Anirban Baishya

"Signal and (Red) Noise": An Interview with Daniel Howe

Daniel Howe is an artist and critical technologist whose work explores the relationships between networks, language, and politics. His hybrid practice explores the impact of networked, computational technologies on human values such as diversity, privacy and freedom. He has been an open-source advocate and contributor to dozens of socially-engaged software projects over the past two decades. His outputs include software interventions, art installations, algorithmically-generated text and sound, and tools for artists. He currently resides in Hong Kong where he teaches at the School of Creative Media.

I first encountered Daniel Howe's work in September 2017, when a friend of forwarded me information about a new browser extension that he had heard about. The extension was titled "Track-MeNot" and was focused on online privacy. Being invested in questions of surveillance and privacy, I decided to try TrackMeNot myself. What struck me most upon first reading about the extension on its webpage was its claim that TrackMeNot protects "web searchers from surveillance and data-profiling by search engines [...] not by means of concealment or encryption (i.e. covering one's tracks), but instead by the opposite strategy: noise and obfuscation." To me this seemed like a novel approach to privacy: hiding in plain sight rather than building opaque walls. From there I began to explore more of Howe's work and soon found out that privacy and surveillance were major concerns of his practice. I ended up becoming a user of one of his other extensions "Ad-Nauseum." AdNauseam again, is concerned with online advertising and tracking and, according to the project's description, "hides ads on visited pages, but then clicks each ad in the background, polluting user profiles and creating mistrust between advertisers and the networks they pay for clicks."

Other projects developed by Howe include "AdLipo" and "Redacto." Redacto works through the visual language of censorship: on using Redacto, "all potentially harmful text" on a webpage is replaced by black redaction marks resembling the

26

sanitization of sensitive material on classified government documents. Part browser extension and part sarcastic critique, one's first encounter with Redacto can seem like a bit of a joke, since it really does redact all text on the webpage (Fig. 1). The tongue-in-cheek description of Redacto on the project's webpage after all does hint at this: "Redacto redacts the distracting information on web pages you visit, just like your favorite oppressive regime. This free/open-source browser extension removes all potentially harmful text so that you can better concentrate on your acquiescence." Among other works of note is Advertising Positions (2017), a mixed-media installation that maps actual advertisements encountered on the web on to 3D models of human faces. Advertising Positions was developed as a critical response to the web's surveillance ar-



Fig. 1: Redacto screenshot from Rednoise.org.

chitecture where "Human users are rarely asked to consent, but must instead accept tracking as the necessary cost of access to the "free" information we can no longer live without." In this interview for *Spectator*, Daniel Howe responds to specific questions about his projects as well as the larger political and aesthetic motivations behind his work.

Anirban Baishya (AB): Can you tell us a little about your training and art practice? How did you start working on digital technologies? What are some of the main issues that motivate your work?

Daniel Howe (DH): I got into technology by chance. I studied creative writing and music in university, then worked a series of minimum wage jobs in Portland, Oregon: short-order cook, barback, book-binder, secondhand bookstore clerk, etc. But I was working on my writing during the day and playing in bands at night. Then, through a friend, I got a job doing desktop publishing—which promised to increase my infinitesimal income by 50%. I had imagined doing some work in Illustrator or Quark Express, but on the first day, they sat me down in front of a black & white Sun Sparc Station and told me to learn Unix, then TeX and LaTeX. So, it was a bit of trial by fire. And as our typesetting workflow contained lots of manual, repetitive tasks, I eventually started writing little PERL scripts to automate them, and this was the beginning. It wasn't long after that I was thinking about how to use code in the context of my writing and music.

AB: On your website, rednoise.org, you describe yourself as an "artist and critical technologist." What does art practice mean for you and to what extent do you see digital projects such as AdNauseam and Redacto as art projects?

DH: I think one of the roles of art is to raise questions about how we perceive and interact with the world. Digital technology of course constitutes a large part of contemporary life, and the tools we use—networks, browsers, social media, etc.—play a big role in shaping our experience. Many of my projects exist on some kind of a continuum between tool and conceptual statement. A project like Redacto is primarily conceptual, while AdNauseam is at once a privacy tool, a means for users to express

themselves, and way of rethinking the way we interact online.

AB: A lot of your projects—AdNauseam, Redacto, Adlipo and TrackMeNot for example—are focused on user privacy and inhibiting tracking. What is your take on the current digital media landscape especially given the data practices of companies such as Google, Facebook and Amazon? How do these projects reflect on or intervene in these data practices?

DH: I started working on issues related to data tracking back in 2001. And for a long time, it felt like we were really working in a vacuum. In the last few years though, awareness has grown substantially and the average person, at least in the West, has some sense of the problem, and of how much is a stake. But if we want things to change, we need to imagine better alternatives to the current systems. There are a few such examples that exist, but leaders of the technology community have been unwilling to abandon the systems that have made them rich for ones that are more equitable and responsible. Sadly, the lack of anything resembling responsible leadership from the mainstream technology community may well be one of the defining elements of this time period.

