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« From codex to *ludex*: paper machines, digital games, and haptic subjectivities »

Caleb Andrew Milligan (University of Florida)



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Résumé

Cet article explore la représentation matérielle de <machines à papier> (livres et objets dérivés) comme artefacts jouables au sein des jeux numériques. L'article se focalise sur la traduction de l'imprimé en jeux vidéo en abordant deux jeux indépendants remarquables de 2013, *Gone Home* et *Papers, Please* portant ainsi la discussion du codex au *ludex*. Considérant comment l'humanité est entrelacée avec le papier comme une technologie représentative, l'article argumente que ces jeux ajoutent une interface additionnelle compliquant l'incarnation des sujets humains en formes imprimées comme objets narratifs. Par conséquent chaque jeu fera l'objet d'un examen unique d'aspects particuliers de la culture de l'imprimé. Il y aura un focus spécifique sur le matériel intrinsèque et donc sur les différences thématiques que divers médias, du codex à l'ordinateur en passant par ubicomp, présentent. Les différentes plateformes s'accompagnent d'attentes haptiques différentes. Néanmoins, les plateformes numériques ne reproduiront jamais la qualité tactile du papier même si leurs métaphores fonctionnelles empruntent largement au langage de la technologie et de la culture de l'imprimé (bureau, tablette, etc.). Lorsque les médias présentent souvent des objets palpables, dans ce cas les formes imprimées sont des artefacts jouables, mais ne peuvent pas traduire le sens du toucher initial par le biais du matériel informatique. Ainsi, représenter l'imprimé de manière numérique dans des espaces de jeu tactiles peut prolonger une incarnation subjective, mais il la compromet nécessairement aussi, éclatant alors la subjectivité humaine en subjectivités haptiques. Car le *ludex* n'est pas le codex.

Mots-clés

ludex, papier, jeux numériques, haptique, subjectivité humaine

Abstract

This article probes the material representation of <paper machines> (books and book-adjacent objects) as playable artifacts within digital games. The article's focus translates print about games to discuss two of 2013's indie game standouts, *Gone Home* and *Papers, Please* as games about print, thus taking the discussion from codex to *ludex*. Considering how humanity is interlinked with paper as a representational technology, the article argues that these games add an additional complicating interface to the embodiment of human subjects in print forms as narrative objects. Therefore each game will be addressed as a unique examination of particular aspects of print culture. There will be a specific focus on the inherent material and thus thematic differences which various media, from codex to computer to ubicomp, present. Different platforms come with different haptic expectations. Nevertheless, digital platforms will never replicate the tactile quality of paper even as their functional metaphors borrow extensively from the language of print technology and culture (desktop, tablet, etc.). For media often present touchable objects, in this case print forms as playable artifacts, but cannot translate the initial sense of touch across hardwares. Thus to represent print digitally in tactile game spaces may extend subjective embodiment, but it necessarily compromises it as well, thus splintering human subjectivity into haptic subjectivities. For the *ludex* is not the codex.

Keywords

ludex, paper, digital games, haptic, human subjectivity

Bookishness is not just for books anymore. Bookishness, according to Jessica Pressman, is “the fetishized focus on textuality and the book-bound reading object¹”, but that focus is not limited to the book-bound reading object. Electronic literature has for some time shown us that literary merit does not have to stay bound to the book – neither does Pressman’s aesthetic of bookishness. But the most compelling presence of bookishness in electronic literature has actually arisen through what we could call bookish games. Videogames are an important contingent of electronic literature, and bookish games especially offer important dialogue in the conversation of media confluence when bookishness thinks outside the book. Projects proliferate which analyze reading, playing, and gaming all in their own ways, but I mean to see what happens when reading becomes playing, and vice versa. Carrying the torch before me, Astrid Ensslin analyzes a taxonomy of games and electronic literature that marry ludicity (the quality of being ludic – from Latin *ludus* meaning <game> or <play>) and literariness (in her argument, featuring a primary reliance on text and language – not to be confused with <literary> as judgment of aesthetic merit). Within her own schema, she defines what she calls “quasi-literary games” as “games that represent in-game literary technologies such as books²”. But she passes that torch on to someone else to analyze them. My article therefore attempts an answer to Ensslin’s call in her conclusion that, “[a]nother possible project might look at the margins of literary gaming and investigate, in particular, games that reference print culture metamedially³”. I propose then we consider what happens when the codex becomes ludic and what I call the *ludex* is cracked open.

In this article, I probe the representation of print forms as narrative objects in digital games, in order to take the discussion from codex to *ludex*. The *ludex* is my term within this article for that category of book-bound and book-adjacent reading objects found in digital games. By combining <ludic codex> into this neologism, I demonstrate the ways in which the *ludex* is not just a remediation of the codex, but a metamediation as a commentary upon it. My argument aims to probe what is at stake for us in our interactions with both print and digital media, since, as Andrew Piper states, “books and screens are now bound up with one another whether we like it or not⁴”. For, more importantly, humans are bound up with both. I consider how if we observe the ways in which humanity has been interlinked with paper as a representational technology, then we can better see that these games layer an additional complicating interface upon the embodiment of

¹ PRESSMANN J., “The Aesthetic of Bookishness in Twenty-First Century Literature”, *Michigan Quarterly Review*, vol. 48 / 4, 2009, <<https://quod.lib.umich.edu/cgi/t/text/text-index?cc=mqr;c=mqr;c=mqrarchive;idno=act2080.0048.402;rgn=main;view=text;xc=1;g=mqrq>>.

² ENSSLIN A., *Literary gaming*, Cambridge, MIT Press, 2014, p. 49.

³ *Ibid.*, p. 164.

⁴ PIPER A., *Book Was There: reading in electronic times*, Chicago, University of Chicago Press, 2012, p. ix.

human subjects in print. But further, I theorize not just human subjectivity, but haptic subjectivities, as the way we read is changing with the way we touch, from codex to computer and beyond. By changing the tactile quality of the codex through digital abstraction, our way of experiencing the *ludex* and thus ourselves is likewise abstracted: subjective embodiment gets extended but also necessarily compromised.

