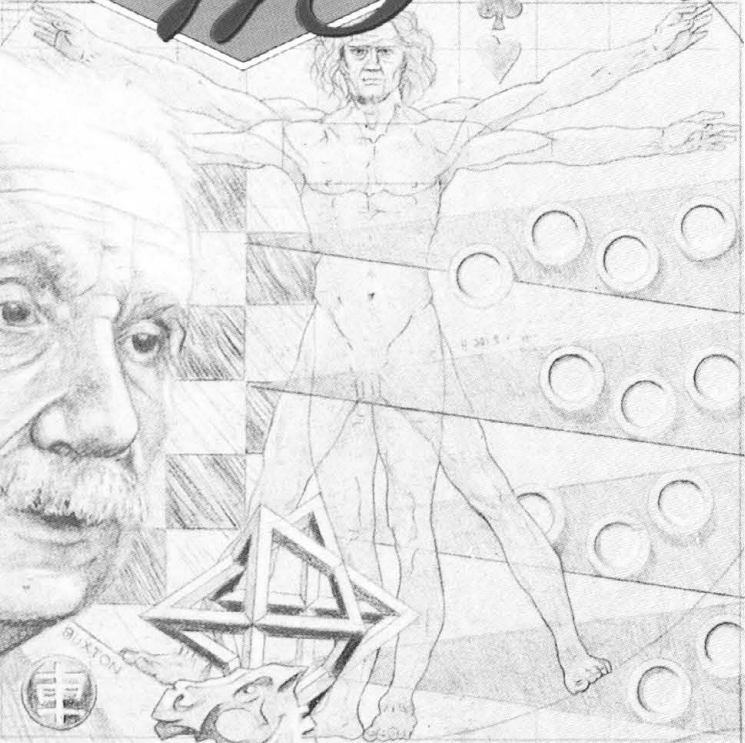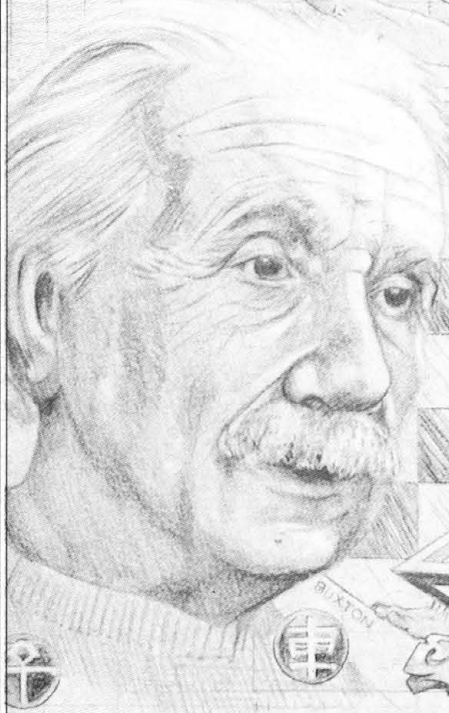# 10

INTELLIGENT™

Strategy Games

ENGLISH

- Backgammon -
- Chess -
- Echecs - Schach -
- Chinese Chess -
- Othello - Go -

- Renju - Gomoku -
- Bridge -
- 4 in a line -
- Draughts -
- Jeu de Dames - Dame

OXFORD • SOFTWORKS

10

INTELLIGENT
Strategy Games

The Oxford Softworks

Intelligent Strategy Games 10
Introduction

● Oxford Softworks have searched the ancient and modern world to assemble this compendium of strategy games - so you can pit your wits against the modern world's most cunning computer opponents. Here you will discover fascinating variants of the most enduring and challenging games that have occupied the greatest minds throughout the ages.

Probably The World's Finest Strategy Games

● Intelligent Strategy Games 10 brings you the world's most challenging strategy games into one easy-to-use package.

You will be playing against game engines from the strongest programmers, those who have won Computer Olympiad, European and World Championships for their chosen strategy game.

Each game has a consistent, easy-to-use, mouse driven graphical interface. 'Use one, use all' has been our design motif.

Intelligent Strategy Games 10 is the ideal partner for beginner and expert alike. All standard features are integral to the programs, take-back, save, load games as well as special features applicable to each game.

The Chess Family

Chess - the universal game of skill and the strategist's ultimate pleasure.

Chinese Chess - the oriental version of chess, reflecting the riches of Chinese culture and philosophy.

