

Comics on Screen: Pages and Places in the Cloud

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Abstract

Comics has long been a form of sequential art that has evolved alongside the printed page. As the print industry has developed so too have comics. From the black and white strips of newspapers to the colourful serial print comics on high quality paper and longer, stand alone graphic novels produced as independent hardback books. Whilst printing increased in output quality and dissemination so too did comics. In more recent times a similar development can be seen in screen comics. With the wide-spread adoption of computers and the additional impact of the internet screens have moved from the large, low quality home desktop monitor to high definition, portable display devices and screen comics have developed from short black and white web comic strips to full colour digital comics.

As the printed comic has developed along with the printed page so to have digital comics developed with the computer screen.

But if print comics developed with the page and digital comics developed with the screen we must ask ourselves whether screen comics truly have “pages” at all. And if they do, should they? We can begin to answer this question by looking at a combination of interactive media and comics reading theory from a number of key academic figures (McCloud, Cohn, Groensteen, Manovich) and comparing how comics are presented to us in their various print and digital forms. In this paper I discuss the lack of page exclusive elements such as the ability to riffle through or physically flip from one page to the next and the inclusion of interactive screen exclusive navigation and reading methods such as guided views and infinite canvases (McCloud). This will serve to inform a discussion and understanding of the difference between comics on the printed page and in the digital “place” or cloud.

Keywords: Comics, reading, pages, portable display devices, digital comics, screen comics, guided view, infinite canvas, reading raster, flippy-throughiness.

1. The Complexity of Multiple Literacies

Comics is a very complicated form which requires us to participate in, and have knowledge of, a number of different reading skills. We must be able to read not only text and image but also a number of other types of information presented to us in different ways such as comics specific elements like word balloons, panel borders and different types of frames. Most importantly we must be able to swap

back and forth between the different cognitive skills associated with these forms constantly throughout our reading process.

An artefact which asks us to use this combination of different types of reading skills is known as requiring multiple literacies. Multiple literacies are defined by Purcell-Gates as ‘the many and varied ways that people read and write in their lives’¹ and in comics they are used continuously when reading the form. The use of these multiple literacies makes comics reading an advanced and involving process which requires a combination of reading skills. Many comics theorists recognise this to be the case which Lavin sums up nicely when, in reference to Will Eisner and Scott McCloud, he states that ‘both [Eisner and McCloud] suggest that the perception of sequential art requires more complex cognitive skills than the reading of text alone’.²

These multiple literacies are not something I will go into much further at this point but they are worth mentioning to illustrate the huge number of reading processes we go through when we read a comic.

What I will focus on here is the format specific reading processes which are a part of this larger selection of multiple literacies in comics. I will focus on print comics in codex form and compare them with the forms taken by digital comics displayed on screens; drawing important conclusions about the differences and similarities between print and digital comics reading.

2. Reading Rasters and Meta-rastic Indices

Comics require us to perform a complicated reading process in order to understand them as well as a number of different reading tasks as we do so but taking a step away from that for the moment let’s look at not what we read but our actual sequence of reading.

When we read in western culture we tend to read from left to right, top to bottom as shown below (Figure 1). This reading process is what is called the culturally defined reading raster; a set of reading rules that are learnt as the standard method of determining the sequence of the reading in a particular cultural environment.

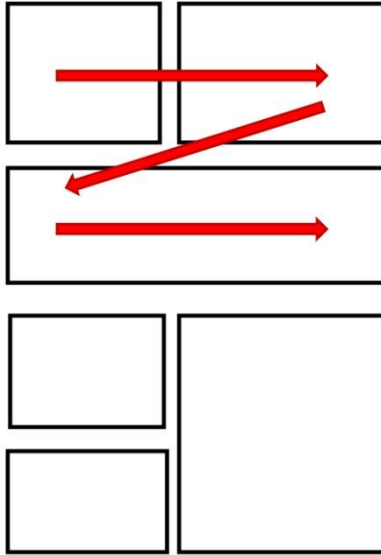


Figure 1

However, comics do not always stick to these culturally defined rasters and often disrupt the reading sequence.

