TabLit: Theorizing, Teaching and Preserving a Platform-Specific eLit

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Tablet computers such as the iPad come with standard technological affordances that other computers such as laptops and desktops do not have as a default, such as touch screens, gyroscopes, and accelerometers. Their simplicity of design, consisting of a flat screen with no required user peripherals (such as a mouse and keyboard), and their manipulability (they can be held in one hand, utilized assuming multiple bodily postures, held at different angles and in various distances from one's face, and easily switched between portrait and landscape orientations) have opened new creative opportunities for multimedia authors. In doing so, 'TabLit' (or 'AppLit') has challenged scholars, teachers and preservationists of eLit to take cognizance of the unique features of the platform which has enabled and shaped this body of work. This presentation represents a very preliminary foray into delineating and foregrounding some of the key issues of TabLit from theoretical, instructional, and preservation and access perspectives. It will first describe four tablet-based works of eLit in order to demonstrate the creative potential of this technology and its value as an object of scholarly study. These works are Erik Loyer's Strange Rain (2010), Tiger Style's Spider: The Secret of Bryce Manor (2009), Simogo's DEVICE 6 (2013), and Semyon Polyakonskiy's Maginary (2020). Second, it will describe a pilot tablet lending program the author developed with his university library in order to ensure that tablet-based works assigned in a Ryerson University course ("Narrative in a Digital Age") were accessible to students. It will outline some of the challenges this pilot faced, including students' tablet/tabLit literacy and technological obsolescence. This last challenge

offers a germane segue way into the final topic, preservation and access, a key concern for both scholars and teachers of tabLit/eLit.

TabLit as a subgenre of eLit

Although they are computers, tablets are not the same as desktops and laptops. In many respects, they are technologically closer to smartphones—indeed they could be described as smartphones without the phone (assuming a tablet does not have a SIM card enabling it to connect to a cellular network). Smartphones and tablets have a specific operating system, iOS or Android, to deal with the hardware specificities of these devices, such as touchscreens, gyroscopes, accelerometers, built-in microphones, cameras, and GPS chips. In terms of technological design, size, and manipulability, tablets are much closer than other computer types to an approximation of the book/book page, and thus it is not surprising that they have been used as a medium for eLit. Although some works of TabLit simulate the 'turnable' pages of the print book or codex (enabling the turning of a page by either dragging or tapping one's finger on a page edge or corner), others radically rethink the idea of 'the page,' requiring the development of a new poetics of the page. In large part due to the touch screen, two common design paradigms can be distinguished in the design of the tabLit page/screen: the *indexical or* digital instrument, which require requires skilled use of a (usually the index) finger (or multiple fingers), and the frame and infinite page, where the tablet screen becomes a 'moveable' viewing window over a page that extends in multiple directions beyond this window. This second paradigm can be extended to TabLit that feature digital pages that remain bounded within a frame but which undergo transformations prompted by multiple types of reader input (using various technical affordances of the tablet).

Erik Loyer is well-known in the eLit community for his innovative uses of digital technology for creative and critical work, and, unsurprisingly, he was an early explorer of the creative possibility of the tablet. His 2010 work, Strange Rain, can be classified as a "textual instrument," defined in the Electronic Literature Collection Volume One as: "A work written and coded in such a way that it is capable, by analogy with a musical instrument, of playing numerous compositions. The reader is invited to become an expert player of the piece, for skill at manipulating it, above and beyond familiarity with how with its interface works, yields reading and viewing rewards. A closely related idea is that of the instrumental text, where an interface allows manipulations of a particular piece of writing in an interesting way" ("Textual Instrument"). As Loyer notes in the App Store description: "Strange Rain turns your iPad, iPhone, or iPod touch into a skylight on a rainy day. Raindrops fall and splatter on your screen, shifting perspective in 3D as you tilt your device like a handheld camera. Touch the screen and guide the path of the raindrops, stepping through the notes of an eerie melody as you go. It's a relaxing, intriguing experience that feels as if you're holding a living window in your hands." In Strange Rain, the primary challenge is to experiment with various combinations of tapping and dragging a range of fingers on/across the screen using various tempos and press durations, allowing one to manipulate images, sounds, words, and sentences in various modes (Wordless, Whispers, Story). The Story mode has iOS Game Center achievements (19 in total) which encourages the user to persist in teasing out the thoughts of the character Alphonse—as he stands in rain processing his sister's involvement in a car crash—through haptic exploring and experimentation. A video of the artist himself demonstrating the functionalities of Strange Rain can be watched here. As Mark Sample notes in a 2012 talk, we have developed a "camcorder