Games Of The Table

Bridge - the world's most popular and sophisticated card game.

Backgammon - the gambler's classic game of chance and skill.

Quick To Learn, Slow To Master

Othello - the rules can be learnt in a few seconds, but the game can take years to master.

4 in a line - simple, yet fascinatingly addictive, the first non-trivial game to be 'solved' by computer.

Draughts - deceptively simple, yet full of labyrinthine intricacies.

Oriental Battlefield Games

Go - the oriental game of surrounding and territorial advantage. The board represents the uninhabited world bounded on all sides by the seashore. The rules are simple, yet play is complex, subtle and intuitive.

Gomoku - played on a Go board, and resulting in a more simplified and quicker-ending game than the more exacting drawn-out battle characteristic of Go.

Renju - a Japanese variant of Gomoku, requiring considerably more skill.

Hard Disk Installation

Note that minimum system requirements are shown on the program format sticker on the Intelligent Strategy Games 10 box. Please ensure that you have sufficient machine RAM and hard disc space before attempting the load or installation procedures.

IBM PC or 100% Compatible

Intelligent Strategy Games 10 must first be installed to hard disc.
Insert disc 1 into drive A, then type

    A:INSTALL

Intelligent Strategy Games 10 will then be installed into a directory called ISG10 on drive C:.

Loading the Programs

Once the installation has been completed, Intelligent Strategy Games 10 can be run by typing:

    C:
    CD \ISG10
    MENU

If you have insufficient memory (manifested by inability to load, program failure, memory error message) then this is most likely to be an out of memory problem, probably caused by the presence of device drivers, TSR's or other programs previously loaded into the computer's memory which are still resident. Try removing any TSR's from your CONFIG.SYS or AUTOEXEC.BAT files and re-booting.

Extra documentation, not available at the time of printing this manual, may be obtained by typing:

    C:
    CD \ISG10
    TYPE README

Copy Protection

Unlike most entertainment software, Intelligent Strategy Games 10 may be easily copied to another floppy disc, or to a hard disc. However, to prevent the use of unauthorised illegal copies, on loading you may be asked for a specific word from a particular place in this manual. On entering the correct word the program will run.

We strongly recommend that you make a back-up copy of the program discs (using the normal disc-copying procedure for your machine) and keep the originals in a safe place. Before backing up your master discs be sure to set the write-protection, to prevent accidental damage.

Our Guarantee

In the unlikely event that your master disc(s) fails to load please return **the disc(s) only** with a clear description of the problem to:

Technical Support, Oxford Softworks, Stonefield House, 198 The Hill, Burford, Oxfordshire OX18 4HX, England.

User Interface and Menus

From the main menu screen you have the option to select any of the ten games available or to exit to the operating system.

After loading one of the games, you will be presented with the appropriate game start screen.

To access the game menu, move the mouse to the top of the screen and press the right mouse button for the menu to appear. Items may be selected by moving the mouse over them and then releasing the mouse button whilst over the highlighted choice.

If no mouse is connected the menu bar will appear after pressing **F1** and items may be selected by using the cursor keys and pressing **Return** when the required item is selected. In general the mouse pointer may be moved using the cursor keys, with the right **Insert** key emulating a left button and the **Del** key the right button.

All the games have been designed with consistent menu usage. The **Game** and **Actions Menus** perform the same functions (with one or two exceptions) in all ten games. The **Special Options Menu** contains functions specific to the particular game.

Menu items which are not available are greyed out. Certain menu items may be disabled under particular circumstances. (Take Back a move at the start of a game, for example).

Game Menu
New - starts a new game
Sound - toggles on and off any warning beeps
Quit - returns you to the main game selection menu

Actions Menu
Save - save the current game to disc
Load - loads a previously saved game from disc
Erase Game - deletes a saved game file from disc
Take Back - takes back a move in the game
Replay - reverses the effect of take-back

Special Options Menu
Backgammon
Double - offers to double the game
Notation - toggles board notation on or off
Defensive - selects a defensive style of play
Aggressive - selects an aggressive style of play

Bridge
Abandon hand - skip this hand and go on next
Peek - to look at the opponents hands

Go
Board - use a 9x9, 13x13 or 19x19 board
Pass - skip your move instead of playing a stone
Autoplay - the program will play a game against itself
Supervisor - allows two humans to play each other

