Issue 1 Spring 2000
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Abstract Games

For the competitive thinker

Front Cover

Camelot was originally introduced as Chivalry in 1887. After some minor changes, it was reintroduced by Parker Brothers Inc. as Camelot in 1930. The set pictured on the front cover dates from 1930. It was discontinued in 1968, reissued as Inside Moves in 1984, and discontinued again in 1985. There were a couple of rule changes in 1931, but none thereafter until the World Camelot Federation made a couple of minor changes recently.

There were 25 or 30 different editions of Camelot published, at least 14 of which are distinctly different from each other. There was a gold-stamped leather edition, a mahogany cabinet edition, tournament editions, regular editions, and low-cost editions. There was a point Camelot variation of the regular rules, and three-handed and four-handed variations played on a regular board. There were even Camelotta and Grand Camelot variations for four players played on a special Grand Camelot board.

In the 1930s, Jose Raoul Capablanca (World Chess Champion) and Frank Marshall (U.S. Chess Champion) were enthusiastic players of Camelot, as were Sidney Lenz and Milton Work, two world-famous bridge players.

Michael Nolan
President of the World
Camelot Federation
P.O. Box 4751, Troy, MI
48099-4751, USA
email: mwn_mqn@msn.com

Membership is free.

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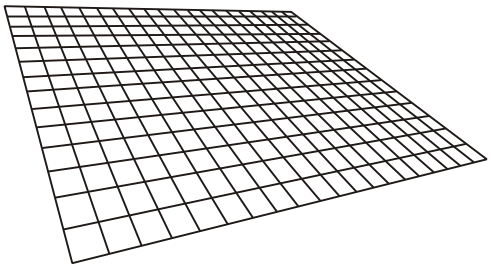

Abstract Games

Issue 1 Spring 2000

This a magazine for people who like abstract games. Chess, Checkers and Go are among the best known examples of this type of game, but there are thousands of others. They include once-popular traditional games like Nine Men's Morris, and games like Mancala and Shogi, which are well known in their home cultures, but largely unknown elsewhere. In addition, a great many new games have been invented in the past hundred years, many of them incorporating highly original ideas.

Chess players have their books, magazines and clubs, and so, too, to a certain extent, do players of Checkers, Go and Shogi. There is no need for another forum for players of these games. Many wonderful games exist, however, which are given very little coverage, if any.

We will be concerned primarily in these pages with games which have been forgotten or neglected, or games which are relatively new and therefore largely unknown. One of the joys of this class of game is that there are opportunities to come up with new strategies. While it is interesting to study the literature of established games such as Chess or Go, opportunities for creativity are limited -- to find anything original one has either to be a genius or to devote a lifetime of study to the game.

Typically, we will introduce a game through a short series of articles. Part of the first article in a series will deal with the rules; subsequent articles will focus more on strategy and tactics, with knowledge of the rules assumed. The three games included in this issue are Bashne, Lines of Action and Kyoto Shogi. Do not be concerned if none of these three especially interests you because other games will be covered in subsequent issues. In particular, I would like to investigate one of the more strategic Mancala games, one of the large Chess variants, and a connecting game such as Twixt. A major determining factor of games covered will be reader response, so if you have a particular game you would like to see written about, please let me know.

Bashne is the old Russian game of Column Checkers that has been enjoying a revival since the mid-1980s. There are a number of serious players in Russia, Latvia and the Ukraine, and tournaments have been held every year in St. Petersburg. A small but fascinating literature is starting to emerge. The article in this issue is largely introductory, but in subsequent issues I intend to bring you some of this literature.

Lines of Action, of course, needs no introduction for fans of abstract games. I intend to present some of my own ideas on this game. Not everybody will agree with what I have to say, but at the very least I hope to stimulate further discussion.

No publication on abstract games would be complete without something on Chess variants. The small Shogi variant Kyoto Shogi is the representative of that class of games in this issue. I hope that Chess players who do not know Shogi will not be put off by the Chinese characters. Once this hurdle is overcome, a fascinating new class of games becomes available.

In addition to these articles focusing on strategy, we intend to include game and game-related reviews and news. This issue has a review by Steve Evans of the Zillions software. I believe Zillions to be the most important new gaming concept since Dungeons and Dragons. Although he modestly refrains to mention it in his article, Steve has already used Zillions to solve some incredibly difficult problems in Chu Shogi which had remained unsolved for hundreds of years.

Our book review in this issue is David Parlett's *The Oxford History of Board Games*, arguably the most important book on abstract games since H.J.R. Murray's *A History of Board Games Other Than Chess*. I enjoyed playing Trax and GIPF for the first time for the reviews in these pages. Trax has been around for some time, and maybe it is a little late for a review, but I believe that many people are as yet unaware of this fascinatingly different game. GIPF is perhaps the best new abstract game of the last few years, and Project GIPF ambitiously introduces a kind of "meta-game" concept .

I hope another function of this magazine will be to help revive forgotten games. I have written about one of my own all-time favorites, Mentalis. If you know of a game that you strongly feel does not deserve to be consigned to oblivion, please let me know. Likewise, I encourage you to send me any information about games that you think is worth printing; I would appreciate news about tournaments, new releases, websites, and so on.

The internet has been a great boon for players of abstract games because it is possible to find opponents for the most obscure games and because of the wealth of information available. Some people are even predicting the demise of print as a medium for information exchange, and, if this is true, the timing is not good for a new magazine. I think, however, that print is going to be around for a long time yet, if for no other reason than convenience. Another reason, of course, is that it is still more pleasurable to read from a magazine than a computer screen. Having said that, the importance of the internet cannot be denied, and we will be putting together a website at the earliest possible opportunity.

If you like what you see in these pages, please consider subscribing, and tell your friends about us. A subscriber base will help to cover printing costs, of course, which is the downside of a printed magazine, but, just as importantly, it will provide a body of enthusiasts that will give this publication life through our efforts to respond to their needs.

I would like to extend my thanks to my game friends who encouraged, and even contributed to, this magazine. Thanks also to my wife, Connie, without whose inspiration and support this venture would not have been realized.

Kerry Handscomb

Publishers
Connie & Kerry Handscomb

Editor
Kerry Handscomb

Cover photo
Connie Handscomb

Contributors
Steve Evans, Peter Michaelsen, Victor Pakhomov, Michael Sandeman

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A Note on Gender
Pronouns "he," "him," etc. have been used in non-gender-specific situations. We realize that women play games, too, and this is merely to avoid awkward constructions such as "he/she."

Notation

A standardized notation is used for all games whenever possible. In diagrams, squares are named using a standard algebraic system. Starting from the bottom left of the diagram, columns are identified by the letters a, b, c ... and rows by the numbers 1, 2, 3 .... A colon is used to indicate captures. A threat to win, or check, is indicated by a "+" sign after the move.

Traditionally, moves of Chess variants are indicated by the first one or two letters of the name of the piece moving together with the destination square. ("N" is usually used for knights.) Sometimes the start square is indicated, too, to avoid ambiguity. Captures are noted with "x", and "+" is reserved for a promotion rather than a check. Promotion in the Checkers variants is also indicated with "+."

With the Shogi variants, we will follow the traditional Japanese way of identifying the squares. Starting from the top right, *rows* are a, b, c ... and the *columns* are 1, 2, 3 .... When the value of a piece changes at the end of a move, we will use "=" together with the new value.

Software review

by Steve Evans

Zillions of Games
An infinitely expandable board-gaming system

Computer programs that play abstract board games have come a long way since taking their first tentative steps in the mid-1950s. The first computer program to play chess was written at the Los Alamos Scientific Laboratory in New Mexico in 1957. This program ran on a huge UNIVAC computer and had to be limited to a simplified 6x6 square game as the full sized game was too complex for the machine to handle. Since then, search techniques and, of course, computers themselves have become far more sophisticated and powerful. Today, there are computer programs that can play many simple board games perfectly and that can rival the greatest human players even in quite complex games like chess.

While the programs available have become much stronger they have generally been limited to playing one board game or perhaps several variants of a particular game or game family. This situation changed recently with the release of *Zillions of Games*, the first commercially released meta-game computer program.

Zillions of Games is the brainchild of Jeff Mallett and Mark Lefler. Jeff and Mark have both had a longstanding interest in computer artificial intelligence and between them have many years experience in developing successful board game playing programs. While Jeff Mallett had initially focused his efforts on chess programs, his inclination was always to take things to the meta-level and to develop a more general game-playing engine that could play a wide variety of abstract board games. Some years ago, Jeff began adapting one of his Macintosh computer chess programs to play other games as well, such as checkers and cylindrical chess. Jeff was satisfied with the experiment and the project was then shelved for a time.

Eventually Jeff, with the help of a friend, Randall De Weerd, spent a spring rewriting the grammar of the language of his Macintosh program to make it more adaptable to different types of games. This involved analysis of board games from scores of books (and a lot of trips to used book stores).

Jeff had known Mark Lefler for a long-time from computer-chess tournaments. Mark was impressed by Jeff's Macintosh program and together they decided to develop the program as a commercial package for the Windows platform. As the development progressed, Mark joined in the programming and from that point the project became a team effort.

The result of this development, *Zillions of Games*, was eventually released in late 1998.

What is *Zillions of Games*?

Zillions of Games is a "universal gaming engine" for Windows 95/98 and Windows NT (with the NT service pack 4 or higher). The "engine" of *Zillions of Games* uses advanced artificial intelligence techniques and is capable of being programmed to

play almost any abstract board game.

The package itself comes with nearly 300 different board-games covering the whole gamut of styles and board shapes. Included on the installation CD are chess variants (all the main regional variants are included together with many historical and modern games), jumping games (such as checkers, and halma), custodial capture games (such as the tafl family and hasami shogi), games of alignment (reversi, the morris family, four field kono, etc), hunt games (eg: fox and geese, 16 rebels), race games (senat), and numerous single player puzzle and solitaire games.

The program interface is quite easy to use and comes with most of the features you'd expect from a good commercial package, including; save game, adjustable skill levels and time settings, legal move display, hints, strategy tips, provision to take back and replay moves, sound effects and music, animated piece movement, board editing etc. The games can be played against a strong computer opponent, or against a human opponent including play via LAN, modem or over the internet.

In addition to the main *Zillions* "engine", the package includes alternative plug-in "engines" that have been optimised specifically for Reversi and Ninuki-Renju. These plug-in programs have both won computer tournaments in their respective games.

How does *Zillions of Games* work?