Getting on the Same Page

Before we can leaf through the *ludex*, we must recognize that the aesthetic reference of the codex within other media is not new to digital games. Garrett Stewart for example, analyzes centuries of painted images of reading, known as “<lectoral art⁵>”. Lectoral art depicts scenes of figures often reading books or related material that we don’t have the privilege to read alongside them (Fig. 1). Either because we are shut out by book covers from the <wrong> observational angle or because the scripts sampled for us “fall [...] beneath the threshold of legibility”, paintings in this genre invite us to read others’ reading, but rarely what they read⁶. But at the end of Stewart’s historicization of lectoral art lies his other most important term in *The Look of Reading*: the “lexigraph⁷”. Lexigraphs “do the graphic work of wording” as paintings of text without scene which align reading with looking and remind us that scripts are themselves visual strokes too⁸ (Fig. 2). Devoid of “subject figured on canvas to embody either the strain or the release of interpretation, reading, such as it is, is ineradicably left to you. No longer narrated, it nonetheless awaits performance⁹”. Without a painted scene of reading to rely upon, lexigraphs call out of the canvas to the only reader there has ever truly been: “the reader is you alone¹⁰.”

⁵ STEWART G., *The Look of Reading: book, painting, text*, Chicago, University of Chicago Press, 2006, p. 6.

⁶ *Ibid.*, p. 15.

⁷ *Ibid.*, p. 329.

⁸ *Ibid.*, p. 330.

⁹ *Ibid.*, p. 329.

¹⁰ *Ibid.*, p. 7.

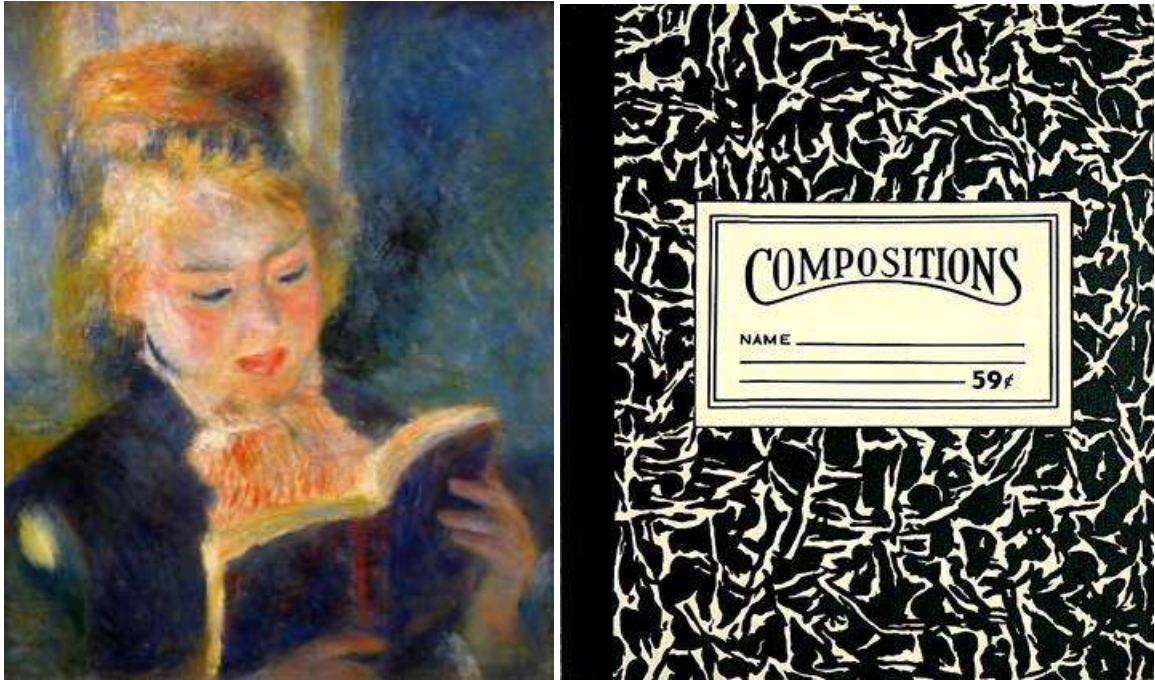


Figure 1. Pierre-Auguste Renoir's 1876 example of lectoral art *The Reader*¹¹
 Figure 2. Roy Lichtenstein's 1964 lexigraph *Compositions II*¹²

So here is the haptic rub then on “the feel of not to feel it¹³”, from painting to gaming. Lectoral art in Stewart’s reckoning normally features scenes of reading, but not often reading itself legible to the reader/viewer. Lexigraphs can sometimes be “hyper-legible [...] lectoral mimesis,” but do not really narrate scenes¹⁴. Perhaps this impasse is where painting’s samples of action no longer serve us¹⁵. For the games discussed in this article aren’t quite lectoral nor are they quite playable lexigraphs. Then perhaps another way to reference Ensslin’s “quasi-literary games” beyond just <bookish> would be to call them <lexigraphical> games. As Stewart dubs his <lexigraph> to be “fused coinage¹⁶”, we transition now to my own version of that, and further the discussion from codex to *ludex*.

What happens when *The Look of Reading* becomes the *play* of reading? As Stewart told us, lectoral art apotheosized in the lexigraph renews our attention to the fact that written texts are also images. Here is where Alexander Galloway comes in handy when he tells us that “if [paintings] are images, and films are moving images, then *video games are actions*[...]With video games, the work itself is material action. One *plays* a game¹⁷”. In his estimation, the haptic engagement games

¹¹ Source : BestOfPainting.

¹² Source : WikiArt.

¹³ *Ibid.*, p. 3.

¹⁴ *Ibid.*, p. 330.

¹⁵ *Ibid.*, p. 76.

¹⁶ *Ibid.*, p. 330.

¹⁷ GALLOWAY A., *Gaming: essays on algorithmic culture*, Minneapolis, University of Minnesota Press, 2006, p. 2.

require is what sets them apart as a medium, for “what used to be primarily the domain of eyes and looking is now more likely that of muscles and doing [...] and what used to be the act of reading is now the act of doing, or just <the act>[...]the instigation of material change through action¹⁸”. Galloway claims “with video games, the action-image [forms] the base foundation of an entirely new medium¹⁹”. It is the “action-image,” however, that helps us temper some of Galloway’s scorched earth trailblazing and better understand why our quasi-literary, bookish games discussed here settle into a tension best described by the lexicographical: they are <first-person> games which employ subjective perspective that makes “the scene of reading in fiction[...]simultaneous with another act of reading: namely our own²⁰”. Galloway tells us the technique of subjective perspective as practiced in games “is[...]used to achieve an intuitive sense of motion and action in gameplay²¹”. One of the most important pioneers in perfecting this seamless perspective is actually a lexicographical game, the irresistible to analyze and oft-cited *Myst* (1993) by Robyn and Rand Miller.

