

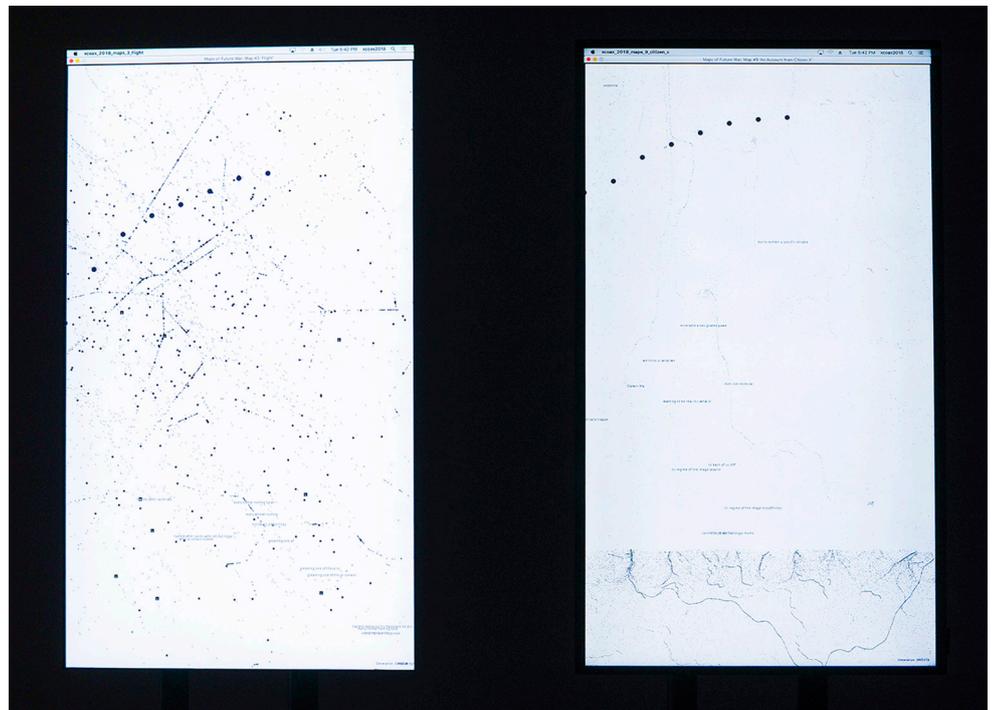


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Maps of a Future War: Flight & An Account from Citizen X

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Maps of a Future War is a series of nine generative maps that explore agent based narratives. The two maps discussed here are *Map #3: Flight*, which tells the story of movement across regions of conflict, and *Map #9: An Account from Citizen X*, which narrates the inner state of a citizen during a moment of political crisis. Using a framework of regions, signals, boundaries and other map elements, text agents drift, collide, and change in an attempt to produce an emergent narrative. The text blocks of each map's narrative agents are combinatorial, assembled algorithmically from an archive of statements that represent agent observations, beliefs, or actions across a range of narrative states. By shifting agent tendencies based on conflict weights and state coherences, *Maps of a Future War* intends to model narrative as a kind of complex system, one that can evolve or adapt according to region and agent conditions.