The program reads the information needed to run a game from a script file. This script describes the board size and shape, the pieces and their powers of movement, the graphics and sounds used, together with the object of the game. Zillions precompiles this information into an internal assembly language and then works out an evaluation function based on factors such as the influence and movement powers of the pieces in play, the structure of the board, and the goals of the game. To help it look ahead quickly and deeply, the engine adopts many of the advanced search techniques used in modern chess programs, such as alpha-beta pruning, selectivity and hash (transposition) tables, etc.

So how well does Zillions play all these games? The answer is: For the most part, very well. Despite the inherent limitations imposed by having to be "all things to everyone" the AI is advanced and flexible enough allow to the program to reach very good search depths in most games. The program's evaluation of board positions is also very good. At its "expert" level and 10 to 15 seconds thinking time per move, Zillions will challenge even a strong player in the majority of the games it plays.

The program is clearly better adapted to certain types of games than to others. For example it is well suited to chess variants (and plays many small chess variants very strongly indeed), but has more difficulty with games that have multi-part moves such as the jumps in checkers. It is also possible for some unusual movement powers (such as the promotion and drop powers of shogi) to "confuse" the evaluation function and result in a piece being over or under valued in play. However, these problems are relatively minor and do little to detract from the remarkable overall performance of *Zillions of Games* given the scope of what it is attempting to achieve.

Adding New Games to Zillions

New games are added to Zillions by creating new script files (or modifying the scripts that come with the CD). The script is written in a simple programming language, called ZRF, that is similar in many ways to LISP. The ZRF language is very flexible and can be used to describe almost any imaginable board shape, a virtually limitless selection of movement powers for game pieces, and a wide range of winning or losing conditions (including checkmate, stalemate or capture of a given piece or pieces, arranging pieces in a certain configuration on the board, having a piece reach a given position or zone on the board, etc).

Are there any abstract board games that can not be implemented with Zillions? The answer to this is: Yes, most probably. There are some games that would be very difficult if not impossible to program. One weakness of the language at the moment is that it does not have any capability to use numbers or arithmetic functions. This limitation makes games with an underlying mathematical element or stacking like the mancala family, rhythmomacia (the Philosophers' Game) and Column Checkers (Bashne) very difficult to implement. There are also some restrictions surrounding the use of multiple jumps that make many of the more complicated checkers variants (eg: International Checkers and Frisian Checkers) very hard to do. But in the main there are relatively few games that can not be implemented and played with the Zillions package.

Can anyone program new games with Zillions? While the ZRF language is quite simple, it would nevertheless be difficult to use it to implement new games without some prior programming experience or at least some familiarisation with basic computer programming concepts. However, even for someone who is not planning to program their own games there is much to commend *Zillions of Games*. How many other board-game programs come with a strong AI for nearly 300 different games? In addition, there are hundreds of new games that have already been created by users and are available for download from the Zillions web pages and other sites on the internet.

One of the real strengths of the Zillions package is that it has the potential to be an indispensable tool for the game inventor. It could be a real boon to game designers when inventing a new abstract board game or variant to have the capability to test the game by playing it against a strong computer opponent.

Zillions of Games is a very ambitious project which has succeeded admirably. The program offers a great deal to all abstract board game enthusiasts. At US$30 it represents excellent value. ■

Zillions of Games
Introductory Price -- US$29.95 (plus P & H)
Contact: Zillions Development, PO Box 2037, Boulder Creek, CA 95006, USA
Web page: www.zillions-of-games.com
E-mail: info@zillions-of-games.com
System requirements:
Windows 95/98 or NT, 8 Meg. RAM, CD-ROM and Mouse.
A Windows compatible sound card & screen capable of 800x600 resolution or greater are recommended.

Steve Evans lives in Tasmania, Australia, and has been interested in board games history and research for a number of years. He is a collector of abstract board game playing sofware, and is the author of a freeware program that plays a number of Shogi variants. This excellent program can be found at http://www.netspace.net.au/~trout/index.html -- Ed.

Game Review

Trax

Invented by David Smith

Trax is a not a new game. It was first marketed in 1982 by New Zealand game inventor David Smith. Since then, it has won some awards and established a following. I had not played it, however, and I suspect there are still many others who have yet to give it a try. This review is for them.

With tongue in cheek, no doubt, the inventor says Trax was not so much invented as discovered. One day, the story goes, his young daughter showed him a flat square-shaped pebble she found in a stream. The pebble had curious markings on it. From this inspiration, Trax was born, ostensibly the reincarnation of an ancient game. (Although I must say that it does look a little like the modern pencil-and-paper game Black.)

The odd thing about this hypothesis is that it is not completely outrageous: the game has such a natural logical structure that, once you have seen it, it is obvious. In this respect, it does have the sense of something discovered in the same way that a mathematical truth is discovered rather than invented. Go has this quality, too, but Chess, on the other hand, is quite clearly a human construct.

A Trax set consists of 64 identical square red tiles. Each tile has a black line and a white line on each side. On one side of the tiles the lines join opposite sides of the square (so forming a cross); on the other side the lines join adjacent sides of the square. The manufactured set is nice to handle.

There is no board. The players take turns placing a tile, choosing which side face up and which orientation, on a flat surface adjacent to a tile already placed. Where the edges of two tiles meet, white lines have to join with white lines, and black with black. A "loop" is a path of one color which joins itself. A "line" is a path of one color that connects opposite edges of the layout over at least eight tiles. One player tries to get either a white loop or line and the other a black loop or line. If a move creates a space into which paths of the same color enter from two directions, the player is obliged to fill in this space with the appropriate orientation of tile as part of his move.

Trax is a completely new experience. When I played it with some friends, our first games were over very quickly as we discovered the simple double loop threats. Once we had found out how to defend against these, our games were rather long and difficult to finish. The next phase of our learning curve is clearly to discover more sophisticated attacks. The game has obviously had extensive play testing, and it would seem apparent that for experienced players attack and defense are nicely balanced.

Trax may prove to be just a little too different from conventional games for some players. However, this difference, together with simplicity and elegance, is one of its great appeals. I am looking forward to investigating this charming game further. I highly recommend it for a change of pace.

The Trax homepage is http://www.traxgame.com/
It can be played on the Microsoft Gaming Zone at http://www.zone.com/ and Richard's PbeM Server at http://www.gamerz.net/~pbmserv/
Trax sets can be ordered directly from the inventor at Trax@xtra.co.nz for US$12.00 inc. shipping & handling.

GIPF

Invented by Kris Burm

GIPF was invented by Kris Burm of Belgium and published in 1996. Unlike Trax, it has a conventional feel to it – it has a board and black and white pieces. In fact, many of the elements of GIPF can be found in other games, such as Abalone and Go-Moku.

The basic game is played on a hexagonal array of 37 points with 15 pieces per player. There are 24 dots situated around the edge of the board; the pieces are entered into play form these dots. In the same style as Abalone, the entering piece can shunt forward any pieces in its way. It is imperative for a player to make a move each turn by entering a piece. If a line of four or more pieces of one color is formed, these pieces are returned to the player's reserves. The crucial point is that enemy pieces contiguous with this line are actually captured rather than returned to their owner's reserve. Thus the store of reserves available to the players is gradually decreasing. When a player has no pieces left in his reserve when it is his turn to play he loses.

The basic game is extended into the standard game by the introduction of three GIPF pieces per player. These consist of two ordinary pieces stacked together. The difference between GIPF pieces and regular pieces is that when a GIPF piece forms part of a line it is not obligatory to remove it from the board, either to capture or return to the reserves. This greatly alters the strategy. The tournament rules extend the standard rules by a mechanism which varies the number of GIPF pieces in play.

The extension of the basic game by stages into the full tournament version is very nicely done: each version builds on the strategy and tactics of the previous version. The full tournament game would probably be bewildering for people seeing the game for the first time.

One of the interesting strategic elements of GIPF is the tension between attack and defense: it is good to have a lot of pieces on the board to increase attacking possibilities, but you must be careful not to be trapped with no reserves. Exciting endgames where both players are depleted of pieces would seem to be the norm.

GIPF is a superb, well-balanced game. Even the equipment is well designed and pleasant to handle.

The inventors are planning to extend GIPF into a series of games, with GIPF as the central game, in what is called Project GIPF. The first of these satellite games, TAMSK, has already been published. The concept is to introduce pieces called "potentials" to GIPF. The activation of the power of the potential is dependent upon the result in another game which has the same name as the potential. It is as if, when playing Chess, before a capture can be a made, a separate battle is fought out in another game to determine whether the capture is successful. This is a kind of "meta-game" concept.

Naturally full participation in Project GIPF will involve considerably more expense and complication for the players, not to mention time. The satellite games need also to be very good,

otherwise why interrupt an excellent game to play an inferior game? The development of six good new games is a tall order, but I do not want to underestimate the obviously talented Kris Burm. He emphasizes, in any case, that participation in Project GIPF is strictly optional. I look forward to watching it develop. ■

The GIPF homepage is at
http://titan.glo.be/ff00476/GIPF/en0.html
Enquiries should be addressed to:
DON & CO NV, Van Den Nestlei 7, bus 6,
2018 Antwerpen, Belgium
Email info@gipf.com

Book Review

The Oxford History of Board Games
David Parlett
Oxford University Press, 1999, pp 386

David Parlett is well known as a writer of books on games and inventor of games. His best known creation is an excellent race game without dice, Hare & Tortoise. His other books include *The Oxford History of Card Games*, to which *OHBG* is a kind of sequel. Many game fans will know him of course as the editor of the great games magazine of the 1970's, Games & Puzzles.

With *OHBG*, Parlett has set out to produce a worthy successor to H. J. R. Murray's *History of Board Games Other than Chess* (OUP, 1952), and in this ambition he has succeeded. Parlett himself comments that Murray's book was "not a popular success in its day and has since become as rare as gold dust, possibly because it was just as dry to read." The only thing dry about *OHBG* is its humor -- Parlett's idiosyncratic style makes it a joy to read.

OHBG is nevertheless a scholarly work with plenty of historical and cultural detail on the field of positional (i.e. abstract) board games. Largely following Murray's work, as well as R. C. Bell's *Board and Table Games From Many Civilisations* (OUP, 1960, 1969), the author classifies games based on general concepts of play into four broad categories:

- **Race Games**, including Backgammon and Hare & Tortoise;
- **Space Games,** in which pieces have to be manoeuvred into specific patterns, positions or alignments, including Renju, Twixt, Halma, Epaminondas, and also Go;
- **Chase Games**, with unequal forces, such as Fox & Geese;
- **Displace Games**, involving armies and capture, including Mancala, Fanorona, Draughts and Chess.

