widely played, are given in full, the rest by reference to them.

Verney's Four-Handed Chess (George Hope Verney, 1881). Probably the best-known exponent of the four-handed game, Capt. (later Major/Lt.Col.) Verney published his *Four-handed Chess* following the response he had to a letter in *The Times* (22 September 1881). It was followed in 1885 by his *Chess Eccentricities* which included many of the games given here. The rules of the Verney game are:

(1) 160-square board (8x8 plus four 8x3 extensions), normal array in each extension (so all queens on white squares).

(2) Opposite players are partners (typically, White and Yellow against Black and Red).

(3) Object is to checkmate both opponents. Unless both of a partnership's kings are mated, the game is drawn.

(4) Pawns move one square at a time and promote (to Q only) on opponents' back ranks. (Falkener and Gollon both favour the pawn-two move for all but the rooks' pawns; they also favour promotion on partner's as well as opponents' back rank.)

(5) When a pawn is blocked by a friendly pawn it can leap over it to a vacant square immediately beyond even if both pawns are moving in the same direction.

(6) A pawn reaching the rear rank of partner reverses direction (and is marked to indicate this), and again if reaching the first rank of the player, and so on, a situation that appears highly unlikely.

(7) The men of a player whose king is mated are inert. They do not exercise any power and are immune from capture.

(8) A player may release an opponent from mate but in doing so may not capture one of the mated player's men.

(9) No castling.

(10) The partnership that does not have the move may change seats before or after White's first move.

(11) The turn of play rotates clockwise.

The first move confers a large advantage (hence rule 10). Games quickly assume a unique character - Verney claims he never saw two games alike after four moves by each player. Double threats are the danger: if partners advance knights so that one attacks an adversary's K, the other the Q, the Q is won. As a general guide, attack the last player or check the following player. Combined attack on one of the opponents is the most effective strategy.

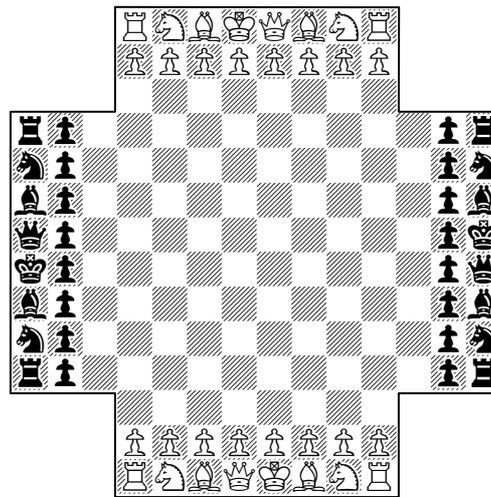
In the ending, as in orthochess, a single rook is sufficient to ensure the win. The method is (1) force a king onto a back rank, (2) post a king to keep it there, (3) mate the second king, (4) mate the first king while retaining the mate on the second king. The same system is used to force the win with two bishops. Pawns are of small value in the endings since promotion is practically impossible. Bizarre end-games can occur

when a king is hunted among his partner's inert men.

According to J. A. Fuller-Maitland (letter to *The Times*, 17 August 1933) Verney got his knowledge of Four-handed Chess from Horatia Nelson, a niece of the admiral. By the end of 1881 the Verney game was already established in America; *The Cincinnati Commercial* (31 December), quoting *The Philadelphia Sunday Times*, noted that 'the game ... is rapidly growing into favour and becoming a marked feature of club play'. In 1883/4 Verney founded the Four-handed Chess Club of London; it was inaugurated on 13 October 1885 with 80 members and survived until World War II. In his opening address Verney remarked that the Czar of Russia was a devotee of the game and he hoped the masters of the 'diminutive game' present (they included Blackburne, Gunsberg, Hoffer and the Rev. MacDonnell) would be initiated into the mysteries of Four-handed Chess and that 'they might eventually aspire to the dignity of mastering the more extended game'. Verney carried his enthusiasm into his home where his floor was inlaid with 28 different chess boards in parquet work whilst his dinner table was graced with a miniature four-handed board, complete with chessmen.

