Slaker & Tawneer
2024

Cradle to Grave: Lesson Overview

WEEK 1: Datafication & Sociotechnical Systems

This lesson provides an introduction to the concept of datafication in everyday life, emphasizing the importance of adopting critical approaches to the study of data. Our broad focus is on how data and technology interact with social processes and structures and how we can consider data as having politics and a social life of its own. Following the pre-lesson activities, we will review the relevance of critical data studies and sociotechnical systems approaches, highlighting their significance in understanding contemporary phenomena of digital data, which we will use throughout our inquiries in this course. The lesson concludes with a practice exercise analyzing the sociotechnical system of datafication in everyday life.

Lesson Activities

- **Raw Revelation #1: 10 Reasons Why.** For the first reflection, students are asked to provide ten reasons why /how they understand digital data/big data as significant in their lives. They will return to this post during the midterm when creating ideas for their final project.
- **Discussion. - Intros & Motivations.**The discussion this week asks students to introduce themselves and share their motivations for taking the course. The discussion also asks students to provide one question that they would like answered by the end of the class. They will return to this post during the midterm when creating ideas for their final project.
- **Data Dialogue #1: Socio-technical thinking - Living a Day in Data.** In the first genre writing exercise, which we call “data dialogues,” students apply the premises of sociotechnical thinking to “living a day in data”. They begin by reflectingon the various interactions they have with digital tools and internet enabled devices then expand to include companies, stakeholders, data types, and potential uses. They then focus on one example within their network of “data in their everyday” to address the oncept of how technology is both social and technicallyocally constituted.

WEEK 2: Born into Data

In this week's lesson, we consider the intersection of data and cultural codes. Our exploration centers on the "datafied" child, revealing how simple data points, such as a child's name, are laden with complex semiotic meanings. Through activities aimed at critical analysis and reflection, you will investigate the political dimensions and implications of how data is signified. A particular focus will be on identifying gaps or omissions in datasets, and the representational politics within data codes that raise critical questions about social differences.

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Lesson Activities

Raw Revelation #2: There's an App for that?! This weeks reflection exercise invites students to This week's reflection exercise invites students to engage with Meredith Broussard's concept of technological chauvinism, alongside her insights as a data journalist. They do so by investigating the data collection practices of an app, platform, or software that collects data about family planning, infants, or children via the terms and service agreement of the technology they selected.

Discussion - There's an App for that?! The discussion encourages students to share the app, platform, software they selected for their reflection. In addition, they are asked to share any questions they have about the terms and service agreement such as obscure language, or help navigating the document to find relevant information. Responses from students (and instructor) are oriented to helping address these questions.

Data Dialogue #2: Data Journalism - A Datasheet for Datasets Using the information they gathered in their investigative work, students are then tasked to prepare a short data journalism piece. However, rather than focus on data visualizations as many data journalists do, students are instructed to prepare a "datasheet for datasets" as outlined by Timnit Gebru et al (2018).

WEEK 3: Algorithms of Learning: Unpacking the New Calculus of Education

In this lesson, we will consider how the datafication of education, particularly secondary schooling, impacts the dynamics of teaching and learning, reshaping educators' approaches, student engagement, and the broader implications for equity, privacy, and child development. A key aspect of our exploration will involve challenging the prevalent belief that data-driven and algorithmic decisions inherently enhance educational systems, child development, and prospects for students. Adopting a critical and sociotechnical approach, we will explore the prevalent myths surrounding big data. You will be guided to recognize and critically examine these myths as they manifest in our language, thoughts, and the practical application of data, particularly through a detailed critique of AI policy.

Lesson Activities

Raw Revelation #3: A Role Model for Who? Students are asked to reflect on the sociotechnical imaginary of datafication, particularly as it influences our discussions and aspirations regarding the importance of teaching children how to code. By examining an article titled "Letter Home from Code Camp," students will list or outline the envisioned characteristics and traits of the individuals these children are imagined to grow into as participants in coding camps.

Discussion: What are we modeling? This week's discussion builds on the reflection on the sociotechnical imaginary of data. Students are asked to input descriptive information from their reflections into an AI computer image generator, aiming to create a portrait of the individual described. They are provided with a starting prompt and parameters for instructions to ensure a safe and respectful engagement. Subsequently, students will critically reflect on the generated portrait.

Data Dialogue #3: Policy Brief - What does data lack? Continuing their exploration of the sociotechnical imaginary, students are asked to find a policy related to the use of data-driven methods, applications, and platforms in secondary or higher education. They are tasked with identifying the dominant data imaginaries present within the policy. Following this, students will conduct an intersectional analysis, using their course readings as a guide, to pinpoint what the imaginary overlooks and how it may differentially impact student populations.

WEEK 4: Am I Dating an Algorithm?