This classification is quite logical, except that I feel the Mancala games, being structured so differently, deserve a separate category all of their own. Both Murray and Bell do classify them separately.

With many of the games, the description would be sufficient to actually construct a set and play the game. This is not always the case, however, and it should be borne in mind that the goal of the book is primarily its historical survey.

The most interesting chapter for me in the Race Game section was the one on games which do not use random generators such as dice or cards. It describes two games, Hare & Tortoise and Bantu. I think this category is still a challenge for aspiring game inventors.

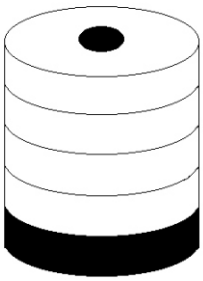
The Space Game category, on the other hand, has not been forgotten by game designers. Parlett describes many interesting and original modern games, many of which I was not familiar with, and some of which I would like to try from his description. The record is set straight (once again!) on the British origin of Othello/Reversi, but despite describing the traditional Japanese game of Ninuki Renju, he curiously fails to mention its popular modern update Pente. Another notable omission from this section is the Game of Y, which clearly deserves mention alongside Hex.

The Chase Game section is necessarily limited, comprising Fox & Geese and its variants and the Tafl family of games.

The Displace Game section contains all those warlike games where two armies square off and try to annihilate each other, including the Chess and Draughts families of games. Mancala is also included, which, as mentioned above, I find a little incongruous. Refreshingly, the author does not devote much space to Chess, commenting, "We will take as read the cultural equivalence of chess with Bethoven's Ninth, and, pausing only to wonder why so many of its greatest exponents have been social misfits, proceed to treat it like any other game in the collection." A real bonus in this section is a whole chapter given over to Rithmomarchy, that arcane medieval game of numerology. One could have wished, however, for some mention in this section of the monster Chess games of medieval Japan, surely some of the largest, most complex abstract games ever invented.

With such a wealth of information in this book, it is not surprising that Parlett does make some errors in addition to the few omissions I spotted. In his description of Lines of Action (Action Lines, here), for example, he states that the game is drawn if a move simultaneously creates a winning position for both players. The usual rule, of course, is that the moving player wins in such situations. In the Shogi section, he gets the pawn promotion rule wrong, and states mysteriously that waiting moves in Shogi are considered bad form and cowardly!

These are minor flaws; the book is enormously pleasurable to read and full of amusing little bits of information. When referring to Conquest, for example, a highly abstract game, the author remarks, "Within a short space of time it was repackaged and re-titled 'George v. Mildred,' after a domestic TV comedy series – a true kiss of death." Elsewhere he notes, "Halma,…Greek for 'jump,'... has also been know as Hoppity in the hopes of appealing to a classically uneducated market." Game books like this come along just once in a generation. It is essential reading for lovers of abstract games.■



BASHNE
AN OLD RUSSIAN COUSIN OF DRAUGHTS

by Peter Michaelsen and
Victor M. Pakhomov

Bashne ("towers" or "columns") is an old Russian game. It was first described as early as 1875 by V. Viskovitov of Moscow in his book *Collected Games and Amusements for Family and School.* However, the game is certainly older -- Viskovitov refers to Bashne as a game that was already well known.[1] Ten years later, when the famous Russian Chess historian D. I. Sargin (1859 – 1921) wrote a short article about it in the magazine Rainbow, it seems that the game had retained only a limited popularity. Sargin thought that the main reason for this was the difficulty of making correct calculations in Bashne.

Bashne obviously inspired Dr. Emanuel Lasker (1868 – 1941), World Chess Champion 1894 – 1921, when he invented his column game Lasca in 1913. Dr. Lasker had traveled to Russia a number of times and had certainly been exposed to Bashne. After World War I, Lasca quickly gained a wide popularity in Germany, the USA and the Netherlands, while its parent game, Bashne, fell into oblivion.

Starting in 1985, however, there was a revival in Bashne thanks to the efforts of Michail Rotschin and Alexei Gavrilov, who arranged seven tournaments in St. Petersburg. In 1991, the organization of the St. Petersburg tournaments passed into the hands of Victor Pakhomov.

Rules

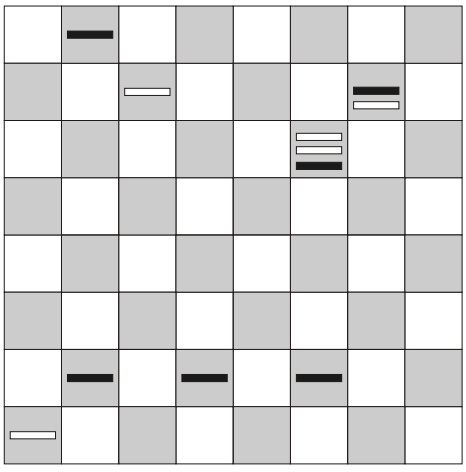
The starting point for Bashne is the game of Russian Checkers. Like standard Anglo-American Draughts/Checkers, the Russian game is played with 12 checkers each on an 8x8 board. Russian Checkers differs in several respects from Anglo-American Checkers:

- The unpromoted pieces, or "men," capture by the short leap forwards, as in Anglo-American checkers, but they can also capture by the short leap backwards.
- The promoted pieces, or "kings," can move any number of squares in a straight line, like Chess bishops.
- Kings capture by the long leap. In other words, a king can move over some empty squares before reaching its victim, and then, after jumping, can traverse some more empty squares before finishing its leap. Start and finish squares must, of course, be in a straight line.
- The "flying king" rule is used, whereby if a man moves by a capture into the back rank, and is therefore promoted, it may continue to capture as a king.
- Capture is, of course, compulsory, but there is no obligation to choose the option leading to the greatest number of captures, when there is a choice.
- When a king is making a capture, and there is a choice of finish squares for the leap, an option must be chosen, if possible, which continues the capturing sequence.

These are the rules of Russian Checkers. It is identical to the game of International Checkers played on an 8x8 board except for the flying king rule and the rule that there is no obligation to choose the option leading to the greatest number of captures.

The convention is that white moves first and plays up the board. The board is placed with white square on the right, as in Chess, and play is on the black squares.

Bashne is simply the game of Russian Checkers played with columns. A captured piece is not removed from the board, but is picked up by the capturing piece to become the bottom piece of a column of two. The captor is now the "commander" of the column and the captured piece underneath it is a "prisoner." Columns can increase in size as further captures are made, captured pieces being placed underneath the pile each time. (Contrary to Anglo-American Checkers, during multiple captures, pieces are captured immediately.) When a column, however high, is jumped, the captor only removes the commander, leaving behind a pile reduced by one with a new commander. Columns always move as a unit, and may never be broken up to move.



In the top left black can move b8:d6. The result will be a two-piece column on d6 with a black commander over a white prisoner.

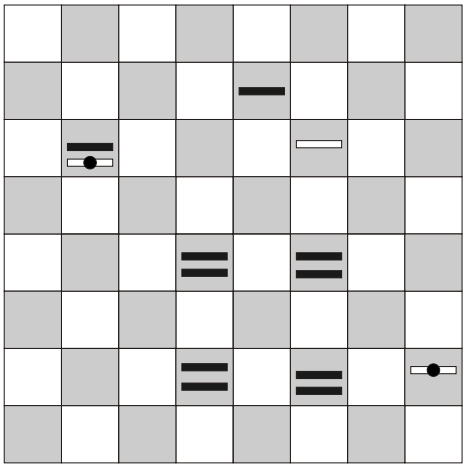
The white man on a1 can make a multiple capture with a1:c3:e1:g3. The result will be a four-piece column on g3 with a white commander over three black prisoners.

If it is black's turn in the top right, he can move g7:e5. The result will be a three piece column on e5 consisting of a black over two whites, and a two-piece column consisting of a white over a black on f6. Black cannot continue his turn by jumping straight back over the column on f6. (See below.)

Because of the columns, kings cannot be marked by simply doubling them up, as in most versions of Checkers. Instead, each checker has a distinctive mark on one side, usually a red spot. When a man reaches the back row, it is turned over with the red spot up to mark it as a king. (In our diagrams, white kings will be marked with a black spot, and vice versa.)

When a column reaches the end row, only the commander is promoted. Columns always move with with the power of movement of the commander, whether king or unpromoted man. A king, once promoted, cannot be deprived of his rank, even if taken prisoner under an enemy column.

After jumping an enemy column, it is prohibited to continue the turn by immediately jumping back over the same column and taking another enemy piece prisoner. However, if the capturing column goes on to make further captures, it may come back to this column later on in the same turn and jump it again.



In the top half of the board, white can move f6:d8+:a5. The white man promoted to a king and immediately made another capture as a king. This is the flying king rule.

In the bottom half of the board, white can move h2:e5:c3:e1:g3:e5:c3:e1:g3(or h4). The result will be a white king over eight black men on g3(or h4). It is permissible to jump a column twice in the same turn if one makes some intervening moves.

The game ends when one player cannot make a legal move. This can come about in two ways: either all his pieces are under columns commanded by his opponent or he is unable to move because he is blocked. In both cases he loses.

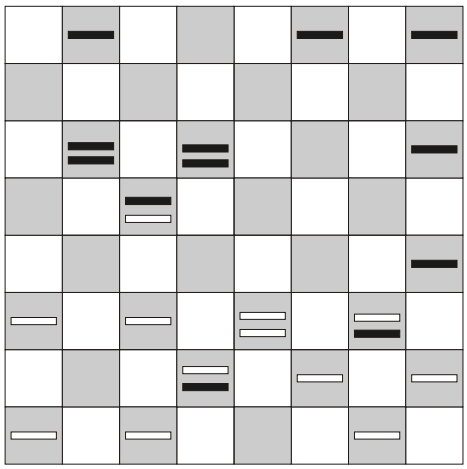
With a little thought, two points will become apparent. Firstly, columns containing pieces of both players will always consist of a stack of one or more whites on top of a stack of one or more blacks, or vice versa. Columns of the form white-black-white are impossible. Secondly, although the number of pieces in play remains constant, there is an ever decreasing number of taller and taller columns, which means that the game tends naturally to run to a conclusion. (According to statistics supplied by Victor Pakhomov, the longest recorded game is 77 moves; the average is 30-40 moves; the draw rate is only 5%.)

