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Reflective Commentary on the Sony eBook Reader

After a semester of using the Sony ebook Reader as a student in our graduate course and as a teacher of first-year rhetoric and composition, I have had the opportunity to reflect on its hardware and software design, its potentials for use in academic settings, and possible redesign of the hardware and software, as well as possible redesigns for academic and institutional contexts in order to incorporate an ereading device. As I explore my reflections of the Sony ebook Reader below, I am strongly influenced by the conclusions of Sarah J. Sloane about literacy practices and technologies in "The Haunting Story of J: Genealogy as a Critical Category in Understanding How a Writer Composes." Drawing on the work of Foucault, Sloane argues that literacy technologies have genealogies: we shouldn't view a new literacy technology as having a single "ancestor" and an origin, nor should should we view them as entirely new. Instead, literacy technologies and their uses are affected by various forces, technologies, and experiences (52-53). Sloane uses the story of a student's writing experiences to discuss how uses of literacy technologies are "haunted" by prior literacy activities and technologies, as well as by experiences and assumptions about writing and technology. Sloane writes that "Every writing technology bears visible traces of earlier writing technologies in its design and in how writers use it; typically, it also belies traces of assumptions bound to earlier technologies and to historical world views that may no longer apply" (63). No literacy technology can ever be completely "new" and instead its design and use depend on prior technologies and assumptions.

As I reflect on the functionality, contextual use, and redesign of the Sony Reader, I will be also drawing from my and others' prior and concurrent literacy activities, experiences, and assumptions because I believe that we can understand the Sony Reader's use and functionality only in context of other literate activities, and if Sony is to redesign for academic users and market it to them, other literate activities by students must be taken into account.

The Functionality of the Sony Reader

As it is designed for leisure reading purposes, the Sony Reader provides hardware and software that are useful and adequate. As I used the reader, I found the bookmarking feature, which is akin to dog-earing a page in a print book, and the two options for turning pages helpful (if I were only engaged in leisure reading). The use of eInk seems like a good choice, because it does not cause the same strain on the eyes as backlit screens, and because it allows for reading in well-lit or sunny places, where glare on backlit screen makes it hard to read. Additionally, the option to read either in portrait or landscape mode is helpful for readers to have to different options for holding the Reader. If I were to be using the reader solely for leisure reading purposes, its organizational scheme is adequate (though not spectacular); I would probably only need to organize books by title or author to find them quickly, and I probably would not be flipping back and forth between various different texts. The software also remembers what last page you were on, which I found helpful when I would have to stop reading for a period of time and then return to the book (and this function is much better than a bookmark in a codex, which can easily fall out as I carry the book around or fall asleep reading at night).

However, while these functions are helpful for leisure reading, few of them are adequate for academic reading purposes. The Reader lacks a function to be able to easily and quickly return to another text without navigating many different menus, which is a problem for someone working with many different texts while working on a paper. The page turning feature works for ebooks, but is slow when reading a PDF document. The zoom in feature is helpful if someone needs to read larger text, but when the document is a PDF file, the text does not re-wrap "naturally," so one is left reading text with jagged edges, making the reading process more frustrating and less quick. eInk is still helpful for

academic reading, though I have to be concerned that this functional property will not be too useful if Sony intends to invest in the academic market, where many textbooks incorporate graphics and color that are important to the textbook's design and readers' comprehension. I worry that eInk will not be useful for a variety of texts remediated for the Reader because it is gray-scale.

I looked forward to the opportunity to put music on the Reader, and I did put a CD or two worth of music on it. However, I found that when I tried to listen to music, the Reader played it in alphabetical order by song title, which is not how I normally listen to music. This function of the Reader became pointless to me, as I'd rather listen to music from my laptop, iPod, or iPhone where I can organize the order the music plays in (and thus meet my own already constructed expectations of music listening).

The Sony Reader in Context

As I read on the Reader this term, I found I had to adapt my reading practices if I were to continue using the device. When I normally read a book or journal article, I mark the text up, underlining key points, asking questions in the margin, providing keywords or summaries that I can return to later when I review the text, or writing down links to other texts I've read. I sometimes will handwrite notes in a notebook (though this is rare) and more often write notes on my laptop, though I tend to shy away from this because the laptop provides a distraction that writing solely on the text does not. What I think is most important from my prior reading experiences is that I expect to be able to write with the text I am reading. However, there is no note-taking functionality with the Sony Reader, and so I was forced to write or type notes as I read. I find this practice distracting, as my focus is now on two machines (the Reader and notebook/laptop) instead of one. Additionally, this hurts my organizational scheme I already have in place (my notes are with the text) because now my notes are forced to be separate from the text. Because of this problem, I immediately began printing out any

