

the simplicity of complex / the complexity of simple

There is nothing new under the sun. It is a rather encouraging thought that we as humans already have everything we need in order to create – what is required is just a bit of reusing / manipulating / constraining / instantiating / copying / remixing of whatever exists on this world. But the interesting thing is, even though we use simple ingredients and procedures, the products and the way we interpret them are always a reflection of our complex human nature, the extensions of our consciousness. Nothing is new, anything could be simple, everything is complex.

repetition

THERE IS NOTHING NEW UNDER THE SUN

“The words have lost meaning and life through years of repetition. Now take the poem and type out selected passages. Fill a page with excerpts. Now cut the page. You have a new poem. As many poems as you like.” [1]

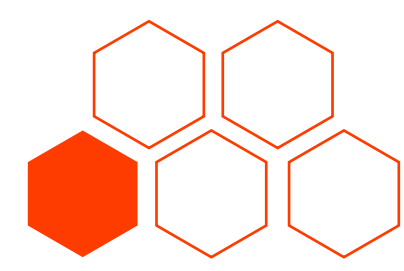
complexity

ORDERED PATTERN THAT IS UNPREDICTABLE



1 Sketchpad, Sutherland, 1963.

2 the randomness and complexity of Cellular Automata, The Nature of Code, 2012.



[3]

0/1

“Cell of cellular automata (i) is an entity that has a state (0 or 1) and a neighbourhood (i-1; i+1).”

EITHER YOU DO IT OR YOU DON'T / EITHER IT IS OR IT ISN'T

“Cut the words and see how they fall.” [1]

»Greek philosophers assumed logically that an object twice as heavy as another object would fall twice as fast. It did not occur to them to push the two objects off the table and see how they fall.« [1]

Cecil Touchon, from the “Three Colages from the Paris Paper” series, Brion Gysin inspired collages, 2013.



uniformity

EVERYTHING TENDS TO THE SAME STATE / SIMPLICITY TENDS TO COMPLEXITY THE MOMENT IT IS DEFINED

»But something we rarely consider about computer drawings, something which Sketchpad first demonstrated, is that these images are objects, and, as such, can be manipulated, constrained, instantiated, represented iconically, copied, and recursively operated upon, even recursively merged.« [2]

“The method is simple. Here is one way to do it. Take a page. Like this page. Now cut down the middle and cross the middle. You have four sections: 1 2 3 4 ... one two three four. Now rearrange the sections placing section four with section one and section two with section three. And you have a new page.” [1]