Hughes-Hughes's Four-Handed Chess (M. E. Hughes-Hughes, 1888). An attempt to make the four-handed game as close to orthochess as possible and thereby attract wider support. The rules are as Verney with three main differences: (1) Qs are on left of Ks (and so on squares of own colour); (2) Pawns can advance two squares initially (e.p. possible); (3) Castling is allowed (if rarely practised). One other minor difference is that a pawn cannot vault a pawn of the same colour, only that of partner (it is possible this was also enforced in the Verney game: the rule is ambiguous). It is odd that Verney, arguing in favour of having all queens on white squares, stated a few years previously (in *Chess Eccentricities*) that 'it is very important that the queen of one party should not be in a position to at once give check to his adversary on the advance of the king's pawn'; adding '(this is) the position adopted almost universally by players in recent times'. The advantage of the first move is much less than

in the Verney game. Within a short while of their introduction, the Hughes rules prevailed.



The game featured in a match between London and Cambridge University at Cambridge on 18 March 1892. A century to the day later a 'return' match was played with Insurance C.C. representing London, the university winning again. Games were played to Insurance C.C. rules, a cross between those of Hughes and Verney.

The games that follow will be described in terms of those above.

Dessau Four-Handed Chess (K.E.G., Dessau, 1784). Extensions 8x3; Qs on white squares; pawns move one square only, no castling; movement anti-clockwise. Allied pawns pass each other by diagonal movement and promote on back rank of opponents or partner. If a player is released from mate, none of his men can be taken until he has moved. (*Méthode de Jeu d'Echecs à Quatre*)

Altenburg Four-Handed Chess (1792). As played in the town. Variant attributed by van der Linde to Duke Ernest II of Gotha-Altenburg. An anonymous pamphlet *Gesetze des Schachs zu Vieren* (Gotha, 1779), the first reference to the game, is similarly credited. Extensions 8x2; Qs on white squares; pawn-2 and castling allowed; rooks' pawns cannot capture one another in the starting position; movement anti-clockwise.

Koch's Four-Handed Chess (J. F. W. Koch, 1801). Extensions 8x3; Qs on white

squares; pawns one square with diagonal passing; promotion on back rank of opponents or partner; no castling. (*Die Schachspielkunst*)

Wilkinson's Four-Handed Chess (C. H. Wilkinson, 1804). Extensions 8x2; partners side-by-side. 'The interest it (the game) excites is beyond description' according to the inventor, who professed no knowledge of any earlier game. (*An Easy Introduction to the Game of Chess*, 1813 edition)

Braunschweig Four-Handed Chess (1814). As played in Brunswick for many decades. Extensions 8x2; Qs on white squares; pawn-2 (unmoved wing pawns cannot capture one another); e.p. allowed; short castling only; play clockwise. 'We prefer this to the English four-handed' (*Schachzeitung*, 1848).

Martensen's Four-Handed Chess (Theodorich Martensen, 1814/15). Played in Lüneburg until at least 1848. Extensions 8x2; partners side-by-side; Qs on black squares; wing pawns cannot be taken until they have moved; pawn-2 and castling allowed. Promotion is on rear ranks of either opponent. (*Schachzeitung*, 1848) ['May have been taken from Wilkinson', wrote David in the first edition presumably on account of the side-by-side partners, but I suspect that chance coincidence is more likely. The arrangement is in many respects a more natural one than that with partners opposite, since pawns advance into enemy rather than allied territory.]

Enderlein's Four-Handed Chess (K. Enderlein, 1815). Extensions 8x3; Qs on left of Ks, i.e. on own colour; no piece can be taken until all players have moved twice; pawn-2 with promotion on any end-rank, opponents' or partner's (the pawn is exchanged for any piece that has been taken, but a player cannot have two bishops on the same colour on the board, a curious restriction). Castling allowed. Enderlein founded a four-handed chess club in Berlin, and his *Anweisung zum Vierschachspiel* was later acknowledged in Germany as the definitive work on the game. His intention was to keep the four-handed game as close as possible to orthodox.

Alberti's Four-Handed Chess (J. J. Alberti, 1821). Extensions 8x3; Qs on left of Ks; pawn-one with promotion on partner's back rank. Castling allowed. (Verney)

Albers's Four-Handed Chess (H. G.

