Interrogating the User in LIS

Issue Statement

The user in LIS is complicated by emerging technical platforms which are premised on "common sense" notions of race and capital and also predicated on logics of accumulation and surveillance, commodifying and reifying precise and scalable versions of the user. Critical information literacy and community archives, as sites of critical inquiry and identity making, are spaces that interrogate the relationship between users and these information platforms.

Introduction

This paper is an investigation into the information user and the impact that information forms have on the identity of the user. The paper explores how library and information studies (LIS) conceives of the user in contradistinction to how prevailing technical platforms understand the user. These notions of the user are informed by human computer interaction (HCI) and by investigations of measurement and value. On the one hand, it has been theorized that knowledge organization should pair with the user's identity (Furner, 2009) while on the other, there is mounting literature investigating how contemporary predominant knowledge organization is shaped by surveillance, algorithms, and data capture. These forces complicate how we think about identity, especially when considering how these technological forces are embedded within larger hegemonic cultural frameworks.

This paper is a descriptive overview of the user in LIS and begins with a survey of literature on the user as a subject-object relationship. This is followed by an inquiry into the emerging platforms such as search engines, social media, and online learning, exploring how hegemonic and "common sense" notions are deeply embedded in these technologies. I then suggest that within libraries and archives, the complicated understanding of the user is acknowledged via critical information literacy and community archives, respectively. Finally, the paper concludes with some future directions on how LIS can move forward given the dominance of these new platforms and the increasingly neoliberal frameworks of evaluation in higher education and information institutions.

Before beginning my MLIS degree, I worked for five years as an Instructional Technologist at UCLA Extension. An Instructional Technologist is a relatively new professional role in higher education whose core duties lie at the intersection of technology and pedagogy. Its function is driven by an increase in what is known as "EdTech," or educational technologies. UCLA Extension is a branch of UCLA that offers courses to non-matriculated students. An affordance of this education model is the ability for remote students and course offerings. As a result, UCLA Extension offers a much higher ratio of fully online courses. Critical to the operation of these online courses is a technical infrastructure that is built upon EdTech platforms.

As an Instructional Technologist working with primarily online courses, I was able to explore many of the technologies that online learning was predicated on in detail. In particular, I became

interested in the interplay between platforms and users, especially on the implicit assumptions of platform design that revealed how the user was conceived. My interests in the user-platform relationship were not confined to technical limitations and concerns of accessibility, but also how instructional content was packaged. It became clear that in order for the learner to succeed in these online educational settings, they needed to meet the frameworks as defined by the institution and supported by the technical platforms. These interests and concerns fueled my application to the MLIS program and subsequent studies in informatics.

Literature Review

The notion of the user is core to the LIS field. From libraries to archives to museums, there is an interest in pairing information structures with identity and community (Furner, 2009). In order to effectively align information structures with identity and community needs, there first needs to be an understanding of who the user is so that these institutions can organize themselves in a way that meets the needs of the information seeker. Complicating this understanding of the user is the technologies that these users engage with on a daily basis. Recent literature, both within and external to LIS, explores how information technologies are informed by and embedded within power structures, revealing how these technologies that information users engage with are 1) built on ideologies of racism, capitalism, and neoliberalism and 2) datafying the user, codifying them into an information object.

In "Death of the User: Reconceptualizing Subjects, Objects, and Their Relations," Ronald E. Day posits the co-constructed nature of subjects and objects. For Day, "subjects and meaningful objects are co-determined by social, cultural, and physical affordances and co-emergent out of those relationships through expressive powers mediated by mutual affects." By moving away from mechanistic understandings of the user, Day invites an understanding of the user as socioculturally structured, informed by "contextual social, cultural, and physical affordances" (78). Day's analysis of the user reveals that user behavior is the result of subject-object relations and 'mediated' by social-cultural norms (85). This understanding of the user reveals how information, media, and platforms are critical to the construction of identity and spell the "end of a certain understanding of human beings and their activities as either determinative causes of, or effects from, 'generating' or 'using' information," (2011) but instead as entangled with material forms.