---------- x ----------

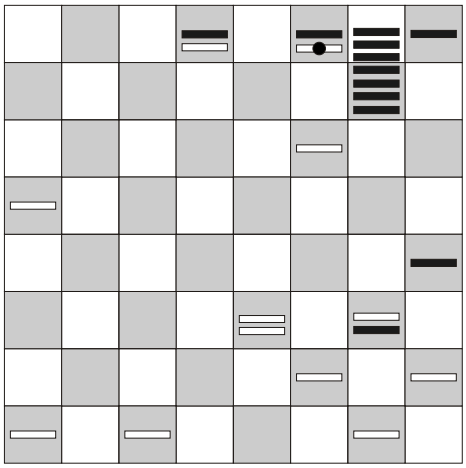
A sample game from 1875

In his book mentioned above, Viskovitov records a game of Bashne to clarify the rules.[2] This is the oldest recorded game of Bashne. Victor Pakhomov has proposed several variations of play.

1. g3h4 b6a5 2. f2g3 c7b6 3. e3f4 f6g5 4. h4:f6 e7:g5:e3 5.d2:f4 d8e7
(Var: 5...h6g5 6. f4:h6 f6g5 7. h6:f4 d6e5 8. f4:d6 d8c7)
6. g3h4 d6e5 7. f4:d6 e7:c5 8. e3d4 c5:e3 9. d4:f2 f6g5
10. h4:f6 g7:e5 11. c3d4 e5:c3 12. b2:d4 b6c5 13. d4:b6 a7:c5
14. c3b4
(Var: 14. e3d4 c5:e3 15. f2g3 e3:c5 16. c3d4 c5:e3 17. d4:f2)
14...a5:c3 15. b4:d2 f6g5 16. f2g3 g5h4 17. e1f2 (diagram)



(Var: 17. e3f4 h4:f2 18. g1:e3 g3:e5 19. f4g5 h6:f4 20. e3:g5 e5:g3 21. h2:f4 c5d4 22. c3:e5:c7:a5 f8e7 23. a5:c7:e5 e7d6 24. e5:c7 b8:d6 25. g5h6)
17...b8a7 18. e3d4 c5:e3 19. d2:f4 d6e5 20. d4:f6 e5:g7 21.c3d4
(Var: 21. f4g5 h6:e4:d2:b4 22. a3:c5 b6:d4 23. b4:d6)
21...f6e5 22. f4:d6
(Var: 22. d4:f6 g7:e5 23. f4:d6 f6:d4 24. e3:c5)
22...b6a5 23. d6c7 a7b6
(Var: 23...a5b4 24. a3:c5 b4:d6:b8 25. d4:b6:d8+ h6g5 26. d8:a5 f8e7 27. a5:d8:f6 g5:e7)
24. c7b8+ b6c5 25. d4:b6 a5:c7 26. b8:e5
(Var: 26. b8:d6 c7:e5 27. e3d4 e5:c3 28. d4:b2 ...29. f2e3)
26...f8e7 27. e5:b8 b6:d8 28. a3b4 g7f6 29. b4a5 e7d6
30. b8:e5:g7 h6:f8 (diagram)

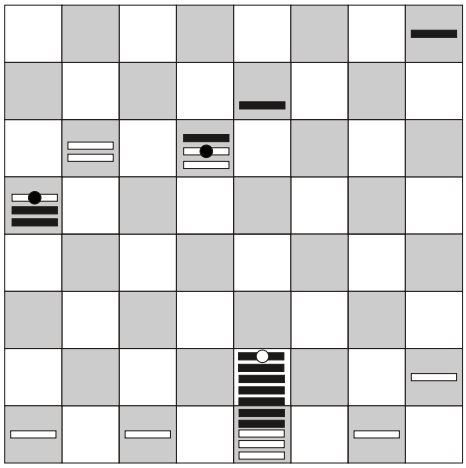


Here the game score published by Viskovitov ends. The game is not yet over, however. Maybe some readers are able to find a solution of the very difficult problem of finishing the game correctly after black move 30.

An interesting continuation was proposed by the Berlin Chess Champion, Werner Golz. This is commented by Heinz Machatscheck, and we have added some variations by Victor Pakhomov.

31. e3f4 g7:e5 32. f4:d6 e5:c7 33. d8:b6+ c7b6
(Var: 33...d8e7 34. b8:f4 e7f6 35. f4:b8 c7d6)
34. a5:c7 d8e7 35. c7:a5 *(It is interesting how black sacrifices the whole column, one by one, in order to get the white king.)* e7f6 36. a5:c7 b6:d8 *(The point of the maneuver.)* 37.b8:e5:g7 f8:h6 *(Black has two white kings under the man on h6!)* 38.f2e3? *(Correct is, according to Heinz Machatschek, 38. a1b2 g7:e5 39. f2e3! h4:f2:d4, 40. h2:f4:d6:b8+, and Pakhomov adds: 40. ...41. b2c3 d4:b2 42. c1:a3)* 38... h4:f2:d4 39. h2:f4 g7:e5:g3 *(White should resign now.)* 40. c1b2 d4e3 41. b2c3 e3f2! 42. g1:e3:g5 g3:e1+ 43. f2e3 h6:f4:d2:b4 44. a1b2 b4a3 45. b2c3 e1:a5 *wins.*

Another interesting continuation of Viskovitsov's game proposed by Victor Pakhomov:
31. a5b6 g7:e5 32. b6c7 d8:b6 33. g3f4 e5:g3:e1+ 34. e3:g5 h4:f6 35. g5:e7 f8:d6 36. f6:d8+:a5. (diagram)

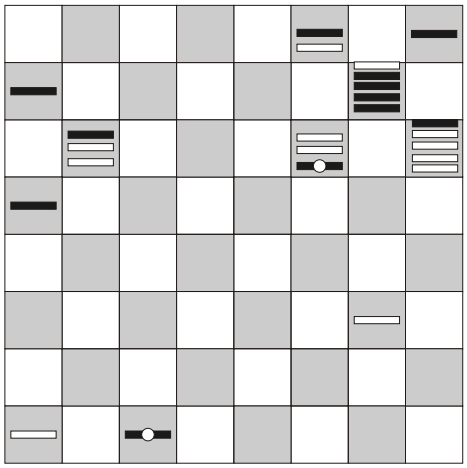


Pakhomov invites readers to find the best continuation of this variation -- perhaps in less than 25 moves from move 30? A win for black or for white? (This problem was originally proposed by Heinz Machatscheck in 1984.)

A recent game

Lastly, here is recent postal game between two top Bashne players, AnatolyZbarzh, the best Ukranian player, and Sergey N. Ivanov, the best player in Moscow.

Zbardg-Ivanov
1. c3d4 f6e5 2. d4:f6 e7:g5 3. g3f4 d6c5 4. f4e5 f6:d4 5. f2g3 d4:f2:h4 6. h2g3 h4:f2 7. g1:e3 g5f4 8. e3:g5 g7f6 9. g5:e7 f8:d6 10. f4e5 d6:f4 11. d2e3 f4:d2 12. c1:e3 b6a5 13. e3f4 e7f6 14. f4e5 f6:d4 15. d2c3 c5b4 16. a3:c5:e3 d8e7 17. e3:c5 d4:b6 18. f2e3 e5d4 19. c3:e5 c7d6 20. e5:c7 b8:d6 21. c7:e5 e7f6 22. e5:g7 h6:f8 23. d6:b4 c5:a3:c1+:f4 24. e3:g5 f4:h6 25. g5f6 b4c3 26. e1f2 c3d2 27. f2g3 d2c1+ 28. Resigns. (diagram)



In the next article on Bashne we intend to give some detail on the strategy and tactics of this intriguing game. In the meantime, interested readers can download Sergey Ivanov's program "Russian Towers" from http://www.mipt.ru/en/download.html or http://www.shaski.ru/eng/programs.htm. The rules differ in some minor respects from those presented here, but the rules in this article may be regarded as standard. ■

Notes

1. The first description of Bashne outside Russia was probably by Heinz Machatscheck in his book *Stein um Stein. Exotik der Brettspiele*, Verlag Neues Leben, Berlin (DDR), 1984. Peter Michaelsen read this description two years later, and in 1988 contacted Mr. Rotschin via a Polish game enthusiast, the now late Mr. Tadeusz Urbanowicz Kier of Warsaw.
2. The translation given here is based on a German translation by Heinz Machatscheck of the Viskovitov book mentioned above, p.90f, and on an English translation kindly provided by Dr. Vladimir N. Belov, St. Petersburg.

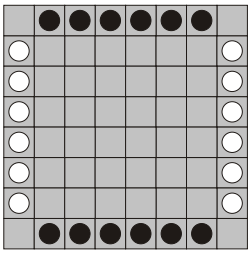
Peter Michaelsen is a minister in the Evangelical-Lutheran Church in Dronningborg, Denmark. Since his youth he has been very interested in abstract games. He has written several articles on board games history, and has a special interest in the Checkers variants.

Victor Pakhomov is a retired mechanical engineer residing in St. Petersburg, Russia, except in the summer when he lives in the village of Gorelkow. He is the Russian master of Bashne, and organizer of the St.Petersburg tournaments. He manufactures a Bashne set. Enquiries should be sent to:

ROSSIJA 195256 Sankt-Petersburg
U1. Vernosti, 10-4-258
Pakhomov Victor Michajlovich or

REGIONAL COLUMN DRAUGHTS CLUB OF ST. PETERSBURG
ROSSIJA 195213 Sankt-Petersburg
st. Tallinskaja 23, fl. 26,
Pakhomov Victor Michajlovich (summer address)

-- Ed.



Lines of Action
Strategic Ideas -- Part 1

Lines of Action is a game for two players using readily available equipment, a checkerboard and pieces. It was invented around 1960 by Claude Soucie and described by Sid Sackson in his famous book *A Gamut of Games* in 1969. Since then, LOA has attracted a small but dedicated following among game players as it is one of the very best of modern strategic board games, combining simplicity, elegance and originality.

Rules

I expect many readers will be familiar with LOA, so I will pass over the rules quickly. LOA is a game for two players using a checkerboard and pieces. The pieces are initially set up as shown at the top left of this page. One player controls the twelve black pieces and the other the twelve white pieces. Black moves first and then play alternates, with each player moving one of his pieces each turn. A player cannot pass his turn. A piece moves in a straight line, including diagonally, exactly as many squares as there are pieces, enemy or friendly, including the piece moved, in that straight line.

A piece can move over friendly pieces, but may not finish its move by landing on a friendly piece. The pieces passed over are not affected in any way. A piece may not move over enemy pieces, but may finish its move by landing on an enemy piece, which is then captured and removed from the board.

A player has a winning position when all his pieces are in one connected group. The connections within the group may be either orthogonal or diagonal. If a player is reduced by captures to one remaining piece, then this constitutes a winning position. If a player, by making a capture, creates a winning position for himself and at the same time, by eliminating an isolated piece, creates a winning position for his opponent, then the victory goes to the player making the move.