Myst begins with an unnamed avatar known only as the Stranger who reads a book that transports them to *Myst* Island. Players are given no other motivation than to explore, more closely aligning them with the character they play as, and making their scenes of reading through which they perform explorations more lexicographical in nature. As evidenced earlier, Galloway contrasts reading and doing by relating the former to a more cinematic variety of looking. He describes *Myst* in terms of its “nonplay,” in which “the operator [...] doesn’t play *Myst* so much as [...] submits to it. Its intricate puzzles and lush renderings achieve equivalent results in this sense²²”. And yet: in lexicographical games, doing is reading and reading is doing. That reading though is shifted by the tactile mechanic of a new technical ensemble, making the doing-of-reading a different kind of reading. Piper notes that, instead of turning the page, “[we have, at least for a little while longer, the button. The hand no longer points, and thus cognitively and emotionally reaches for something it cannot have [...] it *presses* or *squeezes*²³”; more accurately in the case of computer games like *Myst*, it clicks. In contrast to the more fluid rhythm of turning pages, “there is a punctuatedness, a suddenness, but also a repetitiveness to pressing buttons [which...] convert human motion into an electrical effect²⁴”. The <machine> of new media merges with that of the old, the <paper machine> of the book, which structures the gameplay and narrative of *Myst*.

¹⁸ *Ibid.*, p. 3-4.

¹⁹ *Ibid.*, p. 2-3.

²⁰ STEWART G., *op. cit.*, p. 74.

²¹ *Ibid.*, p. 40.

²² *Ibid.*, p. 18-19.

²³ PIPER A., *op. cit.*, p. 17.

²⁴ *Ibid.*, p. 17.

Gameplay and narrative by-the-book, or by-the-book-in-the-game, often merge upon a reliably lexicographical trope. Terry Harpold describes the invitation to <do> in *Myst* by setting the following scene: “Any bookshelf that appears in a computer game is sure to contain at least one volume that opens when retrieved, revealing a new point of egress, another passageway of the game world²⁵.” *Myst* does not just follow this trope, however; in some ways, it defined it, and most famously subverted it. Its bookshelf contains textual genres of the *ludex*, which Harpold speaks ahead to when he establishes that while the book page “as vestibule, embedded further in the vestibule of the screen, suggests, on the one hand, transmissibility [...] On the other hand, the page as vestibule suggests blockage or recursion²⁶”. *Myst* features books which allow for all these possibilities as well as combinations between, only awaiting players to click around to access these recursive transmissions. For “in addition to the linking books that join the five ages of [...] *Myst*, the player will encounter three kinds of books on *Myst* Island²⁷”. These include journals of the main non-player character Atrus, which contain hints to puzzles later in the game; illegibly destroyed books which suggest visual evidence of the apocalypse which befell the island before the player arrives; and red, blue, and green books which players must repair page by page in order to interact with the duplicitous Sirrus and Achenar and their father Atrus. Harpold unpacks these texts by saying that,

[t]he first and last of these three kinds of books are variants of the middle term in the series. Each is a *damaged* book[...]in that it is *unreadable*, expect that it directs us to other avenues of discovery in the game world. As the whole of the *Myst* game world is framed by the trope of linking book, the simultaneous luring and frustration of potential readability marks an implicit commentary on the condition of playability-as-readability (not the same as legibility) itself²⁸.

The fact that these damaged books are unreadable is a reading itself then, and leads nicely into investigations of more legible artifacts in other games governed by “playability-as-readability” (Figs. 3, 4).

²⁵ HARPOLD T., *Ex-foliations: reading machines and the upgrade path*, Minneapolis, University of Minnesota Press, 2008, p. 112.

²⁶ *Ibid.*, p. 112-113.

²⁷ *Ibid.*, p. 113.

²⁸ *Ibid.*, p. 113.



Figures 3, 4. Front cover and page spread of a damaged book on *Myst Island*

It is two of 2013's indie game standouts, *Gone Home* and *Papers, Please* that crack open the *ludex* and truly engage a reading of play that plays reading. In doing so, these lexigraphical games mediate the book, meaning they don't faithfully remediate it, they comment on the way "reader-players"²⁹ engage it within a different medial context. That mediation is furthermore a disassembly of the book, and joins other scholarly work on the already paved pathway away from a book history of only books. Lisa Gitelman, most prominently of late, proposes a more robust *Paper Knowledge* that seeks understanding of the "lowly" document form and genre to reveal what gets overlooked when our attention remains rapt upon more intellectually revered concepts³⁰. She argues that documents have existed far longer than books or aesthetic categories like "the literary", so to think about their incorporation "helps in particular to adjust the focus of media studies [...] toward an embarrassment of material forms that have together supported such a varied and evolving scriptural economy"³¹. Gitelman follows after Bruno Latour's "strategy of deflation [...] to look, that is, for more mundane phenomena [...] in the everyday things that people do and handle when they are modern" and defends her interest in "the genre of the document [as] deflationary in the very least because documents may be distinguished from more elevated uses of text, as in <the literary>, and from more elevated forms of text, like <the book³²>". *Gone Home* disperses its puzzles across a countless variety of print memorabilia and *Papers, Please* binds its ludic mechanics to a gradually increasing amount of government paperwork, so both games certainly immerse players in deflationary appreciations of paper formats outside of the literarily bookbound. Yet their narrative experiences actually re-inflate these uses of paper and achieve a gameric equivalent of <the>

²⁹ ENSSLIN A., *op. cit.*, p. 92.

³⁰ GITELMAN L., *Paper Knowledge: toward a media history of documents*, Durham, Duke University Press, 2014, p. 13.

³¹ *Ibid.*, p. 6.

³² *Ibid.*, p. 5-6.

literary through Ensslin's differing definition of the "quasi-literary." Players gain deeper reflection into others' lives by experiencing the paper artifacts that embody them. By thinking outside the book, these lexicographical games demonstrate the power of the *ludex* unbound by the codex.

