

Tracing the Future Lineage for *OBOS*: Reproductive Health Applications as a Text for Feminist Rhetorical Inquiry

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Abstract: This essay reflects upon the foundational work of *OBOS* to identify and inform future scenes for feminist rhetorical health research. We draw parallels between *OBOS* and reproductive health applications, particularly period and fertility tracking apps. Doing so, we make the case that these applications act as technological texts extending the commitments *OBOS* originally made, yet, we also raise caution and questions regarding how these applications collect and commodify user's personal health data. This essay then applies *OBOS* as a framework to inform a series of questions for feminist health rhetoricians. Our intention in sharing questions related to design, pedagogy, methodology, and ethics is to inspire future feminist health intervention work within rhetorical scholarship and to encourage users of these applications to demand more ethical care in the empowering design of these technologies.

Keywords: care, feminist ethics, feminist rhetoric, FemTech, health, reproductive health applications

As women, knowledge of our reproductive organs is vital to overcome objectification...The purpose of this paper is then to help us learn more about our own anatomy and physiology, to begin to conquer the ignorance that crippled us in the past when we have felt we don't know what's happening to us. The information is a weapon without which we cannot begin the collective struggle for control over our own bodies and lives. (Boston Women's Health Course Collective, p. 9-10)

Introduction

This abbreviated essay discusses the future of feminist health rhetorics research given the announcement that the Boston Women's Health Collective will no longer publish updated versions of *Our Bodies, Ourselves*. Specifically, we situate the Collective's decision to end production of this important text by considering the rise of (and simultaneous reliance on) female reproductive health technologies, commonly referred under the scope of the "FemTech" industry.¹ This industry is largely technology-driven, promising women's empowerment in health-related decisions through the collection of personal health data. Examples of such products and services include mobile reproductive health applications such as Clue (a period and health tracker), Glow (an ovulation and period tracker used often for predicting fertility), and Maven (a digital clinic for women). Recent projections predict FemTech to become a \$50 billion industry by 2025 ("FemTech Digital"). Frost and Sullivan's reporting indicates that this boom in female-centered health technology can be traced to new statistics citing women as primary users of digital health tools. In fact, these statistics reveal that

women are 75 percent more likely to use digital tools for healthcare than men (Magistretti). Additionally, 66 percent of female internet users look online for healthcare information (“FemTech—Time”). Frost and Sullivan’s findings underscore women’s turn towards technology as a platform to increase empowerment in the making of health decisions and marks a palpable shift in the types of texts women consult and trust when seeking new methods for assessing health information. Nonetheless, we find that without the publishing of *Our Bodies, Ourselves* (*OBOS*), the FemTech industry would not be the dominant industry it is becoming today. *OBOS* laid the foundation for valuing new methods that enhanced women’s health literacies by fusing both embodied and medical expertise into one text with the goal to increase female agency and sense of empowerment in making health decisions.

In what follows, we trace the parallels between *OBOS* and reproductive health technologies with a focus on period and fertility tracking applications; both can be seen as resources that seek to empower female users with an increased self-knowledge about their reproductive health. Establishing commonality between the two resources, we turn our attention to their differences and how reproductive health applications and FemTech at-large. A critical look at these reproductive health applications unearths how data collection that occurs within the apps precariously positions female users and impacts their assertion of agency over their health. We examine the feminist ethics of collecting personal health data in exchange for providing female users with an increased self-knowledge about their reproductive health and suggest how *OBOS*’ history can inform more ethical, feminist approaches to the collection of personal data in these applications. Pivoting outwards, we reflect on what FemTech technologies, like reproductive applications, can learn from *OBOS*’ past by pointing to a series of questions to guide future feminist health rhetorics research. These questions may be viewed as an invitation for further scholarship that evokes critical care, an idea that posits rhetorical scholarship can influence how care is extended to scenes of health and its stakeholders. We end by articulating that perhaps the most important contribution *OBOS* made to women’s health, including the rise of the FemTech industry, was the ability to collectively use one’s voice to advocate for better care.

