

Chapter 18

Mutation games

[In a normal game of chess, men other than pawns retain their original nature and powers throughout the play. This chapter describes games where their nature may change. Shogi is considered later under regional and historical games, and games which seem best regarded as shogi variants appear there also.]

18.1 Taking the power of a captured piece

Absorption Chess, also known as **Cannibal Chess** (origins unknown). ‘Of great antiquity’ according to one source (*Chess*, September 1952), this game has been independently invented several times. There is basically only one rule: a capturing piece or pawn absorbs the powers of the man captured. Two rules extend from this: a K cannot cross attacked squares (but may give check over them), and a pieces+pawn combination can only promote with a P move. It is quite possible to gain a Q+R+B+N+P, which effectively reduces to Q+N+P (the P gives the option of an e.p. capture). The game has an inherent weakness: it is unwise to make a capture if the opponent can recapture unless it is the start of a series of captures in which the first player makes the last capture. However, **Progressive Absorption Chess** works well, particularly for postal play, as it produces short, exciting games - it is rare for a game to go past move 7. White starts with a large initial plus, but does not always win. (*Nouveaux Jeux d’Echecs Non-orthodoxes*)

In Absorption Chess, capturing can never weaken a man. The **Protean King** (Albert Kniest and John Niemann, 1948) was a problem theme in which the king took on the powers of any man it captured in place of its own (*Fairy Chess Review*, August 1948), and this has quite a different flavour. It was developed into **Frankfurt** or **Chameleon Chess**, in which any capturing man, including the king, assumes the powers of its victim (*Feenschach*, January 1959). A king may not cross an attacked square, but king can check and even mate king if their current powers are different. A pawn that captures when

promoting must take the powers of the captured piece. An example of naïve opening play: 1 e4 b6 2 Bc4 Bb7?? 3 Bxf7(P)+ (becomes P, and checks as P) Kxf7(P) (forced, but having taken a P the Black king now has to move as a P) 4 Nf3 (threat 5 Ne5+ Kf6 6 Ng4 mate, and if 4...Bxe4(P) then 5 Ne5+ Kf6 6 Ng4+ Kf5 7 Ne3+ Kf4 8 g3 is still mate) d6 (stopping Ne5, but it isn’t enough) 5 Ng5+ Kf6 6 Qf3+ Kxg5(N) (the Black king now moves as a knight instead of a pawn, but any rejoicing is premature) 7 Qf5 and the king-knight is neatly mated.

Mutation Chess (John Bosley, 1987) differs in two respects: king captures are orthodox, and a queen may not give check or checkmate. Bosley explains that this second rule is necessary because it would otherwise be too easy to capture an unmoved pawn and promote next move. The queen’s power to pin or control flight squares is unaffected. Mutation Chess was created for the New Zealand team in the 1st Heterochess Olympiad, in which each side was required to nominate a variant of its choice. It has been played by correspondence as **Progressive Mutation Chess** but is equally amenable to normal play, and certainly in its progressive form is rarely dull. (*Eteroscacco*, special Olympiad number and subsequently)

Escalation (George Jelliss, 1973, revised 1992). Usual board, but the men initially on the board are wazir (moves one square orthogonally), fers (one square diagonally), dabbaba (leaps two squares orthogonally), alfil (ditto diagonally), and knight. Composition of forces is based on the requirement for each

type of piece to be able to reach every square on the board, thus 1 x N, W (since they can reach every square), 2 x F, 4 x D, 8 x A; recommended array (a1-h1/a8-h8 and inwards) ADANWADA, AAFDDFAA. The W is the royal piece and its capture ends the game; stalemate is a draw.

The pieces as set up initially consist of an opaque white or black base to indicate ownership with a detachable transparent overlay to indicate power. On making a capture, the power of the capturing piece is increased by the power of the piece captured, and it takes over the victim's overlays to indicate this (any duplicates being set aside for use as described below). A piece initially has

'one-step power' only, but on reaching the 7th or 8th rank it assumes 'riding power' (the ability to take two or more consecutive steps in a straight line as long as the way is clear) in all its permitted directions, and its overlays are turned over to indicate this. Subsequent captures may result in 'hybrid pieces' which have riding powers in some directions and only one-step powers in others, and such pieces cannot be promoted further. Additionally, and instead of a normal move, a player may place one or more duplicate overlays captured as above on top of one or more of his existing pieces, the giving of check being permitted. (*Variant Chess* 8) [Text largely editorial]

18.2 Promotion and demotion

Change-Over Chess (Russell Chauvenet, 1943). A man other than a king changes after moving in the sequence P-Q-R-B-N-P. **Complicacious Chess [Single King]** (V. R. Parton, 1961) makes the changes the other way round. Chauvenet comments that several sets of men may be needed, and Parton suggests imposing a restriction, if desired, that a player have not more than 4xN, 4xB, or 4xR on the board at any time. (Letter to *Chess*, January 1944; *Chess - Curiouser and Curiouser*)

Joyful Chess (Karl Schulz, 1945). Two squares on the 4th or 5th ranks, chosen by lot, are designated Paradise and Hell and are marked accordingly. Pieces that occupy these squares have their powers increased and diminished respectively; kings and pawns are unaffected. A piece occupying Paradise augments one step in value on the scale N<B<R<Q (the Q is unaffected); a piece occupying Hell drops one step on the same scale (the N is unaffected). The line pieces may not traverse Hell. (*Nouveaux Jeux d'Echecs Non-orthodoxes*)

Degraded Chess (V. R. Parton, 1958). A type of Replacement Chess in which a captured man is at once put back on any vacant square but its rank is degraded in the sequence Q>R>B>N>P (no P on 1st or 8th rank; B must be on same colour). Pawns are not replaced. The advantage of this form of game is that it

usually leads to a conclusion whereas Replacement Chess between well-matched players is often a non-event. (*Nouveaux Jeux d'Echecs Intéressants*)

Schooling Chess (Paul Schooling, 1960s). Usual array but Ks, Bs, Ps only. On capturing, a man promotes one step on the scale N-B-R-Q. A Q making a capture creates a friendly P on the square vacated; a K making a capture creates on the vacated square a friendly man of the same rank as the man captured. Pawn promotion to B only. (Manuscript notes presumably deriving from personal communication)

