Dennis Kogel
Digital Culture
Department of Art and Culture Studies
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Rethinking Webcomics: Webcomics as a Screen Based Medium

JYVÄSKYLÄN YLIOPISTO

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JYVÄSKYLÄN YLIOPISTO

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1. Introduction

Despite the growing popularity of online comics or webcomics, there seems to be a surprising lack of response from both comics scholars and Internet researchers as to *what* webcomics are. Some attempts at theorizing webcomics, mostly connecting webcomics with popular ideologies, have been made, but so far, no known scholar has made a serious effort to analyze webcomics as a system of meaning-making in the same way that comics have been analyzed by theorists such as Will Eisner, Scott McCloud or Thierry Groensteen. Even in works meant to serve as an entry point to current comics studies such as *A Comics Studies Reader*, webcomics exist only as a footnote pointing to the beginnings of "informed criticism" (Heer & Worcester (eds.), xiii) without referencing the informed critics. I would like to contribute to this barely existing discussion and suggest ways of how to rethink webcomics as a screen based medium built upon a foundation of visual storytelling shared by all comics.

In this thesis I understand webcomics mostly as they are defined by Marianne Hicks as "comics produced primarily for the web rather than for print" and "made by an independent creator or creators, without an original 'print version' or corporate sponsorship" (Hicks, 11.3). I would, however, somewhat open the definition up for the purpose of this thesis. First, when discussing webcomics I do not mean digitized print comic books sold through channels like the digital distributor Comixology. However, I acknowledge that some comics that are being published online are not primarily produced for the web, but are being published both as a free online edition and a print book. I would omit the presence or lack of corporate sponsorship as an identifier of what a webcomic is as I see no reason why a mainstream publisher could not publish a webcomic, and like *FreakAngels* (Warren & Duffield), published by Avatar Press, shows it is certainly possible. The question that remains to be answered by this definition is if there are some qualities beyond being published online that defines webcomics and it is a question that I would like to try and answer.

The aim of this thesis is not to discuss the ideologies or ethics of webcomic creators, but to show what makes webcomics unique as parts of the wider comics field. For this I will first review the present literature, drawing attention to contributions that might help conceptualizing webcomics. Most important for that are articles by Fenty et al. and Marianne Hicks who view webcomics as representations of hacker culture and participatory culture, respectively, as well as the deep literary analysis of the webcomic *The Order of the Stick* by Rodriguez.

Webcomics present a unique research field because they are both influenced by the language and history of comics and the web. To address this, I will analyze a limited set of webcomics using both theories of comics studies and screen-based media. Most notably I will employ Thierry Groensteen's seminal work *System of Comics* and his theories on the rhythm of comics as well as Joseph Witek's *Comic Books As History* in which he discusses the somewhat broader properties of the medium and the differences between different types of comics, like comic books and comic strips. From the screen-based medium side of the theory, I will mostly use N. Katherine Hayles theory of "editions" to examine the differences between webcomic online and print editions in order to better understand how the web influences the comic.

Using Hayles framework of media specific analysis I will then analyze a set of webcomics, selected due to their use of certain techniques representative of broader movements in webcomics. With the analysis of the humorous comic strips *A Softer World*, *Dinosaur Comics* and *AmazingSuperPowers* I would like to show that webcomics need to be understood as comics on a surface level, but also as image files on a coded level. These comics create their punchlines not only in their panels, but also in their image code, through alternative text and hyperlinks to additional content.

Because unlike comic books (perhaps with the exception of superhero comics), most webcomics tend to be published for a very long time, I will examine the comics *Questionable Content* (Jacques), *The Order of the Stick* (Burlew), and, to a limited degree, *Ctrl-Alt-Del* (Buckley) to illustrate how webcomics change over time and how that influences how they are made and perceived. I will look at how webcomics can be fit into the history of comics by utilizing Bolter and Grusin's concept of remediation and Witek's traits of comic books and comic strips. In my analysis of long form, comic book style webcomics like *FreakAngels* and *The Order of the Stick* I will show how the web shapes longer narratives and makes it harder for authors to create works that are not self-contained comic strips. Finally, I will examine a number of avant-garde webcomics that could very well be what McCloud has considered the "future" of comics. I hope to show, however, that comics like Daniel Lieske's *Wormworld Saga* or Emily Carroll's horror comics are not the way that comics will look like in future, but one new possibility how comics can be created, that would be unavailable if it were not for the possibilities and the constraints of the web

2. Theoretical approaches

In the following chapter I will introduce several works and articles dealing with webcomics. I will use these articles to show that so far webcomics have seldom been studied in terms of form and features and have rather been used to tie them to certain ideologies and discourses. This chapter will thus serve as a starting point, establishing the areas of webcomic studies that have been explored and to provide a theoretical starting point to examine other aspects of webcomics. I will introduce the works of Hayles and Groensteen and suggest how to use their theories to rethink webcomics as an extension of the language system of comics.

2.1 Webcomics as reinvention

As with the study of comics, the most often cited name in webcomics research is Scott McCloud, who has written non-academic works on the subject of form and content of comics from a practitioner's perspective. In his landmark work *Understanding Comics* McCloud proposes a (not entirely undisputed) definition of comics as "juxtaposed pictorial and other images in deliberate sequence, intended to convey information and/or to produce an aesthetic response in the viewer" (7-9) and examines some of the unique properties of the comic form. The following book Reinventing Comics (2000) however is far less theoretical, and (despite the bold title) deals with comics' perception by the public, creator's rights, the publishing industry and the history of digital culture. McCloud illustrates 12 "revolutions" that could change the field of comics: According to McCloud, comics have to evolve into a literary medium by broadening its artistic approaches, themes and stories, and thus evolve as an art form; the industry should adapt to a shifting economic climate and give more rights to authors; to further strengthen the value of comics in society, they have to be established as a valid field for research and education; in addition, comics culture and the publishing industry need to be more open to allow gender balance and minority representation; and finally, all these steps should push the comics medium further and thus make them appeal to a broader audience.

McCloud's ideas were hardly revolutionary when *Reinventing Comics* was published in 2000 – and, in fact, despite the book's bold title McCloud never claimed that his ideas were revolutionary, simply that there are changes needed in the comics publishing industry in order to "reinvent" comics as a more respected form of communication. Arguably, many of the revolutions McCloud deemed necessary have been successful to some extent, while other

areas are still lacking. The later chapters then deal with the emergence of digital culture and the role the internet might play in the further development of comics. This second part of *Reinventing Comics* is heavily influenced by the zeitigeist of equal parts amazement and horror of the rise of the Web as a site for e-commerce and business, as well as an admiration of the thinkers, philosophers and scientists that have made these developments possible in the first place. It is a book predating the dot-com bubble burst and is understandably influenced by this lack of knowledge. For this, McCloud has been heavily criticized for the supposed closeness of his views to corporate agendas:

[McCloud allowed] himself to become a spokesman for the same point of view shared by corporations, Western governments, and numerous high-profile media hustlers while masquerading as an outspoken radical bucking the system. (Groth)

It is evident that criticism against *Reinventing Comics* concerned itself more with ideologies of the dot-com-bubble and with the economics of the publishing industry – and not with McCloud's relatively short ideas on the aesthetics, the possibilities and the future of digital comics.