It is unlikely, but possible, that the same sequence of moves or the same board position may occur over and over because to deviate from this sequence would be disadvantageous for the players. This situation is not covered in the rules given by Sid Sackson, but we may assume that if an identical position occurs three times during a game, the game may be declared drawn by repetition.

The Opening

Allowing for rotations and reflections, there are nine possible opening moves in LOA: b1h1, b1b3, b1d3, c1:a3, c1c3, c1e3, d1b3, d1d3, d1f3.

Four of these moves, b1d3, c1e3, d1d3, d1f3, allow the moving piece to be captured. Black cannot recapture, and he has no compensation in terms of better position, so these move are disadvantageous.

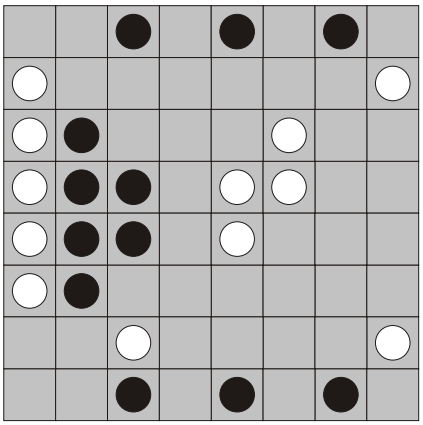
Likewise, the move b1h1 is a wasted move as it does nothing to develop black's position.

The move c1:e3 is what I call a cross-corner capture. 1. c1:a3 is generally not thought to be good because white can reply 1...a2c4. The accepted wisdom is that being able to centralize an end piece like this is good. (If 2. f1:c4 a6:c4, whereas if c1 had not been moved then black could simply capture with c1:c4 to gain a piece.) However, as we will see later on, a centralized position is not always to be considered good. Black does, moreover, gain a piece, which usually *is* good. The opening move 1 c1:a3 deserves more serious consideration.

This leaves the three popular opening moves, c1c3, b1b3 and d1b3. 1. c1c3 is the most central of the three moves, although it allows white to centralize too with 1...a2c4.

A more forceful move is 1. b1b3, threatening d1:a4. White will usually answer 1...a2c2, defending against this threat while bringing the man out from under the piece on b3 and pressing down on c1. However, this is an even exchange, the position is still symmetrical, and black has gained nothing yet from the advantage of the opening move.

My favorite opening move is 1. d1b3, and the reason for this is that black now has the moves b1b4 and b8b5 to block the white pieces on the a-file behind a wall of black pieces. He also has other excellent moves to follow, such as f8c5, f1c4 and d8b6, all of which solidify the wall and further blockade the white pieces, while making of his wall a focal group around which to build a strong position. I call this opening The Wall. The diagram below shows a position where white has let black get away with this plan. White does not, however, have to sit back and allow this to happen; in fact, he has a number of strategies available to him.



White's options are as follows.

- Attack the black wall

There are three ways for white to immediately attack the black piece on b3: h7f7, h5f7 and h3e3.

If 1...h3e3, black can reply 2. b3:e3 h6:e3, 3. c1:e3, and white has sacrificed a piece in order to halt construction of the black wall. However, maybe the better move for black is 2. c1c3, after which b1b4 creates a very solid formation. White's threat, in other words, has forced black to actually improve his position. In answer to 1...h7f7, black can simply capture with 2. b3:f7, which is not bad as it threatens e8:h5 as well as puts him a piece up. Otherwise, black can defend with 2. g8g6, after which he can continue to build his wall. The third possibility, 1...h5f7, may be slightly better for white as 2. b3:f7 is less attractive because black does not then have the threat e8:h5. In addition, 1...h5f7 starts a white wall (with h7e7 and a7d7 to follow) if black defends with 2. g8g6.

- Bring his pieces from behind the black wall

The pieces most likely to be trapped are the central four on a3, a4, a5 and a6.

The ten possible moves of these pieces are a3:c1, a3c5, a4c4, a4c6, a5c7, a5c3, a5c5, a6c4, a6c6 and a6:c8. All of these except a3:c1, a5c7, a6c6 and a6:c8 lead to capture of the moving piece without compensation. The two cross-corner capture moves are not at all popular at this stage of the game, although perhaps they deserve some attention. This leaves the two possibilities a5c7 and a6c6, both of which are good. In particular, 1….a5c7 has the additional advantage for white of starting off his own wall. It is my favorite reply to 1. d1b3.

- Build a wall himself

Rather than extricating his pieces from behind the potential black wall as fast as possible, white can go ahead and build his own wall. Since black has already started to vacate the first rank, it is best for white to build his wall in the top half of the board with either a5c7 or h5f7. Both of these moves are good because they accomplish dual purposes.

With 1....h5f7, white is also attacking the black piece on b3 and, as mentioned above, if black captures with 2. b3:f7 white has sacrificed a piece to sabotage the black wall. If black defends with 1. g8g6 white has gained a tempo in the construction of his own wall.

With 1….a5c7, white is also moving a piece from behind a potential black wall, as mentioned above.

Sample Game

These considerations regarding the opening few moves spring from my ideas for a strategic framework for LOA. Before going any further, however, it might be a good idea to have a look at an actual game.

Kerry Handscomb vs. Hartmut Thordsen, played by email March to May 1999

1. d1b3 a6c6

2. b8b5 a2c2

White has few options to move a3, a4, a5 without capture. This move also blocks c1, allowing his following move.

3. b1b4 a7c5

4. d8b6

Continues to build the wall and prevents a5c7.

4… h2f2

5. g8g6 h6:f8

Example of a good cross-corner capture, as it gets the piece from under g6 while threatening f8:b4 and therefore pinning the defensive piece on e1.

6. g1g3 f2d2

Blocks the defense e1:b4 if f8:b4.

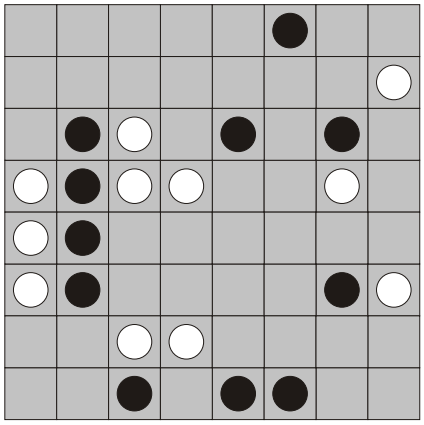
7. c8:f8

Simply removes the attacker.

7… h5d5

Threatening d5:c3, which is blocked by the next move.

8. e8e6 h4g5 (diagram)



Subtle move. On the face of it, white's only threat is g5:b5, which black can defend against with 9. f1d3. But then 9…h7h5, creating what I call a "shotgun" threat, as white is aiming at b5 with both barrels. White is threatening h5:b5 and then g5:b5 when black recaptures with d3:b5. Black could not defend against this. Therefore:

9. g6h5 h3:f1

10. c1:a3

This is a pair of good cross-corner captures. Black's move continues to hem in the white pieces. The point of white's move is the following:

10... f1f3

Threatening f3:b3, but black defends by eliminating a dangerous white piece.

11. g3:g5 d5d3

Again threatening f3:b3, but this is risky as black in turn now has a shotgun threat aimed at c5. (So the one white defender on c2 is not enough.)

12. b5:d3

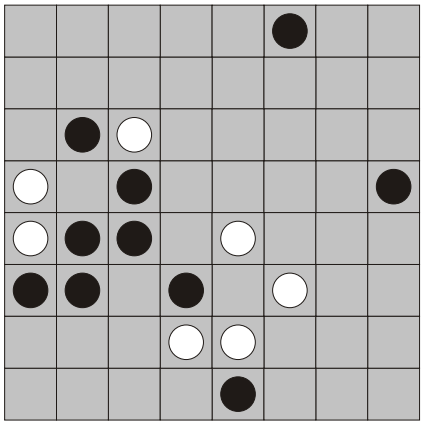
Black feels confident enough now to open the prison door a crack. His material advantage gives him greater flexibility than white.

12... h7e4

13. e6c4

White is running out of options. By threatening e4:b4, he allows black to defend by solidifying his position and blocking the white defense of c2:c5 to g5:c5.

13... c2e2
14. g5:c5 Resigns (diagram)



Black has a solid position and a large material advantage, while white's pieces are scattered and ineffective. All black has to do is calmly connect his stragglers one by one into the main group.

In the second part of this article we will look in more detail at some concepts which form a strategic framework for LOA.

In the meantime, Dave Dyer's LOA Homepage is at http://www.andromeda.com/people/ddyer/loa/loa.html. It contains some interesting information. A large number of LOA players are active through Richard Rognlie's play-by-email server (see opposite). Otherwise, the two organisations listed below hold regular LOA tournaments and can put you in touch with people for play by email or by regular mail. ■

Postal and E-mail Gaming

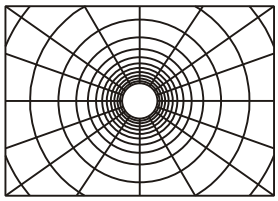
The kNights of the Square Table is a postal (and latterly email) gaming club which has been in existence for nearly 40 years. Most of the members play Chess, but there is a sizeable contingent interested in Chess variants or non-Chess games, such as LOA, Amazons and Reversi. They publish a magazine and hold annual conventions.

KNights of the Square Table (NOST)
Donald cotton, 13393 Mariposa Road
248 Victorville CA 92392, USA
email: doncotten@aol.com
http://members.xoom.com/knightsost

AISE is an Italian postal and email gaming organization devoted to Chess variants. Mostly the members play the various types of Progressive Chess, but they also play a number of other games, including LOA. AISE publishes a magazine and organizes regular tournaments.

Associazione Italiana Scacchi Eterodossi (AISE)
Alessandro Castelli
C. Da Potenza n. 11
62010 Villa Potanza (Macerata), Italy
email: mc4839@mclink.it
http://www.geocities.com/Colosseum/lodge/2483/

Games on the Internet



The worldwide web has been a great boon for game players. There is a great deal of information about games on the web, as well as many opportunities to find opponents, even for some of the more obscure games. No doubt everyone has their own list, but these are some of the sites I find interesting.

Sometimes I find a find a website interesting even when I do not play the game featured. This is certainly true in the case of the homepage of the *Renju International Federation* at http://www.lemes.se/renju/. Although my personal opinion (not shared by thousands of devoted Renju fans, I might add) is that the rules of Renju are an inelegant solution to the imbalance in the primitive five-in-a-row game, I find the whole Renju world fascinating. Here, after all, is a game refined by the Japanese, organized out of Sweden, and spanning Scandinavia, the Baltics, Russia, China and Japan. The top ranked player is Japanese Shigeru Nakamura, but the world's number two, Ando Meritee, is an Estonian. The website is sprawling and idiosyncratic.