Ambition Chess (Ralph Betza, 1977). After each move a player may promote or demote a man of either colour one step up or down the precedence order P<N<B<R<Q. A player may not immediately reverse a change effected by the opponent nor convert an opponent's piece to evade a check. A recommended option is to limit the number of pieces on the board of the same type. Fool's mates abound: 1 e4 (g7N) f5 (g7B) 2 Qh5. (*Nost-algia* 214)

Cubic Chess [Pribylinec] (Proprietary games, Vladimir Pribylinec, 1977 and later). A succession of games based on cubes which show chessmen on four sides, the remaining two being blank. In the version originally marketed, also known as **Echos**, the board was 7x7 and each player had 10 cubes, 1 x KKKK

and 9 x PNBR; initial array White Kd1, Pb1/f1 and a2-g2, Black similarly. K, R, B, N moved normally, but P could both move and capture straight or diagonally forward (no pawn-two); additionally, a player could rotate a cube instead of moving, subject to his men not exceeding a total of 8 on the scale P=0, N=B=1, R=2, men continuing to count even after being captured (*Variant Chess 2*). In a later version, **Virtual Chess**, the pawn reverted to its normal move and the scale of values was abandoned; instead, alternate faces of the king cubes were marked to show 'up' and 'down', and the array became Kd1, Rb1/f1, Nc2/d2/e2, Pa1/b2/f2/g1, the kings initially showing 'down'. If a player's king showed 'down' he could only rotate a cube in the 'down' direction (R>B>N>P), but he simultaneously rotated his king, which then showed 'up', and the effect was to produce 'down' and 'up' rotations in turn (*Variant Chess 24*). The number of PNBR cubes per side was later increased to 13, the board was increased to 7x8, the array became Kd1, Rb1/g1, Ba1/e1, Nc1/f1, Pa3/g3 and b2-f2, Black reflecting across the centre, and an extra rule was added whereby a player could win by getting his king to one of his opponent's corner squares without immediately being captured (*Variant Chess 29*). A further change altered the game much more radically. The board size became 8x8, the number of PNBR cubes per side became 14, a standard queen was added, and the rules governing rotation effectively converted the game into a version of Chessgi (*Variant Chess 48*). [Text largely editorial]

Vicente Aguado's Chess (Proprietary game, J. M. de Vicente Aguado, 1980). The chessmen are replaced by cubes on the sides of which are the six chess symbols. With the cubes correctly orientated a normal game can be played, but rules for other games involving chance are given. (*Ludi-Math 4*) [David's Encyclopedia files do not contain a detailed statement of the rules, so the classification of this as a mutation game is conjectural, but the assumption seems reasonable.]

Progression Chess (Tony Paletta, 1980). The power of a pawn augments as it advances. On the 5th rank it moves like a knight, on the 6th

like a bishop, on the 7th like a rook and on the 8th like a queen. No promotion or e.p. (*Chess Spectrum Newsletter*)

Einstein Chess (Adam and Barthommier, 1981). A piece is demoted each time it moves without capturing (Q>R>B>N>P, P stays as P), promoted each time it captures (Q stays as Q). Kings do not change. Castling demotes R to B. No conventional 8th-rank promotion; pawns act as blocks on 8th rank. They can move up to three squares if on 1st rank, e.p. permissible. Problem theme but probably playable. (*Feenschach*, December 1981)

Tactical Chess (David Coutts, 1981). A pot-pourri of rule changes. B, N forward only, R forward or sideways. However, if moving to or from a position next to its own K, the piece behaves normally, reflecting 'the king's qualities of leadership'. The same pieces may also move one square as K but not to capture. Pawns on a, b, g, h files move diagonally and capture straight. A pawn reaching the end rank does not promote but signals a charge: all that player's pawns henceforth have the option of moving two squares. If a pair of pieces (R, B, N) is lost, the player removes one of his pawns who has 'suffered from demoralisation'. Apart from checkmate, if at any time the defending pieces are outnumbered on the back row, the player has one move in which to rectify this or lose the game. (Author's rules pamphlet)

Applied Chess (V. N. Afanasyev, 1986). Usual array. Aim is to capture opponent's K. Once a Q moves, both Rs and Bs of that side move as Q's but capture normally. A K can only make one move in a game and if forced to do so, the player's Q, if still on the board, is removed. A threat to capture the K can be countered with a similar threat. If as a result both Ks are captured, both players have lost. If a player's Q is unmoved, pawn captures are mandatory. Published in *Svetlana* (Leningrad). (Personal communication)

Retgression Chess (Bruce Trone, 1991). Every time a piece, other than a K, makes a capture its rank is reduced in the sequence Q>R>B>N>P. (Unprovenanced note presumably deriving from personal communication)

Flip Chess (John W. Brown, 1997). All men except may be flipped instead of or after moving. 45-square board, 7x7 less the corners; men include Fers (moves one square diagonally); array (b1-f1/b7-f7 and inwards, centred) BFKFB, PFFFF; B flips to R, F to N, P to Berolina Pawn (moves diagonally, captures straight). Pawns promote on last rank to Princes (move as K, but are not subject to check); bare K loses. **Flip Shogi** has the additional rule that captured pieces may be dropped either side up but only to attack an opposing man; pawn drops are limited to first two ranks. (Chess Variant Pages)

Patricia Chess (Rob Nierse, 1997). Board 5x5; BKB on b1-d1, PP on b2/d2, Black similarly. When a king moves it becomes a queen, next move back to king, and so on; similarly bishop transposes into rook and back again. Capture of King or Queen ends the game. A pawn promotes to knight on either of the opponent's first two ranks (knights do not transmute). Captured pieces change sides and can be dropped in the form they were captured on any subsequent turn (but instant pawn promotion disallowed). (Chess Variant Pages)