Albers, 1821) Extensions 8x3; Qs on black squares; pawn-2 (probable); castling allowed. Promotion on opponents' back ranks, but if no piece of the same colour has been taken, the pawn must wait. Albers, who came from Lüneburg, called this the English board as distinct from the 8x2 which he called the Lüneburg board. (Verney)

Rust's Four-Handed Chess (L. F. Rust, 1834). Extensions 8x3; Qs on own colour; play clockwise. (Verney; van der Linde gives the first initial as 'J'.)

Waiddler's Four-Handed Chess (S. Waiddler, 1837). Extensions 8x3; Qs on same colour; pawn-one with diagonal move to pass ally; promotion on any of the three end ranks; play anti-clockwise. Waiddler proposed that pawns be allowed to move one step orthogonally and take one step diagonally. The usual 'no conferring' rule was in force but players were permitted to make any of the following statements: 'Partner, you are in danger', 'Partner, come and help me', 'Come and release me from mate' and (it must have been a common one), 'You do not see my plan'. (Verney) [Verney apparently gives the name as 'Waider', but van der Linde gives 'Waiddler', as does Wellisch (see Waiddler's three-handed game in chapter 37), and I have followed them.]

Sherwin's Four-Handed Chess (T. Sherwin, 1837). Extensions 8x3; Qs on white squares; pawn-one; promotion on opponents' back ranks, pawn reaching partner's back rank reverses direction, pawn meeting allied pawn may leap it; castling by agreement; clockwise play. This game, published in London, was apparently appropriated by Verney. The inventor gave stern warning on what must have been a common practice: 'The partners are rigorously interdicted from intimating aught to each other by word, look or gesture'. (*Complete Rules for Playing the New Game of Chess for Four Persons*)

Tressau's Four-Handed Chess (L. Tressau, 1840). Extensions 8x3; partners (adjacent) can play one after the other or alternately with opponents. All-play-all offered as alternative. (Verney)

Sause's Four-Handed Chess (W. Sause, 1841). Extensions 8x3; Qs on squares of own colour. Ps on reaching the fourth rank or thereafter could move at right angles towards

an opponent but could not change direction thereafter. Play anti-clockwise, orthodox except no e.p. (Verney)

Fraustadt Four-Handed Chess (1846). Rules published in this Prussian town. Extensions 8x3; Qs on left of Ks. Pawn-one, passes allied pawns on same file by diagonal movement; promotion on opponents' or partner's back rank. (Verney)

The Double Game of Chess [H.H.] (H.H., 1847). The four-handed game 'lately introduced into America' according to the author of an article in the *Chess Player's Magazine* (1847). Extensions 8x2; the men of a checkmated player may be captured by either of the opponents, a rule which does not match that of any European game.

Trabue's Four-Handed Chess (I. H. Trabue, 1855). Extensions 8x3; Qs on left of Ks; e.p. and castling. Characterized by the rule that when a pawn first reaches one of the two major diagonals of the main board (a1-h8/a8-h1), it changes direction ('wheels') towards the nearer opponent. (Personal communication apparently citing a work entitled 'Rules and Directions to Play / Four-Handed Trabue, American Chess / Isaac H. Trabue / Apr 16 / 1904')

Neumann's Four-Handed Chess (G. R. Neumann, 1867). Extensions 8x3; Qs on left of Ks; pawn-2, e.p. and castling permitted. Play is clockwise. (*Das Schachspiel und seine Abarten*)

Gaebeler's Four-Handed Chess (A. Gaebeler, 1873). Extensions 8x3; Qs on left of Ks; pawn-2; promotion on any back rank; e.p. and castling. No piece can be taken before all players have moved twice. Play clockwise. Essentially Enderlein's game. (Verney)

Lange's Four-Handed Chess (Max Lange, 1881). Extensions 8x3; Qs on left of Ks; clockwise play. (Verney)

Double Chess [Crawley and Mooney] (Capt. Crawley and H. Mooney, 1882). Extensions 8x3. Expounded in a series of articles in the *Boy's Own Paper* ('Exception must be taken to the name Four-handed Chess ... why not Four-brained Chess?'). The authors predictably needed Verney who was quick to point out the flaws in the rules: 'In giving a plan of the board, they place two of their queens on black squares and the other two queens on white squares, and then in their

rules state that all the queens are to be on the same colour'. Two innovations to which Verney objected allowed a player to call attention to a partner's queen under attack and, more obscurely, 'a pawn-piece (sic) can only be taken by a piece of its own rank or by a king or a queen'.