It is therefore quite surprising that what eventually remained of McCloud's *Reinventing Comics* in comics discourse today, are not his views on the publishing industry, but his ideas on the so called "Infinite Canvas" (200). One idea of how comics could be "reinvented" was the use of a web page layout for comics that would allow readers to scroll vertically or horizontally to read through a comic, thus moving comics closer to ancient forms of pictorial storytelling such as Egyptian scrolls. While certainly a powerful idea and a storytelling technique worthy of exploration, this is not the only thing McCloud argues for in the last pages of *Reinventing Comics*. He does not promote the use of the web-page-scroll-comic as the be all end all approach to comic storytelling, but argues for the re-examination of the book as an artificial limit to the way stories (in comics and other printed works) are told. Instead of endlessly flowing downwards, a comic could have many forms differing from the rectangular book form all affecting the reader in some ways.

In a way, *Reinventing Comics* is a very odd choice for an academic examination of webcomics as it deals primarily with the publishing industry and comics culture. But McCloud does touch upon two other different concepts that are useful for this study of webcomics: Digital Production and Digital Delivery. In a chapter on digital production, McCloud writes about the growing dominance of digital tools to create comics and their influence on aesthetics and narratives of comics. Here, he stresses the influence of technological restraints and possibilities on comics:

Thus, the first digitally-produced comics in the mid-80s were necessarily raw and required enormous investments of time and expense. Later, more elaborate digital comics art often allied itself with safe familiar genres. As the technology has matured, a few have used computers in the service of a distinctly natural media sensibility. And a few, very few, have put the most exotic aspects of computer generated imagery front and center in hopes of presenting something unmistakably new. (McCloud 140)

This shows that in the early days of digital comics, authors were concerned with testing the limits of the medium. Digital comics went through a period where the tools, the forms, the limitations had to be understood and mastered. Later, McCloud also points toward the exploration of digital tools and their effects on aesthetics:

Seasoned professionals can often spot "newbies" by their tendency to overdo it; using multiple effects filters on a single image for example. Most learn what "works" and what doesn't "work" in due time and gradually back away from this vortex of bad art. But I think that the artists willing to go through that vortex to the other side will learn far more than their more cautious peers. This means temporarily suspending judgment and asking not whether a given visual effect "works" – but whether the narrative effect is an interesting one, and how comics might put it to use. (McCloud 146)

Although comics are now mostly created with digital tools (McCloud 2000, *Reinventing Comics* 140) there is little exploration, academic or artistic, on thaeir effect on comics. Some later academic articles on webcomics use this point to argue that webcomics are often using imagery and aesthetics connected to the web and digital culture, such as video games. Considering the amount of fairly traditional webcomics that have little to no connection to video games, web culture or technology, this seems unlikely as a defining factor for webcomics. Besides influencing aesthetics, digital production, could lower the price of entry into the production of comics. Without the need to buy expensive artist supply, nearly everybody could, in theory, start making comics which would allow for the emergence of new writers with new ideas on how to further develop the medium of comics.

In his chapter on Digital Delivery McCloud attempts an early but interesting definition of webcomics as "comics that travel as pure information" (162) and points towards an interesting debate over the intrinsic qualities of comics on the web and in print, which he sees as more practical at the time of writing. Although print comics are not inherently "better", they are honed and better received through years of appreciation (178).

Reinventing Comics shows McCloud from a very industry- and artist-centric perspective, but that is not to say that his insights here are without value for this academic study. On the contrary, several interesting ideas emerge from Reinventing Comics once the work is not simply reduced to the Infinite Canvas or McCloud's supposed corporate agendas. Even though most webcomics still use a very traditional panel and page layout, unique ways to tell stories through the possibilities of the web have emerged. Their effects and aesthetics will be explored further in this thesis.

Equally, one cannot stress the importance of the book as a limit of how stories are told and organized. But if the web is not subject to the same limits as a printed work, what other limits are there and what are their effects? How do such simple restraints such as page load times change the ways webcomics are written? McCloud touches upon concepts that N. Katherine Hayles expands in her article "Translating Media" in which she proposes to see individual versions of works as editions, all possessing some qualities that influence the perception of the work itself. McClouds *Reinventing Comics* might not explain how digital comics or webcomics are revolutionizing or "reinventing" the comics field, but it gives interesting starting points that have seldom been picked up again as of the time of writing.

2.2 Webcomics as counterculture

One of the earliest academic articles on webcomics not directly related to a critique of McCloud's *Reinventing Comics* is Fenty, Houp and Taylor's comparison of webcomics to 1960s underground comics in "The Influence and Continuation of the Comix Revolution":

Webcomic artists are working within the spirit of the Underground movement as reflected in their subversion of comic book conventions and their freedom of expression in content and form.

The authors argue that webcomics can and need to be examined as a modern variant of "comix", the underground and alternative comics culture of the 1960s. Comix dealt with "politics, sex, and drugs" (Fenty et al.), employed distinctive and disturbing aesthetics and allowed voices not previously heard in broader comics culture to speak up. According to Fenty et al., webcomics follow the paths of "Underground artists", deal with non-mainstream issues and are embedded in hacker- and Open Source culture. Additionally the authors attempt a more complex yet "loose" definition of webcomics, not as "comics as pure information" (McCloud, *Reinventing Comics* 162), but as:

Comics that are made first for the web, made by an independent creator, who may be working with others, but who all have no originary print version and no corporate sponsorship [and are] unfettered by the rules of syndication and sponsorship.

I find this definition highly problematic as it collates several aspects into one, namely: the production and economy of webcomics; a loose idea of independence; a separation from print and complete creative freedom. While certainly in the "spirit" of Underground Comix this definition tells little about the contents, about the aesthetics, the restraints and formal aspects of webcomics. Because "The Influence and Continuation of the Comix Revolution" is still an often cited work in the study of webcomics, I will now address the arguments made by its authors.