For example, in this sequence when we reach the next row we are required to read down the left two panels before moving on to the right and reading the right hand panel; thus breaking the normal left to right, top to bottom reading raster. The eye movement here is shown by the red arrows in Figure 2 (Below).

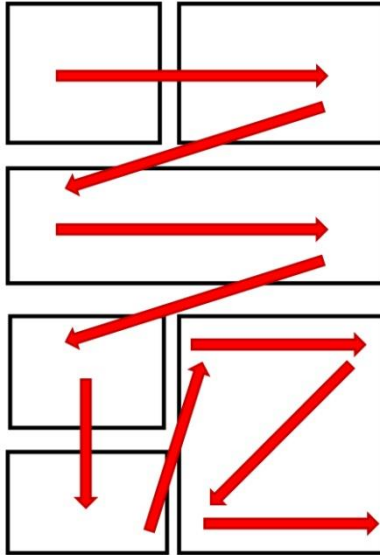


Figure 2

The elements of the comic that instruct us to read the sequence in this way can be referred to as the meta-rastic indices and may be overt or covert in nature. Sometimes these meta-rastic indices are arrows which point out the path of the reading (overt). Other times they might be the content of the panels themselves, or a bridging of the gutter with a word balloon, or a number of other visual indicators.

These meta-rastic indices are very important in leading us through the sequence of the panels and you can read more about them in my paper from a previous edition of this journal.³ What this paper is about is what we do when we reach the end of one of these page sequences.

3. Fitting the Form and the Codex Book

The form that comics take has always been defined by the media of the age and as such the comic book has evolved alongside the media and its production techniques. The first time comics appeared as a form and whether such things as cave painting can be considered comics is a debated point but they can easily be recognised in scrolls that pre-date the birth of the codex book and its multi-leafed form. As the codex book became the dominant form of media comics began to migrate to that state and have developed in this form from basic illustrations to the short strip of newspapers to the comic books and graphic novels we know today.

With the birth and wide adoption of the internet and high quality display devices such as tablets we have seen a shift of media in recent years from a domination of print information in books to a proliferation of information and media becoming available on screens.

Comics are no exception to this shift and are becoming more and more commonly distributed via digital media technologies as the technology develops. As these developments take place a series of new considerations, options, constraints and possibilities are offered by the new medium but to outline what is different when comics are presented to us on the screen we must first look closely at the form of a codex comic book.

In terms of form, codex is the word used to refer to a number of leaves of paper bound together along one side, usually the left in our culture. These leaves are the pages and pages are what gives the codex its unique form and its own set of specific reading processes distinct from other forms such as the scroll which has a singular sheet of rolled canvas.

When we reach the end of the sequence displayed on a page we are required to turn to the next to continue our consumption of the narrative. Doing this is a part of our understanding of the reading process of the codex form and a part of our culturally defined reading raster.

The physical action of turning the page; an act which requires the reader to acknowledge that they have reached the end of the gross sequence on the page and to turn to the next one is an action that can be referred to as redundant or extraneous. This term does not mean that it is an unimportant action but instead that it requires little thought and therefore does not interrupt us from our consumption of the story being told.

As a society we are all familiar with the concept of the book. We know that we read from left to right with the binding on the left, turning the pages as we go. The action of turning the page is so un-intrusive and commonplace to us we rarely consider its meaning when talking about comics but comic books in their codex form are very often written to this turning of the page. By this I mean that the comic uses the page turn as a narrative device for a number of purposes to enhance or control narrative elements.

The page itself can be used as a type of framing device for the panels within it. Referred to as a hyperframe by Groensteen in his book "System of comics"⁴ this page or hyperframe has a relationship to the other panels and hyperframes (pages) surrounding it throughout the book; and with it comes its own set of reading processes. Creators can use the page turn as a way of "holding back" information from the gross sequence of the current hyperframe to build suspense, hide telling information, or remove events from physical proximity for the purposes of narrative effect. It can also add impact or surprise to splash pages or panels in the following hyperframe and even be used to force the reader to pause. Effecting what Paul Atkinson refers to as the "visual rhythms that inform the reading movement".⁵ The visual rhythm is an important part of reading comics and refers to the rate at which we move from panel to panel and the time we spend paused in contemplation of the content.