Partnership Chess [Chauvenet] (Russell Chauvenet, 1943). Extensions 8x2; positions of Qs not specified. Pawns move 1, 2 or 3 squares initially; wing pawns can capture in the initial array. (Letter to *Chess*, January 1944)

Fouray (Proprietary game, Gallant Knight Inc; Don and Paul Quinn, 1962). Extensions 8x4; Qs on left of Ks. A later version (Jack Quinn, marketed in 1988 by Fouray Plus) has 8x3 extensions. (*Nost-algia* 309, *World Game Review* 10, advertisement in *Chess Life*, January 1988)

Multi-Chess (Gerald Sorek, 1960s). Extensions 8x4; Qs on own colour. Several variations suggested. (Author's rules pamphlet)

Duplicate Chess (Proprietary game, Crea Tek Inc; Gerry Sorek, 1967). Extensions 8x3; Qs on left of Ks. Each team, according to the publishers, 'attempts to checkmate both opponents simultaneously', something of a feat. (Proprietor's publicity material)

Quadrachess (Proprietary game, California Games Co; Honey Sauberman, 1977). Extensions 8x4; Qs on white squares. Pawns promote on 16th rank; if deflected into an extension they can move sideways (no captures) until back on own rook's file. Player who delivers checkmate takes over the mated player's army but does not get an extra turn. (Proprietor's publicity material)

Quart'Echecs (Proprietary game, Detente, 1980s). Extensions 8x3; White and Black play Red and Green. (Proprietor's publicity material) [In the array pictured, three of the queens appear to be on black squares and one on white.]

Four-Way Chess (Proprietary game, Taurus Games; Stephen Stockman, 1987). Extensions 8x3; Qs on white squares. Pawns promote on either partner's or opponents' back ranks, also on opponents' edge extension squares, a total of 24 promotion squares (maximum of 19 attainable by any one pawn). (Proprietor's rules booklet, also advertisement

in *Chess Life*, August 1988)

Ajedrez-4 (Proprietary game, Anro, 1980s). Extensions 8x3; Qs on left of Ks. (Advertisement in *Revista Internationale de Ajedrez*, November 1989)

Carre-Schaak (H. P. Kluitmans, 1988). Extensions 8x2; one player in each partnership has an extra Q instead of a K. (*Schakend Nederland*, February 1988)

Maxichec (Proprietary game, Edimax; Jacques Venturini, 1988). Extensions 8x2; two players in each partnership control the Principal armies, their partners the Allied armies; two fortresses, each of four white squares, in the right corner of the principal players, and two neutral zones, also of four squares, in the left corner, thus effectively a 12x12 board. In a principal army, the king and queen are replaced by a General and Lieutenant respectively. Their powers are unchanged except that the General is not subject to check and, if captured, is placed in the fortress of the opposing principal player together with the Lieutenant, from which they can be liberated. Pawns can also move sideways. A pawn on promotion is exchanged for a piece already lost which is at once placed in the appropriate neutral zone. Various restrictions on movement and capture in fortresses and neutral zones, otherwise orthodox with the aim of mating the (allied) king. Also playable by 2 or 3. Diplomas at the Salons de l'Invention, Paris and Le Havre. (Proprietor's rules pamphlet)

Intense Chess (Proprietary game, Intense

Games; Robert King, 1991). Extensions 8x3; Ks on left of Qs. Yellow and Brown play Red and Blue. Object is to checkmate both opponents (also all-play-all, two- and three-player games). The men of a mated player are removed from play. Pawns may move up to three squares initially, promote on 11th rank. Analyzed and endorsed by Judit Polgar and researched by several grandmasters. (Proprietor's rules pamphlets and publicity material) [For Basic Intense Chess and Super Intense Chess, see the next section.]

Board of the Tao King (Proprietary game, Ty Scian, 1992). Extensions 8x2. The game has a mantle of eastern philosophy with the four sets of men coloured green (earth), blue (water), red (fire) and yellow (air).