From the Textual to the Digital: A Commitment to Empowering Women

For over 40 years, *OBOS* operated as a “living document” representing a collective of female voices, which “provided the tools for women readers to challenge medical decision making and to seek alternative structures of care based on the notion of experiential knowledge” (Kline 11). Strategically, the text was always in a state of revision so as to be “viewed as a tool which stimulates discussion and action, which allows for new ideas and for change” (*OBOS* 5). Additionally, the Collective’s decision to write the text as a fusion between medical terminology and embodied experience allowed for crowd-sourcing of expertise, thereby providing women access to medical discourse so as to advocate for their own personal experiences.

Because of *OBOS*, expertise was no longer in the hands of medical professionals, but women had

access to the complex medical language that discussed their bodies as well. Susan Wells explains, “this language destabilized the relationship between expert knowledge and experience to suggest a different way of knowing the body” (707). Further, the coupling of medical discourse with embodied experience provided new moments for increased patient agency, inviting female patients to share with each other and, later, with their doctors how they felt (emotionally and physically) during a procedure and/or illness. For example, Wells explains how this fusion enhanced female agency in the clinic, writing: “women who shared their stories of menstruation or childbirth empowered one another to effect or demanded change” (72). Through the collective, women shared stories that enabled them to look at their bodies as a source of inherent knowledge. These stories challenged the top-down expertise on the female body from physician-to-patient, and, instead, empowered women to have access to medical and embodied discourses resulting in more of an equal stake in their care. The Collective’s decision to incorporate personal experience into the narrative notably allowed for a “process of transforming medical knowledge into something subjective, political, and empowering” (Kline 15). As a book, *OBOS* structurally changed the language of how women talk about their bodies and the ability to challenge notions of medical expertise.

By changing women’s access to medical language/terminology and, thereby, increasing their health literacies, *OBOS* created strategic linguistic moves to emphasize “embodiment as central to emancipation” (Wells 715). For example, in the 1973 edition of *OBOS*, the Collective underscored their embodied approach to the book claiming, “For us, body education is core education. Our bodies are the physical bases from which we move out into the world; ignorance, uncertainty—even, at worst, shame—about our physical selves creates in us an alienation from ourselves that keeps us from being the whole people that we could be” (1973, xix). *OBOS* served to create a counter approach to prior female experiences in the clinic. It radically changed where expertise lived—no longer only from the position of physician but as negotiated expertise between female patient and medical expert. In many ways, *OBOS* made space for boundary spanning, which works to establish authority “by demonstrating their ability to use the techniques and vocabulary of the dominant profession or community” (Lay 78). By making medical terminology more readily available and accessible to women, *OBOS* served as a text that allowed individuals to become an authoritative subject over their health. Yet, how *OBOS* represented women’s embodied experiences was often criticized for a lack of “a commitment to honor difference, particularly racial difference” (Wells 710). As the project developed, a real need emerged “to negotiate two commitments: to the body as universal, as the ‘real’ upon which feminist solidarity could be based, and to the differences in women’s modes of embodiment as they are shaped by class, race, sexual orientation, and age” (Wells 714). Readers of the text identified a need to acknowledge that while bodies may be female, their lived experiences in the world and experiences with health are directly impacted by their varied lived experiences and positionalities. This critique that *OBOS* sought to speak for all women continued as the book was reprinted. Wendy Kline explains that “readers expected to find themselves described within the book’s pages, and expressed confusion, disappointment, frustration, or anger if they did not” (31-32). As Wells and Kline point out, while *OBOS* as a text sought to be inclusive and empowering, issues of representation remained.

Reproductive health applications, and the rise of the FemTech industry, mirror *OBOS*’ commitment to

women's empowerment, offering personalized health information that also asserts that women's health varies between bodies. As digital texts, reproductive health applications operate as technologies that empower users by

1. their wide accessibility and affordability, and
2. their capacity to collect and interpret personal health data to enhance agency in health-related decisions (Novotny and Hutchinson).