randomness

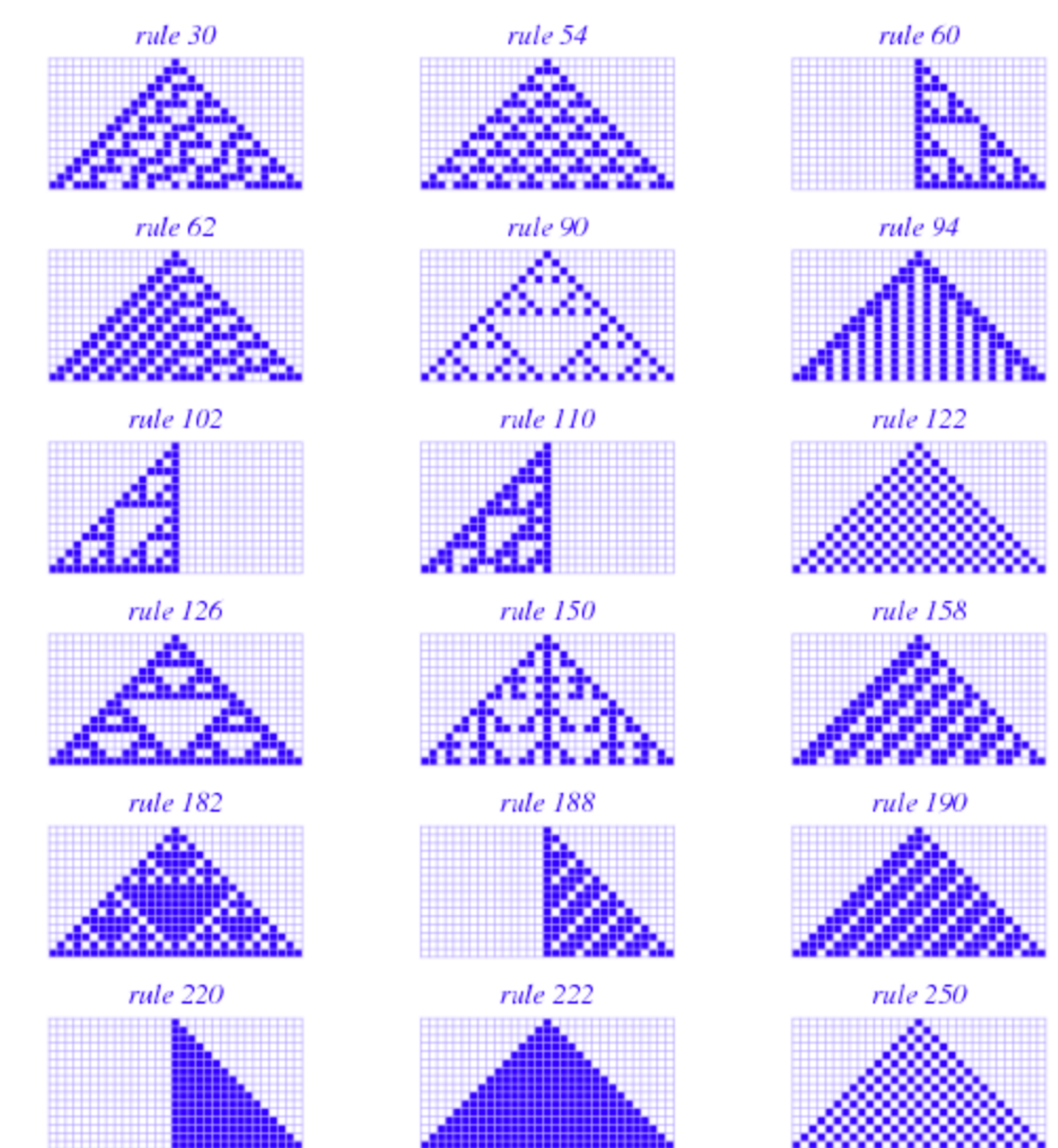
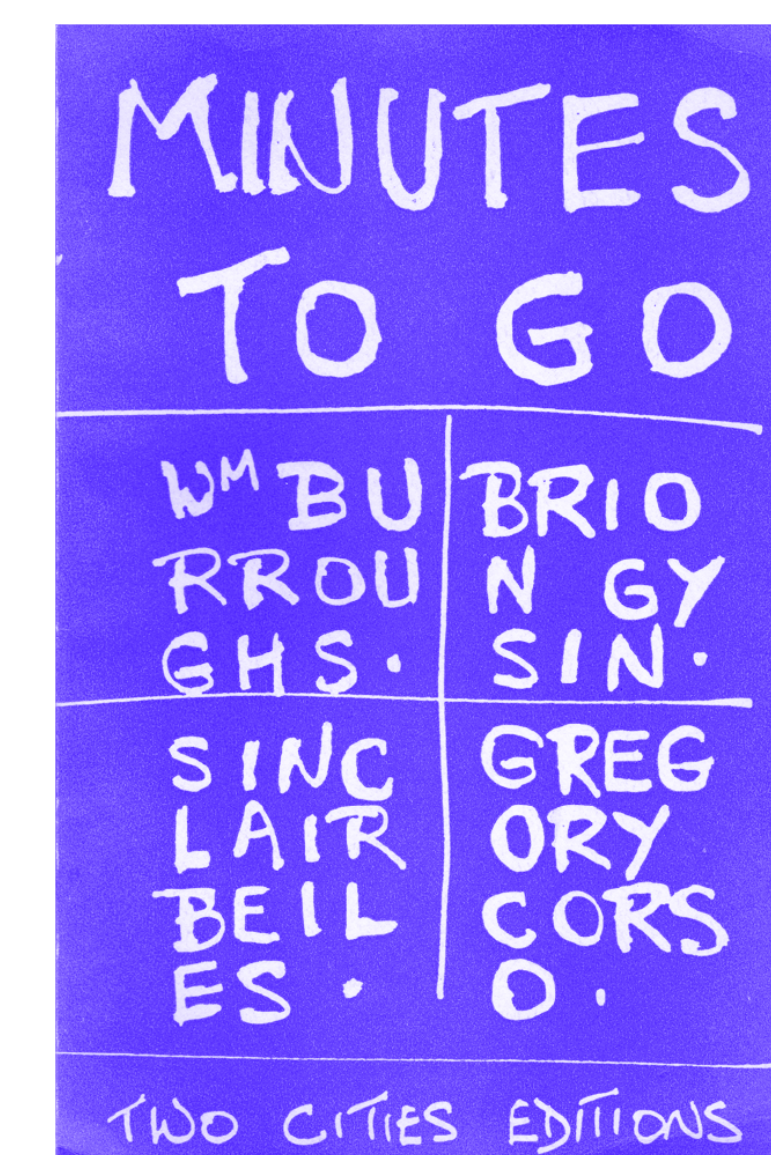
YOU MAKE THE RULES