Chessapeak Challenge (Proprietary game, J. Bruce Jones, 1994). Extensions 8x3; Qs on white squares. Pawns promote on the back rank of the nearest opponent. They change direction on the square, known as the pivotal square, of the first corresponding piece file of the nearest opponent; for example, the c-pawn changes direction on c6, the e-pawn on e7. Pawns may move directly to the square immediately behind the pivotal square, thus the a and h pawns move only one square, the d-pawn five squares. The pivotal squares are marked. One Canadian school structured its whole mathematical curriculum round the game! (Proprietor's publicity material) [The change-of-direction idea would seem to have been anticipated by Trabue, see above, but I haven't checked out the details.]

35.2 Games using other square boards with extensions

Four-Handed Xiangqi. Chinese Chess for four; rules similar to those of four-handed orthodox. Board has 9x4 extensions to accommodate the usual pieces for each player. There is no river, hence elephants have freedom of movement. The board may or may not have the Palaces marked. [David's index sheet for the game refers to two Chinese paperback games books, but there are presumably in Chinese and there is nothing from them in his Encyclopedia files. It is therefore impossible to say whether the game is partnership or all-play-all, but I have provisionally assumed the former.]

Basic Intense Chess (see above) has a 6x6 central area and four 6x3 extensions, the knights being omitted from the array, and **Super Intense Chess** has a 10x10 central area and four 10x3 extensions. In addition to the usual men, each player has two Unicorns (3-1 leapers) and two extra pawns. In the array, the unicorns are in the extension corners with the rooks next to them. (Proprietor's rules pamphlets and publicity material)

The four-handed version of **Victrix** (board 10x10 with extensions 10x3) is described with **Victrix** in chapter 15.

Partnership Four-Hand Chess (Michael Stricker, first version 1949). Board 10x10 with 10x3 extensions; two Lancers and two extra pawns a side. Lancer moves as a queen but up to three squares only; may leap one man of either colour but not to capture. Pawns can move up to three squares initially, one or two squares on their next three moves (pads allow a tally to be kept). King can move up to three squares on its first move only, but not if checked. No e.p., castling. Object is checkmate of both opposing kings. If a player is checkmated, his king is removed from the board and his partner takes over his pieces. Baseline RLNBQKBNLR but K and Q can be interchanged if desired. No discussion is permitted during play but an odd feature of the game is that a player may, in moving a man, point it towards a square or area as an indication to partner. It is up to the partner to deduce the significance of this. (Inventor's rules pamphlet dated 1988)

Alliance Chess [Bathgate] (Harold Bathgate, 1970s). Four-player game (partnerships or all-play-all). Board 12x12 with four 12x3 extensions (two are ignored if two play). Extra pieces are 2 x Financier (as Q but up to 3 squares) and 2 x Saboteur (3-1 leaper). Pawns can move up to three squares initially. (*Chess Spectrum Newsletter*)

Schwentzer's Four-Handed Chess (Manfred Schwentzer, 1982). Four players; board 15x15 with a 15x2 extension on each side occupied initially by the players' forces. Thus 120 men on 345 squares; a game for those who believe big is beautiful. (*Komsomol Pravda*, 15 April 1983)

Cincinnati 4-Way Chess (David Moeser, 1991). Four-handed partnership game in which the men-to-squares ratio is high. Board 5x5 with four 5x3 extensions, a further 3x1 extension centred on the last row of each 5x3, and a triangular area abutting on all three squares of the 3x1; array K, RQR, NNBBN,

5xP in each extension, but the inventor suggests that one of the knights might be replaced by a squirrel (leaps as N or two squares orthogonally or diagonally). Play is clockwise; object to mate kings of both opponents. If a player is mated, his men are frozen and he does not move unless released from mate; if stalemated, his men may be captured. No pawn-two; if two friendly pawns meet on a file with a vacant square beyond one of them, the other can leapfrog. Promotion in partner's territory (extension) to Superpawn (moves backwards and forwards, captures diagonally in any direction). If a pawn enters an opponent's territory it changes direction at right-angles and promotes to any piece on reaching the triangle. This can be entered from any of the three squares in front of it. Only one piece can occupy it. This piece blocks an incoming pawn on the central square, but can be captured by a pawn on either adjacent square. A rook in the triangle can exit only down the central file. The name derives from Cincinnati's chili parlours where a '4-way' consists of chili, spaghetti, cheese, and onions. Played in Mt Carmel. (Inventor's rules pamphlet)