These two points, we argue, make FemTech more appealing than less-digital texts such as *OBOS*. And while, *OBOS* will no longer update its text, new reproductive health applications are being developed and downloaded for use at a consistent rate. For example, a 2015 IMS Institute for Healthcare Informatics report found that of the 90,088 health apps in the U.S. Apple iTunes store, 7 percent of them are marketed solely as products assisting with women's health and pregnancy. Another study reported that women who are under the age of 35, trying to become pregnant, and have regular cycles are more likely to use apps to track their periods than other women (Lanham and Christensen). Additional studies cite that use of these applications support more interactive and engaged conversations between women and their physicians concerning their reproductive health (Haelle). The embrace of these apps, the impact they have had on patient-physician interaction, and the ease of accessing these applications for relatively no-to-little-cost suggests how they mirror much of the self-empowerment intentions of *OBOS*.

Therefore, the intuitive design of these technologies enhances the use and appeal of FemTech compared to a physical text like *OBOS*, as these apps are generally affordable, easily accessible on a mobile device, and generate personalized health information that recognizes the embodied differences of individual users. The default requirements of their programming ask users to input name, weight, race, gender, age, height, and detailed information about their reproductive cycles. The collection of this information, when collated through the complex algorithms within the application, seek out to provide users with an individualized, tailored user-experience directed personally for them. These apps mirror prior commitments made by *OBOS* and the women's health movement which argued that bodily knowledge can support women's agency over their bodies. In these ways, reproductive health applications embrace the commitments of *OBOS* and simultaneously respond to the need to recognize difference in women's embodied experiences.

Though specific facets of both *OBOS* and FemTech support women's ability to assert more agency over their bodies through acquisition and access to medical discourse about their body's functions, certain limitations still present issues. Marissa J. Doshi built off of feminist communication research that showed how reproductive health applications operate based on traditional, heteronormative ideologies of gender to study how these applications also reinforce beliefs on what constitutes a "healthy female subject" (185). Looking at applications within the iTunes app store that specifically targeted women's health, Doshi found that these applications overwhelmingly depict white women who fit the Barbie stereotype, are "bikini ready," and exists in a resting state of fertility (187). Doshi's research points to how the marketing and design of FemTech further normalizes limited—and even

oppressive—views of what constitutes a healthy woman. FemTech offers the potential to increase women’s agency over their reproductive health, but also encapsulate limitations of representation that OBOS has as well.

Troubling the Empowerment of “DIY” Health Technologies: FemTech for Profit

We find reproductive health FemTech operates as “do-it-yourself” (DIY) technologies. Such applications offer a variable of services to monitor user’s bodies that provide them with substantial information about how their reproductive cycles function. Many track women’s menstruation cycles to predict ovulation dates in order to help users either plan for or avoid pregnancy. Applying user generated data, some, such as Glow, provide financial support to guarantee pregnancy; others collect and compile user data to provide substantial reproductive health information such as STI/D prevention (Clue) or promise to work as digital contraception (Natural Cycles). The popularity of these apps shows just how needed they are and how necessary users find having access to both information and the means to monitor their body’s reproductive health on their individual terms.

Technology companies have capitalized on these reasons and promoted their apps accordingly. However, as the Electronic Frontier Foundation (EFF) reports, “Women’s health is big business” (Quintin 3). Not only has news surfaced that these apps tend to fail in their marketing promises, but they also have significant security issues. In 2017, EFF published *The Pregnancy Panopticon*, a twelve-page research report that analyzed security and privacy issues within the most popular apps claiming to empower women over their reproductive health. EFF found that, while many of these apps like Glow and Clue use certificate pinning (a security measure that protects data from being intercepted in transit between the user to the company’s servers that, apparently, most bank applications do not even use), they tend to allow third parties to track users throughout their use of the app (Quintin). The big business of women’s health through FemTech inevitably means that the data provided within these apps—content users provide through app use—is what drives profit. Michelle Murphy’s work points to how necessary--and feminist-it can be for women to look at their own bodies (117), whereas reproductive applications can mediate how users visibly interface with their bodies in similar ways.² If the empowering promises of FemTech texts are replacing the use of OBOS, we would like to call on feminist health rhetorics scholars to investigate how the collection of data empowers and creates moments of agency through for users of these reproductive health applications interactive participation.