AB: One of the ways criticisms of digital media works in popular culture is through calls for abandoning technology altogether, or through assertions that the impacts of digital media are altogether negative. But your work doesn't seem to be Luddite either. You work with technology even as you work against its hegemonic uses. I guess I'm starting to dig into the term critical technologist a little here and asking you what that term means and how you envision your work intervening in and providing an alternative to our current digital environment where tracking and surveillance have become routine.

DH: Abandoning technology is not a real option. Humans have always already used technology, and it is not the fundamental problem. The problem lies in the way we have come to measure value. This becomes immediately apparent if you visit a school or a health clinic in a depressed re-

"SIGNAL AND (RED) NOISE"

gion of the world; and then visit the financial sector, or look at the military budget, in that same region. But the fact that technology is not the root issue doesn't mean that we needn't be careful about the technological decisions we make. In fact, it suggests just the opposite. Technology has the power to liberate or to enslave, and this is something we can see throughout history. It may be that we simply need to spend less time thinking about what we can do, and more on what we should do.

I use the term "critical technologist" because it foregrounds the element of critique in my projects. As you note, I use computational technology as a means of questioning the agendas and values that it can embody, but also as a way of suggesting alternate possibilities. We have the tendency to take the existing state of things as a necessary condition, as the way things must be (this is as true of technology as it is of environment degradation). As a punk skate kid on BBSes (Bulletin Board Systems) in the late 1980s, I was fortunate enough to have experienced an alternative vision of what the Internet could be, however short-lived it was. But for new generations, the fact that the Web could be anything other than a surveillance-fueled, democracy-corrupting shopping mall is difficult to conceive.

But the current systems have evolved directly from the specific decisions of human actors. And it follows then that they could have been different, and still could be different going forward. I don't see much these days to make me believe they will be, but it is useful to realize that the possibility is there. This is, I believe, one of the essential contributions of culture. It allows us, as Alfredo Jaar puts it, "to create a model of looking and thinking about the world that can enter a society and that shows us what is possible."

AB: Building on the previous question about tracking, let's talk a little bit about *Advertising Positions*. Can you describe how Advertising Positions came about and what was its exhibition context?

DH: Advertising Positions evolved directly from AdNauseam, specifically its "Ad Vault" feature that allows users to view and interact with the hidden ads they are served (Fig. 2). Through developing this feature, I noticed how the collages presented unique

and often quite personal views of users, including sensitive aspects of their daily lives (Fig. 3). This idea, of a data portrait as imagined by the advertising network, was fascinating to me. It was at once quite revealing, but also clearly flawed in ways that exposed powerful assumptions. So, it was a natural next step for me then to start testing ways of foregrounding this aspect of the project. A few months later, in early 2018, early prototypes of Advertising Positions were exhibited at a local gallery called Oi! Street. Later that year the first complete version went to the Art Center Nabi in Seoul, South Korea (Fig. 3). Most recently it was featured in a large international show, called "Algorithmic Art: Shuffling Space and Time," at the Hong Kong City Hall.14 This version included 3D models on large screens in the gallery space, which responded in real-time to the gaze and movement of audience members.

AB: In "Advertising Positions: Data Portraiture as Aesthetic Critique," you describe the intention behind the work as a desire to "create a visceral tension between the aesthetic appeal of the work, on the one hand, and the disturbing social dynamics from which it emerges, on the other." I'm really interested in the idea of the "data double" that you bring into the work. How was it working with the idea of these ads mapped onto (3D models of) human faces? The trailer for the project on Vimeo for example shows these faces in different expressive states. How do you think our routine interactions



Fig.2: The "Ad Vault" feature in Ad Nauseum. Screenshot from author's browser.



Fig.3: A "data portrait" from Advertising Positions showing advertisements mapped onto a 3D model of a human face. (Image courtesy Daniel Howe)



Fig. 4: Advertising Positions on display at Art Center Nabi, Seoul. (Image courtesy Daniel Howe)

with the web have modeled human subjectivity and what is the role of a work such as Advertising Positions in understanding this condition?

DH: The assumption of behavioral advertising, the foundation for what has been called "surveillance capitalism," is that human behavior can be easily quantified; and that, once quantified, it can be predicted, influenced, and controlled. The same type of pattern can be seen in recent machine-learning systems, where models are trained to recognize patterns in user data, then those models are used to predict and influence future behavior in a sort of self-reinforcing feedback loop. It is easy to see then how existing biases, assumptions, inequalities—in fact the status quo—are recapitulated and solidified

in the process. These types of systems assume—and, in fact, enforce—the notion that given enough data, human actions are both quantifiable and unambiguous. Yet we know this is often not the case.

