Abstract Games **Issue 9 Spring 2002**

Realm
The dilemma: Creation or Destruction
by William L. Mikulas

R ealm is a wonderful and unique two-person abstract strategy game. It involves capturing territory and blocking and immobilizing the other player's pieces. New pieces are generated and added to the game as the game progresses, and strategy and objectives dramatically change through the course of the game. A few rules generate a game of great complexity and depth. People new to the game play a decent game fairly soon; mastery will take a long time, as the depth of the game is gradually revealed.

Individual games are quite different from each other, with different patterns requiring different strategies. Also, a small change in the number of starting pieces often results in dramatic changes in optimal playing strategy. Realm is little known or analyzed. Hence, there is great opportunity for people who like to discover game strategies; and, currently, people can not have an advantage because they have memorized some standard moves and defenses (as in Chess and Go).

In this article I give a brief history of Realm, the complete rules, and a number of significant variations. Then I will discuss general playing strategy and provide the moves of a complete game.

History and Development

Realm was created by Phil Orbanes, with input from Sid Sackson. They, and others, had a small game company in the1970's called Gamut of Games, which released Realm. Another game of theirs was Cartel, a fun family game for four. (Cartel was later rereleased under the name "Dallas.") Gamut of Games went out of business, and Orbanes went to work for Parker Brothers. Orbanes did not pursue development of Realm due to a conflict of interests. My friend Stanley Levin and I love Realm, so we acquired the rights to Realm from Orbanes, to see if we could get it back on the market.

We had a number of copies of Realm made up, which we sold locally and through the mail. These are now gone. The primary reason for having this version made was to have a model to try to sell the game to a company to mass-produce. Although several companies showed initial interest, we were overall unsuccessful because of a general perception of a lack of an adequate market for new abstract strategy games. We did come close to success a few times. For example,

Ravensburger considered Realm for a year before declining. They did put a copy of our Realm in their game museum. And a small game company, that was off to a strong start with one of their games, took a prototype of Realm to the New York Toy Fair. They unfortunately overextended themselves and went out of business. So Realm is currently in limbo.

Equipment
Figure 1 shoes the Realm board, which has 144 squares divided into 16 *Realms* of nine squares each. The *Center* of each Realm is the middle square marked with a circle. The other eight squares of each Realm are called *Border Spaces*.

Figure 1 – Realm board
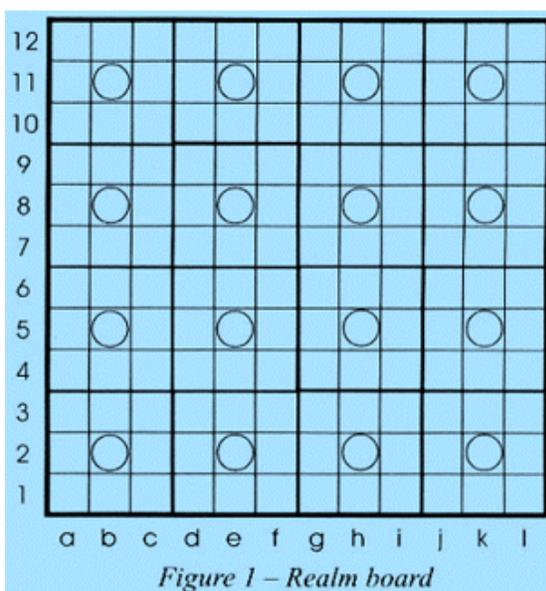
Realm is a game for two players, White and Black, who take turns, each to move his own pieces. For each player there are three different types of pieces: three Powers, eight Enforcers, and 12 Bases. Additional pieces are needed for some of the variations. (See Variation 1 below.) The pieces can be many different shapes, but here we will assume the Powers are circular, the Bases square, and the Enforcers triangular. The only critical features concern the Enforcers. They must be clearly pointed in some direction—e.g., isosceles triangles with fairly acute third angles. Also there must be an easy way to show when an Enforcer has been immobilized, such as turning it over to display an additional mark that distinguishes the bottom from the top.

