MORRA - BOARD ™

A
PIET HEIN
game

Sherlock Holmes

Professor Moriarty

Julius Cæsar

describes the game which he played with marbles, praising it for its psychological possibilities, and even indicating a method for divining the number chosen by the opponent. This method consists in copying the opponent's facial expression, thereby sensing how far or how short he is thinking. It is not an infallible method. All in all the game is not an easy one. But it is not a dull game. Neither is it, as could easily be supposed, just plain gambling. It provides opportunities for utilizing a good deal of psychology. The player who can best read the thoughts of his opponent gets the upper hand.

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However, on the other hand, it is a slightly monotonous game, since the same situation repeats itself every time you make a guess.

I feel I have always known this game and always wanted

Morra-board builds on an ancient game – renewing and varying it by linking it to a board.

The old game on which Morra-board is based is in Danish called *Klunse*, in English *Odds and Evens*. Each of the two players presents a clenched fist containing a few small stones, coins or matches – both players taking turns at guessing if the sum of the objects in the two hands is even or uneven.

The game has been known for a long time in the history of mankind.

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In ancient Rome it was very popular and was known under the name of *Micare Digitalis*. It may have been played by *Julius Cesar* and *Brutus*.

In present-day Rome it is played under the name of *Morra*, particularly in Trastevere, the other side of the Tiber, where it is so zealously played that it often takes on the appearance of a street bawl. Indeed the popular Roman version comprises all features for inflaming the participants since it is not played with stones, coins or matches, but with the simultaneously upheld fingers of the two players – giving a player ample opportunity to change his number of fingers, or at least to suspect his opponent of doing so, when it is too late. *Augustus Hare,* an English traveller in Italy during the last century, supposed that the extraordinary excitement engendered in the Trasteverians by this game was the cause of the many murders committed in Trastevere.

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Edgar Allan Poe, the famous American author, who many reckon to have invented crime fiction with his story »The Murders in the Rue Morgue«, and who was a fine psychologist,

Edgar Allan Poe

to relieve it of its one fault, its monotony. I believe I have managed to eliminate that fault by linking the game to a board, thereby placing the decisions in new situations all the time. This is the principle behind Morra-board. The different places and situations on the board provide ceaseless variations, brought about by the fact that the interests of the two players in the various possible results of the sum of the balls (one of the numbers 0 – 1 – 2 – 3 – 4 – 5 or 6) constantly change, giving a new basis for the objectives of each player and for his assumptions of his opponent's actions etc.

Adapting the old game by combining it with a board provides a great number of situations of interest from the point of view of psychology and the theory of games.

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S herlock Holmes and his mortal enemy *Professor Moriarty* played this kind of game in a special situation. It is in *Conan Doyle's* story »The Final Problem« – a story cited as a typical gambling problem and analyzed by the American mathematicians *John von Neumann* and *Oskar Morgenstern* in their scientific work on the theory of games.

The story goes as follows. Sherlock Holmes is trying to escape from his enemy Moriarty, who wants to murder him, by taking the train from London to Dover and from there leaving for the continent. Just as the train draws out of Victoria Station in London, Moriarty reaches the platform. The two enemies catch sight of each other, but Moriarty fails to board the train. Moriarty pursues Holmes by special train. On the London to Dover stretch Sherlock Holmes's train only makes one stop – at Canterbury. Sherlock Holmes can alight here. Moriarty knows this. Neither of them knows what the other will do. What will give each the best chance of gaining his objective? What can they both calculate that the other will do to achieve his objective? If they both choose the same station, Moriarty will kill Holmes. If Sherlock Holmes chooses Dover and Moriarty chooses Canterbury, Holmes eludes his enemy, thereby winning the game. That is the best result for him. But is it the safest to gamble on? Moriarty knows that this is the best chance for Holmes and will perhaps himself gamble on Holmes choosing Dover. If Holmes chooses Canterbury, and Moriarty chooses Dover, the final confrontation will only be postponed, so this is of less advantage to Holmes.

In the story Sherlock Holmes therefore chooses to get off at Canterbury, while Professor Moriarty tears on to Dover.