Cannon Chess (Peter Michaelsen, 1999). Board 9x9; men other than K can optionally promote when making a move that begins or ends in the last three ranks, or in capturing. Captured men change sides, and may be reintroduced on any empty square (in place of a normal move) in either their normal or their promoted forms. Men are Iron General, which moves as orthochess K or two squares by leaping an adjacent piece, captures a man two squares away by leaping an adjacent piece, promotes to Iron General which moves and captures as orthochess K; Copper Cannon, which moves as B or can leap one man, captures only if there is one man between it and its target, and promotes to B; Silver Cannon and Gold Cannon, which do the same on R and Q lines and promote to R and Q; Copper General, which moves and captures as IC+IG and promotes to N; Silver General, which moves and captures as GC+IG and promotes to Gold General, which moves and captures as IC+Q; and King, the royal piece, which moves and promotes as GC+Q. (*Eterosacco* 86-88) [Text editorial]

Ambassador Chess (James Wittman, 2002). Board 3x2(!), each player has two pieces; an Archbishop (B+N), the royal piece, and a Changeling. The C begins as a Thorny Rose (move as K, capture as B), then after each move changes in sequence to R, B, Q, and back to a TR. When captured, its original owner may, on any subsequent turn, drop it back on an empty square in the form it was captured; it thereafter resumes its move sequence as above. Checkmate the A to win. Array: Aa1/a3; Cb1/b3. (*Variant Chess* 44)

Pocket Mutation Chess (Michael Nelson, 2003). Orthochess array; at any stage a player may remove a piece (not a K) from the board and keep it in hand to be dropped, except on the 8th rank, on a subsequent turn instead of moving. No castling, e.p. normal; P on second rank has two-square move option however it got there (P dropped on first rank does not). Pieces are placed in classes: (1) P; (2) N, B; (3) R, Nightrider (as in chapter 16), SuperBishop (as B or one square orthogonally); (4) Cardinal (B+N), SuperRook (as R or one square diagonally); (5) Q, Chancellor (R+N), CardinalRider (B+Nr), SuperCardinal (as B or N, or one square orthogonally); (6) ChancellorRider (R+Nr), SuperChancellor (as R or N, or one square diagonally), SuperCardinalRider (as B or Nr, or one square orthogonally); (7) Amazon (Q+N), SuperChancellorRider (as R or Nr, or one square diagonally); (8) AmazonRider (Q+Nr). If the piece was removed from 1st-7th rank, it may be changed into any other piece in its class before being put into the pocket; if from the 8th rank and not already in the highest class, it is promoted to any piece in next higher class, again before being put into the pocket. There is no normal promotion; a pawn moved to the 8th rank stays there as a pawn until pocketed. (Chess Variant Pages)

Abstract Chess (João Neto, 2003). Board 8x8; pieces are stones in stacks of 1 to 6. 1 moves like P, 2 like N, 3 like B, 4 or 5 like R, 6 like Q. Aim is to capture royal stone (moves like K). On turn, player may move friendly stack, transfer a stone to an adjacent friendly stack, or capture an enemy stack by replacement. Array (a1-h1/a8-h8 and inwards) 4236K324, 8x1. (Chess Variant Pages)

18.3 Combination and separation

Combination Chess, also known as **Check** (W. S. Campling, 1898). Described as ‘Being the Game of Chess slightly modified, to admit the introduction of a new principle calculated to enhance both its variety and interest’ (*British Chess Magazine*, July 1898). Normal board and set-up, but the queen has only the move of the king. Pieces, other than the king and pawns, can combine in pairs and threes (couplets and triplets), pooling their powers. This is achieved by moving one piece onto the square occupied by a different friendly piece or pieces. This allows six different couplets and four triplets. Combinations move, capture and are captured as a unit. Combinations can also split, but not to check or capture. Castling is not permitted if the rook is part of a combination. Pieces combining share the same square. A large chessboard (or a small set) is recommended. [Campling is referred to as ‘E. S. Campling’ in an editorial note to Maus’s article in the May 1925 *Chess Amateur* (see below), but on what authority I know not.]

Coronation Chess (Frank Maus, 1924). Beneath this umbrella title Maus recommended a change to the game which he believed was ‘the long-sought answer to the question ‘What will be the next permanent change in chess?’’ (*Chess Amateur*, May 1925). He argued that there are two special moves in chess; castles (associated with the opening) and promotion (associated with the endgame) and proposed that a third move be introduced, essentially linked to the middle game, that of coronation. Coronation consists in moving one of the three pieces R, B, N, to a square occupied by one of the others of the same colour and fusing their powers.

In Coronation Chess proper, only the union of rook and bishop is permitted and that only when the queen has been lost, but there are no restrictions on promotion. In **Empress Chess [Maus]**, a player who has lost his queen may crown either a new one or an Empress (R+N) or Princess (B+N), but he may not have more than one crowned piece on the board at a time. In **Union Chess**, this restriction is removed, and he may have as many crowned pieces as the supply of rooks, bishops, and knights may allow, and in **Confederate Chess** a crowned

piece may be separated back into its component parts. Maus eventually settled on **Empire Chess**, where a player is normally allowed only one combination piece on the board at any one time; additional combination pieces can be obtained by pawn promotion (pawns can promote to empresses and princesses), but a player can in no circumstances have two identical combination pieces on the board together. Empire Chess was dedicated to T. R. Dawson, who described it as ‘the ultimate and perfect method of bringing the Empress and Princess into a great game’ (*Chess Amateur*, June 1925). However, the inventor admitted that the majority of games turned out to be standard chess from start to finish, and in an exhibition game arranged for the *Chess Amateur* between Maroczy (on a U.S.A. chess tour) and E. W. Gruer (a former California State Champion) the first seven moves were agreed beforehand in order to guarantee a queen exchange. The name came to Maus when standing on the bluffs of San Francisco as the British battleship *Hood* came in through the Golden Gate. [A problem in the June article was dedicated to Maus ‘on his birthday, 29/12/24’, hence the assumed date ‘1924’.]