Another website that I find myself looking into now and then, even though I do not play the game, is that of the *Federation Modial du Jeu de Dames* at http://www.fmjd.nl/. The game here is International Draughts, most popular in the Netherlands, although there is a globe-spanning collection of national organizations. What I find most interesting is that the *FMJD* is promoting Christiaan Freeling's hexagonal version of their game, Hexdame, as a replacement to the traditional game on a 10x10 square board, Apparently Hexdame is less drawish. I am sure this is an unprecedented action by an otherwise conservative organization. Just imagine an announcement from FIDE that they were promoting Glinski's Hexagonal Chess!

This brings me to the website of the great Dutch games inventor Christiaan Freeling at http://www.mindsports.net/. Of course Hexdame is included, but also a large variety of his other games. I like these games a lot. Although they tend not to involve totally new concepts, many of them are excellent and sophisticated adaptations of existing game ideas. An example of this is Emergo, which takes the column checkers concept in a new direction. One of the most original of Freeling's games is the modern classic Havannah. You can play these games online at this website. .

A great way to play games on the internet is by email through Richard Rognlie's server. The website can be found at. http://www.gamerz.net/~pbmserv. The server sends an updated board position to both players after each move, which eliminates a lot paperwork. A large number of games are now available on this server, including some pretty obscure ones as well as the old favorites. (One of these days I just have to find the time to play Philosopher's Football!) Because it is well known and easy to use, a number of the major email tournaments are organized at this venue, including Lines of Action, Trax, and Renju. It is an amazing resource for gamers.

Surfing the net is a personal thing, and these are just some of my thoughts on a few sites which caught my eye. I would welcome comments from other people on their own favorite game websites. ■

Kyoto Shogi -- Part 1

The reader is probably familiar with Chess, but perhaps not with Shogi. Shogi is the king-hunting game of Japan. It differs from Chess in three basic ways:

- Nearly all pieces can be promoted.
- Pawns capture as they move, orthogonally forward.
- Captured pieces are not dead, as in Chess, but change sides and become reserves for the capturing player. This means that, subject to certain limitations, a player may re-enter a captured piece to the board rather than move a piece already on the board.

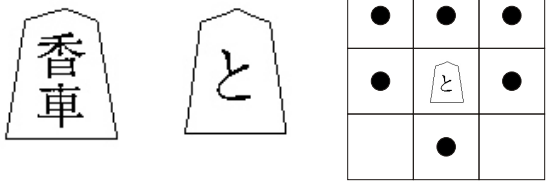
In 1976, a small Shogi variant was published under the name *kyoutoginkakukinkeihifushougi*. In English, this tongue twister is usually rendered as Kyoto Ginkaku Shogi or just Kyoto Shogi. Kyoto Shogi uses all the pieces from conventional Shogi except the promoted rook and promoted bishop. The game is played on a 5x5 board with the pieces (five per player) initially arranged along the back rank.

Shogi pieces are flat and wedge shaped. Pieces belonging to the two sides are not distinguished by color, but by orientation: the pointed end of a piece faces towards the opposing camp. The value of a Shogi piece is written on top of the piece in *kanji* (Chinese characters). In regular Shogi, the value of the piece when promoted is written on the reverse side. In Kyoto Shogi, too, there are different values written on both sides of the pieces, but for a purpose other than promotion. Briefly, whenever a Kyoto Shogi piece makes a move on the board, whether to capture or not, it is reversed upon completion of the move. A subsequent move of this piece is made with the new value, upon completion of which it is again reversed.

It is often heard that Shogi is offputting because the piece values are indicated by *kanji*, which are "difficult." In reality there is no difference between associating a piece's move with a *kanji* or with the shape of the piece, as in Chess: both are essentially pictorial symbols. The difficulty is in remembering and getting used to the moves of the pieces rather than their physical representations. I considered using letters in the diagrams instead of *kanji*, but, despite having played Chess for nearly forty years, if I saw a diagram with Chess pieces indicated by letters, I would have problems understanding it. It is worth the little effort it takes to get used to the *kanji* because, once you get used to them, you will have the whole family of Shogi games available to you.

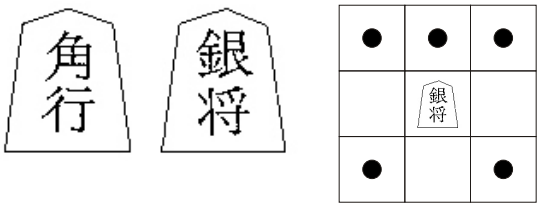
The five Kyoto Shogi pieces are shown below. Each pair of diagrams represents the two sides of the same piece. (The piece names are actually puns in Japanese. In the first piece, for example, *kyoto* means "lance-promoted pawn," but, with different *kanj*, it could means the Japanese city of Kyoto.)

1. *Kyoto*



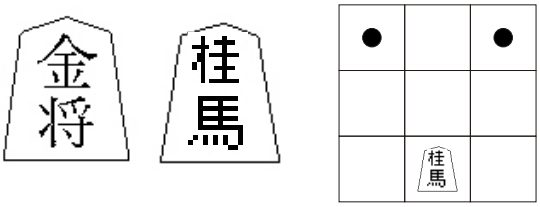
Kyoto is the name of a Japanese city famous for its many temples and other historic and cultural artifacts. Here it refers to *kyou* (lance) and *to* (promoted pawn in regular Shogi, sometimes called *tokin*). The lance, on the left, moves like a rook in Chess, but only straight forward, neither sideways nor backwards. The *tokin*, on the right, can move one square in the directions shown in the diagram. It cannot move diagonally backwards.

2. *Ginkaku*



Ginkakuji is the famous silver-roofed temple of Kyoto. Here it refers to *gin* (silver) and *kaku* (bishop). The bishop, on the left, moves exactly like a Chess bishop. The silver, on the right, can move one square in the directions shown in the diagram.

3. *Kinkei*



The *kinkei* is a golden bird roof decoration. Here it refers to *kin* (gold) and *kei* (knight). The gold, on the left, moves exactly as the *tokin*, which is the right side of 1. above. The knight, on the right, moves exactly as a Chess knight, and can jump over intervening pieces, except that its move is restricted to the two squares shown in the diagram.

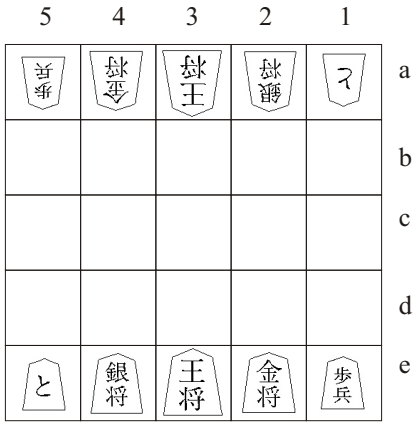
4. *Hifu*

The meaning of the *hifu* is a little obscure. It could mean a secret recording. *Hi* is the rook and *fu* is the pawn. The rook, on the left, moves exactly like a Chess rook. The pawn, on the right, is a Shogi pawn: it moves one square forward and captures forward, too, unlike the Chess pawn.

5. *Osho*

The *osho*, or king, moves like a Chess king. It is the only piece that does not reverse when it moves. The object of the game is to capture the opposing king.

The full name of the game expresses the values of the pieces and their arrangement along the back rank from left to right. I intend to refer to the pieces off the board in general by their compound, Japanese, names and when they are on the board by their English names. (Except that the *tokin* has no English equivalent.) For example, a *hifu* in hand (piece in hand = captured piece not yet re-entered) will become either a rook or a pawn on the board.



The diagram above shows the starting position. Note that the squares are numbered in the traditional Japanese way.

Rules

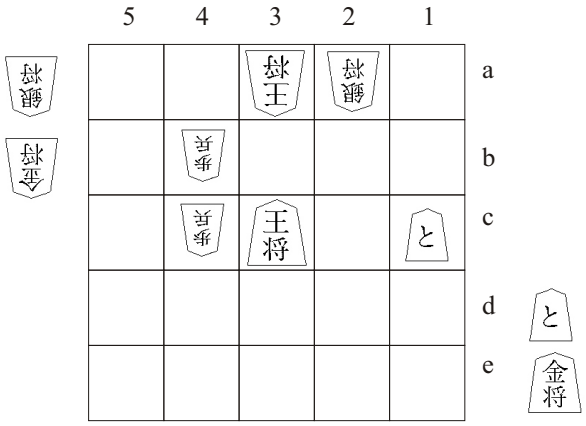
The rules are basically those of Shogi. In other words, players make one move each by alternating turns. A player moving a piece onto a square occupied by an opposing piece captures that piece and keeps it by the board, usually on the right side. (A player's captured pieces will be shown to his right in our diagrams.) On a subsequent turn, a captured piece may be placed on any vacant square on the board instead of moving a piece already on the board. The first player to capture the opposing king wins.

The rules differ from Shogi in the following details. In Kyoto Shogi, there is no promotion: at the conclusion of every move, the piece that moved must be reversed. For example, after the initial move T-4d, the first player (traditionally called black although the pieces are not distinguished by color) has a lance on 4d; after the reply P-5b the second player (ditto, white) has a rook on 5b; after the third move (black's second move) Lx4a, black has a *tokin* on 4a, a *kinkei* in hand, and white is in check.

In Shogi, a piece must always have a possible move, so a piece may not be dropped (re-entered), or moved without promoting, to a square from which it would have no further move. In Kyoto Shogi, this is not the case. There are no restrictions on squares to be dropped on or moved to. In Shogi, a piece can only be dropped in its unpromoted state. In Kyoto Shogi, which has no promotion, a player can choose which side up to drop a piece. In Shogi, only one unpromoted pawn per player is allowed on each file. In Kyoto Shogi, two pawns are possible on one file. It is legal to drop a pawn to give mate in Kyoto Shogi, but not in Shogi. (Although this rule seems unnecessary as a *hifu* could be dropped as a rook with the same effect.)

Chess players are used to the idea of a draw by stalemate. In Shogi (and Kyoto Shogi), it is not illegal to move into check, so stalemate does not arise. In Kyoto Shogi it is possible to arrive at a position from which a player has no physically possible move. In such a case the player loses. Repeating a position three times loses for the player whose move brings about the initial position of the sequence, unless the position is repeated by checks, in which case it is a loss for the checking player. These repetition rules are for completeness only; they are very rare cases.