The commentaries played out by these games speak volumes to my article's major concern, namely how humans conceive of themselves via print now digitally abstracted. Jacques Derrida periodizes: "Paper is [...] the limited <subject> of a domain circumscribed in the time and space of a hegemony that marks out a period in the history of a technology and in the history of humanity³³". Seemingly at the <tail end> of that history of humanity and paper technology, Derrida speaks forward to the rise of what Pressman considers fetishized focus on the book in opposition to its impending <death> and predicts how bookishness can furthermore be an anxiety of self and not just medial extension. He aptly observes that, "what is happening to paper at present, namely what we perceive at least as a sort of ongoing decline or withdrawal, an ebb or rhythm as yet unforeseeable [...] remind[s] us that paper has [...] a history tangled up with the invention of the human body and of hominization³⁴". We will better understand these digital games if I trace that paper trail now.

The paper trail of this "invention of the human body" is both linguistic and literary. According to Bernadette Wegenstein, those distinctions are indistinctly the same, for "the concept of bodily fragmentation, in circulation since the sixteenth century, has in the twentieth century, been integrated into a holistic body concept – a concept that reveals the history of the body to be, in fact, a history of mediation³⁵". She explains that the body became objectified through the study of anatomy in the fifteenth and sixteenth centuries, "producing what we could call the *scientific fragmentation* of the body," out of not just the theory but the practice of dissection³⁶. For the first time, "an objectified, materialized body-in-pieces [began to] present itself to a new gaze³⁷". This diffusion and differentiation was further entrenched and extended by the history of anatomy textbooks from early modern movable books all the way to the canonized classic *Gray's Anatomy* and beyond. The body as corporeal entity and concept was cut open and canonized. Thus the mediated, holistic, body-in-pieces furthermore finds its fragments in textual metaphors, from corpus to body of work and so on, showing that the human body is historically textual and textually embodied.

Furthermore, it is material: regarding the material interactivity of digital games, this embodied involvement began with print. We could sample considerations from a brief history

³³ DERRIDA J., *Paper Machine*, Stanford, Stanford University Press, 2005, p. 41.

³⁴ *Ibid.*, p. 43.

³⁵ WEGENSTEIN B., *Getting Under the Skin: body and media Theory*, Cambridge, MIT Press, p. 3.

³⁶ *Ibid.*, p. 6

³⁷ *Ibid.*, p. 6

transitioning print outside to inside of games in order to see how – and to better understand the importance of print about games to games about print. For example, the first-ever genre of computer games, interactive fiction (IF), can cite several avant-garde print literary texts as influences. Then there’s another of interactive fiction’s widely cited, similarly print-influenced precursors, Gary Gygax and Dave Arneson’s table top game *Dungeons and Dragons* which is still played today (in fact, table top gaming is on the rise again, for more proof of bookishness in games). And then interactive fiction itself still contains fascinating promise for more scholarly excavation, especially regarding haptic interaction from digital to print. There are a number of avenues worth pursuing further, such as IF game company Infocom’s practice of packing their games with “feelies” – physical and precarious artifacts such as handwritten letters, decoder wheels, scratch and sniff sheets, and more (Fig. 5) – or rival company Synapse including hardback novels with their games that foreground or extend the playable story³⁸. And from textual to graphical play, the history of interactive fiction and its implicit pressures on players to draft up mapped visualizations of where they have typed around comes to haunt the transmedial notetaking most of *Myst*’s byzantine puzzles required before online FAQs and walkthroughs.



Figure 5. ‘Grey Box’ contents of 1985 Infocom title *A Mind Forever Voyaging*

Derrida notes this physical feature too, for, “Paper is utilized in an experience involving the body, beginning with hands, eyes, voice, ears; so it mobilizes both time and space³⁹”. He again lays groundwork for those writing after him, for this aspect of paper sounds a lot like Galloway’s claim supposedly unique to gameplay – that players “move their hands, bodies, eyes, and mouths when they play video games⁴⁰”. But when the experience of paper that Derrida describes first then intersects Galloway’s later point, the continued development of the human body seems abdicated to

³⁸ MONTFORT N., *Twisty Little Passages: an approach to interactive fiction*, Cambridge, MIT Press, 2005.

³⁹ DERRIDA J., *op. cit.*, p. 44.

⁴⁰ GALLOWAY A., *op. cit.*, p. 4.

the digital apparatus. Games like *Gone Home* and *Papers, Please* recognize this shift in subjectivity through different registers of commentary on human experience culturally and haptic engagement medially.

1995: Handwritten and Homespun

Gone Home is a simulation of the notion that handwriting conveys individual subjectivity, evidenced through scribbled and scrawled ephemera left around for the player to discover (Fig. 6). Set in 1995, college student Katie Greenbriar returns home from an overseas trip to a new house her family moved into while she was away. When she arrives from a late flight one dark and stormy night, however, she finds this house she's never been to deserted, her parents apparently gone camping and no trace of younger sister Samantha except for a note on the front door telling her not to look for her. What presents at first as a creepy invitation into a haunted house game turns out to be a much more intimate and topical exploration of one Portland, Oregon family's inner workings through what they leave behind (Fig. 7).



Figure 6. *Gone Home* logo, simulating the appearance of handwriting;
Figure 7. Greenbriar family photo, with protagonist Katie pictured standing

It eventually becomes a powerful queer coming of age love story for Samantha and her girlfriend Lonnie that the player pieces together “almost like a historian⁴¹”. Elizabeth Goins explains that *Gone Home* creates all of its “characters and their relationships through miscellaneous pieces of ephemera. Players learn about Sam, not through direct description, but by finding things that

⁴¹ GOINS E., «*Gone Home* and Its Hidden Objects», *Gamasutra*, 15th February 2014, <https://www.gamasutra.com/blogs/ElizabethGoins/20140215/210908/Gone_Home_and_Its_Hidden_Objects.php>.

belong to her: a short story written in grade school, grades received on projects," and scraps of her diary entries.⁴² Wegenstein's "body-in-pieces" as mediated through textual traces merges into the more "holistic body concept"⁴³ only if players do the *paper-work* themselves. According to Goins, "the mechanism underlying this strategy relies heavily on the Gestalt principle of closure. Gestalt principles describe ways of restoring equilibrium to a world out of balance"⁴⁴, and the house that Katie enters reveals through pieces which form a disparate whole that Sam has run away from a home out of balance.