journal articles from the Reader and reading them as printed texts instead of on the Reader. I was too attached to my prior literate activities to be able to fully incorporate the Reader into my academic reading and writing practices. Since I was also teaching with this device, I was able to read ebooks while preparing for class, and write my notes and questions into my lesson planning document. But I still found myself often turning to the print version of the text, where I could underline and be able to quote from passages more easily during class discussion. I found that some of my students turned to handwriting notes and quoting passages in their notes to prepare for class discussion, but referring to particular passages in the book was difficult during class (because they were hard to locate through the navigation mechanisms). Ultimately, I found the Reader's insistence that reading is an isolated activity separate from writing with/on/about the text to be frustrating and not conducive to my academic experience and expectations.

Part of the reason I write on texts is so that I can remember what I'm reading. The process of writing notes helps to reinforce ideas, and the ability to look back at notes helps me to recall them. This also relates to the next struggle I (and my students) had with the Sony Reader's interface. Every page on the Reader (when reading ebooks) looks about the same. With a print book, I am able to look ahead, look back, visualize how much of the text remains to be read, note the way print in one book looks different in one book compared to another. (Even when reading on a computer screen, one can glance as a scroll bar to see how far one is in the text, or scroll through it to preview the text.) These activities, important to reading a book, are lost on the Reader. When my reading expectations cannot be met, I am, understandably frustrated. I found my ability to recall based on visual memory and my ability to predict impaired. Since memory and prediction are important to the reading process (and to any perception activity, I'd argue), my reading process on the Reader wasn't as rich as it would have been reading a book: I couldn't recall as easily after and during reading, nor predict as easily because the lack of spatiality in this new reading context.

I was excited about the Reader at first because I thought I would not have to carry around as many materials every day. My students, too, were excited about this prospect. However, my students soon realized they'd only be carrying around one book at a time for our class anyway, and I soon realized that since reading on the machine wasn't going to work for me, I'd be carrying around piles of printed articles anyway. I think if the Reader were redesigned in ways to accommodate academic reading and incorporated in many different classes, this potential benefit of the Reader would be a boon, but as it was used in this context, it wasn't a benefit to me or my students at all. One immense benefit was that I was able to use six or so different ebooks in the class I taught, and that students didn't have to pay for these because they were "checked out" from the library. Students were fortunate to be able to read from a wider variety of texts without having to pay for them, and I didn't have to be concerned about copyright by photocopying from different texts and creating a course packet. (Students often read about two chapters from these books instead of the whole book.) There was a financial

As I mentioned above, using the Reader as a student and as a teacher made discussion in class difficult. It was hard to navigate through a document in order to find a passage to quote and discuss. Although important pages in a text can be bookmarked on the reader, unless one has a sharp memory, a user can't remember why the page was bookmarked or differentiate between various bookmarks (they only mark a page, not denoting why that page was marked). With PDF documents, the page turn rate was so slow that conversation would have moved forward before students had a chance to find a page number. Luckily, I had students who were willing to handwrite notes as they read, and I often resorted to using a print book, which helped forward discussion because students and I had alternative texts to reference (their notes and my print book). Many students did refer to the Reader and used it in class discussion early in the term, but as the term wore on, many of my students began to ignore the Reader and work mostly from their memory. Discussions would often include comments such as: "I can't

benefit for students, and the added benefit that more material could be incorporated into the class.

remember where the author said..."; "I don't remember the exact details, but didn't he claim that..."; and questions about who wrote what. Now, these comments are not new, but I heard them from students more this term than in previous classes. Students struggled with their spatial memory, with referring to the text in class, and with navigating the text to help them recall what they read. Also, because all the texts looks about the same, it was harder to distinguish between texts and remember author names.

Another disappointment with the Reader I experienced was an inability on my part to integrate it with writing projects in the course. An important part of first-year rhetoric and composition is research, and a digital reading device could offer a lot of potential for storing and reading PDFs or websites that students are using in their research. Because reading PDFs on the Reader is difficult, this was not an option for me as a researcher in the grad course, and I doubt putting their research on the Reader occurred to many of my students. Additionally, because the device requires software in order to read online content, and this is only content from RSS feeds, not individually selected content, none of the websites I used for research were incorporated into the Reader. Even if I had done this, I doubt it would have been helpful. I expect to be able to cut and paste as I read and write, and this is not a function available on the Reader since it is designed as solely a reading machine. I felt that the Reader could not be adequately incorporated into my various reading and writing activities because of its limited functionality. I would love to be able to read blogs on a handheld device, but since I often respond to blog posts via comments, write blog posts discussing online content, or share online content using Twitter, I did not bother to incorporate the Reader into my other literate activities.