If we look at the most interesting elements of the human experience-creativity, humor, language, music, stories—we notice first that their value is extremely difficult to formally quantify, and second, that they involve high-levels of ambiguity. Two examples that illustrate this are interpersonal relationships and artistic pursuits. Both are highly contextual, highly subjective, and resistant to quantification. They function, especially the latter, on ambiguity. Without ambiguity, it is hard to imagine how art of any meaning could exist. As Bill Kentridge puts it, "I am interested in a political art, that is to say an art of ambiguity, contradiction, uncompleted gestures and uncertain ending." So as regards Advertising Positions, I wouldn't say that the primary goal was to create the tension you refer to. But I am indeed wary of works that use similarly problematic situations (environmental degradation or economic oppression, for example) as the sort of raw materials with which to create aesthetically pleasing outputs. I want to resist any visceral aesthetic appeal that might overshadow the difficulty (and ambiguity) of the content.

AB: What are some other projects that you have in the pipeline and what are they about?

DH: An important part of my practice is making creative tools for other artists and teachers (the RiTa library is one well-known example). I just recently finished a custom scripting language and set of authoring/visualization tools for generative dialog in games and other interactive experiences called "Dialogic." It was used in an amazing new AR game called "Tendar," which launched recently and has already won a bunch of awards (it playfully tackles some of the same surveillance issues found my work). And I've just begun work on Spectre, a very interesting privacy-related project with new collaborators in the UK, which I unfortunately I can't really talk about quite yet.

AB: How does your art practice feature in your teaching? Can you talk a little bit about some of

"SIGNAL AND (RED) NOISE"

the classes that you teach? How do you encourage your students to think through practice and what are some of the challenges you have faced along the way?

DH: At the School of Creative Media in Hong Kong, I teach Hacktivism and Tactical Media, Privacy and Surveillance, Writing Digital Media (basically creative writing with computation), Network Art, and several varieties of Creative Coding. I try to teach them much like studio workshops in an art school, where we present work in progress for critique throughout the semester. I find that a key

ingredient for learning is active engagement, so I want the students to work on projects that they care about, rather than exercises. In addition to learning the craft of coding, the goal is for them to learn how to plan and identify risks, how to solve problems as they arise, to iterate and improve their designs, to clarify and articulate their thinking (both orally and in writing), and to give and respond to constructive criticism. These are skills that will be critical in the future, whether they end up as artists or not, and no matter how technology might change going forward.

Notes

- 1 Daniel C. Howe, Helen Nissenbaum, Vincent Toubiana, "TrackMeNot," NYU | Courant: Computer Science, Accessed January 20, 2019, https://cs.nyu.edu/trackmenot/
- 2 "AdNauseam W' NISSENBAUM & ZER-AVIV," *Rednoise.org*, Accessed December 30, 2018, https://rednoise.org/daniel/detail.html#adnauseam
- 3 "Redacto," Rednoise.org, Accessed January 14, 2019, https://rednoise.org/daniel/detail.html#redacto
- 4 Daniel C. Howe, "Advertising Positions, 2017: Animations / Mixed-media Installation," *Rednoise.org*, Accessed February 1, 2019, https://rednoise.org/daniel/adverpos/
- 5 For more details see Batya Friedman, Daniel C. Howe and Edward Felten, "Informed Consent in the Mozilla Browser: Implementing Value-Sensitive Design." *Proceedings of the 35th Hawaii International Conference on System Sciences*, 2002. DOI: 10.1109/HICSS.2002.994366
- 6 Khanya Mashabela, "Alfredo Jaar on the Capacity of Culture." *Hyperallergic*, February 16, 2019, Accessed February 23, 2019, https://hyperallergic.com/484801/alfredo-jaar-cape-town/
- 7 See "Algorithmic Art: Shuffling Space and Time," https://shufflingspaceandtime.com/daniel-c-howe-hk/8 Daniel C. Howe, Qianxun Chen and Zong Chen, "Advertising Positions: Data Portraiture as Aesthetic Critique." Leonardo, Vol. 51, No. 4 (2018), 417
- 9 "Advertising Position: Trailer," Vimeo, July 12, 2018, Accessed January 15, 2019, https://vimeo.com/279622110
- 10 Brook Mason, "Moving matter: William Kentridge's politically charged films air in NYC," *Wallpaper*, January 28, 2016, Accessed February 23, 2019, https://www.wallpaper.com/art/politically-charged-filmworks-by-william-kentridge-take-nyc-marian-goodman-gallery
- 11 "RiTa: a software toolkit for computational literature," *Rednoise.org*, Accessed February 23, 2019, https://rednoise.org/rita/
- 12 "Dialogic," *Github*, Accessed February 23, 2019, https://github.com/dhowe/dialogic/#dialogic-fish 13 See the homepage for the game at *Tendar*, Accessed February 23, 2019, https://tenderclaws.com/tendarom/daniel-c-howe-hk/