Gone Home unveils its narrative through the *ludex* in deconstructed form, across hundreds of sheets, flyers, papers, etc. And nearly every one of them, from the note on the door all the way to the binder in the attic which reveals Samantha and Lonnie have run away together, operates on the principle that Friedrich Kittler cites: "once a hand took hold of a pen [...] the body, which did not cease not to write itself, left strangely unavoidable traces [...] for] handwriting alone could guarantee the perfect securing of traces"⁴⁵. The Greenbriar's traces, from Janice's tidy cursive to Sam's jagged punk lettering, convey their personalities almost as much as what they have written. As Kittler phrases it, "the alphabetized individual had his <appearance and externality> in this continuous flow of ink or letters"⁴⁶. But further comprising the Greenbriar's personalities is the "<appearance and externality>" of the papers themselves which bear their traces – not just what or how they have written, but what they have written on and how that is scattered throughout the house. The game's metamedial commentary is built into its '90s nostalgia, for as lead designer Steve Gaynor puts it, "It's nice how much physicality there was in the nineties," specifically distributed physicality, for "it was [also] set in the '90s because we didn't want players to find their sister's cell phone, read her texts and get the whole story right there"⁴⁷. On the other hand, there is a precarity of digital information that the game's '90s print-filled house doesn't suffer from: instead of intimate information relegated to texts and posts that can easily be deleted, the paper trail remains. Within this textual tangle of what paper offers, Gitelman remarks that "the workings of paper are admittedly complex and even paradoxical. Consider that paper is a figure both for all that is sturdy and stable [...] and for all that is insubstantial and ephemeral"⁴⁸. Paper <trails> as they are known

⁴² *Ibid.*

⁴³ WEGENSTEIN B., *op. cit.*, p. 6, 3.

⁴⁴ GOINS E., *op. cit.*

⁴⁵ KITTLER F., *Gramophone, Film, Typewriter*, Stanford, Stanford University Press, 1999, p. 8-9.

⁴⁶ *Ibid.*, p. 9.

⁴⁷ SLOAN R., "Videogames as Remediated Memories: commodified nostalgia and hyperreality in *Far Cry 3: Blood Dragon* and *Gone Home*", *Abertay Research Collections*, 31th December 2014, <<https://rke.abertay.ac.uk/ws/portalfiles/portal/8555729>>, p. 19.

⁴⁸ GITELMAN L., *op. cit.*, p. 3.

feel both insubstantial in their dispersed scatter and stable in that they stay readable for those that find them, and *Gone Home* houses itself between these contradictory confluences.

The stability and insubstantiality of paper as expression of the self meet in perhaps the game's most ludic mechanically fascinating moment. When an account of one of Sam's most deeply personal moments – her first sexual experience with Lonnie, and ever – is found on a discarded diary page in her downstairs bathroom, Katie refuses to read further once she realizes what it is, directly disobeying the player's haptic inputs to pick it back up no matter what. Recalling Piper's breakdown of buttons, any amounts of repeated clicks which “convert” now agitated “human motion into an electrical effect⁴⁹” effects nothing except the onscreen text, “Okay, not reading anymore of that,” which asserts Katie's opinion in opposition to the player's (Fig. 8).



Figure 8. Katie's refusal

For a brief moment, the player/avatar relationship severs, and the simultaneity of reading perspective which signals lexicographical games stops, making “the reader” truly for the first time in this game, “you alone⁵⁰” because Katie won't cooperate. The curious player is left to question why they are curious, and rethink how a game's mechanical trope of completion intrudes upon a character's inner life. This scene truly indicates *Gone Home*'s presentation of Derrida's saying that “<Paper is me⁵¹>”, for throughout the game, <Paper is the Greenbriars, is Sam,> and here Katie's refusal to read attempts to give Sam her privacy.

1982: My (Fate Determined by) Documents

⁴⁹ PIPER A., *op. cit.*, p. 17.

⁵⁰ STEWART G., *op. cit.*, p. 7.

⁵¹ DERRIDA J., *op. cit.*, p. 56.

Elsewhere, in a totalitarian state where privacy is likely unheard of, a border control agent goes to work every day and deems refugees and immigrants fit or unfit to enter the country based on the documents they present. As presently prescient as that sounds, I actually describe the fictional Arstotska circa 1982, the setting of Lucas Pope's *Papers, Please* (Fig. 9). Its 1982 setting is meant to evoke associations of a Cold War Soviet Union, much like its bleak story. The game is subtitled "A Dystopian Document Thriller."



Figure 9. *Papers, Please* logo, including dystopian documents

Gitelman explains that documents are defined by what she calls the "know-show function, since documenting is an epistemic practice⁵²" – in other words, we know what documents are because of what they show us, and they show us because we need to know. The way that *Papers, Please* turns the know-show function dystopian is by operating upon documents whose epistemology is at the whim of shadowy government who increases requirements for documentation almost daily, quite like levels in a *videogame*. So certification of personhood and entry into the country is a matter of heightening piles of paper. All that paper creates the conditions of gameplay, as *Papers, Please* confines players to their desk, and requires them to process more and more documents by the day within the stress-inducing time limits of an expedited work shift. Pope says of the game's motivating mechanic that, "It's hard to describe the game and make it sound fun⁵³", but once in action, it is surprisingly engrossing. Its "fun" stems from the high stakes of the game's morally

⁵² GITELMAN L., *op. cit.*, p. 1.

⁵³ HAWRELIAK J., "Generating Tension in *Papers, Please*: a case for ludonarrative dissonance", *The Ontological Geek*, 18th August 2014, <<http://ontologicalgeek.com/generating-tension-in-papers-please-a-case-for-ludonarrative-dissonance/>>.

tense parameters which it puts players through constantly, forcing them to play ethics. As Jason Hawreliak describes, “the primary tension between the narrative and ludic units revolves around the theme of dehumanization⁵⁴”. Players must “essentially choose between quantifiably positive outcomes (more money) which requires to ignore claimants’ stories, and a less straight-forward moral victory which requires to ignore the potential money earned⁵⁵”, money that must go toward feeding and housing the player’s poor family, who must survive in order for the player to <win>. With twenty different endings, ranging from getting a promotion within the government to fomenting a revolution that will overthrow it, however players choose to play the game means choosing between papers, either money or the resistance pamphlets that secretly swap hands under penalty of treason. Such textual tension “reminds us of the extent to which identity, the social bond, and the forms of solidarity (interpersonal, media-based, and institutional) go through filters made of paper⁵⁶”. Those filters can mean life or death for the player’s border control agent avatar. But the border patrol agent doesn’t even have it the worst.

It is who Derrida calls “<paperless⁵⁷>” people that suffer most in *Papers, Please*. After all, it is “A Dystopian Document Thriller” (Fig. 10) in which,

documents are at once familiar <props in the theater of ruling [and] policing> and the fetish objects <of the modern economic era,> while bureaucracies don’t so much employ documents as they are partly constructed by and out of them⁵⁸.