For Fenty et al., webcomics represent a possibility for newfound creative freedom "to release comics that the mainstream industry and audience would reject." Aside from the vague notion of a mainstream comics audience, I have to agree here, if only partially. In his 2001 critique of McCloud's Reinventing Comics "Tape This to Your Cubicle Wall" Charles Brownstein gives numerous examples of webcomics that are using the unique properties of the Web and the browser to create compelling works which would be difficult to publish in printed form due to their size or the type of media they employ. Fenty et al. however only hint at the existence of such comics and focus on the editorial freedom of webcomic authors instead of their formal freedom. The authors cite comics with fairly traditional comic strip layout and aesthetics, but "geek" or niche subjects such as video games, computer science or office culture which do not "appease a mainstream audience". I would argue that these subjects can be discussed as easily in comics as in webcomics, while debating the "nicheness" of themes such as gaming compared to "print subjects" such as, for example, the Holocaust in Spiegelmann's Maus, McCloud's comics theory or Iranian politics in Marjane Satrapi's Persepolis seems to end in pointless semantics. This definition leaves the question whether editorial freedom really differentiates webcomics so much from print comics? If it does, the effects of "missing" editors and publishers can be found in theories of blogs that are adapting a (self-) publishing model similar to webcomics.

Besides the tradition of Underground Comix, Fenty et al. identify the Copyleft¹and Open Source issues as a driving force behind webcomics: "[Webcomics] present the hacker movement, which argues for "Open Source" and conscientious coding." Because webcomics are also using elements of webpages or blogs, Fenty et al. argue, they can be used effectively to "discuss these ethical concerns with those aware, and those unaware, of issues like Open Source and Copyleft." But despite the popularity of webcomics that are aligned with Open Source movements such as the irreverent *xkcd* written by ex-NASA employee Randall Munroe or *User Friendly* which has been published in printed form by the O'Reilly Press, which supports these movements, I find it hard to see webcomics as a whole being influenced by Open Source movements. While many cartoonists (as well as many other computer users) are using open source software, only a small part of webcomics deals with issues such as Copyleft and hacker ethics. In the same vein, Fenty et al. argue that webcomics "present alternate portrayals of women in comics and videogames" and are "feminist" in nature.

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¹ In contrast to the concept of copyright that is used to restrict what users can do with works of software, art, literature etc., Copyleft refers to the practice of giving users rights to modify, reproduce and distribute certain works under a copyleft license. Known copyleft licenses include GNU General Public License and Creative Commons.

Although this is an important point that harks back to one of the "revolutions" McCloud is partial to in *Reinventing Comics*, it can be – given the right examples –argued that webcomics are misogynist, androcentric and homophobic instead.

With this Fenty et al. try to construct a webcomics subculture, which I find deeply problematic, as such a view tends to render invisible outlying works not fitting the proposed subculture. This view might fit a (more or less) closed group or collective of artists such as in the case of Underground Comix, but it proves almost useless when discussing webcomics as a whole. I would argue instead that there exist many webcomic subcultures, or rather, subcultures in which webcomics are made public (such as gaming or arts and craft) and that these subcultures are not necessarily interconnected via Open Source- and Copyleft-ideologies. Thus, defining webcomics through the one theme that is explored in some popular works seems unlikely to yield useful results.

The definition of webcomics as "comics independently made for the web without originary print version and without corporate sponsorship" given by Fenty et al. mirrors these viewpoints and presents a definition that, while useful for many comics, is too vague and too ideologically loaded, to be of use in defining something as fluid and diverse as webcomics. According to the authors webcomic artists can "express their beliefs and tell stories without censorship and without a specific marketing goal in mind," and while certainly applicable to many webcomics, there are enough examples of self-censorship in the field to appease the readership (Hicks 11.7). The lack of a marketing goal is a difficult qualifier as well, because many webcomic authors try to market their own comic to secure a modest income from advertising on their website and their own merchandise products. The lack of a corporate sponsorship meanwhile would disqualify comics that are published online but supported by a publisher, such as Warren Ellis and Paul Duffield's *FreakAngels*, which, incidentally, did have no ideological ties to Open Source or Copyleft.

While problematic "The Influence and Continuation of the Comix Revolution" shows that the seemingly simple question of what webcomics are has not been answered so far. The tentative proposal of webcomics as Open-Source-aligned comics on the web following the paths laid out by artists of the Underground Comix movement is certainly more workable than the simple "comics on the web", but focuses too much on popular genres, subcultures or single works to be usable. Rightly, Fenty et al. note that the space webcomics operate in "is not ideal" but "limited by computer technology, including screen sizes, pixel depth, and download times on the web", but I would disagree that these constraints "equal to those seen by Underground Comix, in terms of page layout and feasible page sizes" and rather propose

to see these constraints as individual limits each possessing certain traits that influence the creation of a webcomic.

It seems to me that in order to properly analyze and describe webcomics one must move away from the content of webcomics, separate them (as best as possible) from ideologies of movements such as Open Source or Underground Comix and instead see them as a screen-based medium sharing many common principles with comics but expanding upon those principles using the systems of the Web.

2.3. Webcomics as part of participatory culture

Influenced by Fenty et al. as well as Henry Jenkin's theories of convergence culture, Marinanne Hicks makes a case for webcomics as a product of the social web in her 2009 article "'The Futar': The Power of the Webcomic and the Potential of Web 2.0". Hicks broadly structures her essay into an introduction to convergence culture, a new attempt at defining webcomics which she then follows up with chapters on participatory culture, ideology and activism.

Hicks mostly follows the definition given by Fenty et al. and suggests that webcomics are "comics produced primarily for the web rather than for print, [...] made by an independent creator or creators, without an original 'print' version or corporate sponsorship" and "can encompass everything from stick figures to complex graphic novels." (11.3) Additionally webcomics are seen not as one genre, community or subculture but based in "social divisions" and the "digital divide", meaning that when webcomics are discussed only a small subset – that is, webcomics created by North American artists – of the available works are studied and used to define webcomics.

Although similar to the definition by Fenty et al. Hicks' definition shows small, but important differences. Hicks sees webcomics as made "primarily" for the web, thus asserting that webcomics remain webcomics even in printed form and, in fact, can be created for both print and web without compromising their "webcomic-ness." Still, the corporate sponsorship remains ideologically loaded as numerous comics on the Web created with corporate sponsorship exist. I fail to see how (corporate) money and possible editorial oversight (or even outright censorship) would transform a webcomic into a non-webcomic on the Web. Hicks' remark about the digital divide operating in the webcomics field on the other hand seems important for me. Looking at the study of Fenty et al. one can easily see that the works cited are primarily made by North American artists, despite the existence of numerous

webcomics in any language that might challenge the idea of webcomics as Underground Comix.² This means that any discussion that focusses on webcomics based on their content, popular formats or ideologies such as Hicks' very own webcomics-as-Web 2.0-discourse, is bound to ignore works that might directly contradict those assumptions. This bias is a concern in this thesis as well, but it is one I would like to work around as best as possible by concentrating on various techniques and possibilities of creating webcomics that are not bound to genre, language or subculture.