In order to investigate the LIS user, then, an understanding of the forces that shape and inform technical platforms is necessary. One of these forces is race as outlined in Michael Omi and Howard Winant's *Racial Formation in the United States*. Omi and Winant invoke Gramsci's definition of hegemony through "common sense" (1994). Common sense is used to justify and reify dominant power structures of whiteness and capital, the effects of which are especially observed in the development of technical platforms. Safiya Noble, in *Algorithms of Oppression*, highlights how search algorithms are predicated on this common sense, with queries suggesting results which reinforce racism. Similarly, in *A Prehistory of the Cloud*, Tung-hui Hu traces the internet to its sovereign beginnings, noting how the infrastructure of the internet is built on

material forms which are informed by political power. These examples and others¹ serve to show how the platforms that users engage with everyday are mediated by power structures of common sense.

Complicating the subject-object relationship further is the logic of accumulation and resulting surveillance capitalism outlined by Shoshana Zuboff in *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. As a new market form, the logic of accumulation utilizes "surveillance [which] is a foundational mechanism in the transformation of investment into profit," compiling large data sets in order to perform predictive analysis resulting in behavior surplus, "our voices, personalities, and emotions" aggregated. This behavior surplus anticipates behavior which is then sold back to the user through marketing. Users navigating information platforms built on behavioral surplus and mediated by discriminatory algorithms both reinforces prevailing notions of hegemony as well as the subject-object relationship itself. Wendy Chun, invoking Phil Agre, notes that there is an "odd paradox at the heart of capture systems: they are both representation and ontology, data and essence" (2017). As Chun postulates in *Updating to Remain the Same: Habitual New Media*, "information is habit" (2017), laying the groundwork for understanding users as both the subject and object, information and habit.

¹ Further examples include Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy where Cathy O'Neil interrogates how the algorithmic use of big data reinforces discrimination and Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor where Virginia Eubanks explores data driven discrimination.

Essential to the quantification of habit, which is codified as information, is the notion of measurement and scale. Anna Lowenhaupt Tsing argues that precision is necessary in order to scale, but at the expense of heterogeneity (2012). In other words, in order to quantify behavior and produce value there needs to be clearly articulated, measurable concepts which can be codified and expanded upon. Andrea Mubi Brighenti suggests that the relationship between measure and value is circular, or entangled, and as such constitute a "measure-value environment" whereby objects are both quantified and understood (2018). Given that measures are environments, then value is inextricable, and only meaningful when contextualized within the environment. Measure therefore is both how we understand the environment and the environment itself, with maps, networks, topologies, and symbols representing and constituting the world. In the same article, Brighenti gives special attention to the unit "n = 1," noting that it "is not just a quantitative happening among others, but is a qualitatively distinct event," a result of the entanglement of measure and value (2018). Articulating the user and their associated behaviors as precise, measurable units is at the core of scale, accumulation, extraction, and ultimately discrimination.

With these notions of measure, scale, habit, and sovereign infrastructures in mind, it is important to consider how public and community oriented information institutions recognize these forces both external and internal to the user. The following section suggests that recent movements in libraries and archives are contesting the idea of the user as scalable through critical and communal information practices.

Discussion

This section of this paper discusses how these complicated notions of the user play out in libraries and archives. As platforms persistently reinforce the user as quantifiable and scalable, public information institutions are tasked with both making users critical of these platforms and of their relationship with information as well as providing users with a sense of belonging that is not bound up with dominant hegemonic platforms. Through a discussion of critical information literacy and community archives, an analysis of how libraries and archives strive to meet multiple criteria of success and identity is explored. These practices aim to liberate users through this critical evaluation and empower users by providing other ways of knowing and identifying external to the logic of capture.

Critical Information Literacy

Within libraries, the user has been explored in detail, especially in literature on information literacy. This subfield has theorized the user in depth when considering how to effectively meet the needs of library users, especially in academically oriented libraries. Christine Pawley introduces the tension between what information literacy sets out to accomplish in the library and who users are in the article "Information Literacy: A Contradictory Coupling." For Pawley, the inherent tension lies on the one hand with the intent to empower users through increased literacy while on the other conforming the user to established conventions through standardized

curricula, described metaphorically as a "procrustean bed" (2003). Through an examination of information literacy, the tension of the user as traditionally conceived in LIS becomes apparent.