subjectivity" as a result of habitually "viewing the world through devices [i.e., smartphones and tablets] that have cameras on one end and screens on the other" and Loyer, in an email exchange with Sample, noted that "[a]s people began to play the piece, many of them held it up over their heads so that 'it looked like the rain was falling on them from above—many people thought that was the intended way to play the piece'" (Sample)—a posture only possible with a mobile device like a tablet or smartphone.

A quite different digital instrument from *Strange Rain* is Tiger Style's *Spider: The Secret of Bryce Manor*. In this work, the user controls the titular spider, who can crawl on surfaces by pressing and dragging a finger on the touch screen, jump between surfaces with a quick finger swipe, and spin a web with a tap (to anchor a strand of silk on a surface) and a swipe (to jump and attach the other end of the strand to a different surface). This is the core of the gaming aspect of *Spider*, but, as *Spider*'s subtitle suggests, it is also a story (or perhaps more accurately, a potential story), told exclusively through images of the Manor's rooms and spaces in which the spider moves. This story, increasingly disquieting and moving as it emerges over the course of the game, concerns the fortunes and fates of the absent Bryce family, which revolve around a hidden family treasure and what appears to be a romantic triangle involving the two Bryce sons. A playthrough of *Spider* can be watched here.

One of the most intriguing aspects of *Spider* is that this digital touchscreen gameplay is completely independent from the story concerning the Bryce family, which might initially suggest that it is an irrelevant 'gamification' add-on, potentially diluting the impact of the story. To survive, the spider must feed by 'spinning' webs to trap a variety of insects that fly into that space (the one exception is hornets, which are caught by tackling them in mid-leap—very fun!).

Spinning webs increases the need to feed; conversely, the spider needs to feed to replenish the silk it needs to spin webs. Another familiar game element are the statistics provided at the end of each level (score, time to completion, bugs eaten, greatest number of bugs caught in one web, number of silk threads used, number of webs created, percentage of web coverage of room, web with most number of sides), which encourage the user to hone and perfect their digital skill as a webspinner. Does all this 'gaminess' devalue the story of Spider? Does playing a non-human, indeed a widely feared and reviled insect avatar that doesn't (and indeed, can't) care about the story, diminish its meaningfulness for the player? Typically, the presence of spider webs on the furnishings of a room evinces a state of abnormality in human life and gives rise to foreboding. It is the conjunction of spider web and human domesticated space that makes Spider so emotionally compelling: in the Bryce Manor rooms, the player is compelled to act 'instinctively' as a spider that does not and cannot care about the humans who moved in the spaces which now are inhabited only by insects, that has a complete lack of interest in anything but its own survival. That the player, through the spider, digitally enacts this instinctdriven indifference, progressively authors, room by room, a home whose spiderwebs stand as testimony to its being utterly devoid of human life, serves to amplify the poignancy of the story rather than diminish it.

Moving to the second tablet design paradigm, the *frame and infinite page*, Simogo's *DEVICE 6*, in terms of design, is very bookish, even print-like, in its use of letterpress fonts, typography, ornamentation and layout: as you can see in Figure 1, *DEVICE 6* draws on writing/typographic traditions like shaped text, here with the text visually representing the spiral staircase the character Anna climbs.

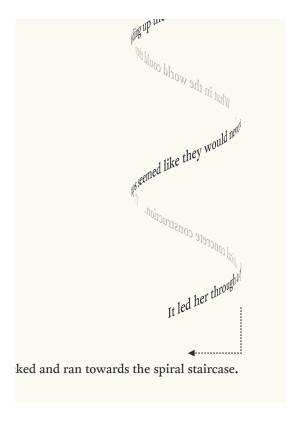


Figure 1: A portrait-orientation view of a portion of the 'infinite page' of a DEVICE 6 chapter. Note how the text moves from a horizontal alignment along the bottom to a vertical alignment up the spiral. The text actually does spiral as the reader drags their finger down (to move up).