Figure 2 – Realm pieces
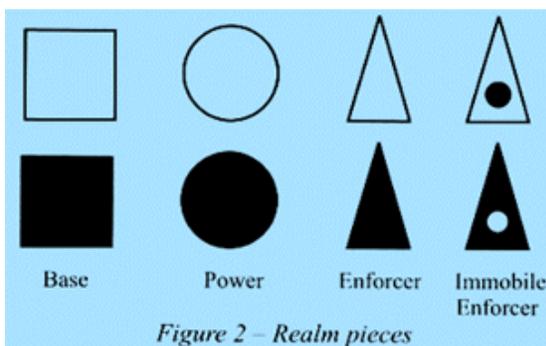
Setting Up and Movement
Going first is determined be any convenient and/or appropriate means, such as flipping a coin or allowing the loser of the previous game to choose. In the examples we will assume that White moved first. Beginning with an empty board, the first player places one of his bases on the Center of any Realm. His opponent then places a Base on the Center of a vacant Realm of his choice. Players continue placing Bases on vacant Realms in turn until they have each placed three Bases. During this phase a player cannot place a Base on any Center that lies in the same

row or column of Realms as another Base he has previously placed. The setting up of the board then continues with each player alternately placing Powers, one at a time, on any Border Space of a Realm where a friendly Base was previously put. Only one Power can be placed in each such Realm during this phase. A player is said to control a Realm if he has a Base on its Center. Thus each player will begin the game controlling three Realms, and each controlled Realm will have one of his own Powers within it. Figure 3 shows the board after one possible sequence of setting up moves.
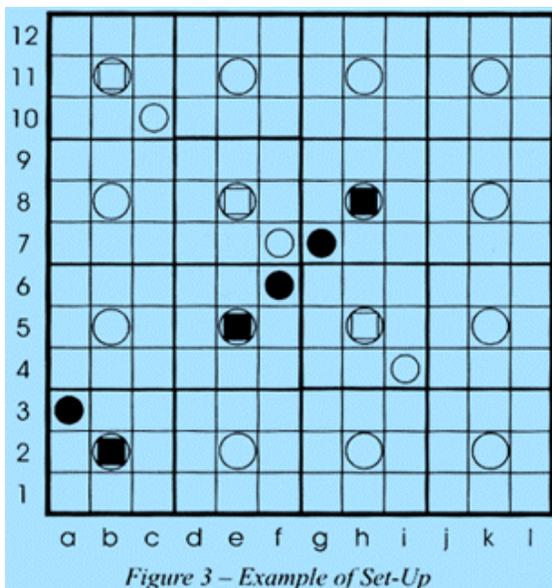

Figure 3 – Example of Set-Up

■ *Bases* are immobile. Once placed on a Center, a Base cannot move.

● *Powers* move any number of spaces in a straight horizontal or vertical line. They may stop wherever, as long as they move into a new Realm. However, a Power must end its movement when the next space is blocked by any piece. A Power may move through a vacant Center, but may not end its move on a Center.

▲ *Enforcers* move in the same manner as Powers, except that they may only move in the direction in which they are pointing when they move. Prior to moving an Enforcer a player may turn its point a quarter?turn (90o) in either direction. Thus, an Enforcer can usually move in one of three directions on a given turn, but never directly opposite from the direction in which it begins pointing. After an Enforcer ends its movement in a new Realm it remains pointed in the same direction as it moved. Immobile Enforcers cannot move. (See below.)

Special Events

After each piece completes its movement it may cause a Special Event to occur according to the following:

● ■ *A Power creates a Base*. When a Power ends its movement in a Realm with a vacant Center, and there are no enemy Powers within the Realm, a friendly Base is created and is immediately placed on the Realm's Center.