The Feminist Ethics of Collecting Personal Health Data

Our scholarship has focused on FemTech because we have experienced the value of reproductive health apps first-hand (see “Teaching a Critical Digital Literacy of Wearables: A Feminist Surveillance as Care Pedagogy” and “Data Our Bodies Tell”). For example, Maria has relied on fertility and ovulation prediction applications as an alternative option to expensive out-of-pocket clinical services. Les looked to several pregnancy platforms during her complicated pregnancy to gain insight for navigating health complications. Like other users of these applications and technologies, we, too, value the appeal of these apps to have support while making health decisions across a variety of industries that are often costly, inaccessible, and even invasive or depersonalized.

Incidentally, we also know, as feminist researchers who think critically about how our bodies are implicated through our technologies, that the data collected from our bodies by these applications raise concerns both for their security issues, but also their backend design to profit off of user bodily data. We have previously discussed the implications of third-party tracking, explaining that both collecting and providing access to data to third parties through these apps envelops users in a non-consensual relationship with unknown entities (Hutchinson and Novotny). Because, while many of these apps have extensive security backend design to prevent public leaking of sensitive health data, they still give access to private (and often silent) corporations at the benefit of the technology companies.

Acknowledging these design contractions, we find that FemTech apps are not as empowering as they make themselves out to be, and offer a definition of empowerment situated in rhetoric. Natasha Jones explains that “while rhetorical agency creates a (negotiated) rhetorical space for resistance and potential change, empowerment represents the actual enactment of rhetorical agency in a transformative way” (342). Her emphasis on empowerment needing the capacity to act with rhetorical agency shows how users of FemTech would need the ability to enact agency over their health data. To be more empowered as users of reproductive health apps, women should have a say in what data is collected from their bodies, how it is collected and stored in the company’s servers, and who has access to their personal, private health information. We consider here the ethical problems surrounding data collection when users have no means for input or negotiation when that data is content derived from the body. In her chapter “Terror and the Female Grotesque,” Rachel Hall felt prompted to move conversations around surveillance “away from matters of privacy, security, and efficiency to a consideration of the ethical problem of combating new forms of discrimination that are practiced in relation to categories of privilege, access, and risk” (148). Hall’s prompt returns us to OBOS’ purpose: women feeling empowered over their reproductive health with language and knowledge through the collective uplift of their voices. Though FemTech may do all of these things, the self-knowledge gained does not solely rest with the individual user. At the end of the day, all the bodily data collected is for sale. We wonder, for those of us doing feminist health rhetorics, how can we intervene to support further feminist empowerment via FemTech?

Future Questions to Guide Feminist Health Rhetorical Research

We see the capacity for OBOS to inform ethical approaches in reproductive health application design. For instance, Kline reminds feminist researchers of OBOS’ commitment to honoring the lived experiences of users of the text. She explains, “By its very formation, then *Our Bodies, Ourselves* encouraged readers to respond” (Kline 90). However, Kline and other scholars have noted the limited capacity to integrate a diversity of representations in the text and also found issue with OBOS’ lack of providing women with the means to address gender discrimination from their physicians (98). This same fundamental commitment to inviting readers critique and response is a feminist ethic we also see missing in the FemTech industry. Technology companies can better design their reproductive health apps to adapt critique and response through user experience surveys regarding data collection and consent, consultation with privacy and surveillance scholars, and by redesigning Terms of Service/Use with options for users to decide what and how their personal, private health data is

collected, stored, and used by the technology companies and their third parties.

We also propose that reproductive health technology companies and designers take note of The Design Justice Network's series of principles that can guide ethical, just design. These Network Principles³ set a standard of practices that promote decolonial, feminist, community-based practices that challenge us all to consider how we can evaluate and intervene with these technologies. By redesigning apps that already work to promote user empowerment in many ways, but still require change to limit commodification and exploitation of users through data collection, these applications can fully fulfill their marketing promises to their users by respecting them as knowledgeable contributors to the application's community.

We offer the following questions as consideration to guide technology designers, researchers, educators, and users in evaluation and intervention of FemTech and reproductive health applications:

Designers

We call upon designers, as well as instructors of design, to consider not only the use of health applications but the ethics of these applications. The questions below, we hope, will guide more just design and ultimately empower users of FemTech applications.