Chessers [Maus] (Frank Maus, 1925). Normal board and set-up except that pawns are draughtsmen whilst conserving their usual chess moves. A piece (including a king) may at any time be played, according to its normal movement, to a square occupied by a friendly pawn, forming a chesser, but not vice versa. Thereafter the chesser may move as the piece or pawn, but only forward. The piece may at any time leave the pawn with a normal move but the pawn cannot separate from the piece. If the unit reaches the end rank, the pawn is lost and is removed from play. A pawn on its own promotes normally. Chessers may take, but may not be taken, e.p. The game offers interesting features. By forming chessers, bishops can change colour, line pieces can transport pawns to the 7th rank before leaving them, and kings can escape back-rank mates. Because promotion prospects are greatly enhanced, games tend to be shorter than in orthochess. (*Chess Amateur*, May 1925)

Augsburg Chess (Erich Bartel, 1965). Major pieces can divide or be formed by combination. $Q=R+B$. The idea has been extended to include the king (**Kombischach**) and unorthodox pieces. Problem theme but playable. (*Variant Chess* 16)

Nuclear Chess (Garry Crum, 1967, modified by Bruce Trone). Two or more men of the same colour can occupy the same square. When this happens, either fusion or fission occurs, at the player's choice, but fusion cannot take place on the player's first two ranks. Fusion combines the powers of the pieces occupying the square (in theory, all 16 men of a side could fuse into one piece); fission causes the fused piece to split up, the separate pieces breaking away by their own moves, the catalyst (the piece that moved to unite with the fused piece) remaining on the square. A fused piece subject to fission may explode in any way desired. A queen is considered as $R+B$. Men that 'explode' (move) as a result of fission may capture or check but no two men may explode in the same direction. Men that explode may cause chain-reaction by fusing or causing further fission. All the elements of a fused piece are lost if it is captured. A pawn on the first rank can move 1, 2 or 3 squares; on the second rank pawn-2 is always possible; no e.p. A fused piece moving to the end rank results in all pawn elements promoting; promotion is to orthodox pieces only. A king may move into check if this results in fission that removes the threat. The nuclear reactions can be bewildering. (*Nost-algia* 173)

Thurrow Chess (David Moeser, 1971). Each player may have one Thurrow in a game. Instead of moving, the player creates a T which 'detaches' itself from one of the player's pieces (not the king or a pawn) and moves to any square the piece could move to. The T acquires the powers, including those of capture but without the right to check, of the parent piece. It may be captured like any other piece. The game is named after Thur Row, publisher of *Chess Ultimates*. (*Neue Chess* 1)

Crescendo Chess (Proprietary game, Strato-Various Products; Walter Dykoski, 1973). Standard board and set-up. Pieces, which are

adapted for the purpose, can stack one on top of another. First two moves of each side are normal. During the next four moves, players can stack no more than two pieces; thereafter up to three pieces can be stacked. This remains the limit for the rest of the game. Stacking is achieved by moving one piece to a square occupied by a friendly piece. Subsequently, the combined piece moves first as the lower or lowest piece, which can then be shed, next as the upper (or middle piece), and so on, this process counting as a single move. Captured men can be removed at once or 'pinned down' for removal later. (Photocopy of proprietor's rule booklet)

Parton Chess (Philip Cohen, 1974). There are basic pieces called Partons, into which regular pieces can decay: Wazir (moves one square orthogonally) Fers (one square diagonally), and others not required in the basic game. Instead of moving, a piece (not K or P) may decay into its component partons: a bishop into four fers, each adjacent diagonally to it and capturing any enemy man in the process, a rook to four wazirs, a queen to four of each, a knight to one of each. Decay cannot take place if any of the adjacent squares is off the board or occupied by a friendly man. A variation allows pieces to decay even if squares are not available to accommodate all partons; another variant permits a parton to move to a square occupied by a piece, thus 'exciting' it with further complications. A theoretical game of doubtful playability, named in honour of V. R. Parton. (*Nost-algia* 171)

Ferry Chess (inventor not recorded, 1979). Game submitted in variant competition (*Games* 5). Pieces are ranked in descending order Q, R, B, N, P, K. A piece may move to a square occupied by a piece of the same colour provided the moving piece is ranked higher. Up to six pieces may be so stacked (numbered tokens can be used to avoid overcrowding). Subsequently the combined piece moves in the manner of the highest-ranking piece (called a ferry move) when the next highest-ranking piece has the option of moving on; thus $(B+N+K) a1-g7$ can be followed by $(N+K) g7-e8$. Only one disembarkation is allowed a turn. A capture is legal only if there is no split. In the example, a capture on g7 would be legal

provided the knight did not then move. Combined pieces are captured as a unit. Some novel play. (Photocopy of letter submitting entry, author's name not included)

Dominator (Proprietary game, Capri, date not recorded). Space battle in which pieces can combine and separate. Capturing according to precedence; combined pieces have greater combat power but lower mobility. (Proprietor's rule sheet)

Troja-Schach (Proprietary game, M+A Spiele; Martin Arnold and Armin Müller, 1994). A piece or pawn, other than a king, may move to a square occupied by a friendly man and create a Trojan piece. A trojan piece moves in the manner of the top man of the stack. At any time a trojan piece may add further men and/or move and leave the bottom piece(s) on the square vacated. Troja sets, which enable pieces to stack, are available from the proprietors. (Proprietor's literature)

Superchess [Montagna] (John Montagna, 1995). A man other than a king may move to a square occupied by a rook of either colour, creating a superpiece which thereafter may move as either element. The occupying man may also move away if desired, and an occupier can be captured thus changing an occupation from 'friendly' to 'hostile' or vice versa. A pawn must leave a superpiece to promote. (*Eteroscacco* 76) [This is a summary of a three-page article in *Eteroscacco*, and even that is described as consisting of 'excerpts from' a book *Superchess Basics*.]

Spirits of the Knight, also known as **S-Spirits** (Peter Fayers, 1997). Four special rules. (1) When a knight is captured, its spirit

lives on, joining the captor and endowing it with the power to move as a knight in addition to its normal movement. (2) Spirits are flighty, and will immediately leap to another unit if its host moves to a square a knight's move away from that unit. (3) Where there are two or more units a knight-leap away from where the spirit ends its move, it doesn't transfer but remains with its current host. (4) A spirit will also leap to any unit that ends its move a knight's move away. Spirits are totally impartial, and under rules 2 and 4 they transfer their allegiance to friendly and enemy unit alike without fear or favour. Problem theme but playable. (*Variant Chess* 23)