James Elmborg introduces Freirian notions of pedagogy to the conversation of information literacy in "Critical Information Literacy: Implications for Instructional Practice." In this article, Elborg draws from Paulo Freire, noting that pedagogy should be formed with and not for the oppressed. In other words, users and their needs should not be treated as a bank where information is deposited, but rather "active agents shaping their own lives" (2006). Central to the concerns of critical information literacy are frameworks for evaluating success and how information institutions are enforcing metrics of assessment onto users through mechanisms such as the Association of College and Research Libraries' Framework for Information Literacy for Higher Education.

Critical information literacy acknowledges on the one hand that users have needs which are informed by the platforms they engage with, while at the same time encourages users to be critical of those same needs. This development is key in two ways: 1) it doesn't assume that users come to the library as a "bank" waiting to be filled with information and 2) it encourages users to be wary of and think critically about platforms that do conceive of users in this way. Through this critical inquiry, an uncovering of the invisible and sovereign infrastructures is possible, inviting the user to reflect on technical platforms driven by the logic of accumulation and on their own entanglement with material forms mediated through these platforms.

Community Archives

Within archival studies, the notion of information is secondary to that of evidence. Michelle Caswell notes that "this difference between evidence and information exposes a tension between the ways archives and libraries approach their materials, their users, and their organizational systems" (Caswell, 2016). Due to the emphasis on context rather than the content, the relationship between archives and users is different from users' relationship with the library. As institutions that are primarily evidential, researchers are often the primary user of the archive. Relatedly, archives in western scholarship are often formal components of governments and research institutions. These archival institutions therefore conceive of the archive as being about a user, as evidence. Given this, surveillance should be a primary concern for archivists (Caswell, 2016), as users could include state agents or other oppressive entities.

Community archives, on the other hand, aspire to pair its collection with a specific community in order to validate the identity of marginalized users outside the scope of mainstream archives. As "collections of material gathered primarily by members of a given community and over whose community members exercise some level of control" (Flinn et al, 2004), community archives offer an alternative to communities who do not feel represented by records in institutional archives. Primary to community archives is an active community that maintains and documents history "on their own terms" (2004). To be considered a community archive, the archive must represent a marginalized identity and aim to liberate those identities (Tai et al, 2019). Through the support and creation of community archives, archive professionals and community members

acknowledge the plurality of identities that are separate from and counter to dominant recordkeeping practices. Critical to the development of these archives is the possibility for representation often considered extraneous to dominant evidentiary institutions, resulting in epistemological, ontological, and affective levels of "representational belonging" (Caswell et al, 2016).

Much like the development of critical information literacy in the library, community archives complicate the notion of the user, and identity, in archives. Rather than accept as evidence those records that align with and thus reinforce hegemonic norms, community archives offer a space where users can "suddenly discover [themselves] existing" (Caswell et al, 2016). Furthermore, they offer counternarratives to users who, through engaging with technically mediated platforms that enforce the status quo, may not experience them otherwise. The records establish a community as legitimate to both the community as well as those extrinsic to that community through exposure to the records. Most importantly, community archives give a space to records, or evidence of a user, that would otherwise not have been captured. Again, surveillance is a concern as those who might use the community archive may not align with the community itself. But crucial is the possibility of capture that represents a marginalized community and increases heterogeneity, rather than capture that reinforces behavioral surplus and discrimination.

Conclusion

In the advancements of critical information literacy and community archives, a trend can be observed that clearly acknowledges the tension of a user who is pluralistic and also constructed

by their relation to dominant information forms. Likewise, both the library and archive exemplify a commitment to encouraging users to explicitly foster new information relationships via these critical methods while at the same time giving the user a voice in these platforms. Furthermore, the newly forged subject-object relationships which result from these critical methods implicitly counter dominant information narratives by offering users a space and place to engage critically with information forms that are not tied to hegemonic technical platforms.

