

Conway's Game of Life is the classical example of a cellular automaton -- the Euclidean plane is subdivided into squares, each of which in a living or dead state, and a rule is specified for how each cell transitions into a new state after one unit of time. A fundamental question about the Game of Life is: are there patterns of living and dead cells that can exist only in the initial configuration? Such patterns are fittingly called Garden of Eden patterns, and in the 1960s, Moore and Myhill gave a strong characterization of the existence of such patterns.