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Designing born-digital scholarship: A study of webtext authors' experience and design conventions

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Abstract

This study curates an annotated portfolio of print scholarship, web design, and webtext features as a basis for interviews with webtext authors to examine their experiences composing webtexts for publication and design rationales within a four-part design space: orientation, movement, multimodality, and contextualization. Findings show that webtext authors draw on conventions of print-based scholarship and web design to define new possibilities for born-digital scholarship.

Keywords: Webtexts; Born-digital; Scholarly communication; Design; User experience; Usability; Conventions.

1. Introduction

The digital ecology of the Web offers a multimodal, interactive, and networked publishing space for scholars. "Born-digital" scholarship—scholarly works that are created and consumed solely by digital means—attempts to disseminate knowledge through multimodal, web-based artifacts, or "webtexts," which have become increasingly popular in academic fields across the arts and sciences. Writing studies has long been a proponent of born-digital scholarship, as evidenced by the publishing models of leading journals like *Kairos, Computers and Composition Online, Xchanges, enculturation, Present Tense*, and *Technoculture*. Moreover, book series like *Computers and Composition Digital Press, Digital Rhetoric Collaborative* and *#writing* by the WAC Clearinghouse have committed to publishing digital, web-based, and frequently open-access academic books and articles. These scholarly outlets promote accessible and sustainable digital publications, devoting attention to the publication process, technical requirements, and infrastructural issues for born-digital publications such as webtexts (Ball & Eyman, 2015; Ball, 2016; Eyman et al., 2016).

Abbreviations: UXD, User experience design.

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In contrast, less attention has been given to born-digital scholarship from the standpoint of user experience design (UXD): the process of designing and orchestrating the behavior, form, and content of interactive digital systems and services to provide meaningful and relevant experiences to users (Cooper et al., 2014). Only recently has research examined the use patterns and experiences of webtext readers (i.e., users) to help authors design the interactive behavior, form, and content of their webtexts in view of the meaningful experiences they want to offer to readers-as-users. In a previous article, we noted how multimodal and interactive features can enable and constrain modes of skimming, scanning, and close reading among webtext users (Tham & Grace, 2020). These findings offer implications for webtext design that recommend attention to the rich vein of theoretical and methodological approaches in the field of Human-Computer Interaction for insight into the use and usability of born-digital scholarship (Grace & Tham, 2020).

While these studies provide design-oriented insights into the experiences of webtext users, we also need to understand the experiences of webtext authors for insights that can help guide UXD processes. In this regard, the Inventio section of *Kairos: A Journal of Rhetoric, Technology, and Pedagogy* has been publishing behind-the-scenes narratives and studies of webtext scholarship since 2007. The section showcases "the processes of creating new media scholarship" and "focuses on the decisions, contexts, and contributions that have constituted a particular webtext" (Sorapure & Stolley, 2007). Additionally, insights from webtext authors can be gleaned from *Kairos's* Interviews section and Praxis wiki section, such as Sara P. Alvarez et al.'s (2017) collective reflections, "On Multimodal Composing." Elsewhere, studies focus on the affective dimensions of webtext design. For instance, Rich Shivener (2020) examined a range of works in "a qualitative study of more than 20 scholars who have authored digital media articles and books since 2015" (p. 42). Shivener focuses on the "felt experiences of scholars who produce webtexts" via the framework of a "rhetorical-affective workflow," which interrogates the relationship between authors' feelings and rhetorical practices.

However, insights drawn from authors' experiences, together with those of webtext users, require explicit connection to the design processes underpinning the growing volume of webtext scholarship. Our project is hence significant for two reasons. First, advancing born-digital scholarship in the field of writing studies requires resourcing the UXD processes of webtext author-designers. Institutions, publishers, and authors themselves need to be aware of the practical challenges involved in composing webtexts to provide and access appropriate resources that can support an emerging genre of scholarly communications. Second, despite recent findings that describe readers' encounters with webtexts (Tham & Grace, 2020), our field needs to map born-digital scholarship as a design space organized around authors' design processes, digital artifacts—i.e., webtexts—that result from these processes, and readers' experiences that result from engagements with webtexts in activities of scholarly research, teaching, learning, and play. For studies of webtext user experience to inform authors' UXD processes, research must span across the design space of born-digital scholarship.

Toward this end, this study reports findings from interviews with webtext authors' that examine their experiences composing and publishing born-digital scholarship, and the design rationales behind their work. As a basis for these interviews, we curated an annotated portfolio of webtext designs, organized according to five categories of features, that prompted authors to compare their own designs with others representing the broad landscape of born-digital scholarship. In addition to our existing knowledge about webtext accessibility, sustainability, and rhetorical workflows, we sought to understand webtext authors' conceptual models for creating academically acceptable yet audience-centered webtexts. Our findings highlight the considerations of authors as they moved from the intention to create a webtext to concrete design decisions. These findings map five areas of convergence and divergence between print-based scholarship and web design conventions that authors must negotiate when designing webtexts.

2. Literature review

This project may be of particular interest to communication designers and writing studies scholars due to the increased use and production of born-digital scholarship within these communities. In understanding current discussions about born-digital scholarship, we have delved into literature by experts from information design, rhetoric and composition studies, as well as human-centered design that have been made by technical communication researchers and beyond to investigate the common threads around digital scholarly communications. Set against mainstream narratives about breaking academic genre conventions and expectations (e.g., Ulmer, 2002;

Cushman, 2004; Wysocki, 2005; Bahl, 2017), our project seeks to align webtext designers' ideals with what webtext users find practical and usable.

To create a baseline for the understanding of born-digital scholarship, we first identified some prominent definitions. The Library of Congress considers born-digital artifacts to be materials "created solely in digital formats" ("Preserving 'born digital' materials"). Cynthia Selfe and Gail Hawisher (2012, p. 690) characterized born-digital scholarship more specifically as:

- Artifacts that are "born and live *only* in digital realms,"
- Artifacts that "do not simply rely on alphabetical text as the primary carrier of meaning,"
- Artifacts that "have not been originally conceived to be published in print but rather electronically," and
- Artifacts that "cannot be fully represented in print contexts alone."

By extension, webtexts are born-digital artifacts that rely on modalities afforded by the web. Cheryl Ball (2016) identified webtexts as "research-based artifacts that enact an author's scholarly argument through a web-based design" (p. 53). However, the term "webtext" has been taken up and used loosely by journals and publishers; some publish primarily text-based articles that are made available on the screen (such as the journals *First Monday, Present Tense*, and *enculturation*), others require extensive born-digital characteristics such as those outlined by Selfe and Hawisher (2012). Moreover, different disciplines consider various forms of digital publication to count as webtexts, including podcasts, video series, interpretive art, graphic novels, stop-motion animations, etc. Such diversity has led us to focusing on webtext definitions that are relevant to writing studies. We began with the two major webtext journals in rhetoric and composition.