Through the promise of interactivity, reader-involvement and open dialogue, Hicks sees a way to diversify the audience and the creators of comics, thereby fulfilling one of McCloud's "revolutions" that the greater comics field needs to undergo:

The place of the webcomic is firmly within the realm of Web 2.0 ideology. The webcomic, unlike the notoriously male, middle class and white world of comic books, has the potential for greater involvement by people who are not 'mainstream', and the gender balance is slowly being rectified, especially amongst the readership. Nonetheless, the producers of webcomics are still predominantly white, middle class men, as the 'digital divide' in terms of 'race', class, religion and socio-economic status continues. Moreover, the medium is populated mostly by North Americans. Of those who are successful enough to support themselves from their work, only one lives outside of North America. (11.3)

Although I agree with Hicks about the importance of a diverse field of creators and readers engaging in open dialogue about subjects other than superheroes and mutants, I am not sure whether the qualitative study of several popular webcomics can prove or disprove that webcomics in fact foster such a dialogue and whether the comics field has diversified because of it. The possibility for diversification through webcomics is certainly existent (as is the *possibility* for diversification through traditional publishers), but so far there is little data showing the field has diversified. As for the activism aspect of Web 2.0 and webcomics, Hicks cites the successful charity organization *Child's Play* that gives video games and toys to children's wards of hospital and was initially organized by the creators of the gaming webcomic *Penny Arcade* (1998-). While certainly impressive, it is the only charity known to me that has originated from a webcomic and direct calls to action seem to occur fairly seldom in the webcomics field – in fact, I would rather say that *Child's Play* originated in the broader gaming community rather than any one webcomic community. Thus I would argue that webcomics are not inherently a medium that is used for activism.

According to Hicks the study of webcomics is useful "because of their independence" and their freedom from "marketing or PR personnel" (11.4), but at the same time Hicks

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² One such example is the German webcomic scene in which the most popular comics are called "comic blogs" and consist of diary style daily strips. As a genre, the comic diary is popular in other webcomic communities as well, but is not seen as the dominant or defining aspect of webcomics.

asserts that while readers only seldom have direct influence on the content and form of a webcomic "merchandising seems, on occasion, to be directed by the often capricious requests of the fan base" (11.5), which, to some extent, can be used against the argument of complete creative freedom. If the producing and selling of, for example, wacky t-shirts pays an artist's living expenses, then of course this must in some form be reflected in the way the comic is written³, drawn and presented. More importantly, Hicks argues that despite the possibility for creative freedom, many artists engage in "self-censorship" (11.7) to not alienate their audience through non-liberal political views and the like. It seems to me that although webcomics do offer the possibility for creative freedom and greater diversity, it is difficult to deal in absolutes when discussing a multi-faceted field such as webcomics. Some communities might be diverse, feminist and welcoming, others might be anything but. Hicks has written a balanced study and it makes a compelling case for webcomics as part of the broader Web 2.0 discourse. Despite the adaption of social web technologies such as Twitter and Web 2.0 ideologies by many webcomic artists, I am not entirely convinced that the defining trait of webcomics is their attachment to the social web. Nonetheless, Hicks demonstrates that webcomics can be more complex and varied than "just" being comics on the Web. Her article shows that despite the freedom to create comics without editorial- and marketing oversight, pressure to adapt, change and market a webcomic still exist even without publisher. But freedom, it seems, is hardly the defining trait of webcomics.

2.4 Webcomics as microserialized fiction

In his yet unpublished doctoral thesis, Gabriel E. Rodriguez proposes the study of webcomics as works of microserialized fiction in the tradition serialized fiction such as Victorian novels or TV series. According to Rodriguez "this microserialization foregrounds the narrative construction of webcomics, which allows for the continuous study of authorial intention and the influences of a highly participatory reading community on the work" (1). This, to me, seems like an interesting approach to the study of webcomics and their narratives. For Rodriguez, serialization changes the very concept of narrative:

Serial fiction writers face the problem of providing enough significance in one installment while leaving the reader interested in reading the next one. Webcomic cartoonists have one narrative strategy available to them that can help solve this problem. They can end each issue

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³Penny Arcade caused a media outrage when the creators of the comic tried to produce a t-shirt (based on a comic strip) that, according to feminist criticism, perpetuated rape culture. The creators defended themselves against these claims, demonstrating that t-shirts and popular demand are more important than hurt sensibilities (Alexander 2011).

on a cliffhanger, wherein a character encounters a suspenseful situation with the resolution being deliberately absent until the next installment. However, in a microserialized work this framing device can lose its effect rather quickly and make readers lose interest. (90)

What webcomic artists need to do to engage their readers with a microserialized work on the Web is to achieve a "sense of fluidity" (Rodriguez 90), a sense of progress in the narrative without resorting to constant cliff hangers. This is a very complex issue and a particularly well argued explanation on why so many successful webcomics employ the comic strip form whereby each strip tells a self-contained story. Rodriguez shows that webcomics can be a complex storytelling medium, operating in tight constraints governed by practice, reader expectation and comics tradition.

Additionally, Rodriguez sees webcomics as being embedded into websites and lists several of their possible non-narrative features. Especially the spatial dimensions of comics embedded on websites and the ability to edit comics after publishing are considered. The spatial dimensions are discussed as allowing "increased authorial control over the reader's wandering eye" by consciously hiding certain panels from instant view and making them only accessible through scrolling. Indeed, as comics theorist Thierry Groensteen notes a reader always perceives the whole comics page (*The System of Comics* 61) forcing creators to place surprising elements on the next page. The editability of the comic as blog can be used for innovative narrative strategies, for example when a webcomic artist edits earlier pages to confuse the audience or make fun of the webcomic's setting such as a humorous retcon⁴ in the webcomic 8-bit Theater:

One Orwellian Retcon, intended as a joke, can be seen in 8-bit Theater when the character Thief dreams of one day being a ninja. This retcon occurs in "Episode #651: Thief of Time" where he becomes a ninja dressed in bright red, just like every other ninja in this webcomic. However, in the following installment "Episode #652: Solidarity", he appears dressed in black which prompts another character to ask him about his attire. Thief responds that he did not change and adds "besides what kind of a ninja wears bright red anyway." If one looks at the previous installment, one can see that now Thief is wearing black ninja clothing. This retcon and joke only had its full effect on readers who were up to date at the time of original publication and has little effect on those who read it after the change. It is an example that shows how webcomics are intended to be read serially and how some meanings are lost to those who did not partake in that original reading experience. (96)

However, not much thought is given to the particular effects of other elements such as multimedia elements, blog elements, forums, hyperlinks and web shops among others. Nonetheless, Rodriguez study features many important elements of webcomics and their use for pictorial storytelling, as well as a thoughtful analysis of the constraints of webcomics

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⁴ In fiction, "Retroactive continuity" or "retcon" refers to the change of previously established facts in order to achieve some narrative goal that else would not be possible to achieve.

enforced by reader expectations. I hope to expand on the web-elements Rodriguez considered important and show how webcomics employ unique narrative strategies in later chapters.