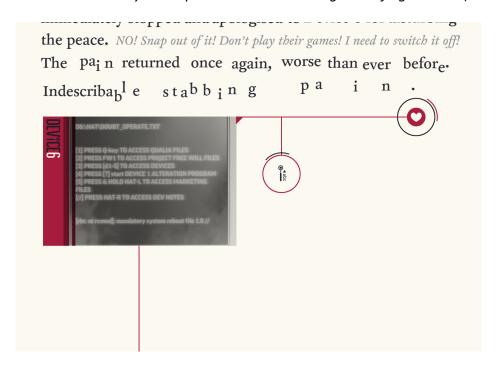


Figure 2: A landscape view of a portion of the 'infinite page' of a DEVICE 6 chapter.

Figures 1 and 2 also show how DEVICE 6 makes use of both portrait and landscape orientations, which can be easily switched between because a tablet can be easily and comfortably rotated. In each chapter of DEVICE 6, the entire chapter is essentially one page (a sort of text map of the environment in which Anna moves) that you see portions of through the 'window' of your tablet screen, and you move the 'window' over portions of that page by dragging your finger on the touch screen. The idea of the "infinite page" is based on the concept of the "infinite canvas" originated by Scott McCloud, the author of the popular *Understanding Comics*, and McCloud's concept is predicated on a vision of the computer screen as a window rather than a page, which so many tablet ebooks still treat the screen as. What creative benefits does the infinite canvas enabled by digital technology make possible? As McCloud notes, creators do not have to let the restrictions of the page be the primary determinant, so they could have masses of white space or scenery or as many panels as they felt was necessary to effectively convey the story, and panels would not be in competition for page space. Creators in print can't use page space to visually convey distance or time because it uses up limited space. McCloud notes that the page is an artificial, material division that is not part of the story; what happens on a single page does not include the beginning and end of a story or even usually a break in the narrative. As well, McCloud notes, the z-axis can be explored for its storytelling potential rather than being just a gimmick.

In the same way that the player of *DEVICE 6* and the iPad they are using are incorporated into the story (as Player 249 and DEVICE 4, respectively), in Semyon Polyakonskiy's *Maginary* (2020), the reader and the tablet are explicitly incorporated into the story: after typing one's name in the space provided after "This book belongs to," the reader is

told at the start of Chapter 1 that the story "began at the very moment that [she/he] turned to the next page of the book, which [she/he] had downloaded earlier from the App Store. ...

[Player name] was reading a book, in which [she/he] was one of the main characters." The book starts off, in appearance and functionality, as a very conventional ebook with 'turnable' pages (a digital simulacra of a codex book) but is quickly transformed by text-altering animations. The role of the reader is to assist another character, Michael Sterry of Ipswich, England, who has woken up in the book after previously having failed to finish "a strange book called Maginary."

To help Michael, the reader has to manipulate many components of their tablet beyond the touchscreen: these include the accelerometer, the brightness setting, the microphone, the detachable power cable, and the camera. A walkthrough of *Maginary* is viewable here.

This brief survey of TabLit is not intended to be definitive or exhaustive of the tablet affordances that can be used for creative purposes, but the hope is that these examples offer compelling support for the uniqueness and value of tablets as a storytelling technology.