The journal *Kairos: A Journal of Rhetoric, Technology and Pedagogy* has been considered a top-tier born-digital publication in writing studies. Its submission guidelines, which include the following, reveal requirements for webtext publications:

> *Kairos* promotes original and challenging electronic work, exploring the possibilities afforded by contemporary digital venues. Kairos publishes "webtexts," which means projects developed with specific attention to the World Wide Web as a publishing medium. We do not suggest an ideal standard; rather we invite each author or collaborative writing team to think carefully about what unique opportunities the Web offers. Some projects may best be presented in hypertextual form or in multimedia. ("Submitting to *Kairos*," accessed January 2022)

Another popular born-digital journal in writing studies is *Computers and Composition Online*. Its submission guidelines also indicate specific expectations for webtext composition:

> Submissions for *Computers and Composition Online* need to be web-aware, meaning that they not only use the World Wide Web as a medium but also take advantage of the benefits of this kind of publishing. Rhizomatic structures that disrupt traditional linear forms are welcome. Artful use of graphical interfaces and hypertext are also encouraged. Multimodal assets, including digital video and audio, are also welcome. ("Submission Guidelines," accessed January 2022)

A common observation in these journal submission guidelines is that webtext authors are encouraged to disrupt conventions of academic scholarship through nonlinear expression of ideas and arguments. Across dominant narratives, webtexts are framed as a rhetorical device to challenge reading practices typified by traditional print publications (Cushman, 2004), provoke critical thinking (Ulmer, 2002; Wysocki, 2004), and inspire new ways to enhance scholarly exchanges (Bahl, 2017; Helms, 2017). Advocating for a platform for online, open-access publishing, Ball (2015) contended that webtexts transform research communication into "multimedia-rich publications":

> Scholarly webtexts have great potential to be realized as spatial and temporal renderings of research, not simply near-facsimiles of the print-based journal article or book. The purpose of authoring a webtext instead of a print-based or print-like article is found in the communication potential and additional layers of meaning-making that multimedia and networked writing affords. (Ball, 2015, n.p.)

Webtext users are asked to embrace and engage with the hypertextual, multimodal, and nonlinear delivery of scholarship in webtexts. More importantly, users are to expect unprecedented presentations in webtexts, be it arrangement, interactivity, and other content experience. In recognition of their experimental nature, Ball (2016) noted that "each webtext is unique since each depends on the technology and media an author might need to fulfill her argument" (p. 54). To help users distinguish webtexts from non-webtexts, Ball (2016) shared the following "genre conventions for webtexts" (p. 55):

- Authors design their own webtexts, either individually or in collaboration with coauthors or designers.
- The design of the webtext must convey the author's scholarly argument and not be gratuitous.
- A webtext's purpose is to convey new knowledge in a discipline through the presentation of research. It is not meant to function as a primarily aesthetic method of conveying creative practice, such as with examples of electronic literature or interactive multimedia for artistic effect.
- Websites can incorporate any number of design elements and media appropriate to the World Wide Web (e.g., java script, links, graphics, and more recently, streaming media, etc.), as long as that inclusion is rhetorically in line with the scholar's argument.
- A webtext cannot be printed without losing its argument.

While webtexts promise new and appealing approaches to present scholarly contents, they are challenged by conventional norms of scholarly communication (e.g., users' preference for print-based reading) and authors' uncertainties in design/compositional practices. In her webtext dissertation, Erin Bahl (2018) highlighted the twin dangers of webtext scholarship, a "pushmi-pullyu" dynamic (channeling Miller, 2010) that enable as well as constrain the viability of this scholarly genre:

> Webtexts blur the lines between traditional and multimodal scholarship in interesting and productively dangerous ways. They raise new questions on how scholarly knowledge is created and what "counts" as scholarship in challenging, potentially risky ways. They perform design-as-argument in the context of what looks in many ways like an academic article, pushing on boundaries of knowledge-creation within traditional scholarly forms in ways distinct from other kinds that can be more easily dismissed as "something else." (Bahl, 2018, n.p.)

The divergence between conventions of traditional, print-based and born-digital scholarship signals an opportunity to examine processes of webtext design that are shaping an emerging genre of scholarly communication. We approach this inquiry from the perspective of UXD—the process of designing interactive systems and services that can facilitate meaningful experiences for users—as webtext authors seek to not only communicate information to readers but, through the design of interactive features, engage them in processes of meaning construction (Alvarez et al., 2017; Wysocki, 2006). These processes require "designing for interconnectedness, where tasks and texts no longer exist individually or in a silo, but instead connect across a broad and complex landscape of interfaces and environment (Lauer & Brumberger, 2016, p. 249).

In recent years, the *Computers and Composition* community has paid close attention to UXD as a field of inquiry to understand the experiences of people designing and interacting with artifacts and applied methods to design artifacts that facilitate experiences that users value. A special issue of *C&C* was dedicated to user-centered design and usability studies in 2018 which contained a rich set of examples and discussions regarding design processes that focus on the needs and capabilities of users (Bartolotta et al., 2018, pp. 1–3).

Our UXD perspective is also informed by Charles Kostelnick and Michael Hassett's (2003) rhetoric of visual conventions. Kostelnick and Hassett explained that design, including arrangement, information hierarchy, signs, and other discernible visual language, does not happen in a vacuum—i.e., any new or innovative design is shaped and authorized by existing conventions and interpretations. Conventions, however, are always fluid and thus can emerge, evolve, and mutate based on uses by the communities that express them. In the case of webtexts, these communities are made up of researchers, authors, publishers, editors, reviewers, readers, etc. And because interpretations of conventions can vary within and across communities, Kostelnick and Hassett contended that it is important to study the perceptual, cognitive, and social forces that influence design choices. Moreover, Kostelnick (2019) emphasized the need to take a human-centered approach to practicing design so as to "humanize" information:

> *Connecting with* audiences, making information *usable* for them, *accommodating* their needs, acting *morally* and *ethically* in their best interest, *simplifying* complex subjects through direct and understandable language––these humanize information in both words *and* images. (p. 4, emphasis original.)

Innate to UXD, the human-centered approach resounded by Kostelnick means paying attention to how people think, learn, and behave. To that end, communication design scholars have advocated for activities that can help designers understand the mental models that people use to associate with unfamiliar interfaces. Jeff Rubin (1996) called this activity "conceptual design," referring to the practice of designing conceptual models. Key among Rubin's recommended strategies for conceptual design are to know the conceptual model(s) users employ to make sense of a product/interface and to "document the intended conceptual model explicitly" (p. 137) so that designers can identify the alignment as well as misalignment between the intended and actual models.

Consequently, for our study we draw on UXD as a field of inquiry into the experiences of authors engaged in webtext design processes. Specifically, our study conducts interviews with webtext authors to examine the 1) goals that motivate authors to create born-digital, rather than print-based, scholarship; 2) challenges that authors encounter when designing webtexts, and 3) rationales behind authors' decisions regarding the interactive behavior, form, and content of the webtexts they designed for publication.

Findings from these interviews describe webtext authors' design processes and decision-making as a negotiation between convergent and divergent conventions of print-based scholarship, web design, and emerging norms of webtext design. By connecting these findings to design requirements identified in studies that examine how people read and experience reading webtexts, this study offers implications for UXD processes that can help authors design webtexts that users experience as useful, usable, and, ultimately, meaningful. The following section explains how we reached these findings though the use of an annotated portfolio in interviews with webtext authors.

3. Research design

This article concludes a multi-part project to understand the experiences of people reading and designing born-digital webtexts. For the first phase of the project, we conducted think-aloud tests with faculty and graduate students to examine the user experience of reading webtexts. The focus of this study was on how readers of webtexts navigate born-digital publications. Important findings from this first phase included design recommendations that could help readers *skim, scan*, and *close read* webtexts. Furthermore, these findings allowed us to elaborate a user-centered framework as a resource for webtext authors making situated design decisions (Tham & Grace, 2021).

