Chapter 8

Transporting and teleporting

[In these games, men are moved in a way that may be foreign to them. They resume their normal powers subsequently, but during the forced movement they are mere dummies which go here and there at the behest of others.]

8.1 Selective transport of individual pieces

Teleport Chess [Paletta] (Tony Paletta, 1980). Any man except a king may, instead of making a normal move, teleport to the corresponding square on the other side of the board (files a-h, b-g, c-f, d-e) provided that the player is not in check and the square moved to is vacant. (*Chess Spectrum Newsletter*)

Teleport Chess [Schmittberger] (R. Wayne Schmittberger, 1984). Once in a game each piece (not king or pawns) may teleport to any vacant square. Right to teleport can be indicated by a counter under each piece at the start of the game which is removed when the piece teleports. (Originator's rules note)

Teleport Chess [Green] (D. K. Green, 1986). Inspired by Chakra (see Part 2). Rooks have the power to teleport but only friendly pieces, not pawns or each other. A piece that can move to a square occupied by a friendly rook is instantly transported to any empty square adjacent, including diagonally adjacent, to the other rook. The only strictures are that a bishop must reappear on the square of its initial colour and a knight must appear on a square of the opposite colour to which it stood at the start of its move. If a rook is lost, the player may nominate a pawn for the role of teleporter. If both rooks are lost all teleporting powers are lost with them, but power may be restored by a pawn promoting to rook. Bishops and knights can be used to teleport instead of rooks. Regularly played by small groups in Essex; two tournaments held. (Manuscript notes deriving from personal communication)

Highcastle Chess (Ed Pegg Jr, 1988). In place of a regular move, a player may castle. He moves any man two squares towards another man of either colour either orthogonally or diagonally, and brings the second man to the square over which the first passed. The king may castle or be castled through or out of check, the enemy king may be castled into it. (*Nost-algia* 307 and later)

Start-Again Chess (D. B. Pritchard, 1990). Instead of an orthochess move a player may put a man back to its starting square provided it is vacant. Rooks and knights may go to either start square. A more aggressive version also allows a player to move a piece (but not a pawn) to the opponent's corresponding array square. Put-backs only apply to own men.

Transporter Chess (Torben Osted, 1993). Each player has a counter or coin, known as the Transporter, placed beneath the kings in the array. The transporter moves like a king, either independently or carrying a man with it (thus bishops can change square colour). A T cannot capture or be captured though a man on it can. A piece on a T, moving normally, can carry the T with it or leave it behind. The T can move beneath an enemy man but cannot move it. Moving a T, occupied or not, counts as a move. A pawn returned to the second rank regains the two-square option. The piece affords considerable scope for original play. (*Eteroscacco* 65/67)

Follower Chess (Michael Howe, 1993). Usual array. White starts with an orthodox move. Thereafter the player on turn makes an orthodox move followed by an unorthodox move. The latter consists of moving any friendly piece (not the K) to a square on the path of the piece just moved. The path is the

square vacated plus any squares passed over. The path of a N is considered to include every vacant square in the 3x2 rectangle. A follower (unorthodox move) may give check. The K may not be a follower and must escape check by an orthodox move. No castling or e.p. (*Eteroscacco* 66)

Follow-The-Mover Chess, also known as **FTM Chess** (Gianluca Vecchi, 1994). Orthochess except that after making a move the player may transfer any friendly man, except the K or the man just moved, to the vacated square. Bs can occupy the same colour. The K must escape check with an orthodox move and a P cannot be transported to the 8th rank. Here is a postal game won by the inventor: 1 Nf3 Nf6 2 Ng5 (Qf3) Ng8 (Raf6) 3 Qxf6 (Raf3)?! gxf6 (hg7) 4 Nxf7 (Nbg5) fxg5 (af6)?? 5 Nxh8 (Bcf7) mate.