“You can not will spontaneity. But you can introduce the unpredictable spontaneous factor with a pair of scissors.” [1]

“Burroughs indicates, rather, that randomness and recombination can be used by an author as an intermediate step in composition.” [1]

“What is the simplest possible agent, which would have the simplest possible neighbours, and the simplest possible set of rules as to how it interacts with its neighbours? If we could design this system, could we still achieve complexity? That’s the question we want to answer when looking at cellular automata.” [3]

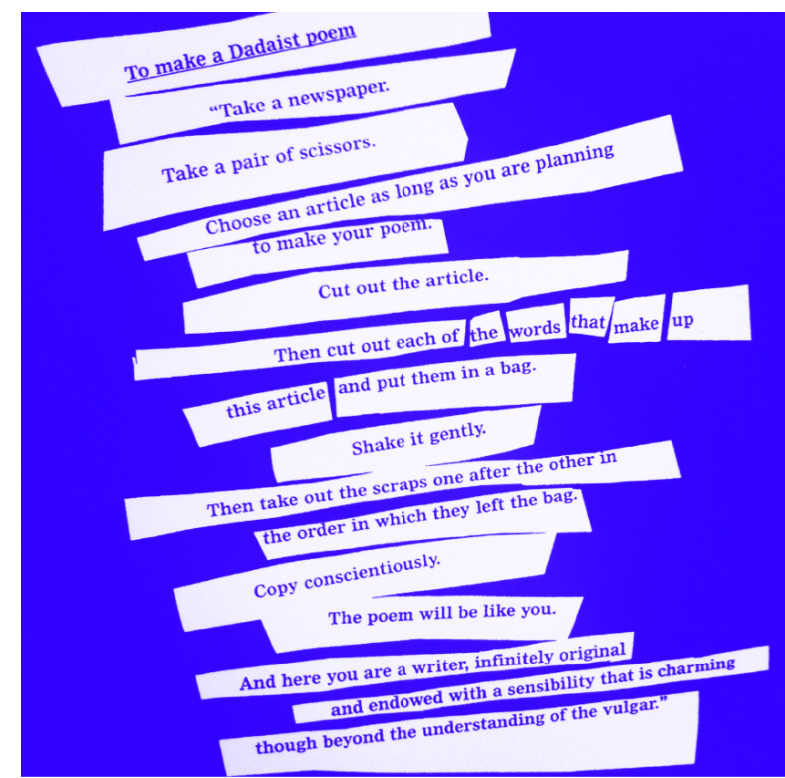
Minutes to go from Brion Gysin, Reality Studio, 2019.



Elementary Cellular Automaton rules, Wolfram MathWorld, 2019.

[1] William S. Burroughs The Cut-Up Method of Bryon Gysin, 1963
[2] Ivan E. Sutherland Sketchpad: A Man-Machine Graphical Communication System, 1963 [3] Daniel Shiffman The Nature of Code / explaining John Neumann's Cellular Automata, 2012

How to make a Dadaist poem by the method of Tristan Tzara, writing.upenn.edu.



“We get completely random results. We essentially get a pseudorandom number generator out of just cellular automata.” [3]