However, the subject-object relationship as theorized by Day suggests that forces such as algorithms of oppression, logics of accumulation, and big data all reinforce discrimination, racism, and neoliberal practices through platforms that are invisible and pervasive. If libraries and archives are to impact the habits of users while at the same time support the pluralistic needs of users, in part informed by these prevailing platforms, their task is not small. They must resist neoliberal trends of quantified assessment that have taken hold of higher education and are seeping into many public information institutions. Critical information literacy and community archives are a good start, but are tricky to deploy, especially when they themselves are subject to quantification and scale through pressure to demonstrate success and efficacy.

My experiences as a higher education administrator working with technical platforms have opened my eyes to these neoliberal pressures of algorithmic individuation and private-public partnerships in information institutions, pressures that ultimately filter down to the user. These pressures take many forms, from technical limitations to standardized instructional practices. Given the recent pandemic and now absolute dependence on these technical platforms, it is

imperative as information professionals administering these programs that we are both conceptualizing the user as entangled with and also as measured and recapitulated by these forces. Only when we have done so can we engage users with requisite empathy and with methods of critiquing these experiences and for discovering themselves existing.

The co-construction of identity with these technical forms shaped by power structures such as race and capital is what propelled my application to the PhD program in Information Studies.

The concepts outlined in this issue paper offer a starting point for interrogating how the information field engages with the user, both morally and practically. Moving forward, I hope to use these theoretical foundations for designing and engaging with methodologies that continue the trend of refocusing the conversation in the LIS field towards equity, inclusion, and social justice.

References

- Brighenti, A. M. (2018). The Social Life of Measures: Conceptualizing Measure–Value Environments. *Theory, Culture & Society*, *35*(1), 23–44. https://doi.org/10.1177/0263276416689028
- Caswell, M., Cifor, M., & Ramirez, M. H. (2016). "To Suddenly Discover Yourself Existing": Uncovering the Impact of Community Archives. *The American Archivist*, 79(1), 56–81. https://doi.org/10.17723/0360-9081.79.1.56
- Caswell, M., & Punzalan, R. L. (2016). Archives and Human Rights: Questioning Notions of Information and Access. In *Perspectives on Libraries as Institutions of Human Rights and Social Justice* (Vol. 41, pp. 287–301). Emerald Group Publishing Limited. https://doi.org/10.1108/S0065-283020160000041012
- Chun, W. H. K. (2016). *Updating to remain the same: Habitual new media*. The MIT Press.
- Day, R. E. (2011). Death of the user: Reconceptualizing subjects, objects, and their relations. *Journal of the American Society for Information Science and Technology*, 62(1), 78–88. https://doi.org/10.1002/asi.21422
- Elmborg, J. (2006). Critical Information Literacy: Implications for Instructional Practice. *The Journal of Academic Librarianship*, 32(2), 192–199.

 https://doi.org/10.1016/j.acalib.2005.12.004
- Flinn, A., Stevens, M., & Shepherd, E. (2009). Whose memories, whose archives?

 Independent community archives, autonomy and the mainstream. *Archival Science*, 9(1–2), 71–86. https://doi.org/10.1007/s10502-009-9105-2

- Furner, J. (2009). Interrogating "Identity": A Philosophical Approach to an Enduring Issue in Knowledge Organization. KNOWLEDGE ORGANIZATION, 36 (1), 3–16. https://doi.org/10.5771/0943-7444-2009-1-3
- Hu, T.-H. (2016). *A prehistory of the cloud* (First MIT Press paperback edition). The MIT Press.
- Information Literacy: A Contradictory Coupling. (2003). *The Library Quarterly*, 73(4), 422–452. https://doi.org/10.1086/603440
- Noble, S. U. (2018). *Algorithms of oppression: How search engines reinforce racism*. New York University Press.
- Omi, M., & Winant, H. (2015). *Racial formation in the United States* (Third edition). Routledge/Taylor & Francis Group.
- Tai, J., Zavala, J., Gabiola, J., Brilmyer, G., & Caswell, M. (2019). Summoning the Ghosts:

 Records as Agents in Community Archives. 22.
- Tsing, A. L. (2012). On NonscalabilityThe Living World Is Not Amenable to Precision-Nested Scales. *Common Knowledge*, *18*(3), 505–524. https://doi.org/10.1215/0961754X-1630424
- Zuboff, S. (2019). The age of surveillance capitalism: The fight for a human future at the new frontier of power (First edition). PublicAffairs.