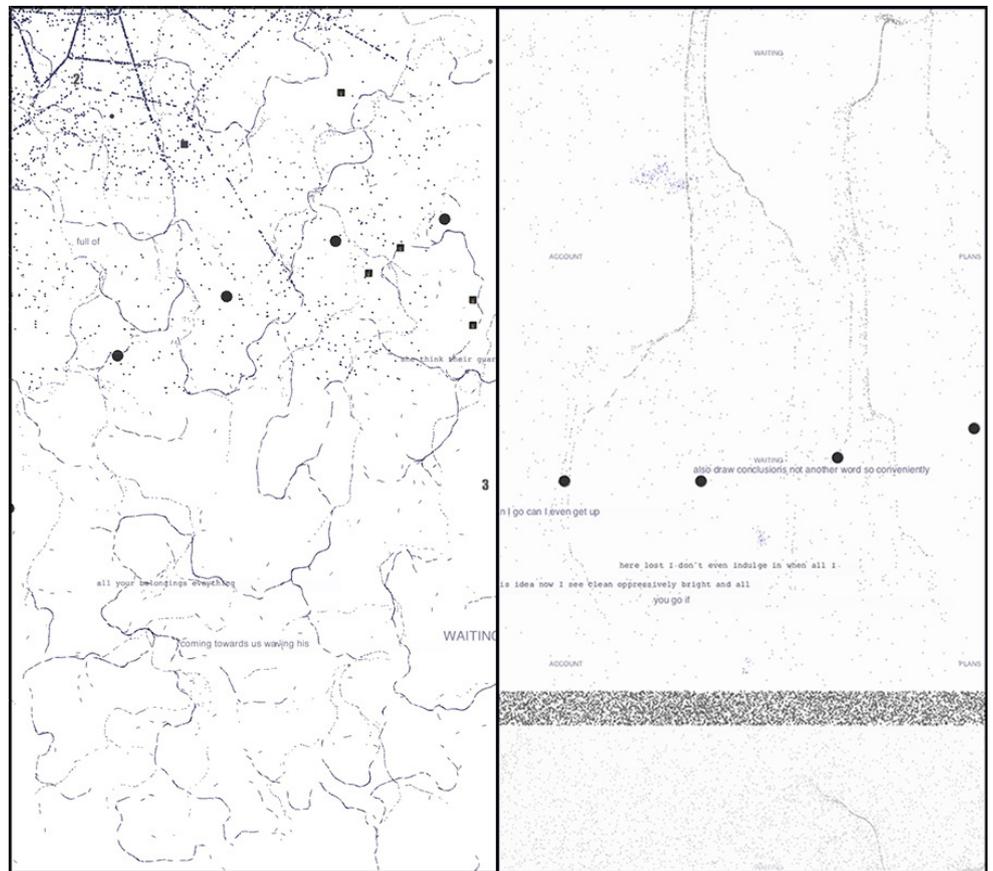
1. DESCRIPTION

Maps of a Future War continues my research in narrative aesthetics and stories that might operate as systems. The maps are environments in which text agents and other map elements form interrelationships that determine an overall framework for a fictional work or recombinant story. Working within a system of signals and boundaries, the text agents of maps use genetic algorithms and conflict weights to reproduce in an attempt to create an emergent narrative. Screenshots of map #3, *Flight*, and map #9, *An Account from Citizen X*, are shown in Figure 1.

2. AGENTS

Each map starts with a small group of text agents which are distributed across a set of narrative modes. Based on readings from the fields of political history, the narrative modes of map #3, *Flight*, were configured as Clausewitzian strategy, history, justice, politics, and sociology. Drawing on readings from literary theory and the narrative structures of monologue, the agent modes of map #9, *An Account from Citizen X*, were configured as memory, doubt, recognition, bargaining, and denial. A further description of the maps narrative modes is shown in Tables 1 and 2. These modes are made up of a number of archives or reservoirs of text fragments that represent the narrative of the agent concerned. These fragments were written as fiction for a story that might self-organize as recombinant system. On instantiation, each text agent is coded with a numerical array meant to represent that agent's 'DNA'. Fragments are then left to drift through the environment where they may 'collide', 'reproduce', and 'mutate' based on signals from map regions, borders, and other map elements. On collision with map borders, text agents can 'reproduce' or create child texts whose newly evolved narrative goals are the product of a genetic algorithm that reflects the influence of the collision border's DNA as well as the parent agent's genetic identity. Future text generations are selected based on the amount of algorithmic fidelity a child text exhibits towards an agent's continually recalculated narrative state.