Eight-Handed Chess (G. H. Verney, 1884). Teams-of-four game. Board 16x16 with 16x3 extensions on each of the four sides (448 squares); four complete sets of men. On the first two ranks of each extension two full arrays of the same partnership side by side, all queens on white squares, partners facing across the board. Pawns move one square at a time, no castling. The aim is to mate all four opponents. Rules as for Four-Handed Chess; order of play clockwise. This is Verney's four-handed game extended to accommodate eight players, an unlikely assembly. (*Chess Eccentricities*) [An unlikely assembly indeed, but Multiple Bughouse (see next chapter) has been played with eight players *per team* and what is perhaps truly unlikely is to find eight players each willing to wait for all the others to move before his turn comes round again.]

35.3 Games using a round board

Four-Handed Round Chess (George Verney, 1884). 128-cell circular board consisting of 4 rings (files) and 32 sectors (ranks); four arrays

PPPP, QBNR, KBNR, PPPP at regular intervals round the board (kings and queens on the inside ring, all queens on white squares).

Partners sit opposite. General rules as for Verney's Four-Handed Chess. Half the pawns move clockwise, half anticlockwise; they have only a one-square move and do not promote. (*Chess Eccentricities*, also *Les Jeux d'Echecs Non-orthodoxes*)

Orbital Chess [Schmidt and Dyson] (Proprietary game, SDM Inc; B. W. Schmidt and E. P. Dyson, 1969). Circular board, 32 sectors x 6 cells (4 players in partnership, also for 2), modified board of 180 cells (3 players). Pieces are placed in usual arrangement round the perimeter with pawns in front, partners opposite each other. Barriers between the arrays prevent movement to the left or right on the first two ranks so that rooks are not en prise to one another. Pawns must cross the centre space and continue to opponent's back rank to promote. Checkmate both kings to win. The men of a checkmated player are frozen but come to life if the king is later released. (Information presumably deriving from a set in David's game collection)

Quad Chess (Steve Preston, 1981). Four-handed (partnership?) game on 224-cell

circular board consisting of 8 rings (files) and 28 sectors (ranks). Each player has the usual eight pieces arranged RNBKQBNR from the centre (so alternate queens are on white and black squares), flanked by two rows each of eight pawns which move clockwise or anticlockwise as appropriate. Pawns have six steps to promotion. Partners may combine forces to checkmate. The pieces of a checkmated player are frozen. Variations have been suggested. (Inventor's rules pamphlet)

Escher (Proprietary game, Oreste Gallino, 1986). Round chess for four. Each quadrant is composed of 8x4 chequered squares (cells) distorted symmetrically to form a 128-cell circular board. White and Green play Red and Black. (*Eteroscacco* 38)

Duchess (Proprietary game, Alain Blair, 1984). Two-six player partnership game. Modified circular board of 157 cells. Each player has 1 x K, Q, N, Duchess (B+N), Fortress (R+N), Wizard (as K), 2 x R, B, 5 x P. A piece adjacent to a W may be teleported next to any other W. Mate all opposing Ks to win. (Proprietor's rules pamphlet)

35.4 Games using other boards

Fortress Chess, also known as **Russian Four-Handed Chess**. Origins unknown, but Murray believed it was the game referred to by Coxe on his Russian tour in 1772. There was a London club devoted to the game in 1855, and both Tchigorin and Capablanca are recorded as players. The playing area is 192 squares, the normal board with four 8x2 extensions and four fortresses, each of 4x4 squares, in the corners. There are 24 small holes outside the playing area, six in front of each player. These are for pegs to keep tally of games won. A partition, raised on some boards, is set between the two left-hand squares of each player's array and the adjacent fortress. Normal array (Qs on left of Ks), and in addition each player has an extra R, B and N which are placed initially in the fortress to his right on squares of his choice. Partners face each other, the turn of play is clockwise, and the object of the game is to mate both opponents. When a player is mated his forces are removed from play, after which the