2.5 Webcomics as part of the history of comics

As evident by the arguments by Fenty et al., Hicks and McCloud, webcomics are most often considered as the future of comics, a new way of making comics or a radical break the ways comics have worked before. Though it is tempting to see comics on the Web as a completely new frontier for the medium of comics, it is important to place webcomics as part of comics history to understand how they use and change the medium of comics. For this it is again useful to connect both theories of digital culture and the study of comics.

According to Bolter and Grusin, newer forms of media such as webcomics "remediate" (65) older forms of media, that is, they adapt and use their already established methods for their own ends. For this thesis, the concept of remediation is an important one, as it helps ground webcomics in comics history. Far from being a complete conceptual reinvention of comics, webcomics can be seen as a new form of comics that nonetheless relies on the practices of what the comics scholar Joseph Witek identifies as the two main forms of comics: The comic strip and the comic book. According to Witek, the comic book and the comic strip constitute "different literary forms" (6).

Although newspaper comic strips have been published before comic books became a popular form of the comic and it might thus be tempting to assume that the long comic book is just the evolved form of the short comic strip, these forms work according to their own rules and conventions even though they share many aspects related to the medium of comics. Witek identifies comic strips as brief, humorous, self-contained works with a rigid layout that does not differ from strip to strip to fit newspaper layout and to please readers with amusing episodes. Comic books on the other hand can tell more complex stories by being based around the page and the double page of the printed book and thus have more freedom in terms of layout, pace and theme.

This division is evident to some degree in today's webcomics. Instead of being a wholly new form of comic – like McCloud seemed to suggest in *Reinventing Comics* – most webcomics tend to either remediate the comic strip or the comic book. In this thesis I hope to show how the Web influences these formats and how the remediation of older comic forms changes webcomics.

2.6 Webcomics as systems and editions

So far it seems that most current works dealing with webcomics are not taking the time to examine the structures and properties of webcomics. If one is to move away from works dealing directly with webcomics, a number of theoretical approaches applicable to webcomics can be found. I will highlight two works that I consider especially important for this thesis and elaborate on their use in further chapters: *The System of Comics* by comics scholar Thierry Groensteen and "Translating Media" by N. Katherine Hayles

Thierry Groensteens neo-structuralist work *The System of Comics* is a careful examination of comics as "a language, that is to say, not a historical, sociological, or economic phenomena, which it is also, but as an original ensemble of productive mechanisms of meaning" (2). According to Groensteen comics scholars have mostly abandoned the structural study of comics and moved towards semiotic analysis without having properly examined comics' structure in the first place. Groensteen suggests stopping the "fetishization of the gutter" (112), meaning the spaces between comic panels which McCloud considers as comics' source of mystery and magic in *Understanding Comics* (66), and instead seeing all elements of comics as interrelated contributors to the overall meaning-making.

Groensteen creates a hierarchy of meaning by conceptualizing comics as a "dominantly visual narrative species" (7) which relies on the image to create a narrative. But even though for Groensteen the image is comics' central element, he goes to great lengths to show that other parts and concepts such as gutters, page formatting and page layout interrelate with the image and can be used to expand upon the meaning of the image.

In my opinion this lends itself very well for approaching webcomics because Groensteen's system is very flexible and can accommodate the inclusion of film and audio elements as well as web-based elements such as hyperlinks into the "language" of comics. It is therefore quite surprising that Groensteen himself seems not to consider webcomics, or screen based comics, as a worthy addition to the language of comics as he explains on his own blog ("pourquois je ne lis pas de bande dessinée sur écran". According to Groensteen screen based comics lack the "feel" of the book and are limited by the low quality of computer screens. Because I believe that one cannot comment on the feel of books in general (there are too many books, too many editions to even attempt passing judgment) and cannot discuss the technical qualities of even a fraction of the screens currently in use, I will not use Groensteens comments on webcomics in this thesis.

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⁵In English: "Why I don't read comics on screen".

Despite Groensteen's flexible system, he does not seem to see webcomics as an enrichment of comics. I would strongly disagree and feel it is much needed to consider screen based comics not as a completely new medium related to concepts such as Open Source and Web 2.0, but as an extension, an edition of comics itself. According to N. Katherine Hayles, the "body" of a text (such as a book or a web site) matters in the perception of the text itself: "By changing *how* the work means, [one] alters *what* it means" ("Translating Media" 265). According to Hayles, different "editions" of a work across different forms of media do not constitute a completely new work, rather, the differences change the way a work is perceived in often barely noticeable ways. Groensteen does consider webcomics an "edition" of the comics medium itself. The only difference between comics and webcomics that Groensteen sees, however, is that he finds webcomics more difficult to read due to the properties of computer screens. I find this somewhat shortsighted. Groensteen ignores or chooses to ignore the ways in which webcomics use the system of the Web to relay meaning.

I would therefore suggest combining Groensteen and Hayles approaches for the structural analysis of webcomics in this thesis. This would allow me to consider webcomics as an edition of comics itself, a subtle change built on the established "language" of comics, using new ways of meaning-making made possible by the Web.

3. Methodology

In this chapter I will introduce the methodology of my research as well as explain the selection of the material to be studied. I will use a qualitative approach in internet research that will use elements of Hayles' Media Specific Analysis (MSA) and idea of "editions" mapped to concepts of structuralist comic studies to explore the use and the influence of web elements in webcomics.

3.1. Method

To decide on a method for the analysis of webcomic structures is a difficult task. Although it is tempting to see webcomics being the prime subject of comics studies and the methods associated with it, such an approach is simply not possible because no single method for studying comics exists. According to the editors of the *Comics Studies Readers* "Comic scholarship is eclectic" (Heer and Worcester xi) employing a blend of many disciplines examining the art, the business, the people, the language and the history of comics using a diverse set of methods from different academic fields such as literary studies, queer studies, art history or social and visual studies. Notable works that examined comics' structures so far came mostly from comic artists themselves, such as Scott McCloud, who do not consider themselves being part of academic tradition.