But what if Moriarty had been a little more cunning and had calculated on Holmes choosing the less advantageous possibility, because Holmes would assume that Moriarty would reckon on his choosing the best? Then Moriarty would also have left the train at Canterbury, thereby winning. Unless of course Holmes had calculated with this calculation on the part of Moriarty, and had therefore nevertheless travelled on to Dover – etc.
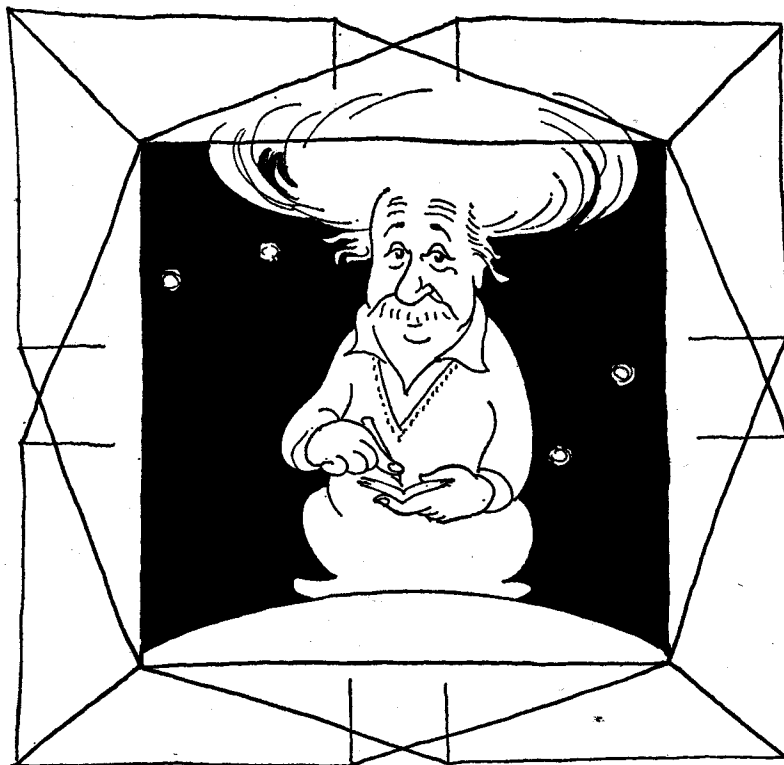
Albert Einstein

No, Morra-board is not a game for the dull-witted.

Numerous situations of this kind are created by renewing the old game by linking it to a board in Morra-board.

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A lbert Einstein, who loved simple games, often said (as an argument against certain features in quantum physics) that he couldn't believe God played dice. I once replied that perhaps God played Morra with us. Einstein laughed and said he would much rather believe that.

If so it is certainly not Morra in the old monotonous version but with new variations all the time on a very complicated board indeed.

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I like games that are simple in principle yet inexhaustible in the sense that they adapt themselves to the level they are played on, and are obvious or sophisticated according to the mentality of the players.

I hope I have, in Morra-board, given an age-old game a great new variability – without spoiling its beautiful simplicity.

Piet Hein
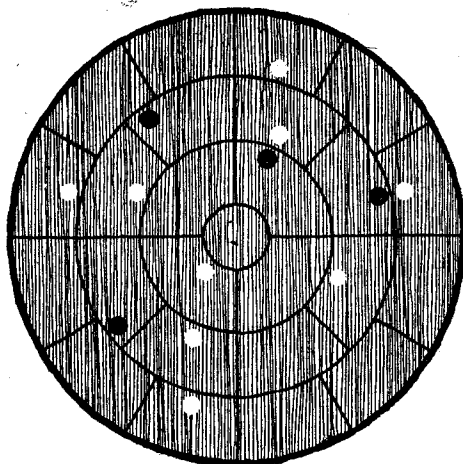
Directions

The Rules of the Game

The board has the shape of a target. The objective is to be first on the centre.

There are 2 different pieces for marking the positions of the players on the board, and 6 small balls, 3 for each player, used for determining the moves of the pieces.

The game starts by each player choosing a position in the outer ring on the board on which to place his piece. The two pieces may start on different places or on the same place.

The pieces travel with the sun, i. e. clockwise, round in the board in the ring in which they are placed.

The moves of the pieces depend on the sum of the balls held in the closed fists of the two players.

First the players play on the move of one of the pieces, then on the other etc.

Each player puts forward a closed fist containing a number of balls (1 – 2 – 3 or none at all), both opening their hands simultaneously. The piece in queston then moves clockwise round the board as many places as there are balls in the two outstretched hands, that is 1 – 2 – 3 – 4 – 5 – 6 or no places at all.

When a piece lands on a place on which there is a spot pointing further onwards to another place in a ring either further in on the board or further out, the piece immediately moves to this new place and remains there regardless of whether there is yet another spot on this new place.

If the presentation of balls leads to no move at all (i. e. there are no balls in either hand), then the situation is regarded as if the piece is in that move arriving on the place it already occupies, consequently if there is a spot on that place pointing to another place then the piece now moves on to this new place.

When moving, if a piece ends on a place already occupied by the opponent's piece, it pushes the opponent's piece onwards one place in a clockwise direction, both pieces following any arrows on the places they end on in this way.

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Variations

It can be arranged at the beginning of the game that the pieces travel anti-clockwise around the board instead of clockwise.

The game can also be played by three or four players. In this case, the owner of the piece to be moved presents balls with the following player to determine the move of his piece. In this way only 2 of the players at a time determine the move of the pieces. In this version a piece can push 2 or 3 other pieces each a place onwards in the ring.
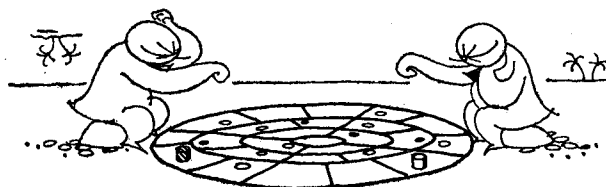
Problems worthy
of attack
prove their worth
by hitting back.

Piet Hein