

Chapter 30

Dice games

[Dice have been used from very early days to add a chance element to chess. They can of course merely be used to choose an initial array or an opening sequence of moves, but that is a very peripheral use. In the present chapter, they will be called on much more often.]

30.1 Using dice to determine the man to be moved

Medieval Dice Chess. One of the earliest forms of chess, in which dice were used to determine the man to be moved. The Alfonso MS (1283) gives 6=king, 5=firzan, 4=rook, 3=knight, 2=fil, 1=pawn, with the requirement that if a piece cannot be legally moved or none of that type is on the board, the die is thrown again. The game is stated to have been as popular in the 11th century as chess. Several of the games described in section 26.2 could also be played with dice: Acedrex de las Diez Casas with a seven-sided die, Grande Acedrex with an eight-sided, Oblong Chess with a cubic. In the last case, the values were 6=king, 5=firzan, 4=fil, 3=knight, 2=rook, 1=pawn, and a player unable to escape check with the number rolled apparently lost. [Text revised. David's files cite various sources in addition to those listed in chapter 26 (Addison, *100 Other Games to Play on a Chessboard*, Gollon, *Chess Variations*, Brace, *An Illustrated Dictionary of Chess*). Those who can read medieval Spanish will find a transcription of the relevant part of the Alfonso MS on pages 488-9 of Murray.]

Modern Single-Die Chess. With modern men, the usual relationships are 6=K, 5=Q, 4=R, 3=B, 2=N, 1=P, but many permutations have been employed. AISE (1978) used 1=K, 2=Q, 3=B, 4=N, 5=R, 6=P (*Eteroscacco* 16 and later). The first correspondence tournament was held in 1979. Also played in conjunction with Progressive Chess. In **Team Dice Chess** an organiser throws dice for White and Black alternately. Scale as above but 6 = any move; castling is R move. If legal move not possible, move king; if king not possible, move pawn; if still not possible, move a piece specified by the opponent. (*Chess*, May 1952)

Gaudeamus (Manfred Mittelback, early 20th century?). Board chequered 8x8 with array squares a1-h1/a8-h8 numbered 17-11-15-13-18-14-12-16 and a2-h2/a7-h7 numbered 3-5-7-9-10-8-6-4. These numbers correspond to all possible totals on the faces of three cubic dice. The pieces are discs, each displaying a piece symbol and a number corresponding to that of its array square. Usual men and array. On each turn, three dice are cast and the player is obliged to move the man indicated. Castling permitted on a throw of 16 (short), 17 (long), 18 (either). If a throw cannot be utilized, the dice are rolled again. There is no check and the game is won by capturing the king. The game is flawed by the laws of probability. Whereas the e-pawn can expect one move in eight, swiftly exhausting its mobility, the a-pawn and king will rarely stir. [Author's rules pamphlet, set out in such a way as to suggest that it may have been intended as a patent application]

La Régence Dice Chess (originator unknown, 1934). The game practised by adepts at the Régence in Paris used two dice with the player choosing between them (if neither playable, the move was lost). The game had a curious feature: the die values for B and N were reversed (2=B, 3=N), whilst only double-6 (a 1-in-36 chance) permitted castling. Inexplicably, a K was mated if the only escape for it was to capture a non-checking man. (*L'Action Française*, 16 July 1934)

Las Vegas Chess (Art Gamlin, early 1960s). A form of Dice Chess dignified by Kenneth Harkness in the U.S. Official Chess Handbook, the variant has reportedly provided commercial sponsorship for a number of chess

events in Nevada. Two cubic dice are used, the twelve faces showing 3 x P, 2 x R, 2 x B, 2 x N, 1 x Q, 1 x K, 1 x free choice. Both dice are thrown and the player must move one of the men indicated. When a check is given, it is parried by any legal move at the defender's choice after which dice rolls are resumed. 'A silly game in which skill plays next to no part at all' in the opinion of Bobby Fischer (*Boys' Life*, August 1969). **Vegas Fun Chess** (George Koltanowski) differs only in minor detail. (*Chess*, September 1964, also Chess Variant Pages)

Buczko's Dice Chess (Anthony Buczko, 1970s). Board 8x12; standard array with a marker placed at the side of the board between 6th and 7th ranks. Three cubic dice are used; two are normal and the third has an extra 1 instead of a 5 (faces 1, 1, 2, 3, 4, 6). A player on turn casts all three dice and may elect which type of piece to move. Pawns can move up to three squares initially. A double or triplet requires that that man is moved two (three) times. Thus a roll of 1, 3, 3 permits the player to move either a pawn or one bishop twice. If a player rolls a double (triplet) but can only move the designated piece once (twice) the whole move is lost. If a player cannot move, the marker is shifted one rank towards him. There is no check: a player wins if he captures the king or if the marker crosses the opponent's base line. Another version permits check (win by checkmate) and allows the

player in check to make any single move or capture to escape the check without throwing the dice. The queen is relatively weak whereas the pawns are active. It is often better to deprive the opponent of one type of piece (so that the dice number cannot be used) rather than to go for material advantage. Buczko also suggests a 10x10 game with two extra knights and pawns on each side played to the same rules. (Originator's rules pamphlet)