Level - set the level of play
Hint - suggests a move for you to play
Setup - allows you to alter or setup a position

Chess
2D/3D - switch between 2D and 3D boards
Set time - set different levels of play
Autoplay - the program will play a game against itself
Supervisor - allows two humans to play each other
Swap sides - forces the program to play the next move
Move now - forces the computer to play it's move
Hint - suggests a move for you to play
Setup - allows you to alter or setup a position

Draughts/Checkers
Level - set the level of play
Flip board - reverses the board orientation
Setup - allows you to alter or setup a position

Othello
Level - set the program's skill level
Score - keeps a running total of games won/lost/drawn
Autoplay - the program will play a game against itself
Supervisor - allows a two player game
Swap sides - forces the program to play the next move
Pass - skip your move instead of playing
Move now - forces the computer to play it's move
Hint - suggests a move for you to play
Setup - allows you to alter or setup a position

Gomoku, Renju, 4-in-a-line
Level - set the program's skill level
Score - keeps a running total of games won/lost/drawn
Autoplay - the program will play a game against itself
Supervisor - allows a two player game
Swap sides - forces the program to play the next move
Move now - forces the computer to play it's move
Hint - suggests a move for you to play
Setup - allows you to alter or setup a position

Chinese Chess
Level - set the program's skill level
Score - keeps a running total of games won/lost/drawn
Autoplay - the program will play a game against itself
Supervisor - allows a two player game
Swap sides - forces the program to play the next move
Move now - forces the computer to play it's move
Hint - suggests a move for you to play
Setup - allows you to alter or setup a position
Pieceset - gives the user a choice of an English or Chinese pieceset

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Backgammon

Although versions of Backgammon have been played from Occident to orient for thousands of years, the first reference to the game as we know it was in 1645 when it regained popularity and developed into the game played today.

Rules of Play

The Board - The screen is divided into a rectangular board of two halves, the inner (or home) table and the outer table. Each section is subdivided by twelve alternately coloured triangles called points.

Pieces - Each side has fifteen checker-like pieces. The computer plays Black and the opponent White. Black's (the computer's) pieces move from White's inner table clockwise to Black's inner table. White's (your) pieces travel in the opposite direction.

Each player uses the two dice and the doubling cube.

Start of the Game - The computer automatically rolls the dice. The upper for White, the lower for Black. The player with the highest number plays first by using the number on both dice. If a double is thrown on the first throw the stake of the game is doubled, and the dice are rolled again.

Notation - Each point is numbered and a move list displayed. For example, B12-W6 means a piece has moved from Black position 12 to White position 6.
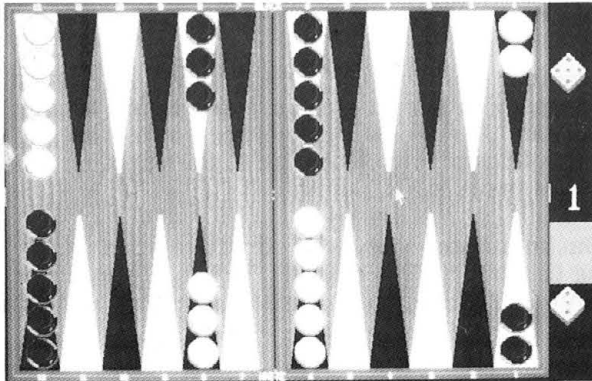
The Play - Each player's objective is to move all fifteen pieces to his inner table and then to bear them off (remove them from the table). The first player to bear off all his men wins the game.

The numbers on the dice show the number of points over which pieces may move. A single piece may be moved over the sum of the dice or two pieces moved, one for each.

When a player throws dice of the same value (a double) it counts double i.e. two sixes count as 24 points not 12 and the player may move up to four pieces.

The player must attempt to move as the dice dictate. If only one number can be played the higher must be used. If no move is possible play passes to the opponent.

The Moves - A point is open when it is not covered by two or more of the opponent's pieces. A single piece on a point is called a *blot*. When a blot is hit by the opponent the single piece is removed to the *bar*. This is effectively off the board and the piece must then re-enter before any other piece can be moved. The player with a piece removed must re-enter the board when a number is thrown that will place the piece on an unblocked point in the opponents inner table.

A player has blocked a point when two or more pieces occupy it. An opponents piece cannot rest on that point but it can move past it.