The closest I can come to an already established approach that is similar to what I propose to do is what Thierry Groensteen has called "Neo-Semiotics" (2). Attempting to replicate Groensteen's approach step by step would mean an exhaustive semiotic analysis of each and every element of a webcomic and their effect on the whole. This would be far too large a scope for my study. So instead of trying to fit my research into narrow concepts used before, I would suggest to place it first and foremost into the area of qualitative research. With this I want "to increase the overall understanding of the quality, characteristics and meanings" ("Qualitative Research") of webcomic structures. Because this study is exploratory in nature, I believe this approach to be more useful than i.e. a quantitative study naming recurring elements in webcomics.

One approach that is similar to what I have in mind has been used by N. Katherine Hayles in "Electronic Literature: What is it?" In this essay, she attempts a definition of electronic literature as "a first-generation digital object created on a computer and (usually) meant to be read on a computer" excluding digitized print works. Though electronic literature, as it is

understood by Hayles, is very different from webcomics, there are many similarities between the two concepts. Both webcomics and electronic literature are drawing on older media, but employing tools of the web and computing in general to their advantage. Like electronic literature, webcomics are "composed of parts taken from diverse traditions that may not always fit neatly together" (Hayles, "Electronic Literature"). Thus I will use Hayles' writing on electronic literature as a starting point to examine the parts of diverse traditions out of which webcomics are composed. And certainly, if webcomics can be seen as similar to electronic literature, Espen Aarseth's concept of it as "ergodic" (1), meaning non-trivial to read as opposed to the trivial reading process of printed works, must apply. However, I would modify Hayles' definition and see webcomics as "digital comics meant to be read on a computer", because webcomic authors are not necessarily creating "first-generation digital objects" but also digitizing more traditionally made drawings (McCloud, *Reinventing Comics* 140).

Using this definition, it is important to note that webcomics are not only meant to be read on a computer, but also to be viewed on the Web. They are an internet phenomenon as well as a comics phenomenon, which necessitates using the tools of internet research to do them justice. According to Annette N. Markham, internet research is used for the study of "social phenomena", "sociocultural phenomena" and "the network, technologies, or capacities of the internet" (112). I am interested in showing how elements that are more common for web content such as alternative image text, blog formats, the general pace of the web and others are influencing webcomics. As this study does not aim to provide insights into the process of creating comics, nor into webcomic communities, it is the third kind of internet research I will employ: The study of the technology and capacities of the Internet.

For this, I will use Hayles' methodology of Media Specific Analysis as explained in her essay "Print is Flat, Code Is Deep". According to Hayles, new forms of media need a new critical approach that takes into account their specificities or unique properties:

Lulled into somnolence by five hundred years of print, literary analysis should awaken to the importance of media-specific analysis, a mode of critical attention which recognizes that all texts are instantiated and that the nature of the medium in which they are instantiated matters. Central to repositioning critical inquiry, so it can attend to the specificity of the medium, is a more robust notion of materiality. (68)

For Hayles, understanding a medium is closely related to its "materiality", its unique properties. So in order to understand and conceptualize the specificity of webcomics one must study how they use technology and how technology is in turn changing them. Hayles proposes to consider the interplay of materiality and content to study the overall effect of a work.

The crucial move is to reconceptualize materiality as the interplay between a text's physical characteristics and its signifying strategies. This definition opens the possibility of considering texts as embodied entities while still maintaining a central focus on interpretation. In this view of materiality, it is not merely an inert collection of physical properties but a dynamic quality that emerges from the interplay between the text as a physical artifact, its conceptual content, and the interpretive activities of readers and writers. Materiality thus cannot be specified in advance; rather, it occupies a borderland—or better, performs as connective tissue—joining the physical and mental, the artifact and the user. (71)

It is in the examination of this "borderland" between the material specificities of a work and its various strategies of meaning-making discovered through close analysis and interpretation that I hope to find insights into the specificities of webcomics. Following this approach I will combine the close reading of comics in Groensteen's *A System of Comics* and McCloud's *Understanding Comics* with the analysis of web elements and the specificities of publishing comics on the Web. Because many webcomics are published in blog format, one framework that will be useful for this analysis as well is found in Jill Walker Rettberg's examination of blogging, in which she shows how the blog format changes or influences a blog's content.

Media Specific Analysis does not "imply that all aspects of a medium's apparatus will be equally important" but instead stresses that "materiality should be understood as existing in complex dynamic interplay with content, coming into focus or fading into the background, depending on what performances the work enacts" (Hayles, "Print is Flat" 71), this approach frees me up to concentrate on the "performances" of webcomics that do influence their overall effect. Thus, I can concentrate on elements of the Web and novel ways of using the comic medium instead of trying to explain the use of each comic element, such as gutters or panel borders, previously discussed in works like Groensteen's *System of Comics*, which will still remain an important cornerstone of my analysis. I believe this method to be more useful for this study than a Groensteenian examination of all the separate constituting elements in one given webcomic as it would negate the importance of the "interplay" between web and comic.

Another important aspect of my methodology is the placement of webcomics in Hayles' "edition" framework. In her essay "Translating Media" Hayles proposes that "changing *how* the work means [...] alters *what* it means" (264), effectively saying that slight changes in the format of a work, in its materiality, can change the overall meaning, but still leave the "core" of a work in place. In this study I argue that webcomics can be understood as a form of edition of the broader comics medium. Webcomics can be seen as an attempt to bring comics online in a way that differs starkly from print and fits the Web environment.

In this thesis I wish to analyze webcomics that have been published in print as well. By contrasting their Web- and print editions, I hope to illustrate what is lost or gained in translating comics from one medium to another and thus show their specificities. I am fully aware that, in a way, this method can only lead to limited results, because it is impossible to consider every webcomic ever made, or even only a significant part of the webcomics field as there is simply too much material. Additionally, not every webcomic discussed here does have a print edition, so some parts of the analysis cannot be comparative. This might be considered an issue for reliability of the study, but I would agree with Hayles that Media Specific Analysis is, at this time, the most effective way to study the tensions between traditional and newer forms of expression as found in electronic literature or webcomics:

To understand these dynamic interactions, media-specific analysis (MSA) is essential. MSA aims to electrify the neocortex of literary criticism into recognizing that strands traditionally emphasizing materiality [...] are not exceptions but paradigmatic of the ways in which literary effects emerge from and are entwined with the materiality of texts. ("Print Is Flat, Code Is Deep" 72)

Although I can thus not claim to provide an examination of the whole of webcomics, I would like to see my research as a possible starting point to consider the use of elements of the Web in webcomics as a new way to use the medium of comics.

3.2 Selection

Because it is important to illustrate various possibilities of the use of the Web for comics, I would like to use a diverse set of webcomics. This, however, proves rather difficult as it begs the question of what to consider a "diverse" data set. Webcomics differ greatly in style, content and the application of web elements depending on genre, creator, the community it is grounded in, its language and culture of origin. It is therefore nearly impossible to use any number of webcomics as an example for the field itself.