From the reader's perspective the page turn is more closely related to the artefact itself and offers a number of negotiational benefits with one of the most

important parts of the paged form of the codex being that you can flick through it to find places within the gross sequence with ease. The ability to flick through gives the form a flippy-throughiness that is produced by a combination of the codex's physicality and our own reading memory. So if, for example, we want to find a previous panel or sequence to the one we are reading we can use our memory of where about in the gross sequence that panel occurred coupled with our knowledge of the physicality of the book to flip through and find it.

This is an action that the digital space of the screen and the lack of physicality of the object do not allow for. Some have tried to mimic it but none have found a way that has the same haptic feel.

4. Mimicking Flippy-throughiness

Digital comics platforms have tried to implement a number of different ways to mimic the flippy-throughiness of a codex book's pages. Some, like the very popular Comixology have added extra options such as a "Browse pages" view to show all the pages (hyperframes) side by side on one screen or in a scrollable list. However this has been changed many times since its original conception going from a scroll of thumbnails across the screen to a list view with rows and columns and has taking a number of other forms both within this app and others. The ability to browse pages in this way at any time whilst reading is an attempt to simulate the frippy-throughiness lost by the lack of physical pages but still feels removed from the reading experience and with it requiring the use of menus takes us out of the reading flow in a way that is detrimental and fundamentally different to the flippy-throughiness offered by the codex comic.

It is not only in comics which we notice this loss of flippy-throughiness when changing the physicality of the text. Reading a traditional text based book on the Amazon Kindle demonstrates a number of functions of the form very well.

The kindle offers a number of attempts to simulate elements inherent in the form of the codex books, some of which work quite well whilst other don't.

The visual display of your progress through the book works to give you a constant, un-intrusive sense of how much you have read, how much you have left to read and how quickly you are getting through the text in the same way that the number of pages on either side of the one you are reading do in a physical codex book. It also offers a number of index option and the ability to mark pages but this is still not as easy as using your reading memory to skim back to a section that you have read previously as the lack of physical pages means that whilst moving from one page to the next is easy to do, and quickly becomes a redundant action, flipping back several pages to find or check over a detail or section of text is a very cumbersome act of navigating back one page at a time.

That is not to say that comics are harder to read in the digital form or that they offer less to the reader but instead that they cannot do everything that they can do in the print form. It is important to note that neither is inherently better than the other but rather they must be considered different forms or types of comics.

However, comics in the digital environment of the touch screen can mimic their print counterparts in some ways and in doing so show us which elements of the printed form work well on screens.

One thing that can be retained when transferring print comics into the digital environment is the layout of a page. Tablet screens have a high enough resolution and appropriate dimensions to accurately re present the pages of a comic book, albeit one at a time and not side by side, and allows for the layout of single page spreads to be represented as normal and with very little alteration.

5. The Naviscroll and Other Things That Screens Can Do

As we have established, comics don't have physical pages that you can turn or flick through. That means that an alternative needs to be used. The most commonly used options for mimicking a page turn on a digital touch screen display are either tapping or swiping and these actions can be referred to as the naviscroll.⁶ The naviscroll is similar to the page turn in that, once learned, it requires little cognitive thought and does not break us from the flow of the reading sequence.

The naviscroll is a very important part of our reading process when consuming comics on screen. Be it a swipe which "feels" like turning a page or a tap to continue, it is the redundant action that allows us to experience the comic without noticing the device and this naviscroll action appears throughout digital comics; even those not actively trying to mimic the page turn.

It is important to note that the reason digital environments don't have pages is because their content doesn't take up physical space outside of the two dimensions of what is displayed on the screen. The content of the comic exists in a sort of abstract space in the cloud in a different form to what we see on screen. The content exists only as the rules by which it is made up as outlined by Lev Manovich in his discussion of data storage and algorithms and is a very notable difference from the physical makeup of a print comic where all the content shares a relational space to all the other content at all times.⁷

With the exception of the part we are viewing on the screen at the time, the comic exists in this abstract space as information rather than comic. As such we use the screen as a tool to translate this information into a form we understand (Manovich's Algorithm). We might then consider the screen itself, as McCloud suggests in reinventing comics, as a window through which we view the content of our comic.⁸ Much like looking through a real window as a portal to the outside we can look at the screen as a portal to digital comics.