I'd like to cover one last point in this section. As Rebecca and I prepared to teach our courses, we spent time on Sony's ebook website, where users can purchase ebooks for their Sony Reader. I found the site's navigation decent, and it was helpful that the website usually included summaries or reviews of texts, full bibliographic information, and images of the front cover. However, I think if the

Sony ebookstore is going to become popular, it will have to be redesigned. Most online shoppers (myself included) have a few expectations of online stores: they will offer suggestions for items similar to the one you are looking at, users can tag items so that searchable topics are created by users (social bookmarking or tagging), and users can provide reviews of the texts. Right now, the Sony ebook store is designed like content pre-Web 2.0, which I think will not meet the expectations of a larger reading public, especially students who are now used to shopping on websites like Amazon.com. I did like the simplicity of the website, though (Amazon.com's website, in contrast, often feels too busy).

To summarize my reflection on the contextual use of the Sony Reader, I believe these points are important: 1) Students expect to be able to integrate their reading activities with their writing activities and could not with the Sony Reader, including but not limited to notations on their reading. 2) Students come into reading expecting that they will be able to spatially navigate a text to help them remember and predict as they read. 3) Unless the Reader is adopted across the curriculum, it carries very little benefit when it comes to saving money and saving space in a backpack. 4) Class discussion is more difficult with this model of the Reader because of difficult navigability, inability to annotate readings, and the ways most pages look the same on the Reader. 5) Because of the Reader's focus on reading at the expense (or neglect) of writing, it can't be easily incorporated into other literacy activities such as research, blogging, and reading and sharing online content. 6) The Sony ebook store website doesn't meet the shopping expectations of many young people who shop online.

A Redesign of the Sony Reader

In the following pages, I would like to address a few ideas I have for redesigning the Sony Reader and other technologies to make it a viable reading device for academic contexts. These suggestions for redesign are based on my experiences using the Reader, on my own expectations of a digital reading device, and on my and my students' other literacy activities and assumptions that shaped our experiences with the Reader. These suggestions include 1) a touch screen that allows touch navigation using icons; 2) creating writerly interfaces that allow for a pop-up keyboard and copy and paste functionality; 3) an integrated dictionary; 4) a search function; 5) the ability to organize texts by using multiple user-generated tags instead of folders created on the computer; 6) intertextual navigation; 7) a wireless interface that also allows for the integration of the device with web2.0 applications; 8) a redesign of the ebook store; and 9) a consideration of redesigning for color and size to allow for the use of textbooks on the Reader.

1. Although the Reader is marketed as a device to replace the print book, I think most students in academic settings will approach the device with the expectations developed from a variety of reading experiences, including print books, but also using their laptops, cell phones, and ipods. One aspect I think is important from these expectations is the ability to navigate using icons, rather than a list of texts using solely words, and increasingly the ability to navigate using a mouse, mouse-like scroll button, or a touch screen. I know the newest version of the Reader has developed an iconic navigation system, rather than a text-based menu system, as well as a touch screen, so I won't dwell on this point.

2. Student expectations derived from other reading devices means that reading and writing for many students are not separate: they read and write on their computers, through texting on their cell phones, and by writing in their print texts. A device that is designed to allow only reading does not meet the expectations and needs of academic users. I suggest a pop-up screen that allows for annotating text, a software incorporation that allows for those annotations to be exported to a computer so that students can easily copy and past or refer to it while writing, and a copy and paste function that exports passages along with bibliographic material to a document that can easily be exported to a computer.

3. A software integration that could probably easily be incorporated is a dictionary function that would allow users to click on a word and look up definitions. This is increasingly an option in many reading environments, including reading on many webpages where a word can be right-clicked on and looked up. Reading on a computer also has the easy ability to copy a word, go to a dictionary through only a few clicks of the mouse, and paste a word into the online dictionary. As the Reader is currently designed, a dictionary would either have to be an ebook or be carried around separately (the former of which would not be that accessible and the latter of which defeats the purpose of the Reader). This change could increase reading comprehension and ease of looking up words unfamiliar to readers.

4. Because it is somewhat difficult to navigate texts on the Reader, a search function that would allow for quick access to passages would help with class discussion and with using the Reader while writing papers. Readers of digital content (either webpages or PDFs) are used to search functions that allow for quick and easy access to passages, and I think meeting this expectation will be important for marketing this device to academic users.