Thunder Chess (Fergus Duniho, 2001). Usual board and men plus plenty of spares, and the men should be small enough to allow two of them to occupy the same square. Usual array, but replace the queens by R+B. A simple piece (K, N, B, R) may combine with a non-royal simple piece of either side by moving on to its square. The new piece belongs to the player who made the move. Like pieces may not combine. A non-royal piece may not move to combine with a K. Compound pieces may not combine further. When a simple non-royal piece (N, B, R) is attacked, it may promote by moving to an empty square. N promotes to R+B, B to B+N, R to R+N. When a non-royal compound piece captures a piece, it demotes to the piece whose move it has just used. When a royal compound piece captures a piece, it demotes to a K. The player may split a compound piece into its components by moving one away and leaving the other behind. No castling, promotion only to N, B, or R. Object is to checkmate the opponent's royal piece, whatever its current moving power. (*Chess Variant Pages*) [Text editorial]

18.4 Movement dependent on square occupied

Free Chess [Capellen], also known as **Baroque Chess** (G. Capellen, 1915). Normal board and men, but the file on which each piece stands is determined by lot (if White has both bishops on black squares, the black bishops will be on white squares). Pieces not on their usual squares add the power of the piece whose normal square they stand on; thus Na1/a8 = N+R. A piece moving on the back

rank changes its role; N/Ra1 moving to c1 becomes N/B. Demanding on the memory. Capellen published the game in a booklet (dedicated to Hindenburg) *Zwei Neue Kriegsspiele* (the other was a card game) declaring that Free Chess 'should outlast chess'.

Transition Chess (A. N. Percival, 1947). The board is divided into four rings, each ring

designated by a piece. The innermost ring (d4-d5-e5-e4-d4) is the Q's ring; c3-c6-f6-f3-c3 the R's; b2-b7-g7-g2-b2 the B's; a1-a8-h8-h1-a1 the N's. Array (a1-h1/h8-a8) PKPPPPPP (8 men only, kings on b1/g8). On the first move a man (P or K) may advance one or two squares; thereafter a man moves according to the ring it is on. (*Fairy Chess Review*, August 1949)

Smess, also known as **The Ninny's Game** and **Take The Brain** (Proprietary game, Parker Bros; Perry Grant, 1970). Board 7x8, each square of which is marked with arrows which control the direction of movement of pieces stationed on it. 12 men a side comprising 1 x Brain, 4 x Numskulls, 7 x Ninnys. Brains and ninnys move one square, numskulls as queens in any direction indicated. Ninnys promote to numskulls on the array squares of the opponent's numskulls. Capture by displacement. Aim is to take opponent's brain. **All The King's Men** (Proprietary game, Parker Bros; Reuben Klamer, 1979) is a successor. The setting is medieval (the pieces are now Kings, Knights and Archers), the board has been rationalized and altered in detail, and the object is checkmate. No piece may jump over any other piece. The most radical change however is that ninnys no longer promote, which transforms the end-game. Considered a less pleasing production than the original. (Photocopies of rules and boards)

Migliore's Game (Proprietary game, Fred Migliore, 1971). U.S. patent 3,761,093 of 1971, filed by Migliore, has indicia on the squares, each indicium representing a conventional chessman. All pieces are of the same design, their moves governed by the squares they stand on.

Lumberjack Chess (Bruce Zimov, 1973). All pieces (including kings but not pawns) behave according to the files they stand on. They move and capture in the manner of the piece that occupied the file in the initial position; thus a piece on the e-file moves as a king but otherwise has no royal powers. Kings retain royal powers wherever they move. The combination of Lumberjack Chess and Giveaway (Losing) Chess produced **Fishaway Chess** (Mike Rice as 'Ekim Ecir', 1975), a

felicitous marriage. (*Neue Chess 7*, manuscript note presumably deriving from personal communication)

Frontier Chess (Tony Paletta, 1980). Board (8x8) is notionally divided between 4th and 5th ranks. Kings and pawns have usual powers, other pieces can change. When starting a move in opponent's half of board, a rook moves as a bishop and a bishop as a rook. R, B, N move normally if starting move in own half of board. The queen has limited powers, moving up to 2 squares in any direction in its own half and as a knight in opponent's half. The knight moves as a (limited) queen if in opponent's half. (*Chess Spectrum Newsletter*)

Cataclysmo (Bruce Trone, 1991). Mobility is determined by the square a man occupies. Men on even-numbered ranks move as pawns, on odd-numbered ranks a piece moves as the array piece on the file on which it stands. (Personal communication)

Arlequin (Proprietary game, Mango Games Storming; Gilles Monnet, 1985). Board 8x8; squares in three colours: yellow, blue, red. Each side has 16 square pieces, of which 15 are transparent (3 yellow, 12 blue) and 1 is opaque. On each transparent piece there is a symbol combining two primary colours and one secondary (yellow pieces), one primary and two secondary (blue). The combination of piece and square gives a new colour; for example, a yellow piece on a red square yields orange. The two remaining piece colours (here green and yellow) reveal the contour of a rook. The usual chess pieces are displayed and the game is orthochess (opaque pieces are kings) except that each time a man moves it is most likely to assume a new rank. (*Jeux et Stratégie*, December 1985, also *Die Pöppel-Revue*, May 1988)

Bauern-Schach (Proprietary game, Scholten Partner; Willi Scholten, 1986). Board 8x8; squares in four colours (16 of each) randomly arranged. Colours correspond to movement factors 1-4. Each side has a king (e1/d8) and seven pawns on the first rank. A king or pawn moves orthogonally the number of squares indicated by its station; but a right-angled turn

may be made if the move is of two squares or more. Men may not move over occupied squares and capture is by displacement. Object is to mate the opponent's king. Check is countered normally. [Information presumably taken from a specimen in David's game collection; nothing in his 'Encyclopedia' files]

Square Chess (Veli Toukomies, 1986). Certain squares carry movement indicators: N/S, E/W, NE/SW, NW/SE, all four orthogonal directions, all four diagonal directions, and all eight. Pieces or pawns alighting on these squares subsequently move or capture any number of squares in a straight line in one of the directions shown. A pawn thus moving to the end rank is promoted. A man alighting on a movement square may in the process deliver check. All men not on movement squares behave normally.