For the second phase, described in this article, we curated an online portfolio that categorizes examples of design features commonly observed in published webtexts (Gaver & Bowers, 2012). With the help of a student research assistant, we created the portfolio by gathering design exemplars across the interdisciplinary landscape of born-digital publications, curating them by categories (i.e., abstract/landing page, headers/navigation menus, body text/content, references/hyperlinking, figures/tables/interactive features, etc.) identified during the first phase of the project, and then published the resulting annotated portfolio online as a community resource to inform the design and evaluation of future born-digital webtexts (refer to Fig. 1). We curated webtext features alongside those of traditional print articles and websites based on comparisons that emerged during think-aloud tests with faculty and students. Certainly, as we have mentioned earlier, there are options for webtexts to communicate scholarly content other than alphabetic texts and images, such as videos, interactive data visualizations, podcast interviews, etc. In our curation process, we considered these options and included sample features that diverged from traditional journal articles and websites. We presented this online portfolio, which consisted of curated print article, website, and webtext design features, to participants in the interviews we conducted with webtext authors. Elements of the portfolio are shown in Fig. 4 to Fig. 7.

Five authors of *Kairos*[1] webtexts, including faculty members and senior PhD students in technical communication and rhetoric programs (Table 1), were recruited for semi-structured interviews about their experiences creating and publishing webtexts, as well as the ideals of born-digital scholarship that motivate their design work.

[1] Our participants were recruited based on a convenient sampling method. We have chosen to recruit authors from the same journal in order to avoid variance that might be caused by different editorial requirements.

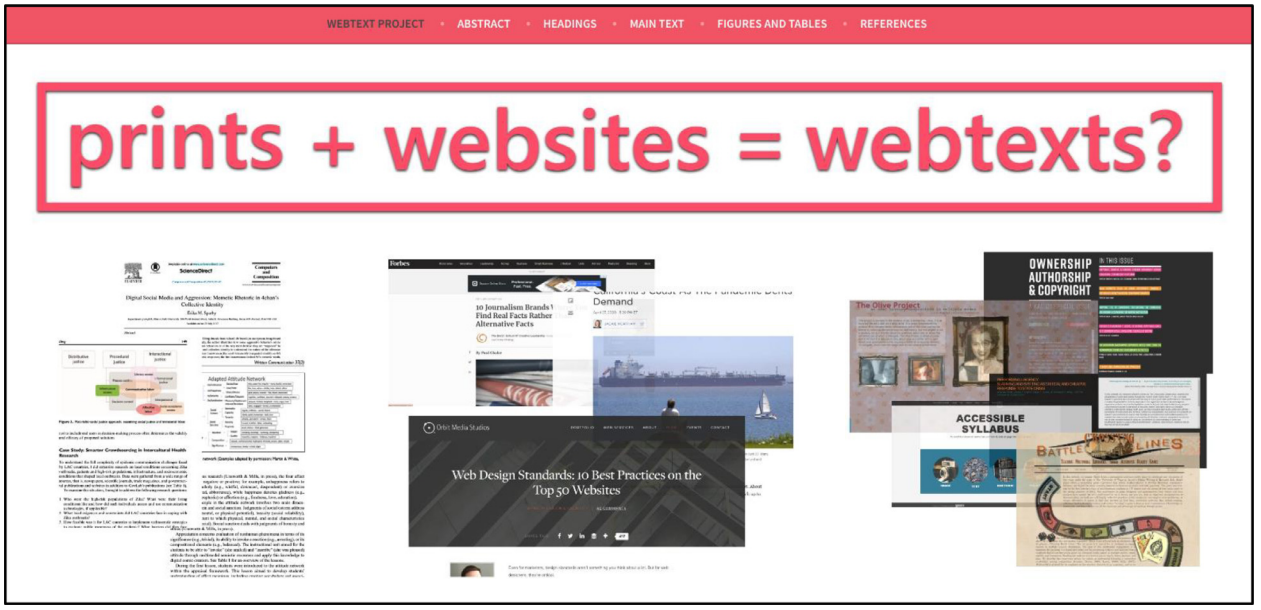

Fig. 1. Masthead of our annotated portfolio for born-digital webtexts.

Table 1
Participants of this study and their respective academic positions and expertise areas.

Participant	Research & Teaching Interests	Webtext Published (Type: Features)	Year Published
P1 - PhD Student	Reading, writing, and literacy; digital literacies; multimodal methodologies	Research article: Multiple-page site with remixed popular digital interfaces	2020
P2 - Independent Scholar (with PhD)	Digital writing; multimodal design; social advocacy; rhetoric of video games	Research article in a special issue: Multiple-page site with stop-motion animation	2019
P3 - Lecturer II	Technical & professional communication; digital media composition; digital storytelling	Research article: Short videos and accompanying commentaries	2018
P4 - Assistant Professor	Science writing; digital rhetoric; environmental communication	Research article: Interactive story-map	2017
P5 - PhD Candidate	Digital rhetoric; multimodal composition; augmented reality	Research article: Augmented-reality map with mobile app	2019

Each one-hour interview was conducted using the web conferencing application, Zoom, and began by asking participants about their practical experiences designing and publishing born-digital webtexts (refer to Appendix A for full interview questions). The first set of questions (#1 and #2) were aimed at gathering authors' intentions and identifying their rhetorical methods for achieving those goals. In responding to these questions, participants discussed their motivations to create a born-digital webtext rather than a traditional journal article, their previous web design experience, and the relationship between their rhetorical goals and the design and technical implementation of the webtext they published in *Kairos*. The interview then shifted to discussion of webtext design features illustrated by the examples curated in the online portfolio. Question #3 and sub-questions aimed to discover how authors considered the crossover between traditional journal article features, website features, and webtext design expectations.

In the second half of the interview, the online portfolio served as a basis for discussing specific and general rationales behind webtext design features. First, the curated examples provided prompts for interviewed webtext authors to discuss how they ideated, designed, and implemented the features of their own webtexts. These discussions included authors' rhetorical strategies, goals for user experience, assumptions of user behavior, and practical

exigencies and constraints of design work, including the availability of technical skills, time, and other factors shaping design decisions.

Second, the categories of example print article, website, and webtext design features, helped to shift authors' attention from how they designed their own webtexts to ideals for how webtexts should be designed within the interdisciplinary fields of born-digital scholarship. These ideals included hopes for webtexts to facilitate unorthodox, multimodal experiences, new modes of scholarly publishing and public engagement, as well as expectations that tenure and promotion, editorial, and peer-review practices will recognize and support the composition and publishing of born-digital scholarship. After completing the interviews, we annotated each category of design features with associated comments made by authors, as well as comments made by faculty and student users during stage one, to illuminate the similarities and differences of the curated designs and, simultaneously, illuminate the various purposes, interests, and uses that authors and readers, designers and users, bring to born-digital webtext (Gaver & Bowers, 2012).