Sui-Chess (J. R. Weddle, 1973). Chess by yourself. At each turn, roll a die: 1 = files 1, 2 or 3 (from left of each player), 2 = files 2, 3 or 4, and so on to 6 = files 6, 7 or 8. You must move a man on one of the three files indicated. If there are none, roll again; if in check, do not roll but get out of check in normal way. Castling permitted if King's file indicated. (Letter in *Chess*, June 1973)

Novak's Dice Chess (Paul Novak, 1977). Five moves are played by each side under normal rules. From then on, a die roll determines the type of man to be moved (castling is a K move). If the player has no man of that type, he rolls again, but the game hinges on a unique rule: if he has one or more men of the stipulated type and cannot make a legal move with any of them, he loses. A fun game with quite a lot of skill apart from calculating the odds. Freedom for the pieces is everything. [Index sheet for the game missing from David's files.]

30.2 Other uses of thrown dice

Tibetan Dice Chess. An unsubstantiated source mentions an ancient 11x11 game with 14 men a side in which a die influences but does not dominate play. The name, originating it is said in Italy, is derived from the putative fact that from about the 13th century sets were carved by Indian and Nepalese ivory workers. (*Games and Puzzles* 27)

Brunner's Game, also known as **Zeiger-Schach** and **Turntable Chess** (Erich Brunner, 1924). The Swiss problemist and games inventor, in common with many of his contemporaries, deplored the fact that advances in chess theory had placed a premium on memory at the expense of original

thought. This variant, a creative leap from his Free Chess, invalidates both opening and endgame knowledge. Brunner's radical solution requires that the powers of the pieces change in every game, and can even change after each move within a game. The pawns are unaffected however, and behave exactly as in orthochess.

Each player has eight small boxes, open at the top, numbered 1-8. There are 16 cubes (dice), that fit snugly in the boxes, of which 8 are white and 8 black, representing the pieces. On one of the faces of each die the piece is shown with lines indicating its normal movement; on the other five faces, each different, its movement is modified. The

pawns are set up normally and the boxes are arranged in sequence 1-8 from left to right on the rank nearest each player. Each player takes all the dice of his own colour. One player casts his dice which determines the power of the pieces for the game; the second player rotates his set of dice to correspond with those cast. White then places one of his dice (pieces) in any box on his first rank (i.e., randomized array), orientating it as he pleases to face forwards, backwards, left or right in order to make the best use of the piece's directional powers. Black must then take his corresponding piece and drop it in his box on the same file, but again selecting the orientation. Next, Black places a piece in an empty box and White copies, and so on until the array is complete. Thus despite the chance factor of the dice roll, both players have equal forces in an identical array, orientation of the pieces apart. Play is as orthochess with two important rule changes: pieces can only move as indicated on their exposed faces; and after moving a piece the player may turn it to face in any direction. Brunner did not mention pawn promotion but a common-sense rule would allow promotion to any piece in the array (with appropriate movement factor). The purpose of the boxes is so that players can repeat a game with identical forces if they so wish. If this facility is not required, the boxes can be dispensed with. Boyer pointed out (*Nouveaux Jeux d'Echecs Non-orthodoxes*) that if the players chose not to oblige one player to copy the other then not only would the number of possible opening arrays, already astronomical, be multiplied, but an extra skill would be introduced into the game. Brunner suggested that instead of dice, tiles could be used showing directions of movement, a concept realised a half-century later in the commercial game Ploy. (Hans Klüver, *Das Brunner-Buch*)

Toss For Next To Play Chess (origins unknown). A coin or die is used to determine who moves next. This is essentially the same as A.C.'s card game (see next chapter), except that the odds do not change as the cards are used up. (*Les Jeux d'Echecs Non-orthodoxes*)

Crazy Chess (said to be of Dutch origin, date unknown). Three standard dice are used, and

their spots totalled. The players then obey the appropriate one of a list of actions previously drawn up. If no legal move is possible, the player has a free choice. (Notes apparently deriving from personal communication) [A note on David's index sheet for the game reads 'per Steve Boniface', and the list of actions in his Encyclopedia files gives 3/18 change sides, 4 forward move, 5/9 pawn move, 6/8 move to the right, 7 rook move, 10 king move, 11 knight move, 12 bishop move, 13 move to the left, 14 queen move, 15 backwards move, 16/17 two moves. In an accompanying note, he is critical of some of these and says that they could be varied with advantage, but there is nothing to prevent intending players from experimenting.]

