BOX HEX

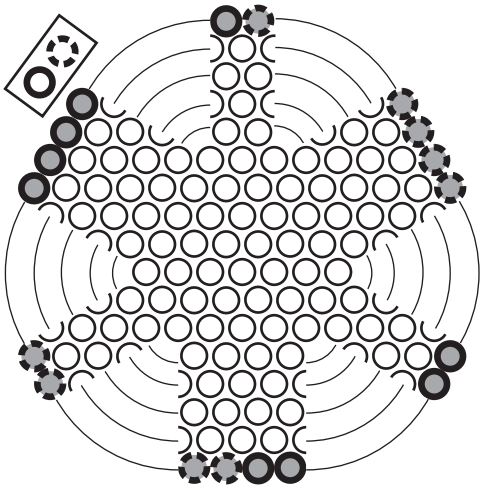

Fig. 1 - Initial Setup

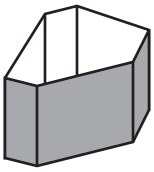

Fig. 2 - The Box

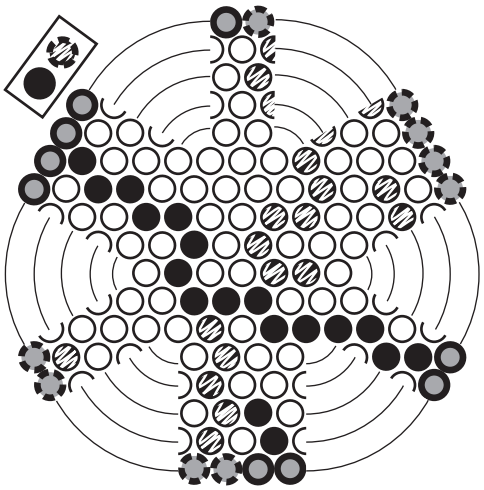

Fig. 3 - Black Wins

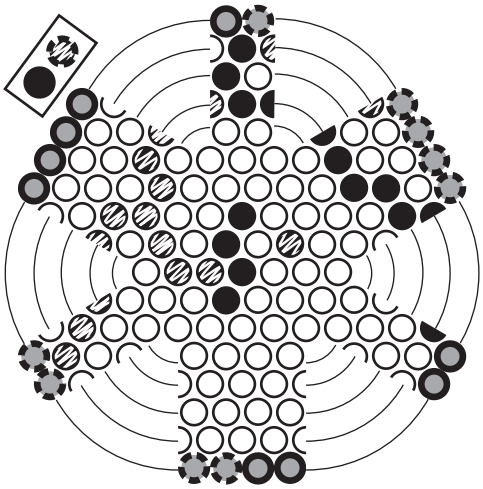

Fig. 4 - Black Wins Again

INTRODUCTION Box Hex is a two player game. A printed paper "board," a pen of one color, and a pen of another color can be used to play. Box Hex is a variant of Hex, a game invented by Piet Hein in 1942 and independently by John Nash in 1948. Mark Steere adapted Hex to a three dimensional surface - a box - on March 19, 2006.

SETUP The board starts out empty as shown in Figure 1. If the six arms of the board were folded out of the page at right angles to the page, the "box" shown in Figure 2 would form. The tiny circles on the side edges of the arms would come together as indicated by the arcs in Figure 1. The half circles would join to form whole circles.

The top edge perimeter of the box is divided into four segments: two dashed segments opposite each other, and two solid segments. Normally two different color pens are used, such as red and blue - one for each player. Here one player will use a black pen, and the other player will apply a scribble pattern.

To begin with, Black colors in the solid circle in the legend and the other player applies the scribble pattern to the dashed circle in the legend as an indicator of each player's goal segments.

BASIC MOVES Players take turns coloring in circles on the board, one circle per turn (or two corresponding half circles in a turn). Circles in the goal segments are not colored in by the players. Those circles are already colored in gray. Circles connected by an arc are considered adjacent. Half circles connected by an arc are considered to be part of the same circle.

OBJECT OF THE GAME Each player attempts to connect his two opposite segments with a continuous line of colored in circles (in his designated color). In Figure 3 Black has won the game by connecting the two solid segments. In Figure 4 Black has won again.

AUTHOR'S NOTE Feel free to copy, distribute, profit from, or do whatever you like with this document and the game of Box Hex. However please don't change the name or the rules, and please attribute the game to me, Mark Steere. Other games I invented: Quadrature, Tanbo, Impasse, Byte, Diffusion, and Cephalopod. For more information see marksteeregames.com.

APPENDIX: COMPARISON WITH REGULAR HEX In Box Hex the shortest paths of connection travel around the outside of the board - not through the center. There are four such paths: two for each player. This solves the strong first move advantage problem of regular Hex, where you have only one shortest path, said path being shared by both players. There's no need for the pie rule in Box Hex.

In Box Hex, as in regular Hex, one connection must exist in a filled board, and opposing connections cannot exist simultaneously. There is a pentagon in each of the six bottom corners of the box. An asymmetric board was chosen for Box Hex to make the game a little more complicated.

BOX HEX
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