● ▲ *A Power creates an Enforcer*. When a Power ends its movement in a friendly-controlled Realm (i.e, a friendly Base exists therein), and no mobile Enforcer of either side exists within that Realm, then a friendly Enforcer is created. This piece is immediately placed in any vacant space within that Realm and is positioned in any desired direction. An Enforcer cannot be created if no vacant space within the Realm exists for its placement.

▲ ▲ *An Enforcer immobilizes an enemy Enforcer*. When an Enforcer stops in a Realm where one or more mobile enemy Enforcers exist, one such enemy Enforcer is immobilized and immediately turned over. If there is more than one enemy Enforcer, the attacker chooses which is immobilized. The moving Enforcer is also immobilized in the same way, unless there are more friendly than enemy Powers existing within the Realm.

▲ □ *An Enforcer captures an enemy Base*. When an Enforcer stops in a Realm containing (1) an

enemy Base, (2) no mobile enemy Enforcers, and (3) more friendly Powers than enemy Powers, the enemy Base is captured. The captured Base is removed from the board and retained by the capturing player for the duration of the game. If only one more friendly Power exists within the Realm than enemy Powers, the Enforcer is now immobilized. However, if at least two more friendly Powers exist than enemy Powers, the Enforcer remains mobile.

Play

So long as a player follows the normal rules of movement, at his turn he moves one or more of his pieces in accordance with his choice of one of three movement options: Dispersal, Concentration, or Rearrangement.

- *Dispersal*. A player is permitted to move any number of the mobile pieces he has within any one Realm to one or more other Realms.
- *Concentration*. A player is permitted to move two or more pieces on the board that all end their move in one common Realm. All pieces must have begun outside the final Realm.

     In both Dispersal and Concentration each piece is moved and any Special Event caused by the piece is enacted before the next piece moves.

- *Rearrangement*. A player may pick up all the pieces he has within one Realm and replace them on different spaces within the same Realm, changing the orientation of any Enforcer as desired. Any immobile Enforcer he rearranges still remains immobile. A player may not rearrange any of his opponent's pieces within the Realm. Rearrangement of pieces does not cause any Special Events. A player may not rearrange in the same Realm three turns in a row.

Objective

The game ends as soon as one player has created all of his Bases or neither player, by agreement, can create another Base. The player controlling more Realms at that time wins the game. If a tie exists, it is broken by determining which player has a greater combined total of mobile Enforcers and uncreated Enforcers. The game is a draw if both players have an equal total of these pieces.

Example

The obvious algebraic notation is used. A Special Event is shown in parentheses after a piece's move. A letter for one of the four cardinal directions indicates the direction of a created Enforcer. Lastly, 'x' is used in addition to show capture of a Base or immobilization of an Enforcer.

     Beginning with the placement shown in Figure 3, White makes a Concentration play into the h11 Realm (i.e., the Realm with h11 as its Center): Pc10g10(Bh11), Pi4i10(Eg12S). Black now makes a Concentration move into the h2 Realm: Pa3i3(Bh2), Pg7g1(Eg3N). Figure 4 shows the board after these two moves.
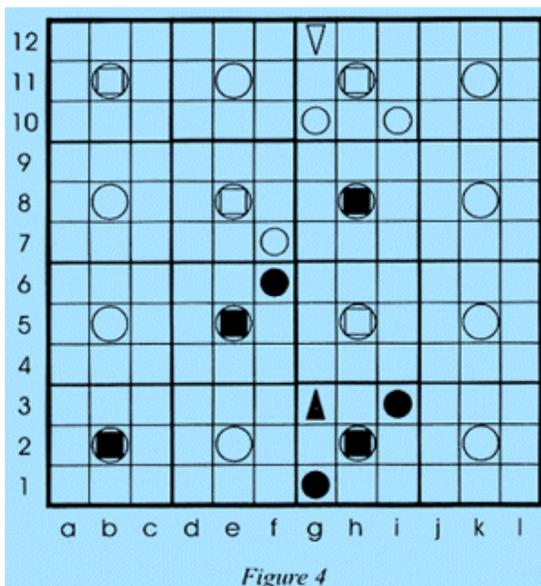
Figure 4

Black's initial set?up and move were not optimal. White now makes a strong Dispersal move from the h11 Realm: Pi10i4(Eg4S), Pg10a10(Ec12S), Eg12g6. This results in the position shown in Figure 5.