Chuck-A-Chess (Proprietary game, Chexi Games Ltd; Peter Costa, 1987). Each player has four dice, each die depicting one of each type of chessman on its faces. In addition, there is a doubling die for gambling. Four different games are given. In all games, two or more dice are rolled, the player choosing between them. Certain combinations earn bonuses such as an extra move. (*Variant Chess* 12)

Chess=Izer (Proprietary game, Fred Pennington Jr, 1989). Two identical decahedral dice depicting chessmen (4xP, K, Q, R, B, N, Free choice). Rules for eight chess games variously modified by dice rolls. (Carbon copy of article by L. U. Dikus annotated 'Pöppel-Revue next issue', 1990)

Turncoat Chess (J. Leistiko and F. Truelove, 1990). Usual array. After each move two eight-sided dice are thrown, one giving a file, the other a rank. If the indicated square is occupied, the man on it changes sides provided there is a previously-captured man of the right colour to replace it. If not, nothing happens. (*Variant Chess* 24)

Dicey Dropsy (Ian Richardson, 1994). Normal board and men, and in addition each player has five ordinary dice and one special die (the originator uses a backgammon doubler). The faces of the ordinary dice denote men, those of the special die denote regions of the board (first two ranks, first four ranks, anywhere,

first two files on left, first four files on left, anywhere).

The game has two phases. In the 'drop' phase, White throws one die plus the special and places a man accordingly, Black does the same, White throws two dice plus the special and places two men, Black does the same, White throws three dice plus the special, and so on. Bishops must not be placed on the same colour, pawns not on the first or last rank. Multiple checks are allowed, and the king must be placed at drop 4 if it has not already come up. If a player has already placed all men of the kind specified, that part of the drop appears to be lost (this is not explicitly stated in the source but is implied by the sample game given).

In the 'move' phase, White starts with one move, and he must get out of check if he can. If he cannot, and Black can, he loses; if neither can, the game is drawn. Black plays one move similarly, then White plays two moves, Black two, White three, Black three, and so on. During this phase, giving check before the end of a player's turn terminates the turn. Games tend to be short, and the originator claims that there is a good balance of luck and skill. (*Variant Chess* 15) [Text editorial]

Skock (Swedish, inventor not known). Board 8x8 with two sets of chessmen. Players set up their pieces (usual arrangement) on the first two ranks and their pawns on the next two so that the board starts full. Two cubic dice are used. On one die the spots 1-6 correspond to P-N-B-R-Q-K respectively, on the other they

equate to the number of consecutive moves (player chooses which is which). Capture the first king normally, mate the second to win. Kings may not pass over threatened squares. (*Variant Chess* 21) [Text completed editorially]

Conflict Chess (Derick Green, 1997). Usual array. Four marked squares (c5, d5, e4, f4) are designated terrain squares. Pawns may move one square diagonally forward in addition to their normal powers; K moves as Q and there is no castling. K and Q are Leaders and both (plus any pawn promoted to Leader) must be eliminated to win (so no checking). Other pieces are Officers. A pawn promotes to Officer on the end rank and an Officer to Leader. Pieces may move onto but not over terrain squares. Each man has a combat strength, used in attack or defence. Men may combine strengths. Both players roll a cubic die and add their respective combat strengths to determine the victor. (*Variant Chess* 25)

Piece-Eater Chess (Peter Aronson, date not recorded) Standard set-up with Piece-eater on d4. Each player has 1xR, B, N and 3xP in reserve. P-E moves like K after each move (an eight-sided die can be used to determine move). P-E treats board as a torus but cannot move next to a K. Piece in reserve can be dropped on player's first rank, pawn on second, instead of moving. P can promote to R, B or N on 7th, Q on 8th rank. (Manuscript notes presumably deriving from personal communication)

30.3 Using dice other than by throwing

Anticipation Chess (Raymond Pink, 1981) Each player has a chess die and cup. An ordinary die can be used substituting P, N, B, R, Q, K for the spots 1-6 respectively. Usual array. Both players decide which man they will move on their first turn and set the die appropriately (1 or 2, i.e. pawn or knight) under the cup. Each player's turn consists of three parts: (1) Reveal the die; (2) Move a man of the type shown; (3) Decide on the man it is planned to move on the next turn and adjust the die secretly under the cup. Castling is a K

move. If a player is unable legally to move the type of man chosen, the move is forfeit and only steps (1) and (3) are enacted. If a player is unable to counter a check, the king is left in check. He remains in check for as many turns as are necessary to break the check or until he is checkmated. A player whose opponent is in check may add an additional check or make any other move that his die selection allows. The skill of the game, chess apart, lies in knowing when to bluff and how often. (Author's explanatory document)