- What does a more socially just design of a reproductive health application look like?
- What aspects of data collection could this design adopt to support user empowerment?
- What is beneficial and supportive about the apps already available to users that helps them feel empowered over their health data, and how can designers continue designing for what works well while making more supportive accommodations?
- In what ways can designers create applications that invite responsive critique from users during real-time app use?

Researchers

As feminist health rhetoricians, we seek to not only critique the limitations of FemTech but hope our scholarship may respond and inform user empowerment. We see then these questions as guiding future feminist health rhetoric inquiry:

- What feminist theories and methodologies would inform the design of reproductive health applications to promote user agency?
- What sub-fields or related areas of inquiry might feminist scholars draw upon to respond to the collection of personal data in reproductive health applications? How may these fields inform or re-envision an empowering user experience?
- How may feminist commitments of inclusivity and social justice assist in how researchers gauge and study user experience of reproductive health applications?
- How might Indigenous research methodologies inform data collection and storage so as to limit the effects of cultural appropriation, racism, and the technology industry's ecological imprint on the land?

Educators

Many feminist health rhetoricians apply their scholarship to writing, rhetoric, and/or technical communication classroom. In these positions, we may instruct and train future designers and users of FemTech. We see the following questions as informing our instruction and curriculum design:

- What courses would be most beneficial for students to inquire about socially just application design?
- What readings and assignments would work well pedagogically in support of these courses' curriculum?
- How can a service-learning course be designed to critique the collection of personal data and serve local and global communities invested in inclusive responses to reproductive health?
- How can writing studies educators bridge relationships between community stakeholders and FemTech industry partners to support collaborative design of empowering reproductive health applications?

Users

As feminist health rhetoricians, we and our students are also potential users of FemTech. Given this position, we reflect on the following questions:

- How can users call for a redesign of an application based on negative experiences such as surveillance, non-consensual data collection, or troubling interactions with other users and/or representatives working on behalf of the tech company (content moderators, designers, etc.)?
- Can users act on their own behalf as individuals or is collective user response needed to make these changes?
- Where does user agency exist when reproductive health applications have secret relationships with unknown third parties?
- What does user-centered, feminist resistance look like in these applications when FemTech fails to listen? Do users quit using the app? Do they protest online in other digital spaces? What forms of resistance are available to users?

These questions offer an entrance for feminist designers, researchers, educators, and users to intervene and reimagine the empowering potential of reproductive health apps and the FemTech industry. As a physical text, *OBOS* can inform and inspire a critical look at how reproductive health applications handle data collection. As feminist health researchers, we believe in the value and potential of FemTech applications for how they enable users' access to better understanding their reproductive cycles. *OBOS* has shown how empowering access and information can be for women. By critically examining and calling attention to moments where female agency could be negatively affected, we believe reproductive health applications and FemTech have opportunities to reimagine how their technologies (physical and digital) may empower, and ultimately provide better care for, users.

Our hope is that this piece can serve as a call for women to continue using their voices by demanding reproductive health apps demonstrate more critical care for their users and be more responsible with

private health information. *OBOS* created a legacy by giving women the language in which to exert agency over their bodies, and reproductive health apps can do the same. With our collective voices, we can challenge FemTech to hear us as our needs evolve and continue to represent our many different—yet all valid and important—lived experiences. The future of *OBOS* is with us.

Endnotes

1. FemTech can be defined as “software, diagnostics, products, and services that use technology often to focus on women's health” (“FemTech—Time”).
2. We engage in a critical rhetorical analysis of fertility applications in a forthcoming issue of *Technical Communication Quarterly* entitled “Data Our Bodies Tell: Towards Critical Feminist Action in Fertility and Period Tracking Applications.” This article presents a more thorough interrogation of this argument in order to discuss how users interact with the design of fertility application interfaces. Due to the limit of space and time in this article, we do not go into that analysis here.
3. To view these principles, please consult:
<http://designjusticenetwork.org/network-principles/>.

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