Kyoto Shogi is a fun game. There is almost no opening and the rapid changes of position can be quite unpredictable. An average game lasts about forty moves (twenty each). In this short series of articles, it is my intention to demonstrate some of the amusing and difficult aspects of the game drawn from my own playing experience. I will also attempt a little philosophy, but all with the harmless aim of encouraging experimentation with this obscure form of Shogi. To conclude this present introduction, here is the finish of a recently played game with some comments.



(Only one side is shown of the captured pieces to the side of the board, but they can be dropped with either side up.)

My opponent had given up a piece for a strong-looking attack. His king is in an aggressive position and my *hifu* are both dysfunctional as pawns. However, he appears to have run out of

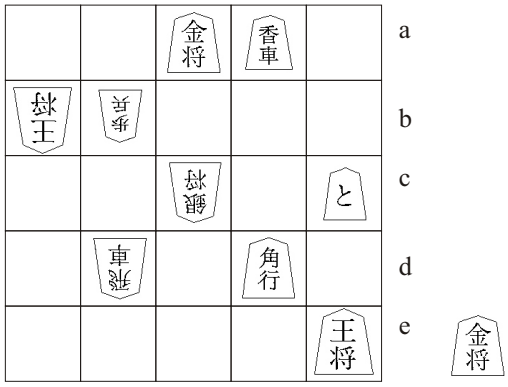
steam and accordingly decided to recapture the piece. Moves from diagram:

22. N*2c K-4a
23. T*3a K-5b
24. Tx2a=L

This lance can be considered to constitute a half piece loss. More importantly, my own king is now beyond the range of sente's pieces, while he has only one piece in hand with which to continue the attack or defend.

24… B*5e
25. K-2d N*3b
26. K-1e B-3c=S
27. S*2e P-4d=R
28. N-3a=G N-2d=G
29. Sx2d=B (diagram)

a



29… Sx2d=S (should be =B)

This silver should have become a bishop, but in this game stayed as a silver. Shogi players when exchanging bishops early in the game often do so by picking up the opponent's bishop, in one movement inverting and reversing it so that it becomes their own promoted bishop, and then placing their own bishop in hand. I did this on 2d and ended up with a silver on 2d instead of a bishop. This eccentricity went unnoticed by myself, my opponent and a third player watching the game!

30. K-1d B*4e

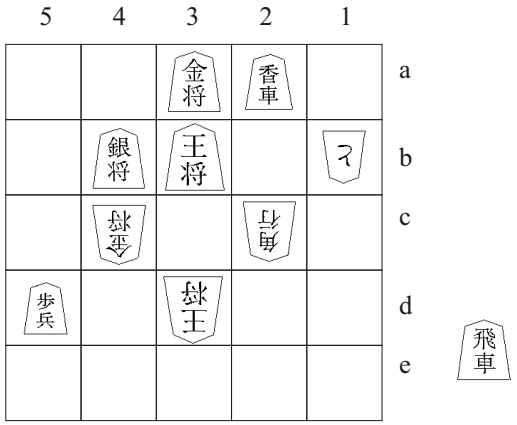
P-4c=R would win immediately.

31. G*5e Sx1c=B

Had I had a bishop on 2d, this would be double check and mate next move.

32. Gx4d=N K-4c
33. Kx1c T*1b
34. K-2d Kx4d
35. B*3e K-5e
36. R*5c B-5d=S
37. K-3c G*4c
38. K-3b K-4e
39. Rx5d=P Kx3e
40. B*5c K-3d
41. Bx4b=S B*2c mate (diagram)

We were playing ten minutes a game followed by thirty seconds of byouyomi (thirty seconds a move) so the endgame got quite exciting. ■



Mike Sandeman is a strong, 4 dan Shogi player and swimming teacher living in Japan. The game score above is from a Kyoto Shogi tournament organized by him in October, 1999.

I will just say a few words here about Shogi and the Shogi variants for those that have not encountered them before. By classifying Kyoto Shogi as a Chess variant, we are using the term Chess variant in the broad sense to mean Chess-type game. In other words, it is a game with two opposing armies of pieces with differing powers of movement, the objective being to capture a particular one of the opposing pieces, the king, usually.

Standard Shogi is the Japanese representative of the family of Chess-type games which extends across Eurasia. Shogi is extremely popular in Japan -- far more so than Chess in western countries. Like Chess, Shogi has its precursors and modern variants. Many of the older Shogi variants, going back to medieval Japan, were much larger than the standard game, which is played on a 9x9 board -- some of them were gargantuan battles with hundreds of pieces, played on boards up to 25x25. A number of these larger variants are fascinating games and very playable. Chu Shogi, for example, played on a 12x12 board, is regarded by some as the best of all the larger Chess-type games, whether from east or west.

In modern times, a number of smaller Shogi variants have been devised. Kyoto Shogi, presented here, is representative of this tendency. Quite playable games as small as 3x3 have been introduced. Because of the nature of Shogi pieces, with each piece able to take two possible values, Shogi lends itself much more readily than western Chess to smaller variants. (I believe I am correct in saying that variants of western Chess played on boards smaller than 6x6 are uninteresting, if not actually trivial.)

It is possible to construct a Kyoto Shogi set by glueing together pieces from a standard Shogi set. A supplier of Shogi equipment is George Hodges, who can be reached at:

P.O. Box 77, Bromley, Kent BR1 2WT, England

George also sells equipment for the large medieval Shogi variants; in fact he was single-handedly responsible for resurrecting these games.

For those able to investigate Shogi on the web, Pieter Stouten's homepage at http://users.iol.it/stouten/shogi.html is a good place to start. Steve Evan's, writer of the review of Zillions in this magazine, has an excellent presentation of the Shogi variants at http://www.netspace.net.au/~trout/index.html. Another place to investigate is Hans Bodlaender's Chess Variant Pages at http://www.chessvariants.com/. -- Ed.

MENTALIS

A forgotten classic from the 1970's

Thousands of games have been launched over the past few decades. A few of these enjoy a brief period of vogue before dropping out of sight and even fewer achieve lasting status as modern classics. The majority, however, are consigned to oblivion with hardly a second glance by the game-playing public. Mentalis, introduced around 1977 by Mentalis Ltd. of London, belongs to the latter category, and it is not difficult to see why, on the face of it. It was an odd little game, with nothing much to recommend it to the prospective purchaser browsing for a new game. There were no flashy graphics nor grandiose promises on the box, which plainly stated its name; inside was just a board and an unexciting collection of colored plastic pieces. Despite getting a very solid review in Games and Puzzles, Mentalis quickly disappeared without a trace. This is a shame, because beneath that unprepossessing exterior was a delightful little game.

Mentalis is, in fact, great fun to play. The tactical cut and thrust starts right from the very first move and the element of bluff, which makes poker such an exciting game, plays a very large part. A certain degree of memory is required in the play of the game, but, rather than being overwhelming, this factor is just sufficient to make the game riveting because of reluctance to let your attention wander so that you lose track of the position.

An original Mentalis set will be hard to come by now, but it should not be too difficult to construct your own set, and the reward will be well worth the effort required. Making a board is easy with a piece of card. It does not really matter if it is in the three different-colored sections, as long as the three regions are clearly marked. The pieces should be made as homogeneous as possible. Flat, neutral-colored counters would be ideal; the colored spots available from stationary stores can be used to denote the different values. You will need an opaque bag to hold the pieces. The commercial set also contained shields for storing your pieces, but a book or your hand will do as well.

Equipment

A Mentalis set consists of a board, as shown in Diagram 1, and 50 tile pieces.(The Mentalis diagrams are shown on the back cover.) The tiles are kept in a bag unseen until they are drawn out to be used by the players. The central 6x6 portion of the board, colored yellow, is the play zone. The two 2x6 end regions, colored red and green, are the capture zones. The capture zones take no part in the actual play and are used solely for storing captured pieces. Each of the 50 white tile pieces has a colored spot on either side. The colors are red (R), green (G), blue (B), black (X) or yellow (Y). Every piece has either R or G on at least one side. The distribution of the colors on the tiles is as follows:

R/G 10, R/R 5, R/X 5, R/B 5, R/Y 5,
G/G 5, G/X 5, G/B 5, G/Y 5

Starting the game

The players decide who moves first in some manner. The person moving first is designated "red" and places the red side of the board nearest himself. The other player is "green." Starting with red, each player draws four pieces from the bag (without looking!), being careful to keep them hidden from his opponent. Red then places a piece on any one of the play zone squares. This piece must have either red or green side uppermost. Red will know what color is on the reverse, but green will not.

Play

Play now alternates between red and green. On succeeding turns, players have a choice:

●Place a piece on the board in a vacant square in the play zone. It must always be either red or green side uppermost and it must always be orthogonally adjacent to a piece already placed.

●"Flip," or turn over, a red or green piece that has already been placed on the board. Depending on the color on the reverse side of this piece, the player may have to take certain further action.

*If the reverse side is red or green, nothing happens and the turn finishes.

* If the reverse side is black, the player who has flipped this piece must pay a penalty of one piece to his opponent. This is accomplished by transferring a piece from his 2x6 capture zone into his opponent's capture zone. If he has no captured pieces, then he must draw a piece randomly from the bag and place it in his opponent's capture zone. After the player has paid the penalty, he flips the black piece back to red or green side uppermost and his turn finishes.

* If the reverse side is blue, the player flipping it must jump it orthogonally over an adjacent piece of his opponent's colour onto a vacant square immediately beyond. (See Diagram 2.) Having done that, he captures both pieces and adds them to his capture zone. If he cannot jump in this manner, either because there is no opponent's piece orthogonally adjacent to the flipped piece, or because, even when there is, there is no vacant square beyond it, the blue piece is captured by his opponent and added to the opposing capture zone.

* If the reverse side is yellow then the player must "hop"

any other piece on the board other than the one he has just flipped, including another yellow piece. He does this by moving the selected piece to any other empty square in the play zone, provided that, in this square, it is orthogonally adjacent to another piece. A piece may not be flipped while being hopped. The flipped piece remains yellow side up and may never be flipped again. If, because a yellow is flipped at the start of the game, there is no other piece available to hop, the yellow is left as it is and the turn finishes.

A player may not flip a piece that was just flipped by his opponent in the preceding move.

Captures

Whenever a 2x2 square of four red or four green pieces is formed in the play zone, these four pieces are immediately captured by red or green, respectively, and added to his capture zone. It is possible to capture a four of your own color even during your opponent's turn.