In Week 4, students consider the role of algorithmic matchmaking and its impacts on love and romance. During our lesson this week we will venture into the world of online data. Drawing inspiration from Habermas's concept of the "colonization of the lifeworld," we critically examine the impact of outsourcing romantic decisions to algorithm logics asking how these mediations might alter the nature of human connection and impact our tolerance for social differences. This exploration will culminate in the crafting of a speculative fiction piece using 23andMe's genetic partner traits suggestions as a starting off point.

Lesson Activities

Raw Revelation #4: ChatGPT, what's your type? In this activity, students will engage in an experiment to uncover potential algorithmic racial biases within matchmaking processes, using ChatGPT as a tool. By creating hypothetical dating profiles and preferences, students will interact with ChatGPT to see how it navigates the complex terrain of matchmaking.

Discussion: Exquisite Data/ing Corpus The discussion draws inspiration from the game, "exquisite corpse," a collaborative, chance-based drawing game invented by Surrealists in the early 20th century. For our purposes, students will engage in collaborative storytelling, in which they will craft the "ideal" date by "aggregating" elements/experiences from the best dates they've experienced or imagined. Following, students are asked to discuss the implications of social compatibility and how it might be interpreted or misinterpreted by algorithms.

Data Dialogue #4: Speculative Fiction -My Statistically Significant Other For the final "genre" writing activity before beginning their final projects, students are tasked with writing a short piece of speculative fiction. They will explore services like 23andMe, which suggest "best matches" based on genetic information. Students are asked to consider the implications of algorithmic decisions, the politics of data, and how these factors impact concepts of compatibility, destiny, and personal choice. Through their speculative fiction, students will question the ethical, emotional, and societal impacts of basing love on statistical significance.

WEEK 5: Datafication & Social Change: Bridging Themes in Public Scholarship

In Week 5, students begin to outline their final projects by revisiting and integrating their prior reflections and genre-based writings, identifying themes and connections that relate to their chosen

topic, such as societal implications or ethical considerations found in their work. For instance, exploring how datafication in education links to health data through concepts like social sorting, autonomy, or equity. This week's lectures feature "walkthroughs" of public scholarship on datafication in daily life, demonstrating how to draw connections across works and apply insights from one domain (e.g., community formation through datafication) to enhance understanding in another (e.g., biases in hiring algorithms), thereby modeling various approaches for critically engaging with data.

Lesson Activities

Activity - Community Sandbox - This activity provides students with access to a curated library of zines and other public scholarship projects, along with participation in working groups. These resources expose students to a wide array of topics, questions, and approaches for tackling their chosen topic. The sandbox environment fosters creativity and collaboration, encouraging students to explore diverse public scholarship avenues

Raw Revelation #5: Annotating Previous Work - After exploring the Public Scholarship Sandbox, students will choose at least two of their earlier works to review. In particular, students are encouraged to revisit their initial reflection ("10 reasons why") as well as their first discussion post regarding their motivations and goals for taking the class. They are asked to make annotations on these works, sharing new questions that arise or considering how they might use certain approaches or critiques to deepen the conversation about their selected topic or to help them surface a topic of interest.

Data Dialogues #5: A Chat w/ ChatGPT Students are asked to engage in a conversation with ChatGPT about their topic, using provided prompts to guide the boundaries of the discussion. They will submit a transcript of their conversation as part of the assignment. This dialogue aims to simulate a brainstorming session, allowing students to refine their thoughts and explore new angles on their topic.

Discussion: Peer Literature Review In this week's discussion, students are encouraged to share key takeaways from their ChatGPT conversations, including insights, questions, or thematic ideas relevant to their projects. They are also asked to identify any information or resources they currently lack. In response, students are tasked with assisting their peers by locating at least one scholarly article related to the question or project at hand, as well as one example from the sandbox that could serve as inspiration for their work's design. This collaborative review process is designed to foster a supportive learning environment, facilitating knowledge exchange and mutual assistance among peers.

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Week 6. Infrastructures of Race and Health

This week, we consider Daniel Nemser's concept of "infrastructures of race" to examine how algorithmic decisions infringe on civil rights laws and causing large-scale harm. Following the course's midterm, we expand our examination from the individual impacts of datafication and algorithmic culture to a broader focus on infrastructure and systems. In the upcoming weeks, we will explore themes such as the infrastructures of race, the carceral imaginary, and social sorting as we shift towards a structural and systemic focus.

Lesson Activities

Raw Revelation #6: Considering your Audience - This week's reflection encourages students to think critically about the infrastructure of their project's subject matter to identify their primary audience. Questions to consider include: Who is this work intended for? Whom are they aiming to assist or influence? Understanding the audience will help clarify the project's direction and objectives.