8.2   Pushing and pulling

Push Chess (Fred Galvin, 1967). All men can move normally but may also push a friendly or hostile man ahead of them. The king pushes an adjacent man one square, the line pieces (Q, R, B) push a man any distance provided squares passed over are vacant. A knight moves to an occupied square, pushing the occupant a knight's move away in the same direction. Pawns push friendly men as they move, one or two squares, but hostile men diagonally forward one square. Only one man may be pushed at a time. No displacement captures; pieces are captured by being pushed over the edge of the board. Suicide is permissible. A king is checkmated when it cannot avoid being pushed off the board; in check when so threatened. A pawn can be promoted by a push. There appear to be two versions: when pushed by a hostile piece, the promoted piece is selected by the player (one version) or by the owner of the pawn (the other version). A pawn pushed to its first rank has a one-step move only, but recovers its normal two-step power on regaining the second rank. A push move that restores the position to that existing before the push is illegal. Castling normal, no e.p., stalemate possible. A Fool's Mate: 1 Bf1-c4 (pushes Pe2 to b5) d7-d6 2 Qd1-b3 (Pc2-a4) f7-f6 3 Qb3-e6 (Bc4-f7).

Push Chess has been described as

(Inventor's rules note)

Carrier Chess (Michael Howe, 1994). Standard array. White starts with one move; thereafter a player on turn makes one orthodox move and one optional carrier move. A carrier move involves taking a friendly man adjacent to the man moved (termed a 'parcel') and placed on a vacant square adjacent to the square on which the move is completed. A king may not be a parcel and Ps cannot be carried to the 8th rank. (Inventor's note giving the rules)

Super Queen Chess (Kevin Lawless, 1994). Usual board and array. The Qs have the additional power of moving to any empty square three times in a game. A Q cannot capture her rival unless she has exhausted her super powers. (Originator's rules leaflet)

'Extraordinarily rich and unpredictable, full of surprises'. Even so, it is now little played, having been superseded by Dynamo Chess below. (*Nost-algia* 232/242)

Dynamo Chess (Hans Klüver and Peter Kahl, 1968, inspired by Push Chess). Dynamo Chess is essentially Push Chess with two additional rules: a man may pull instead of pushing, and it may remain stationary and just push or perhaps pull. A line piece (Q, R, B) may, on moving normally or without moving, push a man of either colour to any square straight ahead of it or pull a man of either colour to any square towards it provided that the men do not move in opposite directions, squares moved through are vacant, and only one piece is pushed or pulled on a turn. A knight moves to an occupied square (or elects to remain stationary), pushing the occupant a knight's move away in the same direction; in pulling, the pulled piece occupies the square vacated by the knight, both pieces again moving along the same path. A king pushes or pulls an adjacent man one square in his direction of movement or pushes a man one square without moving. A pawn pushes a friendly man directly in front of it one square ahead or up to two squares if the pawn is in its initial position. A pawn pushed or pulled back to its

original position regains the right to move two squares. A pawn pushes an enemy man one square diagonally forward. Like the pieces, a pawn may push without moving, this counting as a move. A pawn promotes on the eighth rank to a piece of the player's choice (i.e., if Black pushes a WP to the eighth, it is Black who declares the promotion). A pawn cannot pull since it cannot move backwards (but it can be pushed/pulled backwards, even to the first rank). A man pushed or pulled off the board is captured and removed from play. Suicide is permissible for all men except the king (suicide is the only way to pull a man off the board). A king is checkmated when it cannot avoid being pushed/pulled off the board, in check when such a move is threatened. Push/pull is always optional but is forbidden into, through or out of check or to make a push/pull move that has the effect of cancelling the previous move. Castling cannot be combined with a dynamo move. The e.p. capture, if adopted, can only apply to edge pawns. A fool's mate given by the inventors: 1 Ng1-e2 (Pe2-c3) Qd8-b6 (Pc7-a5) 2 f2-f3 Qb6-f2 (Pa7-e3). Without the pawns on c3 and e3, White could escape by Ke1-d2 (Pd2-c3) or Ke1-e2 (Pe2-e3).