Gitelman discusses “the passport [as] descended from the diplomatic letter, catalyzed by modern governmentality and its construction of personal identity⁵⁹”; *Papers, Please* is indeed a lexicographical game for all the passport books players must quickly and accurately read and stamp before the workday is over. As luckier entrants carry their passports into Arstotska, they enact Derrida’s point that there is power in “holding certificates on official paper on one’s person, close up to oneself. <Paper is me>; <Paper or me>; <Paper: my home⁶⁰>”. But the “<paperless>” person in *Papers, Please* does not share that luxury and must either forge documents hoping the player will not notice or let it slide, or otherwise be turned away. Their misfortune is to be “an outlaw, a nonsubject legally, a noncitizen [...] refused the right conferred, *on paper*⁶¹”.

⁵⁴ *Ibid.*

⁵⁵ *Ibid.*

⁵⁶ DERRIDA J., *op. cit.*, p. 55.

⁵⁷ *Ibid.*, p. 60.

⁵⁸ GITELMAN L., *op. cit.*, p. 5.

⁵⁹ *Ibid.*, p. 10.

⁶⁰ DERRIDA J., *op. cit.*, p. 60.

⁶¹ *Ibid.*, p. 60.



Figure 10. Papers stack up in *Papers, Please*

As for dystopian documents outside the game, Derrida reminds us,

in the United States for example, the word *undocumented* is used to designate analogous cases, or *undesirables*, with similar problems involved, [for] the law is guaranteed by the holding of a <paper> or document[...]that guarantees the <self,> the juridical personality of <here I am⁶².

Again people are <made of> paper, and passed along or discarded as such at the entrance to Arstotska's border. But imagine, especially in such politically urgent times, how much more that dehumanization pervades to those who cannot present the documents the bureaucracy needs to declare them human to begin with. *Papers, Please* could also remind us of more innocuous versions of government <pencil-pushing> facilities which juggle complex tasks coldly with clicks. Hawreliak states that the lessons of *Papers, Please* certainly espouse a social realism for,

[w]hether it's been with a government bureaucracy or customer service representative, most of us have probably been treated in a way that makes us feel as though we're just another file, another task to get through instead of a complex and unique human being. Bureaucratic processes are inherently dehumanizing⁶³.

The conditions of play in this game, however, make players do the dehumanizing themselves. When the doing-of-reading decides the fate of pixelated paperless people, then the pages of the *ludex* add

⁶² *Ibid.*, p. 61.

⁶³ HAWRELIAK J., *op. cit.*

up to a considerable weight. The haptic materiality of *Papers, Please* communicates great social consequence.

Metamedially speaking, *Papers, Please* is particularly interesting as it is available for both PC and iPad, desktop and tablet (Fig. 11). This game all about paper exemplifies Derrida's discussion that,

[t]he page remains a screen [...which] continues, in many ways, and not only metonymically, to govern a large number of surfaces of inscription, even where the body of paper is no longer there in person, so to speak, thus continuing to haunt the computer screen [for] the norms and figures of paper [...] are imposed on the screen⁶⁴.

Where *Papers, Please* as a *desktop* computer game relies upon drag and drop, as a *tablet* game it employs scrolling and swiping.

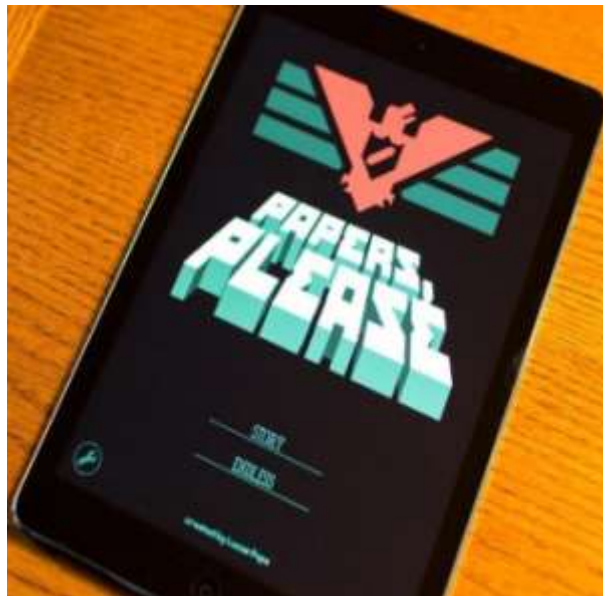


Figure 11. *Papers, Please* for iPad

Our devices are certainly paper machines if we realize how these print metaphors continue to govern digital technology. But the iPad, as a tablet computer, is a bookish device that wants to mine the codex form for innovative avenues out of the book. As a remediator that houses e-books as well as a growing market of desktop computer game ports such as *Papers, Please*, it serves to technologically materialize the *ludex*. So consider how this digital paper machine joins in what Derrida calls “<the paper-form of thinking⁶⁵” to rethink it. He goes on to nickname that paper-form the “<graphosphere> [...which] always implies some kind of surface⁶⁶”. The iPad's touchscreen

⁶⁴ DERRIDA J., *op. cit.*, p. 46.

⁶⁵ *Ibid.*, p. 48.

⁶⁶ *Ibid.*, p. 48.

interface, a newer surface which negotiates the graphosphere's ongoing influence, should make us reconsider that the page was the first touchscreen, and it remains via remediation.

Or perhaps it is metamediation, if we recall the active haptic engagement that *Papers, Please* for the iPad requires. Anastasia Salter predicts that, "[t]he iPad [is] transforming our physical relationship with texts by co-opting many of our expectations of print and integrating them with a range of gesture-driven interactive elements" which replace "point-and-click with touch"⁶⁷. But in many ways that physical transformation is more of a reconnection with the haptic interaction print already required of its readers. The embodied effort that print documents ask of us, the *handling*, plays out across the metamediased surface of the iPad in the mobile version of *Papers, Please*. For it is considerably harder than its desktop counterpart due to its mechanics of swiping rather than drag-and-dropping. As human digits meet the digital, players can touch the tension between modes of metamediation – print, digital, and digital representation of print – and feel the different affective registers which clash upon the layering of contradictory haptics. The print metaphors which govern digital technologies such as iPads or related tablets and the print mechanics which undergird lexicographical games such as *Papers, Please* do so even when haptic expectations differ, and most importantly, when haptic engagements are elided for neither platform will ever replicate the tactile quality of paper. For media often present touchable objects, in this case books as narrative objects, but cannot translate the initial sense of touch across hardwares. The *ludex* is not the codex.