Fig. 1. *Maps of a Future War Map #3, Flight* (2017) and *Map #9, An Account from Citizen X* (2018), screenshots.



3. ENVIRONMENT

Table 1. *Maps of a Future War Map #3: Flight* (2017), narrative modes and states.

MAPS OF A FUTURE WAR, MAP #3: FLIGHT				
Narrative States				
History	Sociology	Clausewitz	Justice	Politics
blur aggressor and defenders	erase human causes	judge all sides guilty	repress critics	point out complexity
is History < 0.6?	is Sociology < 0.6	is Strategy < 0.6	is Justice < 0.6	is Politics < 0.6
↓	↓	↓	↓	↓
erase sequential memory	accept accounts of the aggressor	assign blame equally	point out the wrongs of victims	dismiss preventative strategies
is History < 0.3?	is Sociology < 0.3	is Strategy < 0.3	is Justice < 0.3	is Politics < 0.3
↓	↓	↓	↓	↓
consciousness of the instant	military replaces politics	condemn all sides	punish the innocent along with the guilty	point out failures of politics

As in many agent based systems, agents operate over cells, often called patches, but here conceived of as regions. Regions are made up of groups of cells, two or three dimensional blocks of terrain that develop at discrete time steps based on signals from other regions, agents, and elements. Each region can contain several varieties of map element, including agents, lists, and borders. Unlike agents, regions may change in appearance, but do not produce texts, or contain inner schemata that change, or

evolve. Instead, regions are weighted for conflict so that agents may evaluate a map area in terms of its coherence to that agent's current narrative state. Depending on these coherence weights, agents are either attracted to or repelled from specific regions, thereby creating movement, collision, and the possibility of change, reaction, or evolution of the agent texts. Regions also contribute to the several overall conflict weights for the system, some of which determine the appearance or form of certain textures and borders, and in some cases the sensitivity of certain signal sensors.

Table 2. *Maps of a Future War Map #9: An Account from Citizen X* (2018), narrative modes and states.

MAPS OF A FUTURE WAR, MAP #9: AN ACCOUNT FROM CITIZEN X				
Narrative States				
Memory	Doubt	Recognition	Bargaining	Denial
struggle to recall	question past motives	deny past	assert the questionable	practice counternarrative
is Memory < 0.6?	is Doubt < 0.6	is Recognition < 0.6	is Bargaining < 0.6	is Denial < 0.6
↓	↓	↓	↓	↓
reassign actions	examine gaps in the record	admit oversights	equate the unequal	insist on stasis
is Memory < 0.3?	is Doubt < 0.3	is Recognition < 0.3	is Bargaining < 0.3	is Denial < 0.3
↓	↓	↓	↓	↓
block distant knowledge	revisit conclusions	acknowledge failures	catalog 'what ifs'	examine obstacles

4. EMERGENT NARRATIVE

In contrast to traditional narrative structures, the design schemes of each of the maps in the series assumes a lack of initial goals for its narrative agents, and relies on agent text assembly to create progression. Agents in both maps use weights and rules to calculate a narrative state and a narrative tendency, then assemble archived fragments into a current text block. On collision with specific map elements, which are categorized as borders, agents are able to shift state, change, or evolve. In the case of map #3, *Flight*, collisions cause text agents to evolve according to a genetic algorithm. In map #9, *An Account from Citizen X*, collisions cause agents to evolve according to a narrative rule set or schemata. As agents change, they signal their new states and regions conflict levels, overall map weights, sensor signals, and agent headings are recalculated. Agent texts that lie outside or between the starting states of a map narrative are considered emergent or generative texts. This use of models or systems to express a changeable, evolving text is meant as an alternative to traditional narrative structures.

Table 3. *Maps of a Future War*, agent inputs and outputs.

MAPS OF A FUTURE WAR					
Agent / Environment Relationships					
Borders	→	Collisions	→	DNA	
				↓	
Regions Elements	→	Signals	→	Agents	→ Narrative States

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