4. Results

4.1. Interview findings — part 1: authors' experiences composing webtexts

The first part of the interviews covered authors' rhetorical goals and experiences designing and publishing born-digital webtexts. Authors described similar goals that motivated them to create a webtext—to create a reading experience that would be different from traditional print scholarship (like a text-based article). Independent scholar P2 noted that "Reading academic articles can be really boring and webtexts just introduce a new way of reading ... and a new way for audiences to play with the text." All of the authors admitted that they had little to no prior experience in web design or webtext publication. What lured them into considering publishing in the webtext genre were mainly their own scholarly curiosity (some felt it was necessary to have this experience as a multimodal rhetoric scholar), and the desire to innovate new experiences (e.g., "rub things together"):

> I think it's always been part of what I care about as a scholar is kind of pushing the boundaries of what counts as a text. My research centers around students' multimodal composition. So I feel like it's a little bit hypocritical to be pushing multimodal composing in the classroom if I'm not also enacting it. (P1)

> It was the idea that there were sort of the goals greater than or outside of the frameworks that the traditional academic article allowed for… the idea that the digital components of the article added up to something more than a traditional scholarly article could afford. (P4)

> I felt like exposing [X][2] and testing how I could rub things together. The only way that I felt like I could really do that and kind of create a fun way that incorporates all the, you know, affordances of the digital through web text. (P3)

> I just wanted to make a webtext. (P2)

For P4 and P5, whose projects both involved the notions of place-making and spatial experience through augmented reality, the impetus for their webtexts was driven by the affordances of digital screens and mobile devices. The extratextual and interactive elements on the digital screen allowed these authors to create unconventional reading experiences (e.g., a playful way). For P1, whose interests lie in screen cultures, webtexts afford her the opportunity to critique biased cultures through reenactment of those biases using replicas of interfaces. At any rate, all authors noted they wouldn't be able to achieve what they did on a webtext if they were to publish in a traditional print format.

> It started as kind of like a, you know, playful way of like to kind of talk through what we were experiencing at the [research site]. But then it also became kind of like, oh, this could actually be something that's like a useful way of thinking about writing in place or location based writing or whatever, whatever you want to call it wayfinding." … "I don't think a traditional text would have done this. I don't think a written essay

[2] We have masked certain descriptions or details in the interviewees' quotes using box brackets to exclude identifiable information.

> would have worked this way or generated these kinds of really cool situations like that [of the webtext]. (P5)

> We wanted to embody choreographic writing in a lot of ways, especially with the AR component of the app. We were trying to get users to think about how their interaction with space might be thought of as a form of writing. (P4)

> I was just thinking a lot about interfaces and I've been reading a lot of interfaces and I wanted, as someone who's like interested in digital literacy, [to study] interfaces in devices [and understand] the way bias and culture and all kinds of assumptions are built into those interfaces. That's something I've been reading and thinking about for a long time. (P1)

As all of our interview participants came from a writing studies background, they share a common understanding for the importance of audience awareness in the webtext design process. However, they had different levels of confidence when it came to defining their intended audience:

> There's kind of two audiences—there's the academic audience that we built on to it. Then, obviously, the more direct audience for the sake of the [project] itself was just users or visitors of the [research site]. (P5)

> I come from a design world. I used to make furniture and build things for people and my big thing was that I never liked designing for spec where you really have to think about the needs of the user. It's just never really been my thing. Most of my work has always been very self referential; I'm making it and I'm trying to say something that I want to say, but I'm usually not super concerned with my audience, which is the opposite of what we're teaching our students in usability studies. (P3)

> I mean the *Kairos* audience was always kind of like an aspirational audience in the back of my mind. (P1)

> This [defining audience] is the tricky part because I don't know. At first I wasn't really sure who is about to read these kinds of texts. I was even a little confused, who my audience is ... Sometimes my professors would assign *Kairos* pieces as reading pieces so my assumption was some graduate students may be reading those because they're being assigned those articles, and maybe some teachers and scholars would read this; but I highly doubt it that the general public would be interested. (P2)

Ultimately, when asked to state explicitly who they were designing a webtext for, the authors considered their fellow colleagues and peers in academia to be their primary readers. From the interviews, we observed that the authors based their webtext publication decisions mainly on two things. The first, which was mentioned in the opening of this findings section, was the desire to create/publish a webtext ("I just wanted to make a webtext"); second, authors wanted the webtext to embody their arguments—not just verbally, but demonstratively. As one participant put it:

> I think the major thing we're interested in getting at a webtext project was somehow to unpack the relationship between the content and the medium, and the content was about space in place and theories of location. And so we wanted the webtext to somehow embody that feeling of moving through space. And specifically, the long scrolling page and the parallax design, we thought was well suited to kind of mediate that feeling of [performing an activity central to the research project]. (P4)

Given this second rationale, we asked the authors to describe how they enacted their arguments through specific design choices. Aside from the tools that were mentioned in response—including text editors, drawing tablets, templates from Twitter Bootstrap and HTML5 UP, and Adobe Creative Suite (Muse, InDesign, Photoshop)—the participants revealed certain design elements that served their intentions:

> The main thing was we wanted it to be super simple. And we wanted it to be mobile friendly and so we built it mobile first, and then desktop. (P5)

> By not having a sticky menu I imagined that users would have to move between sections in a way that might feel kind of counterintuitive, or almost frustrating, and we wanted that to be sort of part of the process, because that was what it's like to [perform an activity central to the research project]. (P4)

> What is this [webtext] all about? (Referring to a side menu and subheadings) How can I use this? I tried to use those questions as a way of making the webtext a little bit more approachable. Because like it's meant to be disorienting. It's meant to be kind of like, is this kind of like a place/space to explore new ideas? So the design is more exploratory that way. (P1)

> It was a mix of working in InDesign and also building using a program that's now dead called Adobe Muse. Adobe Muse was like my introduction to coding. It wasn't coding, actually; it was just design and thinking about user interface for the first time. And then they killed the program which bummed me out and my default was to look for another kind of web design software that is more visually oriented, like Web Flow. (P3)

As P3 noted in his response, sustainability of technology can be a concern for webtext projects. Other challenges experienced by authors included inherent flaws in web templates, the author's limited technical expertise with software, and editorial rejections. For instance, one author chose a template that has "pre-codes in the CSS, and then you use the style as you want" so that he doesn't "get caught up" in coding (P5). Another author used a template she felt was "a little counterintuitive to the ethos of the project" (P1). She wanted to make the template more mobile friendly, but she lacked the skills to achieve that goal. Another template user admitted that he and his collaborator were "working within the kind of constraints of what would or wouldn't break the platform because HTML5 templates are designed not to be the best all the time. They have a lot of flaws embedded in them" (P4).

Besides the limitations of templates, authors experienced editorial "push back" and rejection of their design choices (P3-5). One author described how "the editorial board really didn't understand…they didn't" and ultimately rejected a separate submission (P3). Another author, whose original webtext was minimalist in design, was asked to include additional web elements such as menus:

> In design the editors pushed back a little bit against that [minimalist design] and that's why we have the junk menus periodically throughout, but it was an interesting process to start to think about how user experience can play a role in actually consuming the product you're making. We actually redesigned the website. I mean, from the ground up, based on editorial feedback. (P4)

In sum, the five authors revealed that their main motivation for authoring a webtext was to tinker with the rhetorical possibilities of web and mobile interactivity and experiment with extratextual elements such as augmented reality and hyperlinks in scholarly communication. As rhetoric and writing scholars, these authors were aware of the audience in their composing/design process. However, through their responses, we learned that they held different understandings for the audience's needs and expectations. Two of the five authors (P4 and P5) expressed confidence in developing their webtexts, knowing what they can do with design technologies, content, and the context of use. The rest of the authors mentioned that they learned as they went, trying different options to hack and overcome design challenges.

However, all the authors acknowledged that the biggest challenge in creating webtexts was the time required to compose such scholarship. They recognized that, beyond just putting words on the screen, creating webtexts required a vision for the finished product, considerations of technical (skills) and technological limitations (with media, templates, tools), and dedication to follow through the entire composing process even after receiving rejections or pushback on their design choices. The authors realized that they could have written a more traditional print publication for their scholarly arguments—and get published quicker—but instead chose to pursue a webtext direction because they wanted to show that scholarship can be done differently. For this reason, they wished their efforts to be valued differently by their colleagues and reviewers for tenure and promotion.