Between Paper-Work and Networks

So what does this development mean for human subjectivity, if that subjectivity is still interlinked with print even as digital technology dressed in print takes over? It means a certain abstraction of sense of self just as the *ludex* represents the digital abstraction of print. As reader-players attempt to grasp the slippery tactility of print forms spliced through digital formats, then they feel with it human subjectivity splinter into haptic subjectivities. This pluralization into subjectivities, I would argue, begins with what Serge Bouchardon calls gestural manipulation, or the potential of touch to be its own form of meaning making in digital textuality⁶⁸. But manipulation is never simply a one way relationship that users control. Diogo Marques suggests for what I call haptic subjectivities that they are borne out of a blurring of interfaces, both screen and skin "by

⁶⁷ SALTER A., "Convergent Devices, Dissonant Genres: tracking the <future> of electronic literature on the iPad", *Electronic Book Review*, 1st January 2015, <<http://www.electronicbookreview.com/thread/electropoetics/convergent>>.

⁶⁸ BOUCHARDON S., «Figures of gestural manipulation in digital fictions», Bell, A., Ensslin, A., and Rustad, H. K. (dir.), *Analyzing Digital Fiction*, London, Routledge, 2014, p. 159.

means of [...] <machimanipulation,> a manipulation shared by both human and machine⁶⁹". Through metamedial features that highlight the ways in which "digital touch and gestures are becoming[...]indistinguishable from actual touch and gestures," Marques remarks that "digital literary works are questioning the device, perhaps like never before, in order to consider the bigger apparatuses enclosed between us and the machine – including language⁷⁰". Let's take up our language(s) and talk about that.

It is computational language that comprises this apparatus between human and machine and undergirds the true textuality of the *ludex* below the surface of lexigraphical games. After all, there is not a single scratch of handwriting in *Gone Home* that was not typed into code. As much as the game conveys an intimacy of inner lives through the handwritten, it actually operates upon semiotics of simulation which, as Martin Heidegger mourns of the typewriter before the computer keyboard, "tear [...] writing from the essential realm of the hand, i.e., the realm of the word. The word itself turns into something <typed⁷¹>". What Heidegger derides as "mechanical writing" is ironically what makes *Gone Home* possible: a computer game borne out of computer code, no matter how much it thematically espouses human character conveyed through handwriting, in rendered reality "conceals the handwriting and thereby the character⁷²". What the game performs then in this ontological contradiction is a metamedial commentary on the shifting register of subjectivity caught between <knowing> who we were and not yet knowing what we will become. As humans attempt to touch what they are losing touch with, then haptic subjectivities are enfolded within the leaves of the *ludex*. And as for *Papers, Please*, its observation of human subjectivity meets haptic subjectivities where players confront that its lives of paper are actually pixels. Gitelman states, "Digital documents [...] are materially, bibliographically the same as the windows that they appear in and the programs that manipulate them, so that any distinctiveness of a document as a physical form fades away⁷³". Therefore, it is our gestural manipulation of the passport books and reading of their semiotic units that frames their <physicality> and makes them distinct in this sense, but only metaphorically. Playing *Papers, Please* only grasps a softening distinction between borders of print and digital as contested as those between Arstotska and its neighboring countries. And such

⁶⁹ MARQUES D., "Through the Touching Glass: literature for haptic inter[(surf)aces]", *Poétiques et Esthétiques Numériques Tactiles: littérature et arts*, n° 8, 2016, <<http://nt2.uqam.ca/en/cahiers-virtuels/article/through-touching-glass-literature-haptic-intersurfaces>>.

⁷⁰ *Ibid.*

⁷¹ HEIDEGGER M., *Parmenides*, Bloomington, Indiana University Press, 1992, p. 80.

⁷² *Ibid.*, p. 81.

⁷³ GITELMAN L., *op. cit.*, p. 17.

effects leave us echoing for the *ludex* Gitelman's question, "[w]hat is digital thingness, after all⁷⁴". What then are haptic subjectivities?

Importantly for this article's focus on *Gone Home* and *Papers, Please*, we could answer that haptic subjectivities are the more ontologically precarious situations humans now inhabit. For both games dedicate overdue attention to othered bodies: the queer and the "paperless." Essential to each game's nostalgia for more paper-ful, less bookish times gone by is a confrontation with the dark sides of those looks back. Sam runs away from home very likely because of the much less accepting and affirming political era of the nineties for queer identities (not that we are doing miraculously much better by now), and entrants into *Arstotska* perform the fears of the Cold War eighties (which still creep up today in different forms). As these games focus on the othered, the playability-as-readability of their ludices opens people up to the ways in which they too feel othered from confidence of subjectivity. Haptic subjectivities arise as the way we read changes with the way we touch, as reading intersects playing, and as we start to question if reading as a way of understanding oneself can outlast print. Without a graphosphere to situate us upon surfaces, or print culture to orient us within inscriptions, then where do we go from here and how do we – why do we want to – take print with us? When print and paper form as representational technology gets a digital remove, then what is represented does too: ourselves.

As we wrap our heads around what is next (or perhaps already on its way out) then we may trace a growing (unsustainably spreading) interest in networks. And hot on the heels of that rapidly shifting notion is what many, myself included, have called network culture. Network culture too is rapidly shifting as it continually updates the technological substrates it spreads across as we seek out, always just behind, a surface for understanding it. Books, bookish, and book-adjacent objects in this case allow us to situate ourselves within the realm of change as pages are subsumed by screens. Therefore lexigraphical games serve as lynchpins between print and network culture. And our haptic subjectivities are likewise somewhat girded by these metaphorical surfaces for grasping embodiment.

For digital networks are now concepts too big to conceive of or define concretely. Patrick Jagoda proposes *Network Aesthetics* to help us contend with the entangled avenues across which "networks, a limit concept of the historical present, are accessible only at the edge of our sensibilities [and therefore] exceed rational description or mapping⁷⁵". He cautions us against the rhetoric of data visualizations that might sometimes "suggest a fixed form" for networks, which are

⁷⁴ *Ibid.*, p. 4.