The game can be played in several ways. (1) The indicators are placed on the board initially as determined by lot or by agreement between the players. They are not subsequently moved. (2) The indicators are entered during play. A player on turn either moves a man or enters an unallocated indicator on a vacant square. (3) As game (1) or (2) except that instead of a normal move a player may transfer an indicator from one vacant square to another. (Unprovenanced note presumably deriving from personal communication)

Tula Chess (inventor unknown; from region of Tula, Russia, 1990 or earlier). Pieces move

18.5 Relay games

Relay Chess (Mannis Charosh, 1957). Developed by its inventor as a problem theme, later as a game ('Kafkaesque' is Paul Yearout's description), and now largely played in the modified form of Knight Relay Chess below. Rules: (1) Any piece other than the king may, in addition to its own powers, move and capture in the manner of any friendly piece guarding it, excepting the king; (2) A pawn may not move to the first rank nor promote except by a normal pawn move; (3) A piece, advancing one square or capturing as a pawn, does not promote on the 8th rank. (*Fairy Chess Review*, April 1957)

according to the files on which they stand. Q moves as Q on files d/e, as B on files c/f, as N on files b/g, as R on files a/h. R, B, N move normally on own files and files d/e, otherwise as file piece. Pawns move as usual but promote to Q only on files d/e, otherwise to file piece. Kings are unaffected. (Personal communication)

Chess Mutation (Proprietary game, Moebius Evolution; J.-P. Mercier, 1993). Board 8x8, coloured squares; each side has 1 x K, 15 x P. Array: Ks e1/e8 ; Ps ranks 1/2, 7/8. Pawns move according to the colour of the square they stand on. White: as P; Yellow: as N; Blue: as B; Red: as R; Black: as Q. (Photocopy of leaflet 'Chessmutation', also cuttings from *Libération*, 6 May and 13 July 1994)

Ren'e-Zans' (Proprietary game, Bi-Triad; Linda Blömer, Howard Brittain, Stephen Schweim, 1993). Board 9x9; each side has 1 x K, Q, Vicar (moves as N or as 3-1 leaper), 2 x R, N, 3 x B, 8 x P; array (a1-i1/a9-i9 and inwards) RNBQKVBNR, PPPPBPPP. Occupation of the central square e5 temporarily empowers a man to move as any piece (so with bare kings, Ke5 mates Ke7). A tactical point is that the power of the bishops is enhanced at the expense of the knights, with the twist that the bishop on the e-file may be exchanged for a knight with advantage since it cannot reach e5 whereas the knight can. The name is derived from Webster's phonetic spelling of Renaissance.

Knight Relay Chess (Mannis Charosh, 1972). Developed from Relay Chess above, Knight Relay is popular with serious variant players. The basic rule is that any piece a knight's move away from a friendly knight has the additional temporary power of a knight. The game has been subject to much experimentation. Philip Cohen's codified rules (*Nost-algia* 268/9), now generally accepted, are:

(1) Knights are blocks. They can move but cannot capture, be captured or check. This applies also to promoted knights.

(2) Any man except a king, if a knight's

move away from a friendly knight, is 'knighted' and has the power of a knight in addition to its own power (knights defending each other are unaffected).

(3) A knighted man cannot relay its powers and loses them when no longer 'guarded' by a friendly knight.

(4) A knighted pawn cannot move as a knight to the 1st or 8th ranks.

(5) A knighted pawn that returns to the 2nd rank regains the right to the initial two-step move.

(6) There is no e.p. capture.

At least five variations of the game have been tried, of which two are deserving of record: (a) knights can capture, check or be captured like other pieces (the original version); (b) knights relay their powers to men of either colour.

The concepts behind Knight Relay, and the extent to which they change the ordinary game, are easily grasped by a brief look at familiar openings. (R) indicates a relay move. 1 e4 e5 2 Nf3 (the knight is not attacking the pawn since it may not capture) Nc6 (nor is this knight defending it; in fact, by removing knighted powers from the d-pawn, Black has abandoned its defence). Now the usual 3 Bb5 or Bc4 are both unplayable as the bishop would be en prise respectively to the black a-pawn and e-pawn. Another example: 1 e4 Nf6 and now 2 e5 is not playable on account of dxe5(R). After 1 e4 d5 2 exd5 Qxd5, 3 c3 attacks the queen but 3 Nc3 does not. Even the legendary Fool's mate is transformed: 1 f3 e5 2 g4 Qh4+?? 3 fxh4(R). Pawns gain most from being knighted whilst bishops convert easily from one colour-complex to the other. Knights are useful blockaders, particularly in the endgame. Here is an attractive cameo from play: White Rd7, Nb6/c5 (K unimportant), Black Kb8, Ba5, Nc7, Pb7, White plays 1 Rd8+ Ka7 2 Na6!! and 3 Rc8(R) is unstoppable. It is good strategy to occupy the centre with knighted pawns, often leaving the knights at home in the early stages of a game.

The leaders in the first international correspondence championship of Knight Relay were: John McCallion (10/10), Paul Yearout (8.5/10), Phil Cohen (8/10), Alessandro Castelli (7.5/10). National championships have also been held.

The rules of **Bishop Relay Chess** (Mannis Charosh, 1975) are essentially identical except

that bishops replace knights. Appropriately, pieces are ordained rather than knighted. There is one restriction: in the initial position the b- and g-pawns on both sides are not ordained since otherwise each side gains a second queen after two moves. However, b-pawns and g-pawns that move and subsequently return to their starting positions may be ordained. (*Nost-algia* 183)

Strange Relay Chess (Ralph Betza, 1970s). Men have no intrinsic power to move or capture but have relay powers. The movement power of a man is derived from any friendly man guarding it, the capturing power from any enemy man attacking it. Another version only allows a man to capture the piece that is relaying its power. Suppose White Pb3, Black Ka5/Nd4; in the first version, the king is in check, in the second version it is not; in both versions the knight is attacked by the pawn. In the initial position, the d- and e-pawns have maximum movement power (Q+N) and the rooks none. (*Nost-algia* 263, *Eteroscacco* 50)

Rampage Chess (Bruce R. Trone, 1976). Men do not move or capture normally; instead, a man may move or capture directly to any square controlled by its own side. 'Controlled' is defined as being attacked by more of its own men than those of the opponent; if the numbers are equal, the special power cannot be used. Bishops can change square colour. A king in check can only move as in orthochess. (*Nost-algia* 194 and later)