If a 2x2 square of four yellows is formed, it is immediately captured by the player who created it and added to his capture zone. (See Diagram 3.)

Winning

A player wins when he has captured twelve pieces, and the squares of his capture zone are therefore all occupied.

Flip Two – Take Four

When a player runs out of pieces in his hand, he does not straight away take new pieces from the bag, but waits until his next turn. His next turn is a special "flip two – take four" turn. What this means is that he makes two flip moves and then takes four new tiles out of the bag to finish his turn. He must flip two different pieces, if possible, and cannot, therefore, flip a red to green and then back again. In the unlikely event that there is only one piece available to flip, then he flips just this one piece.

Sometimes it happens that there are insufficient pieces left in the bag for a player to draw the full four pieces. In such cases, all the pieces captured so far are returned to the bag from the capture zones. He can then go on to replenish his hand to four pieces. The players must take note how many each still needs to win before removing the capture zone pieces. (The rules with the commercial set state that merely enough pieces to complete his hand are taken from the capture zones, but I think this is unsatisfactory as it does not allow a random draw.)

Other rules

At no time may either player look at the reverse sides of pieces in the play zone. You have to legitimately flip a piece as part of your turn to do this. Players should try to remember the reverse sides of the pieces they have placed and any that have been flipped. At any time, however, a player may examine the reverse sides of captured pieces, whether his own or his opponent's. (Again, the rules with the commercial set are not specific on this point, but I believe this rule makes for a better game.)

Certain repetitive situations may arise where a certain combination of pieces is continually flipped by the players. There is an example of this in Diagram 4. Other more complex, repetitive situations may also arise. In such cases, if neither player is willing to break this sequence, the game should be declared drawn. (Once again, the rules with the commercial set are ambiguous on this point, but I believe this is the best rule.)

As an optional rule, multiple jumps can be allowed with a blue piece. In other words, once the blue has jumped one enemy piece, if it is now adjacent to a second piece that can be jumped it may do so, and so on. All the jumped pieces are captured along with the blue.

There is a really easy and effective handicapping system. The more skillful player usually plays red, and some of the R/R pieces are removed from the bag before the start of play. To give a light handicap, remove one R/R piece, and for a heavy handicap remove all five.

Tactics

To give an idea of the type of fun tactics involved in playing Mentalis, here is an example of the first few moves of a game.

Red draws: G/G, R/B, R/Y, R/R
Green draws: G/G, R/Y, G/G, G/B

1. R/B c3

Putting a blue in the center of the board is a common opening move. Green has to avoid placing a green next to it in case the first piece is a blue, which red can then flip, capturing both pieces. Of course, another common opening move is to put a black in the center of the board and try to bluff your opponent that it is a blue.

1… R/Y c2

Now if green has guessed right about red's placement of a blue on c3, then he could flip c3 and capture c2 on the next move, so red plays to block this.

2. G/G c1

Red also manages to tuck this piece, which is quite valuable for green, away onto the side. But maybe c2 is a blue and green can flip and jump c3. The possibilities are endless, but red takes a chance and assumes c2 is not a blue.

2… G/G d2

Red has guessed right about c2, so green simply gets down one of his valuable pieces.

3. R/R b2

Red knows c2 is not a blue now so he can threaten the four.

3… flip c2, c1e2 (see Diagram 1)

Green flips the yellow to block the red four and moves the green into a better position.

So the game continues. Often the tactical considerations get very complicated, particularly around the flip two – take four moves or when one of the players is close to winning. You will find this out as you play this game for yourself. Believe me, it is a lot of fun! ■

"Chess … is so completely satisfying that a man may easily devote his life-time to it. It is not because they can do nothing else that men play chess, as one often hears said, but because on those sixty-four squares the human intellect can roam, not indeed without boundaries, but without any boundaries that the mind of man has yet been able to surpass."

Lord Dunsany, *Patches of Sunlight*

The same is true, of course, of many other games. -- Ed

Let's Keep Our Heads...

From the WEEKLY WORLD NEWS, May 24, 1994

Moscow -- Doctors are blaming a rare electrical imbalance in the brain for the bizarre death of a chess player whose head literally exploded in the middle of a championship game!

No one else was hurt in the fatal explosion, but four players and three officials at the Moscow Candidate Masters' Chess Championships were sprayed with blood and brain matter when Nikolai Titov's head suddenly blew apart. Experts say he suffered from a condition called Hyper-Cerebral Electrosis, or *HCE*.

"He was deep in concentration with his eyes focused on the board," says Titov's opponent Vladimir Dobrynin. "All of a sudden his hands flew to his temples and he screamed in pain. Everyone looked up from their games, startled by the noise. Then, as if a bomb had been put in his cranium, his head popped like a firecracker."

Incredibly, Titov's is not the first case in which a person's head has spontaneously exploded. Five people are known to have died from *HCE* in the last 25 years. The most recent death occurred just three years ago in 1991, when European psychic Barbara Nicole's skull burst. Miss Nicole's story was reported by newspapers worldwide, including WWN. "*HCE* is an extremely rare physical imbalance," said Dr. Anatoly Martinenko, famed neurologist and expert on the human brain who did the autopsy on the brilliant chess expert. "It's a condition in which the circuits of the brain become overloaded by the body's own electricity. The explosions happen during periods of intense mental activity when lots of current is surging through the brain. Victims are highly intelligent people with great powers of concentration. Both Miss Nicole and Mr. Titov were intense people who tended to keep those cerebral circuits overloaded. In a way it could be said they were literally too smart for their own good."

Although Dr. Martinenko says there are probably many undiagnosed cases, he hastens to add that very few people will die from *HCE*. "Most people who have it will never know. At this point, medical science still doesn't know much about *HCE*. And since fatalities are so rare it will probably be years before research money becomes available."

In the meantime, the doctor urges people to take it easy and not to think too hard for long periods of time. "Take frequent relaxation breaks when you're doing things that take lots of mental focus," he recommends.

Although *HCE* is very rare, it can kill. Dr. Martinenko says knowing you have the condition can greatly improve your odds of surviving it. A "yes" answer to any three of the following seven questions could mean that you have *HCE*:

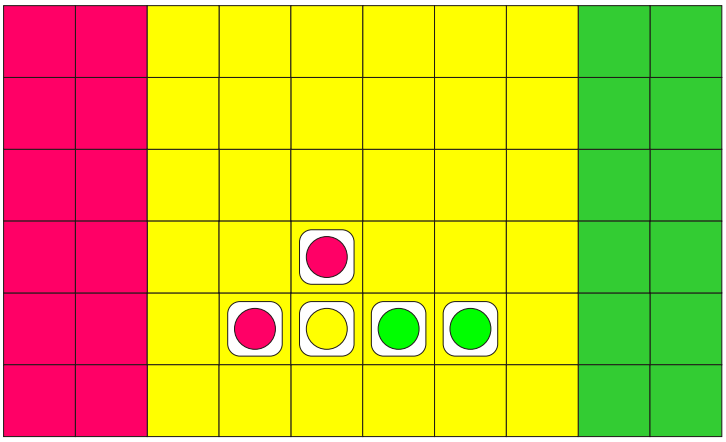
1. Does your head sometimes ache when you think too hard? (Head pain can indicate overloaded brain circuits.)
2. Do you ever hear a faint ringing or humming sound in your ears? (It could be the sound of electricity in the skull cavity.)
3. Do you sometimes find yourself unable to get a thought out of your head? (This is a possible sign of too much electrical activity in the cerebral cortex.)
4. Do you spend more than five hours a day reading, balancing your checkbook, or other thoughtful activity? (A common symptom of *HCE* is a tendency to overuse the brain.)
5. When you get angry or frustrated do you feel pressure in your temples? (Friends of people who died of *HCE* say the victims often complained of head pressure in times of strong emotion.)
6. Do you ever overeat on ice cream, doughnuts and other sweets? (A craving for sugar is typical of people with too much electrical pressure in the cranium.)
7. Do you tend to analyze yourself too much? (*HCE* sufferers are often introspective, "over-thnking" their lives.) ■

Play zone

Diagram 1

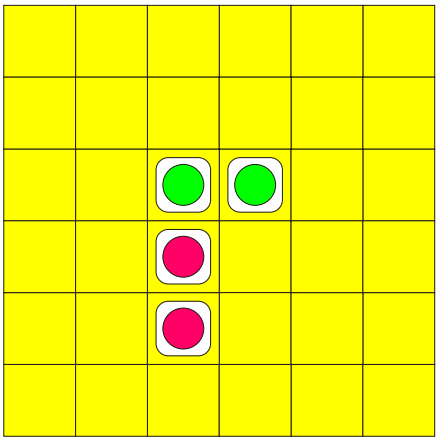
Mentalis board with game in play

Red's capture zone



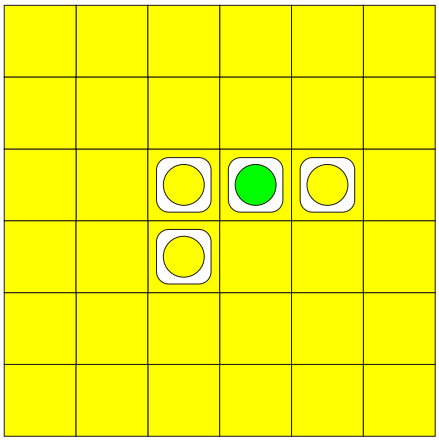
Green's capture zone

Diagram 2



Under the piece on c4 is a blue. If it is red's turn, he can flip this piece, jump over the green on d4, and capture both. If it is green's turn, and he flips the piece on c4, he cannot jump the piece on c3 because it is blocked. He must add the blue piece to red's capture zone.

Diagram 3



Under the piece on d4 is a yellow. Either red or green on his turn may flip this piece, hop the yellow from e4 to d3 and capture the square of four yellows.

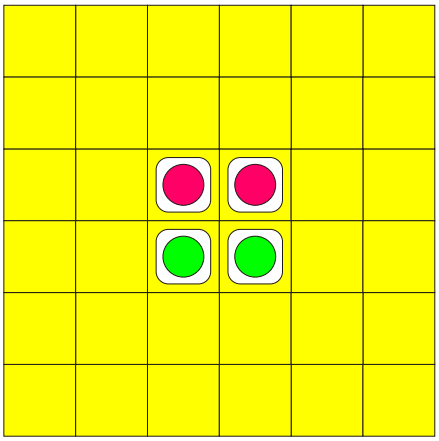


Diagram 4

Under c4 is black; the other three are R/G. Red flips c3, threatening a four; green flips d4 to defend; red flips d3; and so on. Unless this repetitive sequence is broken, the game will be drawn