Teaching TabLit

For my upper undergraduate course, "Narrative in a Digital Age", I wanted to be able to teach works of TabLit such as those described above. However, I could not presume that students would either own or have easy access to a tablet, nor could I require them to purchase a tablet for the course. Accordingly, in 2015, a pilot project was created in which 10 iPads were made available for short-term loan through the Ryerson University Library for a class of approximately 90 students. The Library already had a very successful laptop loan program in place, which this pilot was modeled after. The pilot used a free app to manage the iPads: Apple Configurator. Using this app, identical content and apps were deployed to all 10 iPads. The iPads in this pilot

project were supervised devices. Supervision allowed the Library to configure settings and load apps without students being able to remove them, as well as giving the Library control over the enabling and disabling of features on the iPad. A dedicated MacBook was used to image the iPads. An existing laptop cabinet with a USB Hub was used to connect iPads with the MacBook in order to charge them as well as to transfer content and apps from the MacBook to the iPads. When an iPad was connected to the hub, the MacBook redeployed the image to the iPad including all the needed apps, erasing the apps previously deployed on the device. The pilot used the Library's reserve service model for laptops to lend out iPads. iPads could be loaned for 2 hours.

The redeployment using Apple Configurator did not always work perfectly, and sometimes one or more apps were not loaded. Sometime students found some of the work partially read or played through and were not sure in some instances how to restart or reset the app. For privacy and security reasons, the iPads in the pilot had most functions besides the TabLit works locked down. This disappointed some students, who wanted to be able to peruse the assigned reading, take notes and complete the survey about the reading (on the LMS D2L Brightspace) at the same time using the iPad (a multitasking that was possible with the laptop loan program). Some students did not like the iPad loan program for the same reason students do not like on-reserve print readings: they had to be physically present on campus in the Library and had to do the work immediately and on-site (given the loan period). One of the issues with the 2-hour loan period was that it was almost impossible to determine how much time a student might need to finish a given work: *Strange Rain* was open-ended, exploratory, sometimes challenging to make progress in; *DEVICE 6*'s puzzles could sometimes be

intellectually complicated; and *Spider* required close reading of the features of the rooms and time to interpret what those features signified. Other assigned TabLit works not discussed here similarly offered a plenitude of storylines or ergodic challenges that some students did not have the aptitude or time to satisfactorily address.

The iPad loan pilot was successful enough that it was continued for two more years (2016, 2017). In 2018, "Narrative in a Digital Age" was not offered. In 2019, the loan program was revived, but by this time technical obsolescence was starting to become an issue; in part because at least one of the TabLit works (*Strange Rain*) would not work on newer iOS versions, we kept using the original iOS version from 2015 rather than updating it. In the most recent offering of the course in Winter 2021, most of the TabLit were dropped, with playthrough videos of *DEVICE 6* and *Spider* being assigned rather than the works themselves, a less than ideal scenario. Given the continual updates of tablet hardware and operating systems, and the inability or disinterest of TabLit creators to constantly keep their works compatible with the latest technology, whether the iPad loan program is sustainable in the long-term seems unlikely.

Preservation and Access to TabLit

This last challenge offers a germane segue way into the final topic, preservation and access, which is (or should be) a key concern for both scholars and teachers of TabLit. The issue of the preservation and access to creative interactive digital work is not a new one, and, given the recent demise of Flash, a very present issue; this paper will confine itself to addressing possible solutions to making TabLit broadly accessible to a general public, including university instructors and students (rather than a solution that is primarily accessible to researchers).

As modern tablets are just over a decade old (originating 2009/2010), there is not as robust an emulation culture for iOS/Android as there are for other systems; and while emulators exist, they are mostly concerned with getting current versions of iOS/Android to work on laptops and desktops. As well, the touch screen functionality, perhaps one of the most defining interactive/navigational features of TabLit, cannot be emulated using a mouse and keyboard as the means of interaction. Another solution is the recording and online archiving of TabLit transversals. One example of this is the website and social media channels of the iOS game reviewer, AppUnwrapper (https://www.appunwrapper.com/). Despite being only one person, AppUnwrapper has, over the course of a decade (2011-2021) amassed an impressive archive of reviews and walkthroughs of primarily iOS games focused on adventure and puzzle games (which include games created on other platforms and ported to iOS): her YouTube channel has 6,301 videos as of this writing. One of things that I find valuable about AppUnwrapper is that her reviews are intelligent and informative and her walkthroughs straightforward, with none of the juvenile silliness or 'hardcore' arrogance that characterize other gamers who record their gameplay and views on games for public consumption: I usually recommend her playthroughs of works assigned for "Narrative in a Digital Age." For AppUnwrapper, this work is business, and it's unknown if she has considered or cares about long term preservation of her work. In 2019, due to a misunderstanding, AppUnwrapper's YouTube account (which she uses to host her videos) was suspended and the videos removed, a situation which thankfully turned out to be temporary—however, it was a reminder that such services are not reliable in terms of ongoing preservation and access.