However, I propose to use a small selection not as an example or even a definition of the whole field, but as a showcase for some of the possibilities of how the web can shape comics – or any other medium for that matter. By limiting myself to a smaller set of comics to analyze, I want to keep the scope of the project manageable. Unlike some researchers before me, I do not wish to analyze each webcomic used for this thesis as a whole, but rather examine single strips and explain how they fit into the broader context.

I acknowledge that any selection I make will be colored by my own reading experiences and preferences. In order to make this thesis better accessible, I will focus on English-language webcomics, mostly from the US and Canada and mostly humorous, though I will include somewhat more serious/adult comics as well. I will now explain the reasons for the selection of the included webcomics.

Emily Horne and Joey Comeau's darkly funny photography-based webcomic *A Softer World* is useful for the analysis of possible uses of alternative image text, or *alt text*, a function which lets images be captioned with a short description or title of the image that is displayed in a text box when a user hovers her mouse cursor over the image for a short while, usually 1-2 seconds. In *A Softer World*, comics are not simply described or titled in the alt text, but additional meanings are created by captioning the image files of the comic with new jokes that often subvert the comic itself. This concept is taken further into different directions by comics such as *Dinosaur Comics*, in which there are numerous other hidden image captions, often only available when the comic is read through RSS- or email-subscription. *AmazingSuperPowers* on the other hand, uses the concept of alternative image text, but uses it for alternate or hidden panels.

Jeph Jacques' long-running comic *Questionable Content* is important for the examination of the effect of blog serialization on a comic. During the more than 9 years (at the time of writing) online publication of his whimsical slice-of-life comic, Jacques has often changed styles, characters and themes of the comic. *Questionable Content* does so without marking the beginning of (for a lack of a better term) episodes and shows that webcomics can be a very fluid, procedural form of communication, more akin to a blog that over the years reflects the changes of its creator than a single, edited and published work. These changes in *Questionable Content* are also to be found in other comics like *The Order of the Stick*, which Rodriguez analyzed. *The Order of the Stick* is a perfect example of how a webcomic can change direction without even noticeable changes in art style like in *Questionable Content*. The sometimes negative effects of change for webcomics and the implications thereof, will be examined through the gaming-related comic *Ctrl-Alt-Del*, in which whimsical storylines about video games and robots give sudden way to relationship drama.

Warren Ellis and Paul Duffield's comic series *FreakAngels* will be used to examine how the pace of a story reflects the medium that it is published in. *FreakAngels* is quite an interesting webcomic in itself, because it challenges the assumption that webcomics have to be made by independent creators or adhere to some vague scene or subculture. Instead it is a comic published by an established comics publisher, written by a known comics writer and a drawn by a small team of experienced comic artists. However, the most interesting aspect of *FreakAngels* is the way the story is paced. Because it was published weekly on the web in installations of up to 6 pages, each installation was made to be able to stand on its own. Each week brought the story forward in small chunks, each with an understandable start and a weekly conclusion. It is a format that works surprisingly well on the Web and might show

how webcomics might remediate the comic book, but it seems oddly peculiar when translated into print. Other webcomics, such as the fantasy comic *The Order of The Stick*, face similar challenges and deal with them in different ways. *FreakAngels* is also useful to ask more general questions about the pacing of webcomics. Most webcomics are presented one page at a time, each page a subpage for its main website. To read a webcomic from start to beginning one must click "next" or "next page" numerous times, each time waiting for the new comic page to load. Looking at different works, such as the previously mentioned *Questionable Content*, I will analyze how clicking "next" to read a webcomic changes its pace.

Lastly, I will look at ways to circumvent this way of reading, such as the use of McCloud's often-cited approach of the Infinite Canvas in comics like Daniel Lieske's *The Wormworld Saga* and McCloud's own attempts at the technique he himself proposed with *Zot! Online*. However, the Infinite Canvas is only one innovative technique that is exclusive to webcomics. Other techniques that will be examined are the use of hyperlinks in Emily Carroll's gothic short stories and flip-book-style animations in the gritty superhero comic *Insufferable*.

Although the set of comics I am analyzing is quite diverse, I believe that there are many similarities concerning the use of web elements that will become apparent under close analysis.

4. Webcomics as a Screen-Based Medium

In the main part of this thesis I will now closely analyze the different uses of web elements in webcomics in order to find out how the properties of the web can enrich or, at least, change the way comics communicate. First, I will examine the use of techniques such as alt text, or additional messages hidden in the image code of the digital image file. Comics like A Softer World, Dinosaur Comics and AmazingSuperPowers are using these tools to build upon their jokes and subvert their meanings, inviting their readers to discover them. I will then analyze how webcomics like Questionable Content or The Order of the Stick can change over time while they are published and evolve into very different works, staying the same in name only. After that, I will turn to the aspect of the update schedule, or the rhythm of publication. Webcomics are usually updated with a new installment on a regular basis. This format deeply influences how webcomics are created and read and pushes webcomics into a comic strip format. This influence will be further explored in a later analysis chapter, in which I will show why the webcomic strip format is so dominant and what difficulties comic book style webcomics face. In the last chapter of my analysis I will examine a set of webcomics that try to innovate upon the comics medium in various ways and show what this could mean for the webcomic format.

4.1 Deep Comics

Amidst the discussion of the properties of webcomics, it is easy to forget what most webcomics actually are: Image files on the Web. Among webcomic creators there is a unattributed, self-deprecating saying that they are "in the .jpg business," and there is some truth to that. What webcomic creators do is to upload image files to the Internet. As an explanation for what webcomics are, how they create meaning or use the comics medium, this is of course far too simplified, but it should serve as a reminder of what is possible within webcomics. If one is to take a step back from looking at webcomics as comics, and instead consider their format as image files, certain ways become apparent in which digital image file communicate meaning to users.

4.1.1 The tactility of alt text

Understanding webcomics as digital image files first and comics second opens a wide range of possible uses of online tools to enrich the ways comics tell stories. One that is both simple and surprisingly complex is alternative text, or alt text. When uploading or editing online image files, images can be given a so called "alt" tag, designed to display an alternative text description of the image. A picture of a cat playing with a ball of yarn could, for example, have the alt text: "cat playing with a ball of yarn" or simply "playing cat". If a browser would not be able to display the image (a text-only browser for example), it would only show the alternative image description. Some web browsers display the alt text in a hovering text box overlay when a user rests the mouse cursor over the image for a short period of time. This helps the visually impaired, whose browsers might be able to read out the alt text aloud, thus explaining non-text content that would otherwise be inaccessible. Usually, alt text descriptions of images simply explain what is depicted in the image.

