## Notes from Matthew Reidsma’s Opening Presentation

Slides: <https://mreidsma.github.io/talks/aware> (code version); <https://mreidsma.github.io/talks/aware/> (presentation version)

Transcript: <https://github.com/mreidsma/talks/blob/master/aware/transcript.md>

Algorithm = a set of instructions (input) that create an output

Topic explorers/Researcher Starters as one example of algorithmic bias

Autocorrect as another example

Mentions of recency bias but then also contrast with lack of updates for sources (including Wikipedia!) inside these tools

Research using ethnography to understand the impact on users of these systems

## Notes from Teaching and Learning Discussion after Matthew’s talk

Search as the first place to start with algorithm testing?

* Matthew it is an inherent process to our digital life. People trust these systems.

Results - even after scrolling users tend to choose from top 3

Matthew - are the things that meet need

Lisa - Q: do these best meet need or “of these results they best meet my need”?

Where do people expect customization? I.e., they expect in NetFlix but do they expect in library tools? Do they understand how those recommendations come to be?

Lisa: we should look at Pinterest algo possibly? As bad as YouTube! Mike Caulfield (sp?) has been tweeting about.

Is there a logical way to connect Matthew’s research methods to other online settings (ecommerce, entertainment, social feeds, etc.)?

How would you analyze and measure the algorithmic impact in a social feed (like Facebook)?

Once we distilled some of these research methods, is this something we could turn into a class project? A session exercise?

Library Discovery - does Yewno represent even more/new algo issues/questions with its semantic indexing/mapping/whatever it does?

“Algo self-defense”

Can a user identify what research environment they are in?

Is there a difference between algorithms that personalization or algorithms that center around topics?

<https://dlrp.berkman.harvard.edu/> - digital literacy resources that might be helpful (oriented toward youth)

YouTube Algorithm as another teaching moment. A right to privacy that gets lost when the YouTube

Bethany suggested we also continue to think about tactical and tangible/interactive practices (beyond traditional instructor/student settings) to impart these concepts

* Kit to install an interactive teaching exhibit about algorithms
* Glass room: <https://theglassroomnyc.org/> & <https://theglassroom.org/en/>
* Data Detox: <https://theglassroomnyc.org/data-detox/> (downloadable cards/kit)

Podcast “note to self”

* The privacy paradox
* <https://project.wnyc.org/privacy-paradox/>

Also something to think about: what can we teach our users about how to minimize the reach/impact of algorithms? Ways to correct the algorithm?

* Tor browser
* New Ad settings
* Private Browsing
* New services that enable privacy and anonymization

Are there ways to repair the algorithm? Are there ways to give them their agency back? - Lisa

* To personalize it in a way that is correct for you?
* Data detox - <https://datadetox.myshadow.org/en/detox>

Browser comparison idea as an exercise

* Pull up two browsers: logged in, one in private mode
* Let them browse

Teach the teachers

* Wireshark example where Andromeda at Library Technology Conference where she collected people’s passwords, when OPACs sent passwords in plaintext within password reset emails ( <https://andromedayelton.com/talks/ltc2016/> )
* Andromeda also made the point that we need to make sure we are aware of how our showing these examples might empower bad actors, or put ourselves on the wrong side of ethical lines by exposing people to the dangers we’re teaching them about

Some tools to give people agency: <https://ssd.eff.org/en>

Abby: I also like this one for online security: <https://securityplanner.org/>

Bethany mentioned that there is an opportunity with graduate students or researchers

* Anyone who has a public profile of their work
* Work to show how algorithm takes the form of representation and how you might be able to shape those algorithms to represent you better

What does this look like at the undergrad level, though? How does it fit into writing 101?

* “Beat the google” - can you find something in EBSCO you can’t find in Google?
* People are too far away from graduation to contextualize information literacy in their future adult lives, but they like games where they can beat the system

## Notes from Logic Model Exercise

See enclosing Google Drive folder: <https://drive.google.com/drive/folders/0B00qDiMLT3XdaHdUUGhGMk80eEU>

Outcomes:

Set up user outcomes for attendance:

1. Identify what algorithms are in place
2. Give them working options

What metaphors are we developing?