Data Dialogues #6: Zero Draft of Project Proposal In Week 6, students are tasked with composing a preliminary draft of their project proposal, formatted as an extended abstract. They should incorporate resources from the previous week's peer literature review, alongside their notes and any additional materials they've discovered. Students are also prompted to reexamine their previous assignments for opportunities to realign them with their final project's focus. For instance, they might revise portions of an earlier piece to shift its emphasis or repurpose it as a foundation for a new segment that directly relates to their project's theme.

Discussion: Peer Literature Review. After sharing their initial project drafts, students are invited to present any notes or questions they've encountered during the drafting process. This week's responses aim to support peers in realizing their project ambitions. Students are encouraged to review each other's abstracts and provide concrete suggestions to advance the projects. Recommendations can range from sharing useful tools and techniques to expanding on concepts or clarifying project goals, fostering a collaborative environment that enriches the development process.

Week 7. Hiring Algorithms: From Life Changes to Social Sorting

This week, we engage in a critical examination of hiring algorithms, focusing on how they implement mechanisms of social sorting, the politics of categorization, and the biases inherent in personality and intelligence measuring scales. We are guided by the question of how automated hiring practices can shape opportunities and outcomes for individuals based on attributes inferred by algorithms. Our goal is not only to critique the assumptions within these systems and their impact on our life opportunities but also to start asking questions about how we are represented within these systems and how different people and groups are represented.

Lesson Activities

Preliminary Mock-UP & Content Outline: Students are asked to provide a mock up and thematic or content outline of their work. Students can do so via a draft or sketch of the project. The goal is to have students create a mockup that helps them develop conceptual direction for how they will present their work in their final project. Students are also asked to include a content outline for their final project noting where in the mock up each element/content piece will be addressed/placed.

Discussion: Peer Literature Review. Similar to previous weeks, students are asked to share their work, with responses guided by the task of drawing connections between the lesson on infrastructures and expanding their impact statements to include effects stemming from these infrastructure and institutional arrangements.

Week 8. Algorithmic Governance

This week, we explore the how datafication is incorporated into governance, including predictive policing, digital redlining, and the gentrification driven by tech industries. The aim is to help students understand and recognize the wide-reaching implications of their topics and how they can have significant, ripple effects. Examples we will discuss include the regulation (or lack thereof) of social media, the impact of tech companies like Airbnb, and the prediction in law enforcement. Students will also be exposed to various data activist collectives and communities and review various approaches to challenges they are addressing in their final projects. The objective is not only to expose students to the real challenges in governance but also to expand their understanding of how governance operates and the range of potential solutions.

Lesson Activities

Activity - Community Sandbox. Most of the students' activities this week are geared towards exploring the community sandbox and continuing work on their final projects.

Discussion: Peer Literature Review. Similar to previous weeks, students are asked to share their progress with the class, indicating struggle points/remaining questions, etc. In their response, students are asked to provide support via offering ideas, resources, etc.

Content Drafts & Peer Review. Students are asked to submit content drafts of their work for peer and instructor feedback.

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Week 9. Digital Specters & the Enduring Lifespan of Data

This lesson aims to synthesize and critically examine the concept of the digital afterlife and explore how datafication gives rise to various forms of digital ghosts. These digital entities range from babies who continue to have a presence online after miscarriages to social media accounts that outlive their original users, and even to the specters created by historical data inaccuracies. This exploration will delve into the multifaceted ways in which digital identities are constructed, maintained, and interacted with, even beyond the physical life span of individuals.

Lesson Activities

Revisions. Students are asked to revisit their extended abstracts and integrate their audience and impact statements. This will be used as the introduction to their works.

Discussion: Peer Literature Review. Similar to previous weeks, students are asked to share their progress with the class, indicating struggle points/remaining questions, etc. In their response, students are asked to provide support via offering ideas, resources, etc.

Week 10- Data Futures and a need for Radical Reimagining

In Week 10, we return to the concept of the sociotechnical imaginary of datafication, focusing especially on visions of the future. We explore a wide array of works, from poetry and art to algorithmic moratoriums, showcasing examples of collective action. Through these explorations, we engage in reimagining the future of data, relating these ideas to the students' chosen topics. The work completed this week will lay the groundwork for the final elements of the students' projects.

Lesson Activities

Raw Revelation #7. Final reflection. For their final reflection, students are asked to connect these broad concepts to their specific project themes. This reflection should consider both the challenges and opportunities that lie ahead as it relates to their project topic. They will use this reflection to lay the groundwork for the concluding elements of their final projects, integrating their speculative thoughts on the future with the practical implications for their research.

Discussion: Peer Literature Review. Similar to previous weeks, students are asked to share their progress with the class, indicating struggle points/remaining questions, etc. In their response, students are asked to provide support via offering ideas, resources, etc.

Week 11- Exam Week

Exam week is focused on finalizing their works. In which I will compile a websource of their projects to showcase to the class.