An-nan Chess (M. Hanazawa, 1978). A man moves and captures in the manner of a friendly man stationed on the square immediately behind it, otherwise play is orthochess. The name and the game are derived from An-nan Shogi which has a similar rule. An-nan is a word without meaning. (*Chessics* 4)

Wizard Chess (Tony Paletta, 1980). Queens may move a maximum of two squares in any direction. Kings are wizards which affect the movement of pieces of either colour adjacent to them. A rook next to a wizard moves like a bishop, a bishop like a rook, a queen like a knight and a knight like a (limited) queen. Pawns are not influenced. A piece adjacent to

both wizards behaves normally. (*Chess Spectrum Newsletter*)

Maya Chess (R. Ravi Sekhar and others, 1987). The name is from the Sanskrit: 'illusion'. Pieces (but not kings and pawns) adopt the power of a supporting man (including a king or a pawn) provided that the supporter has made at least one move. If a man has two or more supporting pieces he assumes the powers of all of them, in both cases surrendering his own powers; thus a rook defended by a bishop can only move as a bishop. An unsupported piece moves and captures normally. Castling is only permitted under normal conditions and if the rook is undefended or defended only by the Q. For example a fianchettoed B turns the R into a B, so castling with this R is illegal. A piece on the 8th rank supported by a pawn on the 7th (and hence with the power of a pawn) must promote at once although it can of course promote to itself! K+B or K+N force a win against bare king; K+2B, K+B+N, and K+2N win against K+B and K+N, and also against K+R. K+Q however cannot win against K+B or K+N.

A Maya Chess Federation of India was founded by R. Ravi Sekhar, K. Muragan (both members of the Indian orthochess team at the Dubai Olympiad), and others. The Federation has included a number of masters as well as internationally known problemists. Championships are held and a regular bulletin is published. (*Maya Chess Informant*, January 1993, also personal communication)

Synchronism (Bruce Trone, 1991). A piece, but not a pawn, can move or capture in the same manner as any man protecting it in addition to its normal powers. (Unprovenanced note presumably deriving from personal communication)

Necromancer (Proprietary game, Kevin Cullen, early 1990s). Board 11x7, a1 white, with squares in three colours: grey (ordinary black squares b1 etc, 38 squares), white (ordinary white squares ac...l3., 24 squares), and black (the remaining 15 squares bdfhj246). The grey and black squares together form the 'Demon Grid' which is divided into five zones: centre zone (efg files,

13 grey and black squares), two inner zones (cd and hi files, 10 grey and black squares each), and two outer zones (ab and jk files, again 10 squares each). Each side has 11 pieces, 1 x Necromancer (moves as K); 2 x Wizard (as B), Crusader (as R); 6 x Thrall (as N but forward only; promotes on last rank to W on a grey square and to C on a white). In addition, there are five neutral Demons, which start on the black squares bdfhj4.

A demon cannot be captured, but can capture a hostile piece when invoked by a magic piece (N or W). The invoking magic piece must move into or within the zone of the demon, and the total number of magic pieces within the zone must satisfy certain conditions: one only (the invoker itself) in an outer zone, two (not more) in an inner zone, and all three in the centre zone. The invoked demon is moved within its zone to any vacant square or to capture an enemy piece. A player may also elect to pass (i.e. not invoke the demon). The object is to checkmate the Necromancer. (*Variant Chess* 21)

Dynamic Chess (inventor unknown; perfected by Hugh Denoncourt, 1995). Usual board and set-up. The power of a man is derived from the nearest man of either colour on the same rank towards the a-file. The board is considered as a cylinder (a-file adjacent to h-file). Thus in the starting position the only piece to keep its original rank is the QR since it stands adjacent to the KR. If a man stands on an empty rank, it moves as normal. No P-2 or castling. A main tactic is to force out opposing K next to a P where it is an easy target. Another is the move of Q or B to the 2nd rank when Ps can be shot off like missiles. P promotion is commonly to N. (Personal communication)

Induction Chess [Kommerell] (Hartmut Kommerell, 2000). A man can move, but not capture, in the manner of a friendly or hostile man on an adjacent square. (Manuscript notes apparently resulting from personal communication)

Interdependent Chess (Fergus Duniho, 2001). Board 6x7; men are King, Universalist, Knight, Spider, Conservative, Steward, Guardian; array (a1-f1/a7-f7 and inwards)

SpNUKNSp, CGStStGC. Men move normally (well, more or less) but capture by moving directly away from another piece ‘which is toroidally adjacent’ (i.e. is orthogonally or diagonally adjacent, or would so be if the a and f files were contiguous and likewise ranks 1 and 7). K and N move normally. Sp leaps two squares orthogonally or diagonally. C moves like a rook, but horizontally only. All these pieces have a ‘capturing power’ which is the same as their ordinary move. St moves one square orthogonally and its capturing power is one square diagonally, and G is the other way round. U moves away from a toroidally adjacent piece using the latter’s moving power (an isolated U cannot move). One U moves away from another as a bishop on a torus (all other moves are limited by the board edge). Pieces capture by withdrawal, using the capturing power of the victim. Captured pieces change sides and are held in hand, and can be dropped in any empty space on a later turn in place of a normal move. (Chess Variant Pages) [Text editorial]

Life, the Universe and Everything (João Neto, 2002). Board 6x7; kings (as orthochess) are Arthur Dent (White) and Zaphod Beeblebrox (Black); other men are

Wowbagger (moves one step orthogonally), Ford Prefect (one step diagonally), Marvin (as P but no 2-step option), Life, Universe, and Everything (see below); array (a1-f1/a7-f7 and inwards) WEUKLF, 6xM. Life on its own cannot move or capture, but it may transmit movement and capturing powers from any adjacent piece (diagonally or orthogonally) of either colour to itself or to any adjacent friendly piece. The Universe doesn’t capture, but moves like a K or by changing places with a non-royal piece of either colour (swaps cannot repeat the last board position). If a swap moves a Marvin to its last rank, the M promotes to a piece chosen by the player making the swap. Everything can move with the ‘iterated power’ of any adjacent piece of either colour (an iterated F is an orthochess B, iterated W is R, iterated K is Q, iterated U is non-capturing Q, iterated M can move forward like a non-capturing R, or capture an unbroken chain of enemy men in a diagonally forward direction). L and E have no effect on each other. M may promote to any non-royal piece. White starts with one move, after which the players make two moves per turn but with different men. To win, capture the opponent’s K or leave him with no legal move. (Chess Variant Pages) [Text editorial]