More than five pieces can rest on a point. A number appears on the point to show any extra pieces lying there.

Bearing off pieces. - Once all a player's pieces are in the inner table they may be taken off the board. The first player to remove all pieces wins. A piece may be removed from any point whose number shows on either dice e.g. if White rolls 4-3 then pieces from W4 and W3 may be removed. When a number higher than the highest occupied point is rolled pieces must be removed from the next highest point. If a piece is hit and removed to the bar, it must re-enter and come round to the inner table before further pieces can be removed.

Scoring - The game is won when a player has removed all pieces. If the loser has at least one piece removed and none left in the winner's inner table a single game is lost. If no pieces have been removed the loss is double (Gammon). If, in addition, any pieces are in the opponents inner table, or on the bar, the loss is triple (backgammon).

Doubling - Backgammon is played for an agreed stake which may be doubled during the game. Either player, before his go, has the right to offer a voluntary double. The opponent must agree to the double or forfeit the game at the current stake.

Go

Go, one of the oldest games in the world, is thought to have originated over 4000 years ago in the orient. Now the national game of Japan, Go is ranked higher than Chess and players are rated according to their strength like Judo.

Go is a fighting game. The board represents the uninhabited world bounded by the sea. The object of the game is to acquire territory by surrounding vacant areas of the board with stones. The player who achieves this most economically is the winner.

Rules of the game

The board and the stones - There are 361 intersections or points formed by 19 horizontal and vertical lines. The points are identified by letters and numbers along the board with A1 being the bottom left point. Beginners can play on a smaller board (9 x 9) or (13 x 13) as the game is then simpler and quicker.

Starting with an empty board, Black places a stone on an intersection. The opponents, by alternately placing stones on strategic areas on the board, try to enclose as much territory as possible. Once placed the stones remains stationary unless captured.

The Winner - The game is over when players agree that neither can increase their territory or the number of prisoners. After all captured stones have been removed each player counts the number of points they have enclosed and then deducts this from the number of points lost as prisoners. The player with the highest number wins.

The program, displaying unoccupied territory as squares of the appropriate colour, performs this calculation for you.

Capture of Stones - A stone is captured and removed when all the adjacent points are occupied by enemy stones - Figures 1a,1b and 1c. Two or more stones of the same colour are connected into a single unit by placing them on adjoining intersections - Figures 1d and 1e. Note that this connection is made only along the vertical and horizontal lines.
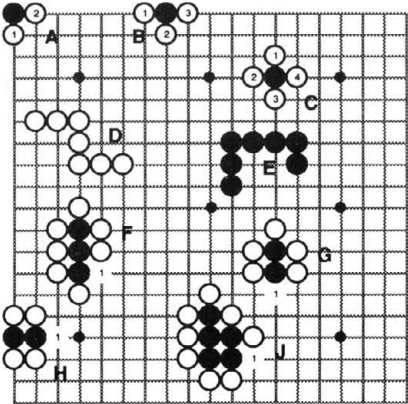

Figure 1

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Liberties - The vacant points immediately adjacent to a group of connected stones are called *liberties* or breathing spaces. When only one liberty remains the stone or group of stones in jeopardy are said to be in Atari. The Black stones in Figures 1f,1g,1h and 1i are in Atari and can be captured when the remaining liberty is occupied - as shown by a White play at 1 in each case. The captured stones are removed from the board at once.

Illegal suicide - A stone may not be placed at any point which is completely surrounded unless in doing so the move captures all or some of the surrounding enemy stones. No stone may remain on the board when it is completely surrounded.

Eyes - An unoccupied point, surrounded by stones of the same colour is called an eye. Figure 2a contains one eye. The opponent may not place a stone in this eye until all the outside liberties of this group have been occupied resulting in the capture of all of the surrounded Black stones - Figure 2b.
Since an eye may be occupied by the opponent only when it is the last liberty of the group, it follows that a group of stones containing two separate eyes is impregnable - Figure 2c and 2d.
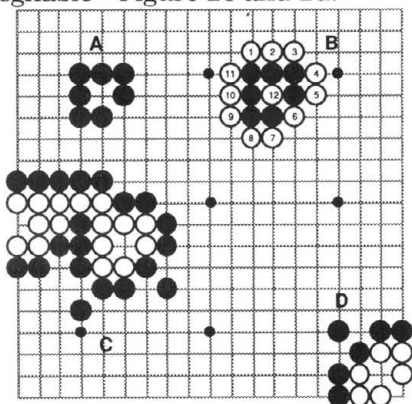
Figure 2

Except for a few rules pertaining to special situations, these are all the rules required to play Go.