5. Currently the only way to organize texts in the Reader is while it is connected to a computer, where users can put files into folders to create libraries. With the increasing use of social tagging, many readers of online content are used to searching for texts based on multiple tags, and to tagging a text with a description at any time. It would be a useful feature of a redesigned Reader to allow a user to tag a text (or even part of a text!) with a certain descriptor so that later, a user can go to a folder on the Reader (and not while plugged into a computer) and access all the texts that she tagged with a certain keyword. For example, let's say I have uploaded all of my PDFs for my research onto my Sony Reader and as I read, I realize that text A is not only useful for my 584 project about audience, but also my project about memory for another class. I would want to quickly tag the text with the subject "memory" and have it accessible later under that tag.

6. One of the biggest struggles my students and I had while using the Reader was the lack of ability to quickly and easily navigate within and between texts. Students, I think, are increasingly becoming aware of intertextuality—how texts connect and reference each other or reference different parts of the same text. It would be convenient for users to be able to click on footnote numbers to go to footnotes, to be able to click on in-text citations to go to that citation, and to be able to leave a text to go to another text quickly and easily. This last aspect, navigating between texts, is something that will have to be connected to the overall navigation system of the device, and I am not certain what it would look like. (Would a reader be able to click on an author mentioned in one book and then get the books by that author that are on the reader? Would a user being able to quickly pull up any other books with the same tag while reading one book?)

7. While the Reader is marketed as a stand alone device, much like the print book it is meant to remediate, I think readers are increasingly expecting a connected device, one that can access the Internet or other wireless services. It would be more convenient to shop the ebook store through the device, and to be able to download RSS feeds through the device (though I didn't not play with RSS feeds and the Reader). To be fully integrated into my academic reading experience, this requirement would also require an ability to integrate with various Web 2.0 applications, such as Delicious or Google Reader. Right now the RSS feeds downloaded onto the Reader require an application downloaded and installed onto your computer. If I could instead integrate my device with Google Reader and read, save for later, and share the blog posts I read through the Reader, the device would be a lot more useful. Additionally, since some of my research is through websites, it would be useful to have this integrated with a website like Delicious, which would allow me to pull up websites that I have tagged to read for later. Of course, these changes make the Sony Reader suddenly akin to a laptop computer, but I think because of the easy handheld nature of the Reader, it would be different in that a user could read their morning news on the bus, and read their research away from the distraction of instant messaging and email. I think that if Sony were to adopt this suggestion, they would have to find a way to navigate the fine line between a reading device that allows for connectivity and an Internet surfing device.

8. I will touch on this point only briefly: the online bookstore is efficient, but I think could be

redesigned to meet Web 2.0 expectations, as I discussed above. This might include allowing users to tag books and add their own reviews, as well as offering suggestions for other purchases based on other users' purchases, similar items, and the user's prior purchasing habits.

9. My last point will be brief as well. If Sony wants to reach a broader academic market and make this a viable device for students, students will want to integrate it into as many classes as possible. The use of grayscale eInk is adequate for humanities texts, which often have few graphics and little to no color. However, if Sony gets contracts to turn textbooks—such as composition, chemistry, calculus, and physics textbooks—into ebooks, the translation of these books, which are heavy in the use of color and graphics, will be difficult considering the software and hardware limitations of the device. It might be useful to consider moving toward a backlit full-color screen that allows for color, and a larger version of the device that allows for the remediation of large textbook pages heavy in graphics, so that the pages do not get distorted in the translation. As a heavy reader on a computer, I don't believe that a backlit screen is that big of a problem for younger users. Many of my students also conveyed they'd rather read on their computer screens than on the Sony Reader. The use of color and a change in size might be something to consider to fully integrate the device into academic life. (As an important side note, though, perhaps a device such as the Sony Reader might help us to question our assumptions about the centrality of textbooks in the university classroom.)

Conclusion

I think that if Sony incorporates some of these suggestions in the redesign of their Reader for uses in academic settings, that the device would be easily incorporated into the literate activities of college students. I think these suggestions are important because they are based on the experiences of students using the device for a full semester, as well as their expectations of a digital reading device from other literate activities. However, I don't think the onus is completely on Sony, and my discussion here has been limited in a variety of ways. Currently, administrations, departments, and teachers have limited their thinking about the ways in which reading and writing activities of students are changing and how they can incorporate new reading and writing technologies into academic life, including student assignments, in-class activities, publishing practices, and administrative practices. I don't think that e-reading will replace the print book completely anytime soon, but literacy practices are and have been changing. It would be smart for all of us involved in education to consider how to redesign not just the Sony Reader, but also teaching, learning, and administrative activities to incorporate a more complex understanding of literacy activities in an increasingly digital age.

Works Cited

Sloane, Sarah J. "The Haunting Story of J: Genealogy as a Critical Category in Understanding How a Writer Composes." *Passions, Pedagogies, and 21st Century Technologies*. Gail E. Hawisher and Cynthia L. Selfe, ed. Logan, UT: Utah State UP, 1999. 49-65.