4.2. Interview findings — part 2: authors' understanding of webtext features

In this section, we examine authors' rationales for the design features of their webtexts and webtexts generally. These discussions were prompted by presenting authors with print-article, website, and webtext features curated in our online portfolio. In the discussion that follows we describe four areas of convergence and divergence between scholarly, website, and emerging webtext conventions. We refer to these areas as orientation, movement, multimodality, and contextualization.

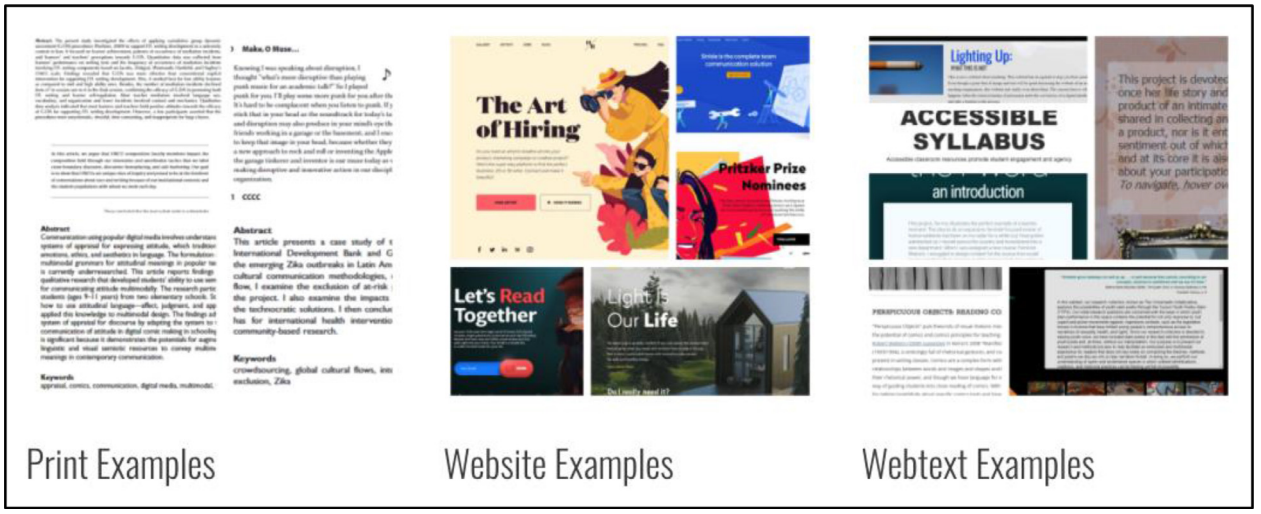

Fig. 2. Comparison of abstracts and landing pages on a print publication, website, and webtext.

4.2.1. Orientation (abstracts; landing pages)

When presented with examples of print article abstracts and the landing pages of websites and webtexts, authors discussed the need to orient readers within a webtext environment (Fig. 2). These needs highlighted the convergence and divergence of print and digital conventions, including divergences between web usability conventions and goals for webtext user experience. Authors noted points of convergence and divergence in their own design decisions, as well as webtexts they encountered whose features were represented in the online portfolio.

First, some authors recognized the need for webext abstracts that summarize, like print articles and websites, the content of webexts as a whole and their individual sections:

> I think there's just too much information out there. I would love to see some sort of project description that's going to help me decide whether or not I'm going to jump into that piece or not. (P3)

> I mean usually there's an "About" section, right? Ours is some version of an about menu. (P1)

Echoing the thoughts of faculty and students while reading webtexts during the think-aloud sessions in the previous stage of the project (Tham & Grace, 2020), webtext authors recognized the need to design features, such as abstracts, that help readers skimming through content select information to read from vast collections of online content. To this end, authors included abstracts for the conventional purpose of summarizing and overviewing webtext content. However, when including webtext abstracts, the authors pointed to designs that can differ from print-based articles: "The template I used has pop-up windows: if you hover over a chapter the abstract is presented" (P2).

Second, some authors recognized the landing page of webtexts as a point of divergence between existing and emerging scholarly conventions. Points of divergence included explanations thatintroduced the "born-digital" format of the webtext, its scholarly purposes, or provided instructions for its use:

> I feel that with webtexts we're still at this point where you're trying to prove that it's a viable or worthwhile medium. I've seen abstracts like this with splash pages or introductory text compensating for the fact that it's a webtext by trying to explain how to use it or why it exists. It feels like these things aren't quite allowed to be just webtexts yet. (P5)

The authors we interviewed all agreed that webtexts should be "allowed to be webtexts," but also noted the need to design webtexts that attempt to accommodate users familiar with traditional scholarly publication. These attempts to bridge print-based and born-digital scholarship highlight the tensions experienced by authors attempting to negotiate the convergence and divergence of existing and emerging scholarly conventions. Decisions to include explanatory or instructional abstracts represent one such attempt.

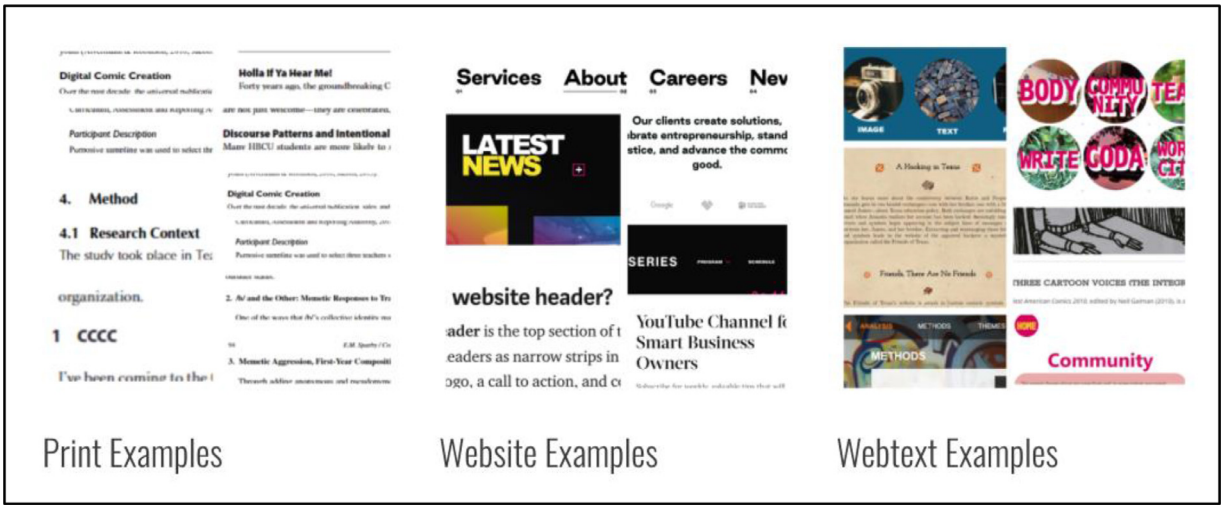

Fig. 3. Comparison of headings and menus on a print publication, website, and webtext.