Special situations.

Live and dead groups - A group of stones with two or more eyes is safe. A group of surrounded stones with only one eye is dead - Figure 3a. A White play in the eye will remove the last liberty of the Black stones which will then be removed from the board.
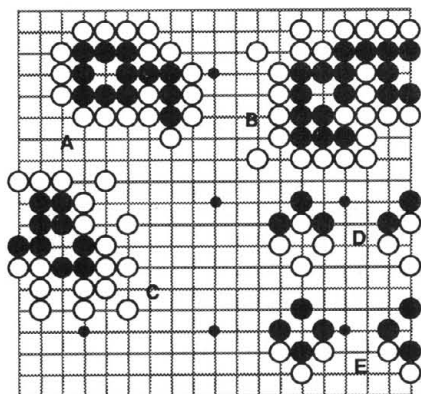
8

Figure 3

Repetitive situations - The situation shown in Figure 3d is called a *ko*. A White stone is threatened on three sides and is in atari. Black can capture it with the resulting position - Figure 3e. If White now recaptures this Black stone, the position is the same as at 3d again. The following rule prevents this happening: In a Ko, after a player has captured an enemy stone, the opponent has to make a play elsewhere before recapture is possible.

False Eyes - When all of the stones that form an eye are not connected to each other, that eye is false. Figure 3c has one real and one false eye and is therefore doomed.

The end of the game - When a group of stones is surrounded so that the formation of two eyes is not possible the group is dead. Unless some of the surrounding stones can be captured it will remain dead and be removed from the board at the end of the game.

Handicap stones - In order to give a weaker player the chance of winning over a stronger opponent the handicap system was introduced. This allows 2-9 stones to be initially placed in certain positions. If handicap stones are placed then White starts the game.

Passing - A player may elect to pass if there is no advantage in making a move. When both players pass the game ends.

Chess

The object of the game of chess is identical to that of many other games, namely the defeat of your opponent. In chess, this is done by placing your opponent's king in checkmate.

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Moving the pieces - Position the mouse arrow over the piece you want to move and click once. You can now move the piece to the desired destination square. Click on the mouse to drop the piece on the square. If the move is a legal one, you'll get the mouse arrow back again. If you pick up a piece and change your mind about moving it, return it to its original square and click once to drop it.

Special Moves

Castling - Just make the king move, the rook will be moved for you

En Passant - Just move your pawn to its destination square (one behind the pawn you are capturing 'in passing')

Promotion - Just move your pawn to the back rank,the promotion will be handled for you.

Use of the Menu

Set Level (Time) - Allows you to change the level of play.

1. Beginners or weak opponent - You can select ten separate levels from 'Orangutan' (very weak) to 'Gorilla' (not so weak).

2. Matching Time - The program will think for roughly the same time as its human opponent.

3. Average Time - You will be prompted for the time (in minutes and seconds) in which the computer will play each of its moves.

4. Tournament Mode - This is the strongest level, where the program makes the best use of available time.

5. Infinite Time - The program will think indefinitely until interrupted by the <ESC> key.

Swap sides - Use this feature to make the computer start a game as white or to change sides at any time. It forces the program to play the next move.

10

Alter position - Allows you to set up and modify a position. Pieces may be picked up from the menu. The program will test for impossible positions (too many kings etc.) and warn you accordingly.

Bridge

The Deal

Bridge is a game for four players. The dealer deals thirteen cards to each player. The turn to deal passes to the player to the left.

The Bidding

After looking at his cards, each player in turn, starting with the dealer, must make a call (pass, bid, double or redouble). If all four pass in the first round, the hand is abandoned and the deal passes to the next dealer. If any player makes a bid in the first round then the bidding is *opened*.

When a player does not wish to bid he says 'pass'. Otherwise each bid must name a certain number of tricks in excess of six which the bidder agrees to win, and a suit which will become the trump suit. Thus a bid of 'one spade' is a bid to win seven tricks (6+1) with spades as trumps. A bid may also be made in no-trumps. The lowest possible bid is one and the highest seven.

Each bid must name a greater number of tricks than the previous bid or an equal number using a higher ranked suit (suits are in precedence of no-trump, spades, hearts, diamonds, clubs).