The rules appear complicated but are quite logical and are easily assimilated. The theme has appealed to problemists. (*Dynamo-Schach*)

Balanced Doppelzug-Dynamo, also known as **DZD**, a combination of Double-move Chess and Dynamo, achieved popularity in Germany where correspondence tournaments were held in 1969. The rules differ from Dynamo in that there is no check or checkmate; the game is won by pushing/pulling the enemy king off the board. No e.p., and stalemate is a draw. White starts with one move (hence 'balanced'); thereafter players make two consecutive moves each turn (illegal for the first move to cancel the second). Opening play has received little attention. The popular 1 Qd4 (Pd2-d6) in Dynamo fails in DZD on account of, for example, Rh4 (Ph7-h3) followed by pushing the queen off. (*Dynamo-Schach*)

Crossings Chess (Philip Cohen, 1973). Robert Abbott's game Crossings adapted to chess. Every man can move like a king but only to an unoccupied square: this is called a Crossings move (c-move). Two or more men of the same colour adjacent to one another in a straight line (orthogonal or diagonal) can also make a c-move. The men move as a line up to the number of squares equal to the number of men in the line. Alternatively, one or more men may detach from the line, again their maximum move being determined by the number of men moving. If a moving line meets an enemy man, that man is captured by displacement by the lead piece of the line and the move ends. If a line meets an opponent's line with fewer men in it head-on, the lead man in that line is similarly captured. A threat to capture the king by a c-move has the same status as a check. A king cannot cross an attacked square as part of a c-move. A pawn can be promoted by a c-move. A pawn pushed to the first rank retains the initial two-square option. All men can also move and capture normally. A Fool's mate: 1 e1/f2-g3/h4 d8/e7-f6/g5 and 2...f8/7/6-f5/4/3. This cannot be done on White's second move, with colours reversed and 1 d1/e2-f3/g4 etc, because Black's king would have to pass through check. **Surge Chess** (Cohen, 1973) is the same game without crossings captures. (*Nost-algia 167/183*, also correspondence between John Gollon and Philip Cohen)

8.3 Gravitational and magnetic effects

Gravitational Chess (Carlos Nafarrate, 1984). After a piece (not a king or a pawn) has finished its move, it is pulled one rank back towards its baseline. The square to which it first moves, and the square to which it is pulled back, must be either empty or occupied by an enemy man (which is captured in either case, so two captures if both squares are occupied). Problem theme but perfectly playable as a game. Fools' mate runs to three moves, for example 1 e4 h6 2 Qg4/g3 f5 3 Qxg7/g6. (*Feenschach*, December 1984)

Magnetic Chess (João Neto and Claude Chaunier, 1996). Standard array and moves except that the scientific principle of

magnetism that like poles repel whilst unlike poles attract is applied to the chessmen. On completion of a move, any hostile piece on the same rank or file in line of sight with the piece played is moved along the file or rank to the square next to it. Similarly any piece of the same colour is moved to the farthest vacant square in line of sight on the same rank or file as the piece played. Kings however behave normally. Castling magnetises the rook, there is no *en passant* and a pawn moved to the first rank retains the two-square move option. A neat Fool's Mate due to Ian Richardson:

1 d3 (attracting BPd7-d4) Bg4 (repelling BPd4-a4 and also attracting WPg2-g3) 2 e3 (repelling WPd3-a3 and WPg3-h3, attracting BPe7-e4) Qxd1! (*Nost-algia* 367, Variant Chess 44/45)

Fruit Bowl Chess (John McCallion, 1997). The board is divided into a 7x7 central area and perimeter squares which slope upwards. A man may move along but not to a perimeter square without the support of an orthogonally adjacent man of either colour. (*Nost-algia* 365)

8.4   Other displacements within the board

Actuated Revolving Centre, often abbreviated to **ARC** (A. E. Farebrother and W. H. Rawlings, 1937). The four central squares, together with their occupants if any, make a quarter-turn clockwise whenever a man enters, moves within, or leaves the centre. Rotation takes place on completion of the normal move. A piece passing over the centre does not actuate it (*Fairy Chess Review*, February 1937 and August 1938).