Figure 5
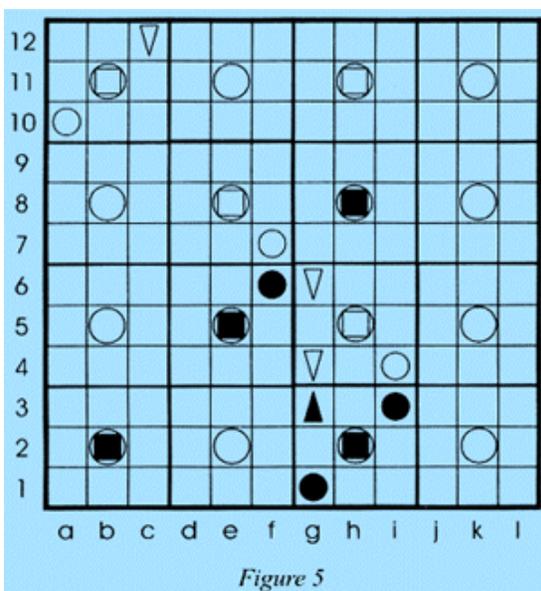
White now has a strong advantage. White has Black blocked in and can keep him blocked in to some extent. White will have a much easier time claiming empty Realms. And Black's h8 Realm is isolated and unprotected.

Variations
1. Start with 11 Bases for a shorter game or 13 Bases for a longer game. Try a game with seven or nine Enforcers and/or four Powers. Initial placement of four Bases and four Powers is an interesting game. When placing four Bases, follow the placement rule of not duplicating row or column for as long as possible.
2. Eliminate the restrictions about initial placement of Bases on the board, so that you may place a Base on the Center of any vacant Realm. This allows you to experiment with various starting positions.
3. Restrict the movement of Powers and Enforcers with the following rule: A Power or Enforcer must end its move when it enters a Realm controlled by an enemy Base, stopping on any space

within that Realm along its line of movement.

4. Make it harder to create a Base by deciding that a Power can only create a Base when it stops in a Realm with a vacant Center and there are no other Powers, friendly or enemy, within the Realm.

5. Make it easier to capture a Base and replace it with one of your own by deciding that as soon as you capture an enemy Base you put one of your Bases in its place. This results in a much faster game.

6. After the initial placement of Bases and Powers the second player moves first.

7. During Rearrangement you may also move the opponent's pieces.

8. Change the rules for winning when the number of Realms is equal. The tie is broken by whoever has the greater combined total of (a) mobile Enforcers, (b) uncreated Enforcers, and (c) captured Bases.

9. Add the Power sacrifice option: A player is permitted to remove one of his Powers before the start of his turn in order to remobilize a friendly Enforcer. To do so, the Power, without moving, is removed from the board for the remainder of the game. An immobilized Enforcer in the same Realm is remobilized and pointed in any direction in the space it already occupies. The player must now make a Dispersal move from that Realm, and the newly mobilized Enforcer may move as part of that move.

Historical Note

The original rules by Orbanes did not include the limit on Rearrangement moves or ending the game by agreement. They did include what are called Variations 8 and 9. And the game used 13 Bases. We also qualified and clarified some of the rules.