The printed page has finite space on which to lay out panels in sequence whereas the screen allows for a much more flexible and expansive array of layout options. McCloud refers to one way of doing this as the infinite canvas and talks about the idea that the entire comic can exist as one single spread;⁹ if you like, a holistic map of the narrative or single hyperframe. We then start to think of the screen much more like a window that we look through to see the comic and less as a page more akin to that of the printed book and using the screen as a window

through which we read this infinite canvas offers a very different experience of reading to that of pages.

Digital screens and the nature of cloud storage also allows for a number of interactive and multimedia possibilities in digital comics including sound, motion and ludic elements which can affect the form.

The multimedia nature of the screen offers a huge wealth of things that can be added to the panels of a comic on screen and these have been used to varying degrees of success. A majority of which are experimental web comics available via the internet with some using animation within panels for short looped actions and others using sound and music to set the mood or further enhance onomatopoeia. Others use game elements and branching story paths to enhance the narrative experience. There is plenty that could be discussed about all these different multimedia options and how they affect the comics form in the digital space of the screen but I would like to focus on one particular type of digital comic that has emerged recently.

6. Changeable Content and Guided View Comics

The nature of the screen also allows for changeable content which offers new options to the comic form previously unavailable to the fixed and physical form of print. Changeable content refers to objects or images displayed on the screen which are changed, updated or animated in some way when progressing through the narrative.

For example narrative or speech balloons can appear when the naviscroll is performed allowing for a conversation to happen between characters in a way previously left to large, cumbersome blocks of text or multiple repeated images with varying text elements. A number of other changeable content can also be used such as a character appearing in the scene, the change in cause and effect as an action is being performed or frames and panels may appear in juxtaposition to show the next part of the sequence. Changeable content is something that is being used more commonly in what is generally referred to as guided view comics and has been used by mainstream, larger comics companies such as Marvel and DC for some digital-only comics such as *Guardians of the Galaxy* and *Batman 66*.

This form of comic is a way of using the unfixed nature of the screen to show comics in a different way. It requires us to perform some altered reading tasks such as recognising what has changed but still delivers an experience which is fundamentally comics and allows us as readers to remain in control of the pace at which we absorb the narrative.

These guided view comics and their changeable content demonstrate just some of the possibilities offered to us by the screen that we don't have with the paper pages of the codex book and as we continue to consume more of our media in digital form screen comics become further divergent from the paper pages of their codex parents to develop into a form of comics not reliant on the turn of the page

or the physicality of space but instead adapted to the changeability of the digital display of the screen.

Notes

¹ Purcell-Gates, V. 'Multiple literacies', *Literacy in America: An encyclopedia of history, theory and practice*. (Santa Barbara, CA: ABC CLIO, 2002), 376.

² Lavin, Michael R. 'Comic books and graphic novels for libraries: What to buy', *Serials Review, Volume 24, Issue 2* (Elsevier Inc. 1998), 32.

³ Nichols, Jayms Clifford. 'Comics on Screen: Reading, Comics and Screens', *Cultural Excavation and Formal Expression in the Graphic Novel*. (Oxford, UK: Inter-Disciplinary Press), 303-312.

⁴ Groensteen, Thierry. *The Systems of Comics*. Translated by Bart Beaty, and Nick Nguyen. (Jackson: University Press of Mississippi, 2009).

⁵ Atkinson, Paul. 'Why pause?: The fine line between reading and contemplation', *Studies in comics volume 3 Issue 1*. (Bristol, UK: Intellect Ltd. 2012),

⁶ Nichols. *Comics on Screen: Reading, Comics and Screens*, 308-310.

⁷ Manovich, Lev. *The Language of New Media*. (Cambridge: MIT Press, 2001)

⁸ Scott McCloud, *Reinventing Comics: How Imagination and Technology are Revolutionizing an Art Form* (New York: HarperPerennial, 2000), 222.

⁹ McCloud, *Reinventing Comics*, 222.

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