ARC is a problem theme of little interest as a vehicle for play, but the idea has been developed and reinvented many times. **Actuated Revolving Quarterboard** (originator unknown) applies the same idea to the central 16 squares, **Lazy Susan Chess** (Bruce R. Trone, date not recorded) is an automatic version in which the central 16 squares rotate a quarter-turn clockwise after every move, and in **Double Lazy Susan Chess** the inner four squares rotate similarly counter-clockwise (manuscript notes presumably deriving from personal communication). In **Pinwheel Chess** (Ralph Betza, 1973), the board is assumed divided into 16 2x2 cells which rotate 90 degrees in alternate directions like so many small pinwheels (a1/a2/b1/b2 anti-clockwise). If a pawn rotates to the 8th rank, the player whose move it is decides on the promotion piece; a king is not in check if next move its attacker will be rotated out of range. A fascinating game according to its inventor, who suggests a computer print-out after each move (*Nost-algia* 168), but 'unplayable' (*World Game Review* 10) may be a sounder judgement. In **Orbital Chess [Betza]** (Betza, 1974) the

board is considered to have four orbital paths; the first consists of the 28 perimeter squares, then, progressively towards the centre, 20, 12 and 4. After each player moves the four central squares rotate, together with any occupants, a quarter-turn clockwise. Progressively outwards the other paths rotate one square anti-clockwise (1st and 3rd orbits) or clockwise (2nd orbit), thereby maintaining the chequered pattern. A move within a path, even if it crosses other paths, is illegal. Capture the king to win. 'Probably unplayable' according to Keller (*World Game Review* 10), but Betza offered a specimen game in *Nost-algia* 168. In **Rotation Chess [Cohen]** or **Gumption Chess** (Philip Cohen, 1969) the rotation occurs instead of a normal move rather than as a sequel to it, and there are several flavours. In the basic game, a player may rotate any 2x2 area which contains at least one of his men and none of his opponent's, and the rotation may be either clockwise or anti-clockwise. A pawn on the first or second rank, regardless of how it got there, may subsequently move to the third or fourth. No e.p. capture allowed. In **Free Rotation Chess** the area rotated may also contain enemy men; a pawn rotated to its 8th rank promotes at the choice of its owner, and if one player rotates an area the opponent cannot immediately rotate it back. In **Restricted Rotation Chess** the direction of rotation, or a sequence of directions, is specified either for each player or for the game as a whole, and in **Free Megarotation Chess** the rotation is of 3x3 squares instead of 2x2 (notes by the inventor, also *Nost-algia* 111).

In **Twist Chess** (D. Trouillon, not later than 1975) the 16 central squares, with their occupants, can be rotated 90, 180, 270, or 360 degrees (the last being a static move) by either player instead of moving, but at least one regular move must be made between rotations and the right to rotate alternates between the players (correspondence between John Gollon and Philip Cohen).

[It was through ARC that I first met David. At the time, the British Library's holding of *Fairy Chess Review* was still incomplete (as often happens with magazines that are sent only to a small circle of enthusiasts, the provisions regarding legal deposit had not been observed), and he had heard that I had the complete run; could I help him, please? Yes, I said, with pleasure, come down and have a look. He duly arrived and introduced himself, and I sat him in front of the fire with a complete pile of *FCR* and a supply of coffee and left him to it. After his visit, I contacted the British Library and supplied it with photocopies of the issues it lacked, with the result that the next time David visited it to consult *FCR* he could not see anything at all because the whole series was away being rebound.]

Pivot Chess (James A. Gutzwiller and David Moeser, 1969). Before moving, a player may pivot any file 90 degrees about any square on it. A file must be pivoted so that squares on it overlap with empty squares on the rest of the board. Pivoted files temporarily become ranks and pawns on them move in their normal directions. (*World Game Review* 10)

Reflection Chess [Fixed Mirror] (origins unknown). A notional mirror is positioned between the 4th and 5th files. Instead of moving normally, a piece (but not a pawn) may reflect to the mirror-image square, provided it is empty, on the other side of the

board. The K can reflect out of check. (Correspondence between John Gollon and Philip Cohen)