Alternatively a player may double (or redouble) an opponent's bid.

The final bid becomes the contract. The player who, for his side, first bid the suit named in the contract becomes declarer and his partner becomes dummy. Dummy's cards are played by the declarer.
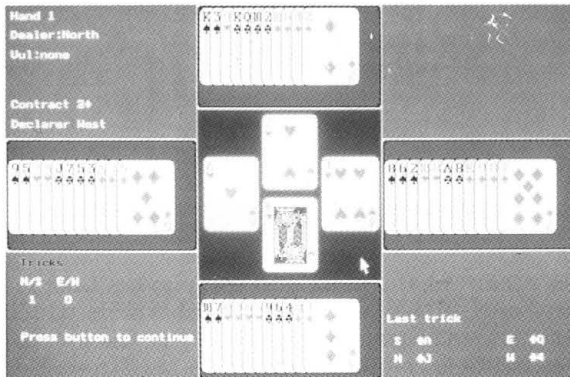
The Play

A trick consists of playing one card from each hand in rotation. The first card played to a trick is called a lead. The leader to a trick may play any card, but the other three hands must follow suit, if they can, or play any other card if not. A trick not containing a trump is won by the hand playing the highest card of the suit led. A trick containing a trump is won by the highest trump card.

Scoring

At the end of the hand, if declarer has made the contract he scores bonus points, otherwise declarer will suffer penalty points.

Use of Bridge Player

For ease of use you are always South, with your hand at the bottom of the screen. A natural bidding system is used, with Stayman, Blackwood and a choice of no-trump conventions.

4-in-a-line

Instantly addictive and the simplest to learn. The object is simply to get four men in a line, either horizontally, vertically or diagonally. 4-in-a-line excites artificial intelligence researchers because it was the first non-trivial game to be 'solved' - that is proved to be a win for the side that moves first.
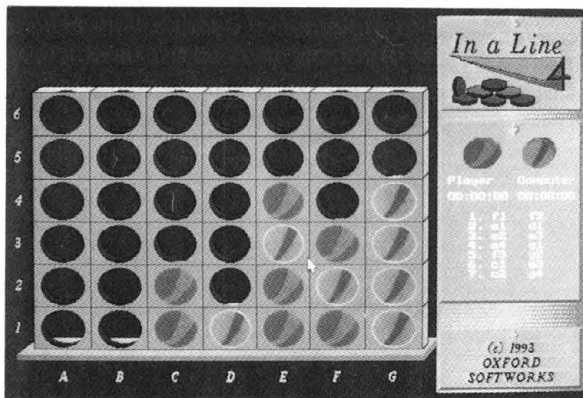
The 7x6 board is vacant at the start and the players take it in turns to drop a stone down any one of the seven vertical channels which then comes to rest on the lowest empty square.

The first player to make four-in-a-line wins.

Draughts or Checkers

The origin of the game is lost in history, but probably dates back to 6000 BC in early Egypt.

The Oxford Softworks Draughts may be played on a standard English 8x8 board.

Rules of the game

The object of the game is to capture all your opponent's pieces or prevent him from moving.

Pieces move diagonally, always remaining on the same coloured squares. A move is made to an adjacent square, a capture is made by jumping over an adjacent piece into a vacant square. A capture, if available, *must* be made in preference to a move. If a piece can continue to jump and make *multiple-captures* he must continue to do so.

If a piece reaches the opponent's starting rank it is promoted to a king.

Notation of the game record

Unlike chess, there is no coordinate system, instead the squares are simply numbered as shown below.
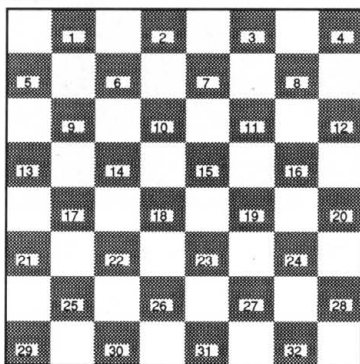
Making moves

Click on the piece you wish to move, and then on the square to which you want to move it.

If it is not ambiguous, selecting one square only will be sufficient.

If the move is illegal (or ambiguous), it will be ignored and you will have to enter another move.

Remember that the rule of forced captures apply, so look carefully for the reason if your move is not accepted.

