ELEUSIS: THE CARD GAME

Robert Abbott, John Golden and the Staff of the Rosicrucian Digest

Citations © 2009 by Robert Abbott from www.logicmazes.com/games/eleusis/

he Mysteries of Eleusis have inspired women and men throughout the centuries in many and diverse ways. One of the most unusual, fun, and challenging is the card game, Eleusis, and its "light" version, Eleusis Express. The creator of Eleusis, Robert Abbott, explains the inspiration and logic of this card game enjoyed by mathematicians, logicians, and game enthusiasts around the world.

Robert Abbott was born in 1933, and is best known as an inventor of games. An early computer programmer in IBM 360 assembly language, he began designing games from 1962 onward. Among the games he has designed are the variation on chess, known as Baroque chess or *Ultima*; the card game *Eleusis*; and the games *Crossings* and *Epaminondas*. Recently, Abbott has begun to invent what he calls "Logic Mazes" or "Mazes with Rules."

Abbott describes the invention of Eleusis and its inspiration:

"I invented Eleusis in 1956. The original version was fairly simple. The dealer devised a secret rule, and the players attempted to get rid of their cards by adding them to a line of correct cards. Figuring out the secret rule would help a player get rid of cards, but that was all it did. Only in later versions of the game could a player make a guess about the rule or declare him- or herself Prophet.¹

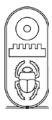
"When I named this game I had seen an analogy of the players being like initiates at the Eleusinian Mysteries—each in turn becomes a member of the cult as each in turn discovers the secret rule. Curiously, this analogy is not so different from the analogy of player-as-scientist. Long before science, probably even before language, the mystery religions were the method of transmitting knowledge, even technical knowledge. In the early form of the mystery at Eleusis, it's probable that the initiate learned not only how Demeter went to the underworld in search of Persephone but also learned how to grow wheat, and this second idea was somehow intertwined with the first."²



Portion of the Sanctuary at Eleusis. Photo from the Rosicrucian Archives.

In the June 1959 Scientific American, Martin Gardner described Eleusis as one of the few games that call for inductive reasoning: "It should be of special interest to mathematicians and other scientists because of its striking analogy with scientific method and its exercise of precisely those psychological abilities in concept formation that seem to underlie the 'hunches' of creative thinkers."

In 1973 Abbott started a rather long project to improve Eleusis. This resulted in a better layout—with sidelines that showed where mistake cards were played. He also added the Prophet. If a player thinks he or she knows the rule, the player can declare



him- or herself Prophet and make the calls for the dealer. ³

"In 2006, John Golden, a professor of mathematics at Grand Valley State University in Michigan, invented a simplified version of Eleusis called Eleusis Express. He intended it as a way for elementary school teachers to present the scientific method. The teacher could divide the class into small groups to play the game, then later the teacher can show how the students were using scientific method as they played the game.

"Abbott considers Eleusis Express to be a great game, quite apart from any use in the classroom. It's also a fun social game."4

How to Play Eleusis Express

John Golden, the inventor of Eleusis Express, explains how it is played, in this excerpt adapted from the Eleusis Website:

The idea: One player has a secret rule for which cards can be played. A very easy example: each card has to be a different color from the card before it. Other players lay down cards they think fit the pattern. If a player lays down a card that works, he or she can try to guess the rule.

Number of players: Eleusis Express is for three to eight players, but is probably best played with four or five.

The stock: Shuffle together two decks to form the stock. If the stock runs out, you can (a) shuffle in another deck or (b) declare the round is over at that point.

Object: A game consists of one or more

rounds (hands of play). A different player is chosen as dealer of each new round, and it is the dealer who chooses the secret rule. The dealer does not play a hand that round. The dealer's score is based on the scores of the other players.

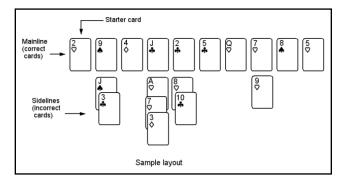
All plays are made to a central layout that grows as the round progresses. An example is shown

below. A layout consists of a horizontal mainline of correct cards, those that follow the secret rule. Below the mainline are vertical sidelines of mistake cards, those that did not follow the rule. These sideline cards can be overlapped to save space.