Mirror Chess [Howe] (Michael Howe, 1994). After each move, the player may place a mirror horizontally or vertically between any two squares and reflect everything in a field defined by the nearer boundary and the square the same distance away on the other side (thus after 1 f4 White can put a mirror between f5 and f6 and reflect everything from f8 to f3, which moves the pawn to f7 and puts Black in check). Restrictions: a reflecting field may not include the king; it may not include a square that was in a field created by the opponent at his last turn; the king must get out of check by an orthodox move; a pawn may not promote by reflection (no apparent prohibition on reflection to the first rank). No e.p. or castling. Fool's mate is one move only: 1 f2-f4 plus mirror between d5 and d6 (reflecting Pd7 to d4 and Q to d3) Qd3-g3 plus mirror between h2 and h3 (reflecting Ph2 to h3 and R to h4). [Text summarized from *Etereoscacco* 66, fool's mate added. Experience suggests that it is easy to overlook the rule that a field may not include any part of the field created by the opponent at his last turn, and it is only the immediate and total cancellation of the opponent's latest reflection that seems worth prohibiting. Perhaps the game might be tried with this rule altered accordingly.]

Belt Chess or **Full Belt Chess** (Michael Howe, 1994). Each file and rank is a conveyor belt. After moving, a player must rotate one rank or file (except one containing a king) any number of squares in either direction, the men on it moving with it. The game can be played using either the standard array or one with a diametrically symmetrical piece arrangement BBNNRRQK (kings on h1/a8), which has advantages. (*Eteroscacco* 66/69)

8.5 Physical displacement of part of the board

Jagged Chess (James A. Gutzwiller, 1969). Before moving, a player may 'jag' a file up or down, but it must always remain connected to neighbouring files by at least one square. Moves must be wholly on the board but a knight can leap empty space. (Manuscript note

deriving from personal communication)

Rotofile Chess (James A. Gutzwiller, 1970). After each player has made a move, the a-file is transferred, together with any men that are on it, to form the new h-file. Another version

has this transfer after every move. The idea was expanded into a number of variants, probably little played: Alice Rotofile, Mirror Rotofile, Straights Rotofile, Time-Warp Rotofile. (*Neue Chess* 8)

8.6   Unorthodoxy relating to castling

Madchess (Thomas Varghese, 1972). Castling Q-side is permitted with a man on b1 or d1 (K and R go to c1/d1 or b1/c1 as appropriate), Black similarly. (Personal communication)

In the other direction, Emanuel Lasker proposed the **abolition of castling**. [I haven't tracked down the source for this, but see no reason to disbelieve it.]

[I was a little surprised that David did not include **All-In Castling**, where castling is permitted whenever K and R are in line with two or more squares between them and the king is moving neither out of nor through check. Perhaps it is found only in jokes and problems. A trick which has been exploited more than once specifies that White has an unmoved Ke1/Ra1 and is required to do something soon seen to be impossible even with the aid of 0-0-0, but of course he also has a pawn on e7, and he succeeds by playing e8(R), claiming that this new rook is still unmoved, and following up with 0-0-0-0-0-0.]

8.7   Other forced movements

Slippery Centre Chess (Philip Cohen, c.1970). The four central squares (d4, d5, e4, e5) are 'slippery' and cannot be occupied. A man finishing on one continues in the same direction to the first square immediately beyond. A king may pass 'through check' on the central squares since no piece can land on one. Line pieces (Q, R, B) may go further if desired; no e.p. A variant untried as at 1978 is **Very Slippery Centre Chess** in which a man landing on a central square slides off at right angles. (*Nost-algia* 215)

Brownian Motion Chess (Ralph Betza, 1974). After each move, all men advance according to a pre-arranged knight's tour. Impossibly cumbersome at best. What happens if the player who is not to move finds his king in check? (*Nost-algia* 168)

Earthquake Chess [Betza] (Ralph Betza, 1996). The board is divided in two either vertically or horizontally, and the two halves are displaced. (*Eteroscacco* 75) [Text editorial]

Iceberg Chess (Ed Pegg Jr, 1990). Each player constructs a seven-square iceberg within a 4x4 square. Only the tip of the berg is visible, the location of the remaining squares being known to the player but not to his opponent (the tip must be one of the four central squares, and it would appear from the examples in the source letter that the squares forming the berg must be orthogonally connected). The berg can be moved like a king every other move, and an enemy piece that attempts to move on to or through a berg is destroyed. A player may place pieces on his berg and they presumably move with it, but if attacked they are captured. A player may make up to five guesses as to the shape of his opponent's berg, and if any guess is correct he wins instantly. (Personal communication) [Text editorial]