Thoughtwave is not an especially deep connection game, and its complexity drops dramatically with each move. However, there is some art to the optimal deployment of pieces. It is critical that players keep enough of the necessary pieces to complete their connection, while forcing the opponent into using up vital pieces. The scarcity of pieces makes it possible to trap an opponent.

History

Thoughtwave was invented by Eric Solomon in 1973.

Variants

Pista

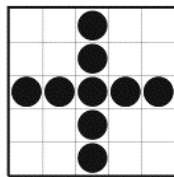Pista is Joris game #96 [2002]. It is identical to Thoughtwave except that

- there are no Tees,
- there is an unlimited supply of all tiles except Terminators (each player gets two), and
- tiles must be laid adjacent to at least one existing tile.

Barton's Game

Barton's Game, a precursor to Thoughtwave, is one of the earliest connection games [Barton 1939]. It features tiles identical to the Thoughtwave minus the Terminator. Play starts at a predefined square, then players take turns placing a tile adjacent to at least one existing tile. In one version of the game, the connection must travel around a central obstacle and connect back to the starting edge.

Davies's Game

Davies [2002] describes a set of games based upon the Thoughtwave tiles supplemented with special Poison and Magic tiles. Some games involve the continuous extension of existing paths each turn, and some games involve length-based scoring.

Hexa

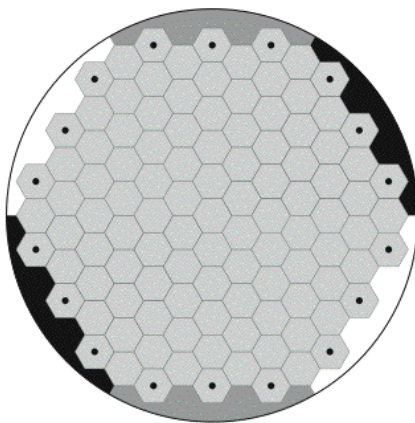Hexa is played with bicolored hexagonal pieces on a six-sided board design.

Figure 7.185. The Hexa board.

Rules

Hexa is played on the hexagonally tiled board shown in Figure 7.185. The game may be played by two players, White and Black, or may include a third player, Gray. Each player owns the sides of the board that bear their color. The three outer-most cells along each edge marked with a dot are special goal cells. The board is initially empty.

Each player starts the game with a number of hexagonal pieces marked with path segments (dark) on a neutral background color (light). The pieces are shown in Figure 7.186 and their distribution to each player is as follows: 1, 3, 3, 3, 1, 3 (top row); 3, 1, 2, 2, 2, 1 (bottom row). The piece shown at the top left is a *defensive piece* devoid of path segments. All other starting pieces are *offensive pieces* that consist of various configurations of path segments passing through a colored center.
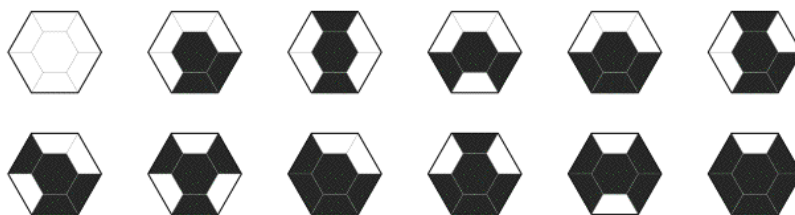

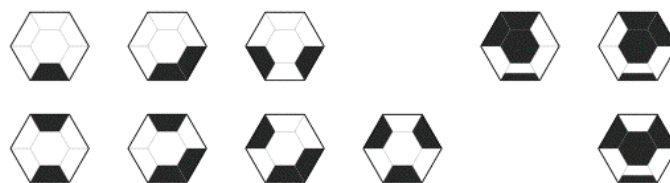**Figure 7.186.** Starting pieces for each player.

Figure 7.187. Defensive Pool pieces shared by all players.

Players also have access to a common pool of pieces called the Defensive Pool, which contains exactly one of each type of piece shown in Figure 7.187. These include additional defensive pieces with neutral centers (left) and *offensive-defensive pieces* that combine characteristics of both types of pieces (right).

Players take turns placing one of their pieces on an empty board cell. The piece cannot be placed if any path segment edge would adjoin the neutral edge of an existing piece. Players may play in an opponent's goal cell, provided that the piece leaves at least one path edge open to the board. Only two such moves can be made against each opponent.

Prior to his move, the player may purchase a piece from the Defensive Pool with any two of his offensive pieces, which are put aside and play no further part in the game. Only two such purchases may be made by each player over the course of a game.

A player wins by completing a path between at least one goal cell belonging to each of his home areas. A winning path may pass through opponents' goal cells. For instance, Figure 7.188 shows a three-handed game won by White. Note that the aim is not to connect the actual board sides (as Black has done) but to connect the goal cells along opposed sides (as White has done). Gray's connection is broken by an offensive-defensive piece towards the top of the board.

If all possible winning paths are cut off, or there is no winning path after all tiles have been placed, then the game is a draw.

Notes

Hexa is unusual in that it plays as naturally with three players as two. This is largely due to the fact that players share a common path rather than distinct paths.

Purchasing defensive pieces does not exclude Hexa from the Pure Connection category—this is more a matter of piece management than introducing an extraneous trading element.
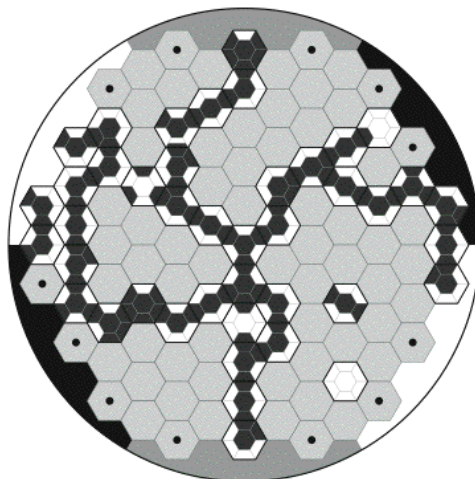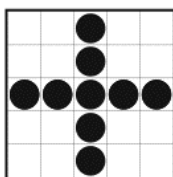
Figure 7.188. A three-handed game won by White.

Defensive pieces are strong as they provide the only means to really impede an opponent. However, players must be careful not to overinvest in defense, and should ensure that they leave themselves enough offensive capability to complete their own connection.

The rules do not state whether it's forbidden to place a piece such that its neutral edges lie adjacent to existing path edges, but this is implied. If this were not the case, then defensive piece placement would be unconstrained and overwhelmingly powerful.

History

Hexa was designed by Thomas Rudden [1980].

 Turnabout

Turnabout is a tile-based path-building game with a somewhat anticlimactic winning condition.