Third, authors highlighted attempts to orient users within the immersive experience a webtext seeks to create through the use of multimodal landing pages, navigation styles, and visual motifs:

> We didn't start with an abstract. We could have, we had that option. A lot of print articles do but we didn't feel the pressure that a typical article feels, when you're trying to orient the reader, because we had a huge background image able to convey a kind of mood in an effective way that didn't need print text. Also, rather than say, "hey, when you scroll we want you to imagine you're on a bicycle," we're able to actually put a scrolling link that you click to get rolling that is meant to convey [riding on a bicycle]. (P4)

Efforts to immerse readers in multimodal experiences often, but not always, contrasted with attempts to explain or summarize by providing more-or-less traditional abstracts and text-heavy designs. Overall, however, differences in design approaches arose when authors recognized or advocated different rhetorical goals for orienting readers within a webtext.

4.2.2. Movement (headings; menus)

When presented with examples of print-article headings and website navigation menus (Fig. 3), authors began to discuss design decisions that relate to users' movement within webtext environments and how affordances for movement order webtext user experience. Again, points of convergence and divergence arose among print-based, web design, and emerging webtext conventions. These include the organization of webtexts following conventional an Introduction, Methods, Results, and Discussion (IMRAD) scientific report structure, the use of typical website navigation menus, and attempts to create affordances for both linear and nonlinear, user-defined navigation paths.

Authors referred to web-design conventions when designing webtext navigation menus. These include, for example, typical horizontal, vertical, dropdown, and hamburger menus that provide authors with a set of prototypical designs that they could expect users to be immediately familiar:

> I think there's only so many different ways you can mess with navigation before people get frustrated and close the tab on your webtext. (P5)

With regard to navigation, the authors we interviewed often addressed webtexts as websites that should accommodate users' expectations for friendly web design. In this regard, headings and navigation menus were judged according to their visibility, simplicity, and the efficiency with which they could help users move through sections of a webtext.

At the same time, however, authors were also interested in webtext features that contributed to an intended rhetorical or design aesthetic. How these features facilitated users' movement through a webtext was judged less by efficiency and usability conventions than designers' goals for immersive user experience:

Fig. 4. Comparison of body texts on a print publication, website, and webtext.

> That [webtext] I made has a scroll feature that scrolls horizontally, kind of like a book, and that freaks people out. Because they're like, "everything's going the wrong way!" (P3)

> I feel the nav bar should go in line with the style of the webtext. So if you have a project, it really depends on the content and style of the composition itself. (P2)

Tied to authors' goals for immersive user experience, such as the feeling of riding a bike through congested city streets, is a willingness to relinquish control over the ordering of user experience within webtext environments:

> If the purpose of academic publishing is for readers to read information, if that's the purpose, then I would say one page will suffice. But when it comes to disrupting that format for more interesting designs, it requires going back to the rhetorical purpose of the article and what it is trying to achieve. (P2)

> When a webtext is done well, it's comfortable with the fact that it might be skimmed. Whereas with a long form article it's not that way. I've seen a webtext that is almost like a roadmap of options that are available. A good web text knows that it might be read out of order or piecemeal. (P5)

Responding to examples curated in the online portfolio or their own webtext designs, authors described users' abilities to skim webtexts along undefined paths as a unique affordance of born-digital scholarship. Consequently, authors looked to conventional navigation menus or immersive navigation features that could facilitate nonlinear, user-guided movement across multiple webtext pages.

4.2.3. Multimodality (body text; figures)

When authors were presented with examples of the body text, figures, and interactive features created in the online portfolio (Fig. 4), they discussed the extent to which written text should define the content of webtexts. While authors recognized that text-heavy webtexts are common, they expressed frustration that this convergence of traditional scholarly argumentation and web-based authorship would limit the unique opportunities to create interactive, multimodal compositions. Instead, authors considered the expectations and resources required for webtext publishing outside traditional scholastic norms.

Each of the authors we interviewed expressed enthusiasm for text-light webtexts that focused on interface design and the composition of multimodal rather than only textual elements:

> I think of those six GUIs (Graphic User Interfaces) as the body text but I don't know that everyone sees it that way. (P1)

Fig. 5. Comparison of figures and tables on a print publication, website, and webtext.

> I have a hard time with the word "webtext." I don't know if that's what I want to make. I'm building communication and packaging information. Why do we have to use the word text when it's so much more. (P3)

> I would be willing to bet that if you compared the paragraphs of this [webtext] and two things I had written before they would be much shorter… We were definitely thinking about how your eye on a screen is going to behave very differently from a print text. We also imagined how this text is going to be potentially on a mobile phone, maybe on a tablet, or on a full screen so we had to think about how the user was going to be able to read this on a phone. (P4)

These ideas echo those defining born-digital scholarship according to its divergence from traditional text-heavy, print-based composition in favor of multimodal, web-based composition and interface design. While such examples were included in our online portfolio, the authors pointed to the discontinuity between the rhetorical goals of born-digital webtexts and common tables, illustrations, and interactive features observed in print-based articles and popular websites (Fig. 5).

However, despite this popular understanding of born-digital scholarship, authors we interviewed described a bifurcated landscape of webtext design and publishing where webtexts represent the convergence of print-based composition and web-based publishing:

> I don't know what the line would be but there's definitely a difference between a web text and just a text that's on the web....perhaps if it can be just printed as an essay and didn't need to be a webtext. (P5)

> I'm wondering if there's still, even at *Kairos*, some bias towards written text when people are thinking about… evidence of scholarship. I love *Kairos* and think it does an amazing job pushing the field... but sometimes when I go there I'm like, "there's so much text on these articles." I feel like we can go further. I feel like we can do more. (P1)

> It's power in our field. I think that was what they didn't like about my project… like I didn't obey their conventions. They were like, what… is this? I still don't know what... it is. (P3)

> I've seen conference presentations where technical writing teachers just ask students to design a website where you go from top to bottom and the whole article is one page. If the purpose of academic publishing is for readers to read information then I would say one page will suffice. (P2)

Fig. 6. Comparison of references on a print publication, website, and webtext.

As the above quotations emphasize, the authors felt that, by implicitly or explicitly privileging written compositions over text-light, multimodal designs, limits are placed on the promise of born-digital scholarship. "You limit yourself when you just bootstrap old approaches to new things," concluded one author (P5).

4.2.4. Contextualization (references)

Lastly, authors recognized a complicated relationship between existing and emerging norms surrounding the use of citations, attributions, and hyperlinks—what we refer to as contextualization (Fig. 6). Generally, authors described the convergence of internet hyperlinking and attribution norms with emerging conventions for including contextual and reference information in webtexts:

> I'm a big fan of clickable links. I think that the reference page is almost outdated. (P5)

> When I teach multimodal composing and first year writing I tell people that the referencing style should fit the genre and make sense to your audience. So if you're making a video it's weird to use APA citations... It's just rhetorical awareness of the context and who our audience is how we have to use references and citations for webtexts. (P1)

These discussions focused on considerations of usability that "make it easier for readers to retrieve relevant information" online (P2). By foregrounding the needs of users, these authors describe a convergence between webtext and web usability requirements.