Othello or Reversi

Othello is played on an 8x8 board, similar to Checkers. The two players each have thirty-two pieces, each piece being black on one side and white on the other.

The game begins with each player having two of his pieces placed diagonally in the centre of the board.

White begins by placing a piece, white side up, adjacent to a black piece and opposite a white piece such that a line of one or more black pieces directly intervenes (horizontally, vertically or diagonally) between the two white pieces.

Any intervening enemy pieces forming such lines are captured and turned over to show the capturing player's colour uppermost. A piece may change colour several times during a game.
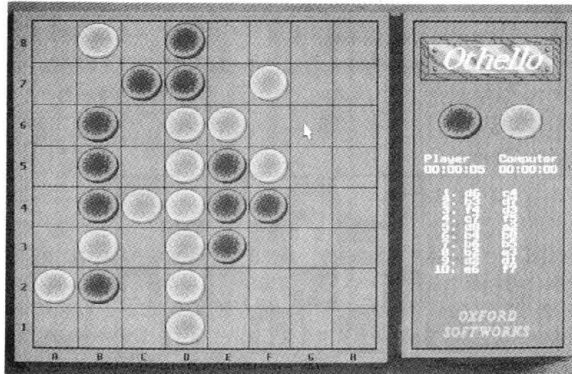
If a player is unable to move he must pass. If there are two consecutive passes the game ends.

The winner of the game is the side having the most pieces at the end of the game.

Gomoku

This game, played on a Go board, is particularly popular amongst those who prefer a more simplified and quicker-ending game to the more exacting drawn-out battle characteristic of Go.

As in Go, the board is vacant at the start and the players alternately play a stone on any intersection of lines. The object being to get five stones adjoining in a straight line, either horizontally, diagonally or vertically.

Black moves first, and as in Go a stone remains on the point on which it was first placed.

If a player succeeds in placing four stones in a line open at both ends, he wins because the opponent can only block one end, and then the fifth stone is placed on the other end.

This winning position can always be achieved if a player can place a stone on a point so that he forms two lines of three stones each, one of which can be manoeuvred into an open four in a line.

Note that an overline (a line of six or more stones) is not a win.

The first move confers the initiative and is a great advantage in Gomoku. In fact you should find after a few games that the winning threat of two lines of three is so easy to obtain that you should be able to win easily.

Renju

Renju is similar to Gomuku, but is played on a 15x15 board.
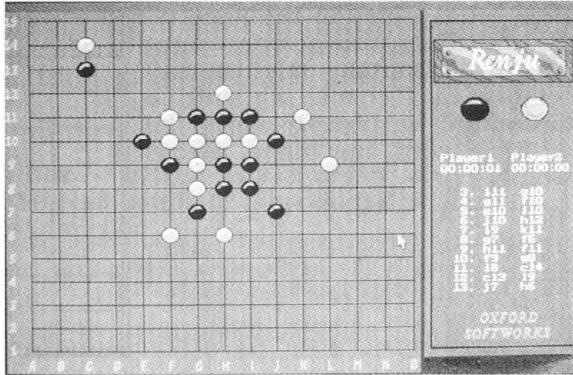
The Japanese have made Renju much more interesting and difficult than Gomoku. In Renju the player that moves first has certain restrictions placed on his moves:

(i) Any move that creates either a double or a triple line of three or four stones is illegal for black (the first player).

(ii) Any move that creates an overline (a line of six or more stones) is illegal for black. Note that, as in Gomoku, an overline is not a win.

Chinese Chess

Chinese Chess differs from its western counterpart, reflecting Chinese history and philosophy. The river in the centre of the board represents the Yellow River dividing northern and southern China; whilst the early development of gunpowder in China led to the addition of a cannon to the piece set.

The Chinese chess board is larger and more open allowing a greater scope for movement of the pieces.

Only the cannon may jump over or move through another piece.

A threat to capture the enemy king is called check, and the enemy king must then escape check on its next move.

If a side has no legal move and is not in check then the opponent scores a win by stalemate.

The object of the game is to checkmate or stalemate the opponent's king.

The Board

Chinese Chess is played on a board with nine vertical and ten horizontal lines. Pieces move between the intersections rather than between squares.
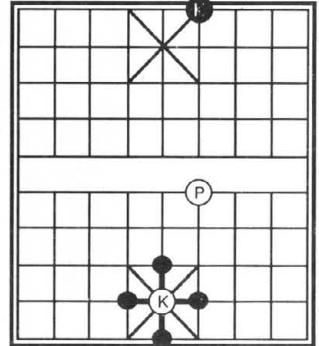The *river* divides the two halves of the board.
Each side has an *Imperial Palace* made up of nine points marked by diagonal lines.