18.6 Other mutations

Von Ranson’s Game (J. von Ranson, 1820). 68-square board consisting of an 8x8 board a2-h9 plus additional squares at d1, e1, d10, e10; kings on e1/d10, pawns on ranks 2-9 (no other men initially present). Each player has in addition a reserve piece that can be entered on an empty square during the game and moved four times only as a Q or N, but can only check or mate moving as a knight. Kings as usual; pawns move like kings, and promote on ranks 2/9 to the orthochess file piece. Promotion on the king’s file is to rook. If a king moves to the square initially occupied by the enemy king, a queen materialises on the square beside him provided the square is empty. According to Faidutti, ‘without a doubt the only German game of this period that does not resort to military terminology’. (Photocopy of title page and pages 51-62 of *Anweisung zum Schachspiel* by ‘J. v. R.’, pages 54-5 currently missing)

Genius Chess (T.V.R., 1827). 68-square board consisting of an 8x8 board a2-h9 plus additional squares at d1, e1, d10, e10; kings on e1/e10 (a difference from von Ranson’s game), pawns again on ranks 2-9. Each player has in addition a Genius in reserve. Kings as usual; pawns move like kings, and promote on ranks 2/9 to the orthochess file piece. Promotion on the two central files is to rook, but a player cannot have more than two rooks on the board at the same time. If a king moves to the square initially occupied by the enemy king, a queen materialises on the square beside him. The genius, which can represent any orthochess piece, may be used only four times during a game. The player puts the genius on a vacant square not attacked by the enemy, at the same time announcing its role. This counts as a move. There is one restriction: the genius cannot be entered as a knight to give check if the opponent’s king is guarded by one of its

own pieces. Thereafter the genius moves and captures as the piece nominated. However, it can only make a total of four moves in a game. After moving the genius the player can opt to remove it from the board. It can later be re-entered as the same or another piece always subject to the four-move restriction. If a genius is captured it is still permitted to re-enter play if it has not exhausted its quota of moves. A player cannot have a queen and a genius on the board at the same time. A player who is stalemated loses. (Verney)

[These clearly refer to the same game, particularly as the 'J' in Gothic script could easily have been misread as 'T'. However, von Ranson admits that his game is only an idea, and Verney's differences of detail may represent the fruit of experience or deeper contemplation. The identification of 'v. R.' with 'von Ranson' must rest on evidence which I have not seen.]

Chakra (Christiaan Freeling, 1980). Board 8x8; men are Emperor (K), Empress (Q), Samurai (R+K), Monk (B+K), Ape (N), Sword (P), Courtesan, Chakra. The object is to checkmate the emperor. Swords have usual pawn powers but only promote to pieces previously captured. The courtesan moves as a king but whenever she faces her own emperor along an open file, rank or diagonal, she commands the length of that line in both directions: up to the emperor in one direction and to the end of the line or up to and including the first occupied square in the other. Suppose White emperor e1, courtesan e3, sword e7; the courtesan defends the sword. (Co-operation between emperor and courtesan is not without historical precedent.)

Chakras are flat pieces with a circle on one side and a square on the other. In the starting position they are placed circle-side up. Array (a1-h1/a8-h8 and inwards) ACoMQKSaCoA, ChSSSSSSCh.

Chakras may be occupied by men of either colour and they may also move, but only if unoccupied and to a vacant square; a chakra cannot move on to another chakra. Circle-side up, a chakra moves as a king, square-side up as a knight. A vacant chakra may be reversed after moving in order to change its power, or it may be reversed without moving, but this counts as a move.

The two chakras together form a Transmitter. Whenever a piece can move to a vacant chakra of its own colour, it may move simultaneously to the other chakra of the same colour provided that this is unoccupied or occupied by a hostile man, which it captures. Suppose White chakras (either side up) b4/f8, swords b2/b3; White can play b3-b4 (transfer to f8 and promotes), and the sword at b2 defends the promoted piece.

Capture is by displacement but chakras do not capture and only an emperor can capture a chakra, which must be vacant. In doing so, the second chakra is automatically captured (but not the occupant, if any) i.e. the transmitter is lost. However, if an emperor occupies one of his own chakras, the opposing emperor may not occupy the other. An emperor, like any other piece, may capture on a chakra, but in so doing he does not capture the transmitter although when he vacates the chakra he will threaten to do so.

A friendly chakra, if vacant, is no impediment to mobility, but a hostile chakra, whether vacant or occupied, acts as a block and may not be crossed. A chakra of either colour does not affect the eye-contact of emperor and courtesan, but a hostile chakra interposed between them cannot be crossed by the courtesan.

A piece occupying one chakra (for example, after making a capture on it) cannot move or capture on the other unless its normal movement allows it to do so, for example if an ape occupied one of a pair of chakras separated by a knight's move.

The chakra is a difficult piece to focus but its powers make for some remarkable play. In the ending, for example, two apes can often mate an emperor if they can use a transmitter.

A feature article on the game (*The Gamer* 3) attracted widespread interest and sold many sets. Dakini Chakra (see below) is a variant.

Dominance (Proprietary game, Jansen, 1984). Board 9x9; 18 cubic men a side of which one is the king (e1/e9) and eight have framed card suit symbols on their faces (first rank); nine with unframed symbols (2nd rank). King moves as orthochess, moves and capturing ability of other pieces determined by rotation of cubes and hence symbols displayed. (Photocopy of rules leaflet)

Dakini Chakra (Gianluca Vecchi, 1996) is a Chakra variant with some renaming of pieces (ignored here) and the following differences: A leaps as N or two squares in any direction; Courtesans replaced by Gauris as described below; Black K and Q reversed in the array, and chakras start with square side up.

If a gauri is on the same rank, file, or diagonal as a friendly chakra, with no intervening unit of either colour, it may move

any number of squares along that line in either direction; in doing this, it may pass over the chakra which is giving the power. If the other chakra is vacant, it may be transported to it and continue its progress, in the same sense (orthogonal or diagonal) but not necessarily in the same direction. It also has the same options as other units in combination with the chakras. (Originator's rule sheet) [Text editorial]