However, authors also recognize the importance of scholarly attribution and standard indexing for professional academics:

> I think that webtexts... are way, way, way behind in indexing and citation practices. I know for a fact that I've been cited for the *Kairos* article a lot more than my analytics are picking up. I think that is partially because some people citing me are in *Computers and Composition Online* and maybe they're not indexing the same way… it definitely seems kind of backwards. The most cutting edge, most online, connected, and virtual [scholarship] would actually be the hardest to get your analytics from. (P4)

While not mutually exclusive, concerns for usability and bibliographic indexing highlight the competing forces informing webtext design practices. Authors' design decisions represent attempts to break free from some scholarly publishing practices while holding on to others. Decisions regarding contextualization reflect this tension:

> It's tough because with [our webtext] we did have a reference page but we also tried to link stuff. However, you don't want to over link stuff because you don't want to have a website where, in five years, half the

> links are dead. Then you feel like you're just exploring some derelict ship. There's still a tension between just linking everything and the print model where you put all your sources at the end. Unfortunately, it seems like best practice is to kind of do both, for sake of being thorough. (P5)

The ambivalence embodied in webtexts incorporating conventional scholarly and website features for contextualization, along with those for orientation, movement and multimodality, mark the emergence of born-digital scholarship as neither a clean break with conventional academic publishing or a full embrace of web design practices. Instead, webtexts represent points of convergence and divergence as a result of design features that embody the needs of both webtext authors and users.

5. Discussion and recommendations

Our two-part project seeks to understand both users' experiences reading born-digital scholarship and authors' experiences designing and publishing born-digital webtexts. Part one, based on think-aloud usability tests with faculty and student webtext readers, concluded with guidelines for webtext design (Tham & Grace, 2020; Grace & Tham, 2020). Part two, based on the interviews with webtext authors conducted in this study, complements previous findings by describing how authors draw on print based, web design, and born-digital publishing conventions when designing webtexts. The four areas where these conventions converge and diverge—orientation, movement, multimodality, and contextualization—map a design space in which authors can consult emerging guidelines for webtext design, such as those we offered in part one of our project. In this regard, this study open a dialogue around design exemplars curated in our annotated portfolio to identify issues that emerge when comparing the ideals (i.e., authors' design rationales), realities (i.e., user experience) and practicalities (i.e., authors' resources and skills) of born-digital scholarship. In this section, we synthesize findings from part one and two and discuss emergent issues that will likely impact webtext authors, users, and publishers in the future.

Discussing ideals and realities of creating born-digital scholarship, the authors interviewed in this study highlighted the webtext as a point of convergence and divergence between scholarly and web design conventions. While the idea of web-based scholarship is not new (afterall, the web has been around for decades), born-digital scholarship lacks common features and conventions. In fact, as Fig. 7 shows, authors who are working to create a webtext often negotiate between their own intentions and the perceived conventions of print and web publications. These expectations converge to guide authors in composing recognizable contents (e.g., abstracts, references) for a scholarly audience. However, at the same time, webtext authors continually diverge from the traditional genre structure of scholarly publications by adding unique, interactive elements afforded by web platforms (e.g., video narratives, augmented reality components, hyperlinked content) and borrowing from broader conventions of web design and usability.

We note, however, that the emergence and use of webtexts as a form of scholarly communication remains a practice of scholars who not only have consistent access to the internet, but varying individual and institutional resources and capacities required for digital design and publishing (Purdy & Walker, 2010). As researchers and teachers of technical communication and rhetoric, we are aware of the potential obstacles that webtexts pose for those who rely on traditional opportunities for publishing and reading scholarship. Diverse practices in our scholarly communities need to be considered by webtext authors who aspire to cultivate new conventions. The following recommendations offer heuristics, rather than rules for authors who confront a landscape of scholarly communication that is continually changing due to changing technologies and patterns of use. We also recognize the limitations of conducting interviews with authors from a single journal, which include certain journal-specific design requirements and editorial processes. Nevertheless, given the close-knitted nature of webtext publication in our field, we believe the observations we made in this study are applicable to authors and designers of writing studies webtexts writ large.

Heeding the experiences of our interview participants, we offer the following recommendations to future webtext authors. First, refine your purpose by considering the interplay between the medium and the message. Authors should evaluate the perceived affordances of webtexts in view of communicating particular scholarly contents. What web-based features will help you perform your arguments? Conversely, what web-based features might constrain these arguments? These questions call into question authors' basic motivations for creating webtexts: What do you seek to accomplish by creating a webtext that cannot be accomplished through a conventional print

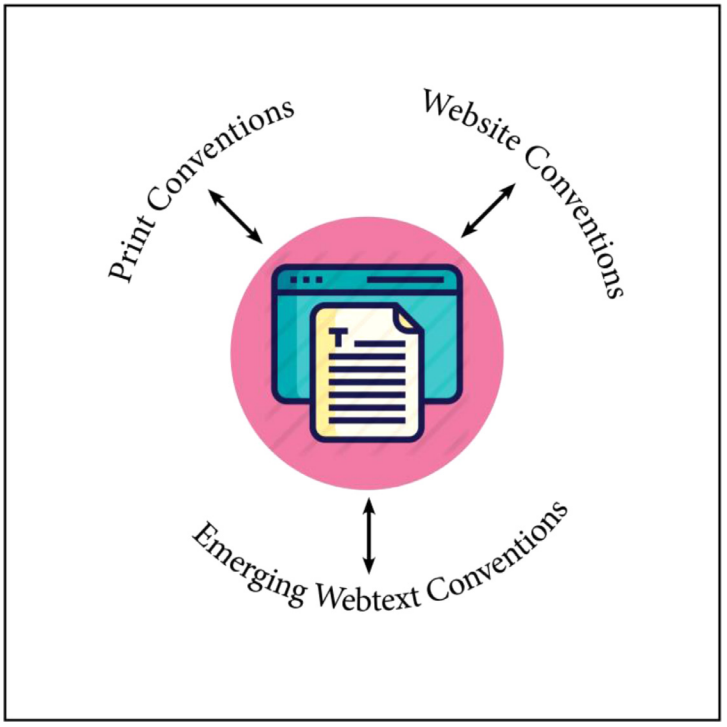

Fig. 7. Interconnected design conventions of print articles and websites contribute to the emergence of webtext conventions.

article? For instance, while we might have reported the findings from this study in an interactive webtext, we determined we could accomplish our purpose—contributing to scholarly conversation on experiences and best practices of webtext design—by reporting these findings in a traditional journal article.

Second, although many webtext authors are rhetorically savvy and have the necessary skills to design and develop engaging webtexts, we recommend that they consider the payoff between experimentation and user experience. As all of the authors interviewed in this study noted, "play" was a motivating force in their webtext design process. Indeed, the flexibility of the web allows authors to tinker with unconventional approaches to communicate and allow users to interact with webtext content. Nonetheless, it is important to pay attention to users' goals, expectations, and activities that structure their engagements with webtexts. Our interviews and usability tests with faculty and students revealed experiences of surprise, confusion, and frustration when these users engaged webtexts in the course of their research, learning, and scholarship. These studies suggest that when webtexts delineate too much from scholarly publication conventions, they can become unusable for the audiences for whom they were designed.

In part one of our project, we concluded with concrete recommendations for webtext design based on the experiences of readers skimming, scanning, and closely reading webtexts. These recommendations or guidelines can be organized according to the design space mapped through interviews with webtext authors conducted in this study (Tham & Grace, 2020; Grace & Tham, 2020):

- Orientation: To help readers understand the layout and content of a webtext, authors should consider the use of descriptive abstracts on each page and/or section of the webtext, as well as visual sitemaps that show users what section they are currently reading (e.g., "You are here") in relation to other sections they have and have not already read.
- Movement: To help users navigate within a webtext, authors should consider the use of navigation menus placed in familiar locations with familiar headings that correspond with print-based, IMRAD-style articles or simply describe the content users will access when following the menu link. Importantly, many webtexts designed as a collection of linked pages do not support full-text search (i.e., CONTROL+F) and, there-

fore, require native search features. Importantly, our findings suggest that authors should employ navigation features that users find familiar if they want to invite users into highly unfamiliar or experimental webtext environments.

