

Varikon Box 2x2x2



a.k.a. *Bloxbox, Crazy Qube*
Basic idea dates back to 1889.

(clear plastic box containing 7 red cubes with blue and white dots, 1.5 inches)

A box with 7 cubes and an empty space that allows you to move cubes around by tilting. One must shuffle the cubes so as to have only blue dots touching the faces of the box and three white dots showing in the position with the empty space. There is a little hole in one corner that had a pin inserted into it to prevent the puzzle from being disturbed during shipping. The puzzle is pleasant to use, and doesn't require great dexterity to move cubes. This basic idea is presented in the 1889 *Rice* patent, and also in the patents of *Sinden* and *Postasy*, and the design of this puzzle has been credited to *Piet Hein* 1972 (e.g., *Hordern's book*). *Jaap's Page* presents a solution.

Here are some other versions (the rightmost is a Soviet version). A parity argument implies that not all positions are reachable from a given position, and you cannot exchange two cubes without changing the configuration of the others. So if you try to solve a puzzle of this type and end up with two cubes exchanged, then it must be the other color has to be on the outside.



*White with
red/blue dots.*
(1.5 inches)



*Blue with
red/white dots.*
(1.5 inches)



*Black with
red/white dots.*
(1.5 inches)



*Black with
orange/white dots.*
(1.5 inches)



*White with
red squares.*
(1.4 inches)

Further reading:

Jaap's Page, from: <http://www.geocities.com/jaapsch/puzzles/varikon2.htm>

Rice Patent, from: www.uspto.gov - patent no. 416,344

Sinden Patent, from: www.uspto.gov - patent no. 3,841,638

Postasy DE Patent, from: www.epo.org - patent no. DE3027556