partner, faced by the combined forces of the opponents who move twice to his once, rarely survives long. The fortress minimises the risk of early loss as it offers a comparatively safe sanctuary. Players normally castle short early in the game to hurry the king into the fortress. Access to the fortresses is not restricted but the barriers cannot be crossed by any piece. The knight is assumed to move first orthogonally and then diagonally, so even if placed at the entrance to a fortress it will command just two squares in the main playing area. It is usual to place the rook in the fortress on the same rank as the array rooks, the bishop poised to operate on the diagonal opened when the RP is moved, and the knight close to the entrance to defend the king in its flight to safety. Wing pawns cannot capture each other in the initial position and there is no accommodation, as is found in Four-Handed Chess, to relieve a block caused by two allied pawns meeting on the same file. Sometimes Fortress Chess was played with the Ks on the

left of the Qs, a harder game since it increased the difficulty of removing the king from danger. (*Schachzeitung*, May 1850, *Shakhmatny Listok*, August 1862, Verney, Faidutti, Machatschek, *Zug um Zug*)

Baltic Four-Handed Chess (L. Kieseritzky, 1835?). Partnership game played on a board in the form of an eight-pointed star. Eight diamonds with alternate angles of 45 and 135 degrees meet at a point, and each is divided 4x4 into 16 diamond-shaped cells to give a 128-cell board. Each side has the full complement of chessmen in normal array. Pawn-two, castling permitted; object to mate both opponents.

The game was described in the first chess book to be published in Lett (1855) and later in German, *Das Baltische Vierschach*, by Leonard Stunde under the pen-name of Leo Livonus. The author declared, with considerable optimism in view of the visual discomfort players must have experienced with the distorted squares, that the game rang the death-knell for the English four-handed game. The game was little played outside North Germany and the Baltic States. (*Schachzeitung* 1865, *Rochade*, 1978.)

Tetra-Schach (Victor Manakin, 1948). Four-handed partnership game played on a 204-square board. Usual forces in four colours but pieces are renamed (e.g., bishops are Officers). The main difference is that the pawns standing in front of the rooks in the array are known as Tetra-pawns and have their own behaviour pattern. A TP moves 1, 2 or 3 squares straight ahead, and can capture 1 or 2 squares diagonally (but cannot leap) regardless of whether or not it has previously moved. A TP promotes to a Tetra Queen (Q+N). If a partnership has lost all its major pieces, the opponents must mate within 10 moves, or if only one king is free in five moves, otherwise the game is drawn. (Photocopy of inventor's rules booklet) [Unfortunately the rule booklet as held by David appears to have been produced for use with a set, because it just mentions a 204-square Tetra-Schach board

without giving an illustration. A possibility giving the normal four-fold symmetry would be an 8x8 board with four 8x4 extensions plus a three-square L at each inside corner, but this has to be a guess and it is a guess which David was unwilling to make.]

Chess-O-Rama (Proprietary game, Lawrence H. Nolte, 1972). Eight players on four boards which interlock to represent four oceans and five continents. Two teams, but in the early stages the four games are played in relative isolation. Awarded gold medal at International Licensing Exhibition of 1973. (Brace, *Illustrated Dictionary of Chess*)

Doubles Chess (Proprietary game, Doubles Chess; Rick Gillipsie, 1983). Four-handed partnership game marketed 1994. 128-cell board obtained by surrounding a central point with 8 quadrilateral kites having successive angles of 45, 90, 135, and 90 degrees, and then dividing each kite 4x4 into 16 quadrilaterals. This gives an octagonal board with eight quadrilateral cells along each side, and every point apart from the centre is the meeting point of four cells. Usual arrays on pairs of opposite sides, partners White/Red having Ks on dark squares, Black/Gray on light. Moves as in orthochess allowing for board distortion. Checkmate or capture both opponents' Ks to win. A checkmated K is removed from play but the player continues to move on turn. Described by Larry Evans as 'The best four-handed version I ever saw - a kissing cousin to chess', Doubles Chess received wide media coverage in the U.S. (Proprietor's rules pamphlet and publicity material)

Octopus Chess (Henk Breugem, 1989). Eight-player game (teams of four, teams of two, or all-play-all) around a 257-cell octagonal board. Central circular cell; surrounding it, a ring of eight kite-shaped pentagons together forming an octagon; from each side, rows of two, four, six rectangles with kite-shaped quadrilaterals joining them; 8x2 extensions on the outside. (*Schakend Nederland*, June 1989) [Text revised.]