The secret rule: If your group is playing this game for the first time, the dealer should pick a rule from the section Samples of easy secret rules. Or the dealer could make a slight variation on one of those rules. Eventually you'll want to create new rules. Here are some guidelines: A rule should allow for several cards to be played at any given time, but not too many. "The next card must be one higher" is far too restrictive. "The next card must be a different suit" is far too permissive. Avoid exceptions or wild cards, like "face cards are always right" or "an ace can be high or low." And remember: Whatever rule you come up with, it will always be harder than you think it will be.

Set up: The dealer writes down the secret rule, then deals twelve cards to each player. The dealer turns over the top card and puts it on the table. This will be the start of the mainline. Before play starts, the dealer may give a hint about the rule. The player to the left of the dealer goes first, then the play continues around to the left.

Play: In each turn, a player puts one card on the table. The dealer says whether it's correct or not. If correct, it goes to the right of the last card on the mainline. If incorrect, it goes below the last card (it either starts a



Layout for Eleusis Express

Rosicrucian Digest No. 2 2009 sideline or it adds to a sideline). The player who makes an incorrect play must draw one card from the deck. Thus the hand remains the same size. The player making a correct play does not draw a card, so his or her hand is reduced by one.

Declaring No Play: Players have the option of declaring that they have no correct card to play. The player shows the hand (to everyone) and the dealer says whether the player is right or not.

If the player is wrong—a card could have been played—the dealer chooses one correct card from the hand and puts it on the layout to the right of the last mainline card. The player keeps that hand and must draw one card from the stock.

If the player is right—no card really could have been played—and the hand is down to one card, that card is put in the stock and the round is over. If there is more than one card, the dealer counts the cards and puts them on the bottom of the stock. The dealer then deals the player a new hand, but with one less card.

Guessing the rule: Whenever a player makes a correct play, or makes a correct declaration of no-play, the player is given the right to guess the rule. Everyone must hear the guess. The dealer then says whether the player is right or wrong. If the player is wrong, the game continues. If the player is right, the round ends.

Scoring: If a player correctly guesses the rule, or if one player gets rid of all his/her cards, the hand comes to an end. The scores are now recorded. A player scores 12 points, minus 1 point for each card left in the hand. If a player correctly guessed the rule, he or she is given a 6-point bonus. If any players got rid of all their cards, they are given a 3-point bonus. The dealer scores the same as the highest-scoring player in the round.

However...you probably should not worry too much about scoring. It is more

important to put together an enjoyable game, one where players are able to discover the rules. For example, if it's halfway through a hand and the dealer realizes that no one can figure out the rule, the dealer could start giving out hints. That might technically be considered cheating and it would increase the dealer's score, but it is okay. It will make the game much more enjoyable. And the players shouldn't worry about discussing the rule with each other, even if they are supposed to be competing.

Ending the game: The game should last until everyone has had a chance to be dealer. Usually there's not enough time for that, so if time runs out, that is where the game ends. Then, add up the scores for the hands and declare the winner.

Sample of easy secret rules:

• If the last card was a spade, play a heart; if last card was a heart, play a diamond; if last was diamond, play club; and if last was club, play a spade.

Sample of hard secret rules:

• If the last card is an odd-numbered card, play a red card. If the last card is even, play a black card.

ENDNOTES

- ¹ Adapted from Robert Abbott, "Eleusis and Eleusis Express" at http://www.logicmazes.com/games/eleusis/index.html.
- ² Adapted from Robert Abbott, Auction 2002 and Eleusis, (self-published, 2002). See http://www.logicmazes.com/games/booklet.html for more information.
- ³ Adapted from Robert Abbott, "Eleusis–Publication History," at http://www.logicmazes.com/games/eleusis2.html. The full rules of Eleusis can be found at Abbott's Website, http://www.logicmazes.com/games/eleusis/index.html.
- ⁴ Adapted from Abbott, "Eleusis and Eleusis Express."
- ⁵ Adapted from John Golden, "Eleusis Express" at http://www.logicmazes.com/games/eleusis/express.html, where more sample rules are available.