⁷⁵ JAGODA P., *Network Aesthetics*, Chicago, University of Chicago Press, 2016, p. 3.

more factually “never a static structure⁷⁶”. Unlike the inscriptions enmeshed with the metamediation of the *ludex* then, networks distend more than extend across ephemerally formless expansions which compromise fixed understandings before they can ever describe how networks work (Fig. 12). One of our best ways of understanding networks and our subjectivities within them then is through strategies that imagine their implications. These strategies resemble what Jagoda calls network aesthetics, “to defamiliarize and make networks sensible⁷⁷”. *Gone Home* and *Papers, Please* enact their ludices as distributed wholes rather than bound objects in order to perhaps approach digital networks through the analogue. As a house full of paper memorabilia means Greenbriar and a desk of government approved documents means Arstotska, these synecdoches nevertheless suggest how “networks raise many problems for aesthetic encounter. How, we might ask, can one see, sense, or perceive anything when everything is interconnected⁷⁸?”.

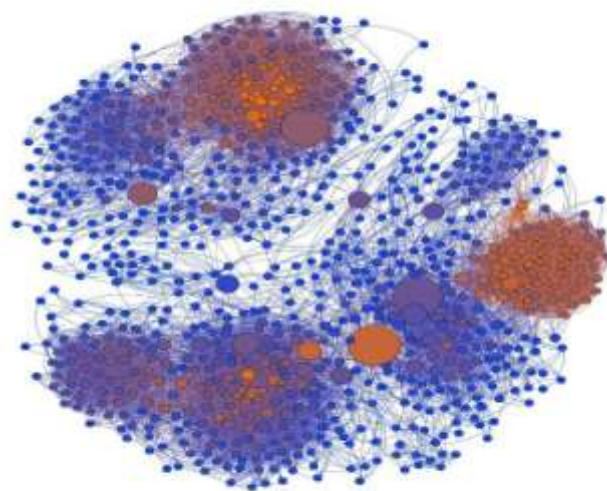


Figure 12. Data visualization which “explains” a network structure (*InterWorks*)

What Gitelman calls in print “an embarrassment of material forms⁷⁹” becomes in the digital print tension of lexigraphical games an entanglement of metamedial frames. Metamedial frames, or the ways in which the print forms of digital games blur into one another, have serious implications for the haptic subjectivities that the aesthetics of the *ludex* explore. Regarding similar aesthetic

⁷⁶ *Ibid.*, p. 8.

⁷⁷ *Ibid.*, p. 5.

⁷⁸ *Ibid.*, p. 19.

⁷⁹ GITELMAN L., *op. cit.*, p. 6.

tensions, consider David Johnston's thesis of *Aesthetic Animism*: "the digital form operates as a container for aspects of a networked self that can only be acquired there⁸⁰". The *ludex* and its lexicographical games then are perhaps the best ways to play with discovering what that networked self is, caught between paper-work and networks.

What lexicographical games notate is that *we* comprise this networked self even as we may anxiously long for the surer selfhood of the graphosphere's surfaces. For though the *ludex* is clearly not the codex, it still branches out its leaves into digital terrain to claim that haptic subjectivities may yet still need paper at least as a metaphorical graph. The book is not dead, and the *ludex* is not killing it. Yet when seemingly amorphous and immaterial structures threaten to make everyone "all, already, <paperless> people⁸¹", no wonder they cling to print metaphors well past their ability to suffice. Bookish digital games, lexicographical games, and games that function via the *ludex* show that the way we read and play or play-as-read – thus how we conceive of ourselves as representationally, performatively human – is changing with the way we touch. Our paper machines and the digital games we play on them present a compromised bookishness of identity built into their narrative haptics. And these narrative haptics clash with the networks that encompass them to produce not just a newly realized human subjectivity, but haptic subjectivities. The *ludex* intervenes by offering audiences a transitional talisman from page to far beyond the screen.

Conclusion

The transition from codex to *ludex* may one day soon entail a further move away from books and/or bookishness altogether. Perhaps whoever is always killing the book will finally get it once and for all. But predicting any number of futures is always slippery, dangerous work, and not really what my proposal of the *ludex* is about. I have intended with this article rather to get a better grasp of our present precarity and its past inflections, to see what is happening to print and how digital forms cannot seem to shake their forebears. To echo Harpold, we need to go back to see what we missed the first time to better grasp what is going on⁸². Here is what we missed: I have been guilty of using the phrase "print culture" in this article for ease of reference – but Gitelman insists controversially that there is no such thing as print culture, that we cannot just correlate the intricacies of the social to the affordances of the medial⁸³. To contradict myself and contain

⁸⁰ JOHNSTON D. J., *Aesthetic Animism: digital poetry's ontological implications*, Cambridge, MIT Press, 2016, p. 2.

⁸¹ DERRIDA J., *op. cit.*, p. 61.

⁸² HARPOLD T., *op. cit.*, p. 2-3.

⁸³ GITELMAN L., *op. cit.*, p. 7.

multitudes, I would *predict* that we will say the same of network culture soon (in fact, Latour already has in so many words). And here is what is going on: what I have referred to with vocabulary such as lexigraphical games, haptic subjectivities, metamedial frames, and above all, the *ludex* is what Stewart calls our “Janus-faced cultural moment⁸⁴”. People cannot seem to get enough of print and paper as they ironically do away with many of their uses – then complain when they are gone. If we cannot see in cases such as these that our present resists the future by revisiting the past, then we should start by questioning what I have started to here: why *Gone Home* and *Papers, Please* are set in 1995 and 1982 respectively.

As humanity has been interlinked with paper as a representational technology, and as paper becomes increasingly subsumed by screens, our human subjectivity is representationally subsumed too. It changes, divides, and extends. Human subjectivity becomes haptic subjectivities as the way we read changes with the way we touch. And the *ludex* helps us question how that way of reading becomes a way of playing. Where the codex becomes ludic, even where the codex no longer contains the play, the *ludex* shows us that games can be bookish too. Gaming and reading meet where lexigraphical games metamedially layer print and digital interfaces. How we understand embodied interaction with all media, print and digital, and how we have the conversations we have about it are shifting, so this article has proposed one way of grasping the complexities. If reader-players turn the page, press the arrow button, and swipe the touchscreen, from codex to *ludex*, they may begin to see the fun in these metamedial commentaries on that very shift. Once readers are ready to play and players are ready to read, then we can most importantly learn to value both codex and *ludex*.

⁸⁴ STEWART G., “Lector/Spector: Borges and the *bibliojet*”, *Variaciones Borges*, vol. 24, October 2007, <<https://www.borges.pitt.edu/sites/default/files/Stewart.pdf>>, p. 185.

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