Strategy

Realm begins with each player placing three Bases. Within the limitations of the rules there are 16 distinct ways a player can place his Bases, not counting similar rotations and mirror images. (Confirming this number is a nice puzzle.) For each of the 16 placements of one player there are up to 16 ways the other player's Bases may be placed in conjunction. Currently it is not known which starting positions are advantageous to which players, or how a player might force desirable starting positions. Generally, you do not want your Bases too separate from each other, and you want to control at least one of the four central Realms. Thus, b11-h2-k5 would probably not be good. Bases in b11-e8-h5 versus h8-e5-b2 is a reasonable and fair beginning (Figure 3). The Powers are placed to try to limit the opponent's options and give oneself the most choice.

In a review of Realm in Games magazine (Jan. 1984), R. Wayne Schmittberger suggested that whoever moves first has a strong advantage. This has not been our experience, and it may or may not still be Schmittberger's view. Such an advantage may depend on opening placement and/or style of play. Schmittberger suggests offsetting this advantage by means such as "allowing the first player to move only a single power on his first turn, or by giving the second player an extra base." If placing first and/or moving first are advantageous, one solution is Variation 6, where after the initial placement of Bases and Powers, the second player moves first. Or, one player could be given the choice of who places first and/or moves first.

Once one begins play it will quickly become apparent that because of the order in which a player may move his pieces on a given turn, he can influence the order and outcome of Special Events. For example, it is usually wise to move Powers into a Realm to gain the advantage before moving in an Enforcer to capture a Base or immobilize an Enforcer. However, by moving in a Power after the Enforcer captures an enemy Base in the Realm, it is possible to create a friendly Base in that Realm on the same turn.

At the beginning of the game there is usually a rush to claim the empty Realms. Often at the end of this phase, each player will control, or have the likelihood to control, eight Realms. If one player can get nine Realms to the other player's seven, this is a strong advantage. Hence, getting nine Realms is the major goal of the initial placement and opening moves. The following are good first two moves. Concentration: Bring two Powers into a new Realm, claiming that Realm. Dispersal: Send these two Powers into two empty Realms, claiming them. Thus, after the second turn, one controls six Realms.

Games often end with players having the same number of Realms, with winning then based on the numbers of mobile and uncreated Enforcers. Thus, getting ahead in the Enforcer count is often important. And when one has such an advantage, one may readily want to trade Enforcer for Enforcer. The game value of Enforcers often depends on the particular variation of the game being played. For example, Enforcers are more valuable in a 13-Base game than an11-Base game. Or, if the winning criteria also include captured Bases (Variation 8), then one might aggressively capture Bases at the expense of Enforcers.

Overall strategy in the middle of the game includes creating multiple simultaneous threats, blocking and immobilizing the opponent's pieces, getting ahead in the Enforcer count, and occasionally giving up a Realm for a better position. Two general strategies are the Blockade and the Juggernaut.

In one form of Blockade you trap your opponent's Powers in a limited area, such as two or three Realms along a side. Enforcers, active and immobilized, possibly plus Powers, are used to maintain the Blockade. In another form of Blockade you split the opponent's pieces into two separate groups of Realms and block one or both groups.

The Juggernaut (devised and named by Stanley) consists of three Powers and at least one Enforcer all in the same Realm and moving together. In one Dispersal play with a Juggernaut a player can capture a Base of the other player and replace it with his own Base, without losing an Enforcer. Thus, the Juggernaut potentially can march along switching Bases, with a swing of two in the Realm count each time. Being forced to deal with the Juggernaut often causes the other player to lose tempo and/or abandon other strategies. Sometimes a Blockade is a good defense against the Juggernaut.

Another advantage of the Juggernaut is that it can be disbanded in a Dispersal play that can be very powerful. Three Powers head off in various directions, creating up to three new Enforcers. Sometimes this is the deciding play of a game. And sometimes the Juggernaut can disperse into one or more Blockades.

The above discussion is sufficient for one to be able to learn quickly to play a good game of Realm. Fortunately, there is considerable opportunity for others to further analyze Realm strategy, and perhaps find errors or qualifications regarding what I have said. Anything would delight me!