- Multimodality: To engage diverse users in webtext environments, authors should deliberately tailor interactive, multimedia content to the diverse needs of webtext users. We observed that students tend to engage the interactive, multimedia features of webtexts more than faculty. While students looked to these features as engaging ways to familiarize themselves with unfamiliar topics, academic conversations, and the webtext as a medium of scholarly communication, faculty considered these features as background (and, sometimes, a hindrance) to the text-based arguments they understood as the core contributions of the webtexts.
- Contextualization: To help users contextualize fragmented webtext content, authors should consider modular designs that allow users to read webtext modules independently or together in non-linear, user-defined sequences. Each module should include the previously recommended features: abstracts, visual sitemaps, familiar navigation menus, and full-text search.

Questions that webtext authors should therefore consider include: What do users want to accomplish and what do they expect when engaging with my webtext? How can I align the goals, expectations, and activities of webtext users with the rhetorical purpose that motivates me to design a webtext?

Third, we recommend that webtext authors also consider the return on time and intellectual investments they make in creating webtexts. Almost all of the authors we interviewed have expressed unexpected disappointments––some greater than others—with webtext composing and reviewing processes. Challenges with design tools and extra-textual technologies mean adding more time to the composition of webtext scholarship. Furthermore, the review and revision process for webtexts may require more time and effort than traditional print articles due to the novelty in most webtext designs. Negotiating with editorial and peer reviewers is common for any scholarly publishing, but the challenge is multiplied in webtext publishing when publishers and authors have different motives or visions for a webtext. Authors should ask themselves: How much time are they willing to commit to the creation and publication of a webtext? How would a published webtext fare against a traditional print article in tenure and promotion appraisals? Are webtext authors willing to modify their intended design to fit a webtext journal's requirements if necessary?

5.1. Communicating webtext design thinking through annotated portfolios

This study recommends the use of annotated portfolios as a way to communicate design thinking among author-designers and scholars of born-digital scholarship. As Bowers (2012) explains, annotated portfolios, such as the one curated and deployed in this study, offer "a means for capturing the family resemblances that exist in a collection of artefacts, simultaneously respecting the particularity of specific designs and engaging with broader concerns" (p. 68). In this study we have identified such family resemblances in webtexts as they relate to orientation, movement, multimodality, and contextualization. Moreover, we show that these resemblances, embodied in particular webtext features, represent convergences and divergences between conventions of print-based scholarship, web design, and emerging practices of born-digital composition.

During our interviews webtext authors were able to recognize and tease out family resemblances between print-based article, website, and webtext designs curated in our portfolio. In this respect, our study suggests that annotated portfolios offer the fields of writing studies a generative and suggestive basis for communicating design thinking that can inform the design, evaluation, and critique of future webtexts (Gavers, 2012). Our portfolio of scholarly print-based articles, websites, and webtexts and associated annotations' gathered through user studies and interviews with webtext users and designers, respectively, represents an attempt in this direction.

Furthermore, as our study highlights, author-designers wrestle with particular questions of webtext design, such as how to contextualize webtexts using scholarly reference information and hyperlinks to online resources, but lack resources that can help connect their situated design decisions with broader concerns and best practices developing among the community of authors and users of born-digital scholarship. From our interviews, these concerns include misalignments between editorial expectations for "text-heavy" scholarly manuscripts and webtext authors' goals for highly multimodal and immersive designs, the lack of bespoke resources, including web design

templates, for novice webtext designers, and the additional time required to create a webtext versus a traditional print-based article.

Indeed, our selected print article examples featured in the annotated portfolio relied heavily on analytical and IMRAD-style presentations of research. As such, the interview participants may have been skewed toward discussing only the scholarly conventions in social scientific structures rather than artistic or literary styles. We aim to be more aware of these styles in future selection of artifacts, knowing that the research domain of writing studies remains diverse and complex. Thus, while our study offers motivation for the use of annotated portfolios to communicate webtext design thinking, future work is required to further map the design space of born-digital scholarship. As William Gaver (2012) explained:

> If a single design occupies a point in design space, a collection of designs by the same or associated designers—a portfolio—establishes an area in that space. Comparing different individual items can make clear a domain of design, its relevant dimensions, and the designer's opinion about the relevant places and configurations to adopt on those dimensions. (p. 944)

By curating multiple examples of born-digital webtexts we can illustrate family resemblances delineating the emerging dimensions of born-digital scholarship. Furthermore, annotating these examples with design rationales and user experiences gathered from webtext authors and readers, respectively, can make available the convergent and divergent requirements, concerns, and ideals of the born-digital scholarly community. In this way, annotated portfolios can communicate design thinking by providing authors with generative resources that mediate between situated decision decisions and community discourses suggesting futures for born-digital scholarship.

6. Conclusion

Webtexts embody points of convergence and divergence between conventions of scholarly publication, web design, and emerging trends of "born-digital" scholarship. Our overall project studied how readers and authors experience webtexts when using and designing them, respectively. This article reports the second phase of our project by outlining findings from semi-structured interviews conducted with webtext authors. In addition to findings related to authors' rhetorical practices in webtext production, our study has produced a web-based, publically-accessible annotated portfolio that curates design exemplars of born-digital webtext features (e.g., navigation menus, headings, multimedia figures) and examples of design features found across the variegated and interdisciplinary landscape of born-digital publications. The annotated portfolio is designed to be a resource that can inform the design and evaluation of future webtexts across the born-digital scholarship community.

More importantly, this study aimed to contribute to the current and future practices in webtext developments by emphasizing the importance of UXD in born-digital scholarship. As we have asserted in previous literature (Tham & Grace, 2020; Grace & Tham, 2020), webtexts are an emerging genre that lacks conventional guideposts that can help readers quickly and easily navigate the publication. This present study re-establishes this observation from the perspective of webtext authors. Based on a limited pool of participants, we have identified a myriad of intentions that inform design choices, as well as four specific points of convergence/divergence that cast focus on the push-pull dynamic between traditional (print) scholarly conventions and aspirations for new media. For webtexts to be usable and desirable, authors and designers need to pay attention to user needs, reactions, and feedback. We hope this study creates an exigence for greater awareness toward the balance between invention, intervention, and convention.

Future studies may include webtext authors from adjacent disciplines and other scientific communities to compare born-digital publishing practices. We also recommend research on the changing expectations for new media usage and affordances of mobile and "smart" platforms for scholarly publishing. Continued research on born-digital design processes and user-reader use patterns and experiences is necessary to further innovation in scholarly communication. To this end, our studies have shown the importance of juxtaposing the experiences of authors and readers for insights that can inform webtext design processes. We hope to engage with future studies that build upon UXD approaches to theorize and examine webtexts.

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Appendix A. Semi-structured interview questions for authors

1 Tell us why you decided to create a webtext instead of a more traditional journal article?
2 Describe your design process when making a webtext—
   a What was/were your purpose(s)?
   b Who did you consider to be your audience? How familiar were you with them?
   c How did you envision people using it?
   d What features did you include? Why did you include them?
   e How did you match your rhetorical goals with the decision to include particular design features?
   f Did you use any specific web design software/templates?
   g Did you follow any specific design principles (i.e., document design, accessibility, conventions of websites, other mental models)?
3 Please comment on each of the following feature categories—Do you think these design features are typical for most webtexts? Why? What's missing from this list?
   a Abstract
   b Headings
   c Body texts
   d Figures
   e References

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