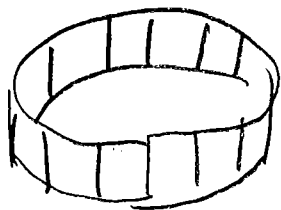
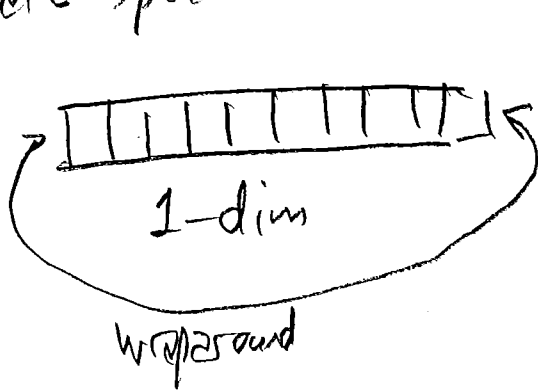


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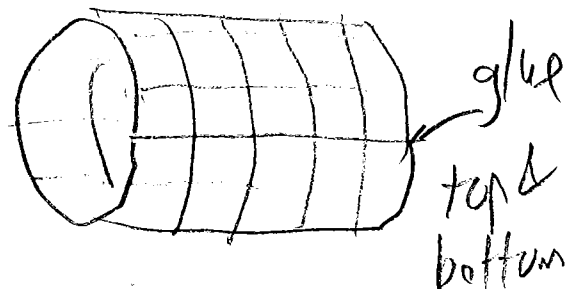
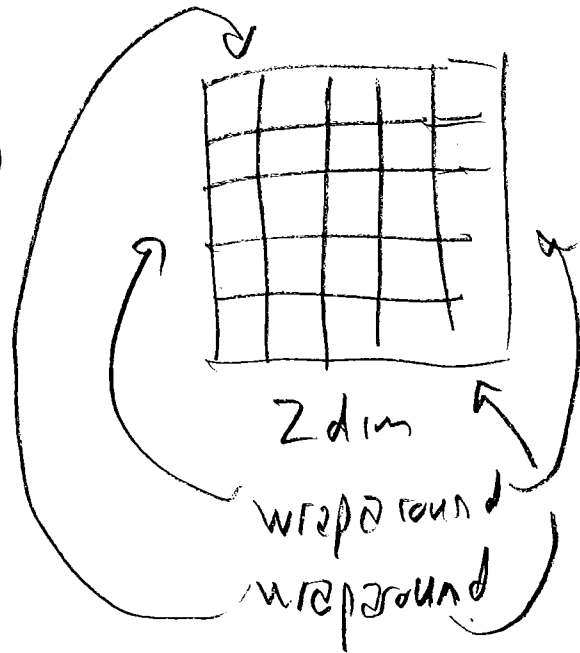
CA = Cellular Automata

Patterns, fractal and others, in space
and time.

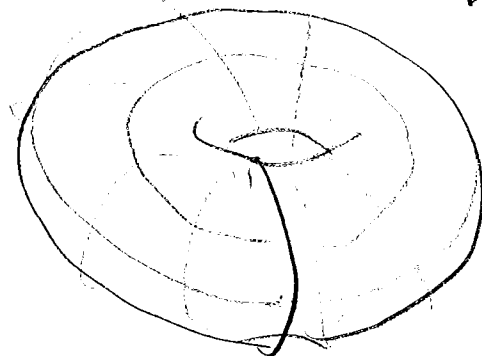
state space = CA universe



circular
universe



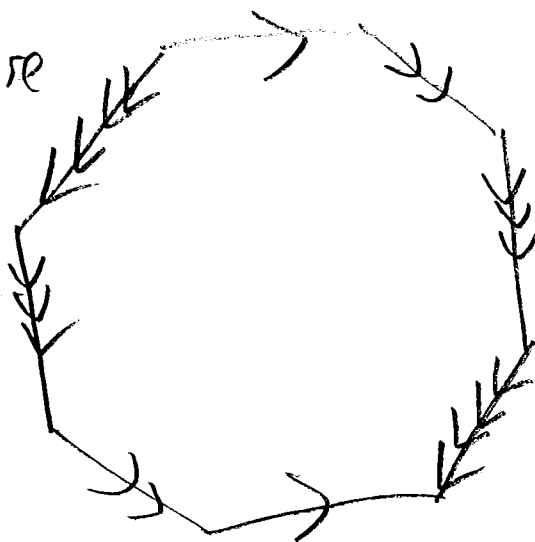
toroidal
universe



Another CA universe

glue opposite
sides together

what shape
is this?



Number of states per cell: binary



alive



dead

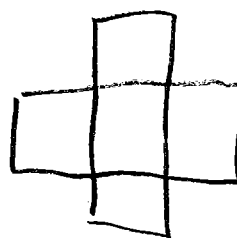
Nbhd of a cell



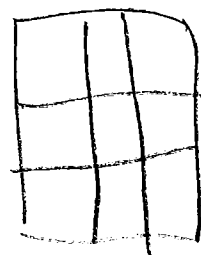
$N=3$ nbhd
of the middle
cell



$N=5$



von Neumann
nbhd of the
middle cell



Moore
nbhd of the
middle cell

outer totalistic nbhds :
 whether the central cell is alive
 and how many of the surrounding
 cells are alive.

CA Rule : Which nbhd configurations
 give a live cell in the next gen,
 all others give a dead cell

Rule 

These give a
 live cell, all
 others give dead