Sample Game
Following are the complete moves from an actual game. This game is shorter than most, and White is basically always in control.
Set?up: 1.Bh11 Bh2, 2.Be8 Be5, 3.Bb5 Bb8, 4.Pi10 Pg3, 5.Pf7 Pd6, 6.Pc4, Pc9,
7.Pi10i6(Bh5),Pc4g4(Ei4W)/Pd6d1(Be2),Pg3d3(Ed2N)
8.Pi6j6(Bk5),Pg4g9(Bh8),Ei4d4/
     Pd3a3(Bb2),Ed2c2,Pd1L1(Bk2)
9.Pg9l9(Bk8),Pj6j7(El7W)/ Pc9c10(Bb11),Pa3a12(Ec12S)
(Figure 6)
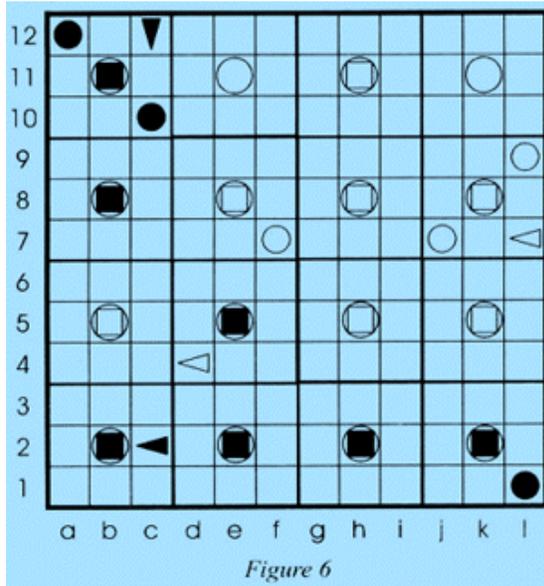
Figure 6

10.Pf7f12(Be11),Ed4d10/Pa12a6,Pc10c6,Ec2c4(xBb5)
11.Pj7j10(Bk11),Pl9c9,El7a7(xBb8,xEa7)/
        PL1L6,Pc6j6,Ec4j4(xBk5)
12.Pf12f7(Ef9S),Pc9d9/
        Pj6b6(Bb5),Pl6l7,Ej4j7(xBk8,xEj7) (Figure 7)

Figure 7
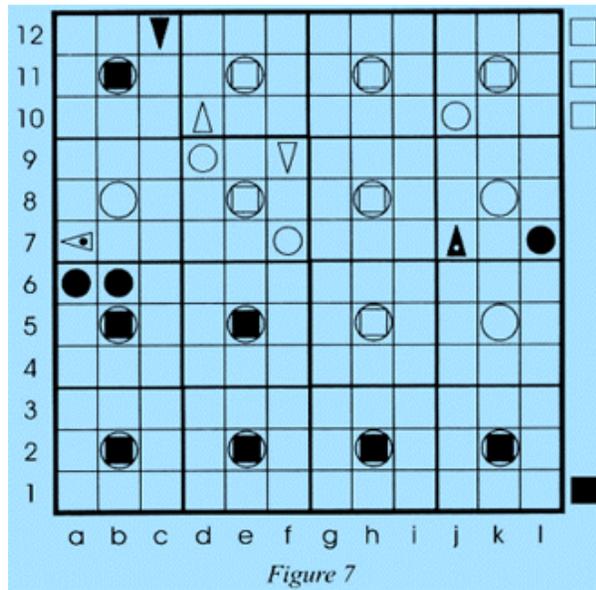
13.Pf7c7(Bb8),Pd9d6,Ef9f6(xBe5,xEf6)/Pl7l4(Bk5)
14.Pj10j9(Bk8)/ Pl4l10,Ec12j12(xBk11,xEj12)
15.Pc7e7(Ef7N)/Pl10l4(El6W), 16.Pe7e6(Be5) wins.