* Abby’s example of “online self-defense”
* “Poking the bear”
* Power of the story -> “Black Mirror”-type narratives

What are the reasons this education matters?

* Some of us like our filter bubbles...

## Notes from Working Breakfast

Notes from Sustainability and Promotion

How do the learning materials confer expertise and empower instructors?

* Is a credentialing part of this process? (Abby mentioned Mozilla’s badging system yesterday.)

Lisa mentioned that there might be a role for a hackathon session where these tools and exercises could be made available.

What are the necessary roles to have represented as part of educational team?

(Taking some inspiration from this article re: DH teams - <https://journals.ub.uni-heidelberg.de/index.php/dah/article/viewFile/34297/43447>)

* Technical consultant -> software developer
* Instructional consultant
* UX and assessment consultant -> help measure classroom experience, help measure curriculum effectiveness, help measure instructor effectiveness
* Instructor

Think in terms of phases

1. Move from proto-curriculum into actual, local curriculum
2. Teaching class at local
3. Develop network to continue to support -> mentor group, create alumni working network for continuing work

Where to promote and set up next partnerships?

ACRL 2019 deadline for remote presentations: <https://conference.acrl.org/conference-content/session-formats/>

Bethany mentions that part of iSchool or Ed schools instruction -> help students learn early about this competency so that they are coming into the field with some of this interest

Next IMLS Grant - moving from planning to program development!

Notes from Curriculum Discussion

Find ways to frame discussion around how this course is multi-disciplinary

Consider life without Algorithms

Social media and Algorithms as a touchstone

Learning outcomes:

* Set more active language
* Students (analyzing, designing, creating
* Students construct their own algorithm in pseudocode

See explorable explanations

* Ncase.me

Reading list suggestions:

Nate Matias - course at Princeton on social media - see e.g. <https://freedom-to-tinker.com/2018/07/03/teaching-the-craft-ethics-and-politics-of-field-experiments/>

Arvind Narayanan (<http://randomwalker.info/> , @random\_walker) - browser fingerprinting, privacy

Data 4 black lives researchers - conference program and livestream: <http://d4bl.org/conference.html> , <https://www.youtube.com/channel/UCHpUM-G3uVBZhCLarz2qOWA>

Cambridge Analytica should be on the list

Lawrence Lessig’s Code as primary text

Data in Health Care

Algorithms in Policing and parole

Latanya Sweeney (data and re-identification; was chief technologist at the FTC; works on the intersection of algorithms with election and financial law, among other things; has taught related courses whose syllabi might be interesting)

Semester-long

* Are there ways to bring personal experience narratives into the class?
* What are the power dynamics intrinsic to algorithms? Who benefits? Who doesn’t?
* Initial discussion of research question to help set up for later (1st month)
* Run at graduate level with faculty partner - John Paxson (CS at MSU), Public Administration, Philosophy,

Workshop with 3 days (modules)

* Set up course workload to accommodate working professionals
  + Let’s say you have about 6 hours of contact time
  + Bethany mentioned thinking about how to compress learning into a daylong course at beginning or end of conference
  + Could it be set up as faculty development course -> they bring
  + Set up instructional model as exercise -> what do you want people to learn? How will you know you are having success? Provide a scaffolding or a template
  + See Open Canvas at Mozilla WOW: <https://mozilla.github.io/open-leadership-training-series/articles/opening-your-project/develop-an-open-project-strategy-with-open-canvas/>
  + Take a look at DLF pedagogy group
  + Take a look at Mozilla WOW curriculum
* Could this be a certification workshop?
* Public library ideas: entry into the fake news problem takeaway
* Scope for audience - we are assuming some experience with instruction
* Rethink readings for this audience -> focus more on training and advising readings; move away from general background and positions about algorithmic bias

Jan suggested that there might be a lower-level iteration of training module for student workers as they move into public service roles

Teaching Tool discussion

Landing page to ground experience and provide intro

See Mozilla X-Ray goggles

Modal Window: A formula for each annotation - What happened? Why did it happen? What’s going on here? What if you want to learn more? Friendly, accessible tone

* Action: work with Scott and David to test for best UX practices and tone

<https://github.com/LibraryCodeYearIG/Codeyear-IG-Github-Project> - github basics self-teaching module in case you end up needing that