THE CITY IS MERELY A SUGGESTION

AGENCY IN THE AGE OF NETWORKS: SUGGESTION AND COLLECTIVITY IN 21st CENTURY CITIES

With each passing year the public sphere, referring to the extent to which we share a reality with others, enters a heretofore unfathomably-precipitous decline[1,2]. The extent to which suggestion algorithms choose what information we see, or don't see, as well as suggest where to go, what to do, whom to jail and how to govern, grows with each passing day[3,4]. In what ways have recent technologies, and their attendant business models, conspired with human nature and political economies to cause US cities in 2018 to be as segregated as they were in 1973, having regressed dramatically from peak integration in 1988? What will segregation in US cities look like in 2048?

I propose that the current crop of suggestion algorithms, by design, maximally segregate people according to all traits visible to them, including direct and indirect proxies for racialization, age, sexual orientation, religion, and protected categories... Furthermore, AI-optimized segregation has the potential to be significantly more efficient than the human-powered segregation mechanisms that preceded it. I propose to explore strategies, in the domains of technology, human-centered design, micro-economics and game theory, for mitigating or reversing this trend, with the goal of discovering novel ways that AI might be deployed to reduce bias, increase equality of opportunity and promote nourishing interaction in a public sphere shared by diverse communities.

[1] http://www.ft.com/cms/s/0/eda3bcd8-5327-11df-813e-00144feab49a.html
[2] https://link.springer.com/article/10.1023/A%3A1006849114681
[3] https://books.google.com/books?hl=en&lr=&id=ZjaEAgAAQBAJ&oi=fnd&pg=PA168&dq=decline+of+the+public+sphere&ots=wLNi3-8MPM&sig=EaYi9Cp4LUoHJMOGCJAtV9rbrmU#v=onepage&q=decline%20of%20the%20public%20sphere&f=false
[4] http://www.nyu.edu/steinhardt/e/pdf/humsocsci/mias/readings07/10.pdf

RESEARCH || PROVOCATIONS || BUSINESSES || OBJECTS || INTERFACES || ALGORITHMS

OUTVOTE — *Peer to Peer Democracy*

Seed Stage Firm - Using Modern Tech to Bring Democracy Back to its Roots

- Social networks obey a universal power law, 0.2% of the population knows 55% of the population
- Conversations with people in our network move democratic participation 10,000x more than ads
- The brief age of one-to-many broadcast politics is over. The next phase of democracy is in some ways a regression to the mean, back to the basics of word-of-mouth conversations between people in the same community
- Outvote allows anyone to participate to easily contribute to a candidate or issue-based campaign by contacting people they know via SMS

SCALES — *Take Back your Dopamine Receptors (and the Public Sphere)*

Functioning Prototype - AI-powered Defense against Abuse of Attention, Junk Information and Tribal Hyper-segregation

- The public sphere, as the extent to which we share a reality with others, is notably in decline. The extent to which suggestion algorithms choose what information we see or don't see, as well as where to go, what to do, whom to do it with, whom to jail and how we discern public opinion, grows with each passing day.
- Scales fights fire with fire, using artificial intelligence to present content platforms with an intentionally-altered version of ourselves, such that optimizing for this alternative user gives us back the content we actually want, rather than the content that makes us click.
- The essential function of a suggestion algorithm is the clustering of its users. The user is served content, based on what has "engaged" similar users in the past. The algorithm optimizes for the most accurate prediction, which optimizes for the tightest cluster, which requires that each cluster become ever more unique. This results in what Ethan Zuckerman calls a "Pointillist Public Sphere" in which there are an endless number of tight-knit groups with little overlap and no common culture or identity. This trend is quite literally the opposite of civilization.
- By causing suggestion algorithms to believe that the content which will maximize our attention is the content that we aspire to be exposed to and to engage with (i.e. the set of user-defined instructions that guide Scales' interactions with platforms), we can demand content that speaks to our shared values, in spite of the fact that we do not usually live up them.

CRITICAL MASS/COMM!T — *Synthetic Willpower is the only Willpower*

Functioning Prototype - The Power of Ulysses' Crew in every Pocket, because Grit is an Illusion cast by Those who Control Their Environment

- The COMM!T platform gives "present you" some leverage over the behavior of "future you" through irrevocable smart contracts, by which you commit to an action and an automated reward or penalty triggered when you take (or do not take) the action

- An example contract might be, [IF] I don't log [10,000] steps today, [THEN] my smart cookie jar won't open for [21] days
- Critical Mass extends the COMM!T framework by allowing irrevocable commitment to group actions, with contracts that are null until some specified number of people have also committed to take the same action

BOSTON FOIA REDESIGN — *"Sunshine is the best disinfectant"*

New Research - Technology, Innovation and Entrepreneurship within Government

- Under the supervision of former US Deputy CTO Nick Sinai and in collaboration with students from the Harvard Kennedy and Tufts Fletcher schools, this project will reenvision the role of technology in providing government records to the public, including journalists, community advocacy groups and the academy.
- Structured as a 12 week UX research, design and prototyping sprint, this project brings best practices in agile innovation from the private sector to bear on massive, impactful and unweildy challenges in the delivery of public services.

DECENTRALIZED FACEBOOK KILLER — *A Transparent Marketplace for User Data and Attention*

Whitepaper - Strategies for Conquering the World's Most Influential Monopoly

- Decentralized, peer-to-peer direct messaging, content delivery and filtering platform
- Users pay for platform overhead costs and earn money by selling their attention and personal data
- Completely transparent marketplace for user attention and data
- GDPR-Compliant

PROJECT PARALLAX — *Breaking the Fourth Wall to Bring us Closer Together*

Functional Prototype - A Computer Vision System for adding Natural Spatial Effects to Videoconferencing

- The much-ballyhooed "death of distance" never quite arrived because even with unlimited bandwidth, telepresence is a diminished form of presence in several important ways
- Project Parallax adds critical elements of presence back to telepresence, such as the parallax effect (foreground objects moving independently of background), the ability to meet another person's gaze and the ability of a screen to show you additional field of view as you peer around it's edge
- In addition to personal communication, Project Parallax is intended to be deployed via public projection to create a live connection between neighborhoods, cities and countries

SMART FABRIC — *Shape-sensing Piezoelectric Fabric*

Functioning Prototype - Commerically-producible bluetooth shape sensing fabric

- Fabric that can accurately report both its shape in three dimensions, and it's orientation in space, via a wireless connection
- This new material has immediate applications in smart clothing, athletic and defense industries

MDLN — *[Stealth Mode]*

Active Development

- ██
- ███
- █████████████████████████████████

MICROSOFT INCLUSIVE DESIGN — *Unknown Objective and Scope*

Entirely Hypothetical

- Project in collaboration with Microsoft and INVIVIA Design