The Pieces

The King - is restricted to the Imperial Palace and may move one point vertically or horizontally only. He may never move into check nor into a position where he directly faces the enemy king with no other pieces intervening.

The Counsellor - is restricted to the Imperial Palace and may move one point diagonally only.
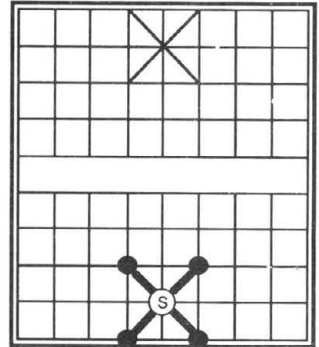
The Minister - may move exactly two points diagonally, he may not cross the river nor may he jump over or through obstructing pieces.

16
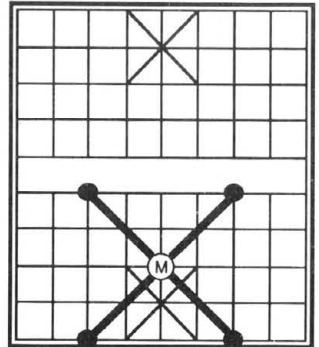
The Knight - may move one point vertically or horizontally, followed by a diagonal move to the left or right. Unlike normal chess the knight may not jump over an obstructing piece.
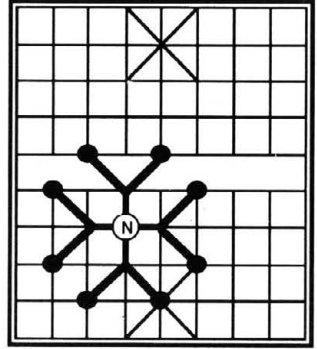
**The Rook** - moves any number of unobstructed points in a horizontal or vertical direction
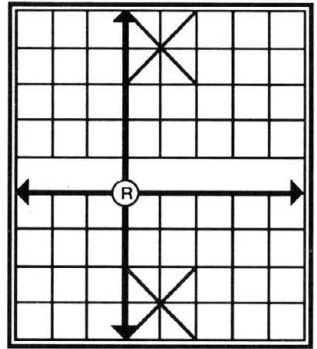
The Cannon - moves much like the rook, except that it may only capture by first jumping over an intervening piece of either colour. This piece is called a *bridge* or *screen*.
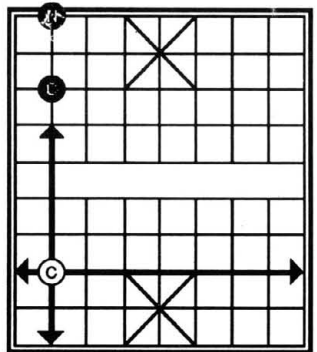
The Pawn - may move a single point forward, until crossing the river, when additional moves horizontally to the left and right are permitted. Pawns do not promote and may not move backwards. Pawn captures can only occur on forward moves.
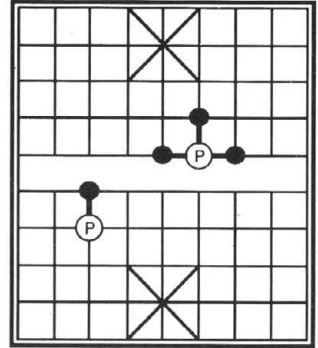
Tactics

The rook is considered the most powerful piece, followed by the cannon and then the knight. The cannon decreases in power as pieces are captured, whilst the knight increases since its mobility improves.

Ministers and Counsellors are limited in power since they are restricted to one side of the board. They should be used as defensive cover for the king.

Pawns are the least powerful due to their low mobility, they become more powerful when across the river, but then become less powerful as they advance further since they cannot then move backwards.

Drawn Games

A draw can occur when neither side has pieces remaining that can cross the river.

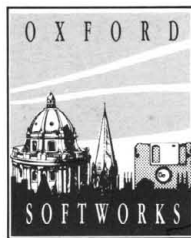Unlike normal chess, it is illegal to put the opposing king in check three times in succession.

Draws by repetition, as in normal chess, are illegal.

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