In an article published in 2019, "We're losing the history of the App Store," Eli Hodapp, who had been editor-in-chief for a decade of *Touch Arcade*, a review site for iOS games (https://toucharcade.com/), announced he was leaving that post to take up a position at GameClub (https://gameclub.io/), a subscription service that enables access to a "library of iconic games." In that article, Hodapp writes:

With each leap forward, pieces of the App Store's history became lost. Keeping your games on the App Store requires regular maintenance - you have to support new screen sizes and resolutions, operating system compatibility fixes, processor architecture changes, and make other required tweaks as technology advances. Not to mention the \$99 per year developer fee.

...[T]o the disappointment of their fans, developers made difficult choices, often leaving old titles in a state of disrepair, half-working or broken entirely, until they were eventually removed from the App Store.

The largest purge of iOS games followed the release of iOS 11 [in September 2017], which no longer supported 32-bit apps. We called this the "appocalypse," and in the blink of an eye, an unbelievable number of truly classic, critically acclaimed games became unplayable.... As time went on, we realized that TouchArcade had inadvertently become the archivists of massive swaths of iOS gaming history. Many of the best games ever released on the App Store now only exist in reviews or YouTube videos we published.

These games are effectively lost forever.

GameClub, founded in 2019, 'preserves' older mobile games by updating their code so that they will run on current tablet/smartphone operating systems. Their catalogue is to date fairly modest. The business model is apparently premised on the expectation that there will be enough gamers who will be willing to subscribe to its service in order to play older games they will otherwise be unable to access (*Spider* is one of the games they offer). To what extent this service's appeal is not just nostalgic is unclear. The revenue from these subscriptions presumably is being used to pay for updating future works and to provide some revenue to the original developers. Whether TabLit such as *Strange Rain* or *DEVICE 6* would ever be profitable to include in such a service as GameClub is an open question.

(https://directory.eliterature.org/) and the ELMCIP Knowledge Base (https://elmcip.net/) cover TabLit? Unfortunately, not very well. The works discussed above that are covered are Loyer's Strange Rain (https://elmcip.net/creative-work/strange-rain) and DEVICE 6 (although this entry is mostly empty), both on the ELMCIP Kb. While "tablet" is a searchable classification on ELD, only two works are so classified: Lucas Pope's indie videogame Papers, Please (2013), created for Windows/Mac and ported to iOS in 2014, and Teju Cole's Seven Short Stories About Drones, a series of tweets published to the author's Twitter feed in 2013. I would consider neither of these to be true examples of TabLit. The ELMCIP Kb's tag for "tablet" returns 9 items, although the "iPad" page currently lists 70 items and the "iOS" page 114 items, under "Works developed on this platform." The "Android" page lists 44 items. Without going through the entries for each item, it is unclear how many of these works were specifically created on iOS/Android and thus

would be considered trye TabLit. A more careful application of tags would enable easier identification of TabLit in these resources.

One suggestion for growing the content related to TabLit and works of eLit in general on resources such as ELD and the ELMCIP Kb is to approach it through the teaching of eLit. The ELMCIP Kb has a category "syllabus" (https://elmcip.net/category/teaching-resource-type/syllabus), and it is in a learning context that I find the need for resources like ELMCIP most urgently needed. Collaborations between EMLCIP and eLit teachers, say in the form of targeted edit-a-thons, would help develop a robust set of learning aids that would hopefully be used year after year and that would maintain an audience for these resources. Content like AppUnwrapper's reviews and walkthroughs should be linked to ensure that entries go beyond mere summaries of the work and give representations of the work itself. Ultimately, the value of resources like ELMCIP depend on the extent to which they can provide or point to access to the work itself, and therefore these resources should spend at least equal effort in finding and providing access to (and, if possible, preserving) outside non-scholarly resources like AppUnwrapper's work.

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