However, some users chose to use alt text not to display an alternative description to the image itself, but to give additional information. Instead of describing the playing cats, the alt text of the aforementioned cat picture could include some information about what the cats did next, why the situation was so remarkable and so on. With the rise of browsers that could display the alt text as a hovering tool tip text box above the image, so did the popularity of using alt text to give additional information. By standards of Mozilla, the developers of the widely used Firefox browser, this was considered bad web design:

Contrary to a popular belief stemming from the behavior of a couple browsers running on the Windows platform, alt isn't an abbreviation for 'tooltip' but for 'alternative'. The value of the alt attribute is a textual replacement for the image and is displayed when the image isn't.

Mozilla doesn't display the *alt* attribute as a tooltip, because it has been observed that doing so encourages authors to misuse the attribute.

- When the alternative text is shown in a tooltip, some authors write bad *alt* texts, because they intend the text as auxiliary tooltip text and not as a replacement for the image. ('Bad' in the sense that the textual alternative is less useful for people who don't see the image.)
- When the alternative text is shown in a tooltip, other authors don't want to supply textual alternatives at all, because *they don't want* tooltips to appear. (Again, making things harder for people who don't see the image.) ("Mozilla Web Developer FAQ")

Mozilla's criticism reduced the "misuse" of alt text, but at the same time drove users to employ the title tag of the image in a similar fashion. No matter if alt text or title tag, image captions have become a way of poking fun of an image or commenting it. For example, the British gaming website *Rock, Paper, Shotgun* often captions images of their articles with witty, irreverent jokes that have little to do with what the image actually depicts. In a news post about a new beta feature of a games distributor, the promotional image of a television set with the product's logo is captioned with the title text: "The number one selection criteria for the beta will be that you have an exceedingly blue and atmospherically lit room" (Grayson).

As a description of the image to be used if the image itself should be unavailable, this caption is almost useless, but as a comedic comment about promotional images it works well.

Still, web-cartoonists traditionally have not seen much purpose in alt text at all: Adding descriptive text to webcomics, a primarily visual medium largely relying on the style of the cartoonist, has little purpose because a description cannot replace the medium-specific content of a comic. Most cartoonists therefore only use alt- and title text to help readers situate the comic in a larger context by adding the number, name or chapter of each comic strip in a longer running series. For some web-cartoonists however, what was considered bad web design by Mozilla, became a valid new way of making jokes. Consciously subverting the intended use of alt text, many cartoonists started using alt text to add jokes, additional information for the strip or to play with readers expectations of what to usually find in alt text. Readers willing to explore these texts coded into the comic image through alt- or title text might find jokes and references that expand upon a comic while more casual readers might only ever see the surface image.

4.1.2 Webcomics as code

One specificity of webcomics in regard to their use of alt text becomes apparent in *A Softer World*, a darkly funny photography comic by writer Joey Comeau and photographer Emily Horne. The comic juxtaposes three panels usually consisting of three photographs or three parts of one larger photograph by Horne with black type-writer-font subtitles inside white text boxes written by Comeau. The photographs are often faded or seem damaged and show only fragments of people's faces, imagery of urban landscapes or cemetery statues while the text seems to further underline the overall morbidity. In comic #506 (Fig. 1) over three images of an ocean wave breaking, the text in the first panel reads: "I wish I could walk a mile in your shoes," followed by a panel without text and a third panel reading: "right out into the ocean".



Fig. 1: A Softer World #506.

But to assume that *A Softer World* is a dark, morbid or gothic comic about a murder wish would disregard the coded level of this comic image. If a reader hovers the mouse cursor over the image in comic #506 (Fig. 2), a simple white text box will appear in most current web browsers reading: "Do you have to play that harp at 3am? Really?" leading to an ironic break with the morbid tone of the image's surface. The poetic wish for the death of an unspecified someone becomes a disgruntled complaint about a neighbor or housemate.



Fig. 2: A Softer World #506 with alt text visible as tool tip.

By using alt text in this way Horne and Comeau play with readers' expectation of genres and make irreverent fun of their own ways of artistic expression. The somewhat hidden nature of the alt text even underlines this. The alt texts of *A Softer World* usually do not denote a speaker or make clear who is making fun of the comic. Although on one level it is clear that the image's creator (or, at least, uploader) must have defined the image's alt text, the impersonal, non-descript appearance of the alt text makes it somewhat mysterious, a secret message out of the depths of image code if one will. Reading *A Softer World* is compelling because of the clash of image with code. The comic invites readers to enjoy the deadpan

morbidity and then lets them join a knowing audience that mocks the overwrought seriousness of surface image and text.

At the center of this particular effect of *A Softer World* is the sense of tactile discovery that the reader has when finding the alt texts. Alt texts are not revealed automatically, they have to be actively sought out by making a conscious move with the mouse cursor that then reveals a message that was before invisible. In a way, the image has to be "touched" to reveal its secret. According to Espen Aarseth such a way of reading a text is "nontrivial" (1) placing webcomics into the category of ergodic text. The importance of the alt text has been further stressed by Horne and Comeau who included their own, specialized version of it: If users click on the image, a textbox in the style of the comic – white type-writer-font on black background – will appear at the tip of the mouse (Fig. 3). This is especially useful for users with touch devices such as smart phones who can now display the alt text by tapping on the image, which is arguably even more tactile than clicking on the image. Clickable alt text also allows users with browsers that do not support alt text or title tags to read the hidden texts. The care that Horne and Comeau put into this function underlines the importance of alt text for the overall understanding of the webcomic.



Fig. 3: A Softer World #506 with clickable alt text.

The attempt to convey the importance of the sense of discovery is also apparent in a softer world: everybody gets got the third print edition of A Softer World. In the print edition the alt text appears as turned around under the comic image, so that readers have to physically turn around the book to read the alt text. This is an interesting attempt to replicate the process of discovery that makes A Softer World unique as a webcomic. Still, I would argue that it is inferior to the use of alt text online as the visible presence of the text under the comic image gives away much of the surprising discovery, while the process of actually making the text

readable by turning the book is cumbersome in comparison to a simple revealing click, especially when reading many strips in succession.

In "Translating Media" Hayles considers electronic texts a "process rather than isolated objects" (270) meaning that a direct "translation" of digital objects on to the printed page will leave out central parts of the work itself. This is evident in the print editions of *A Softer World*. The process of reading *A Softer World* on the screen compared to reading it on a printed page differs in a key element. Even though a webcomic can be printed out or published, its full potential can only be reached online. Publishers might consider the image as essential for a comic, but they do not necessarily realize that webcomics can both be read on a surface as well as a coded level.

Of course, not all webcomics use alt text in this way. Many cartoonists use alt text and title tags correctly as per Mozilla's guidelines displaying only the name or number of one particular strip. But some cartoonists even take the principle of the alt text to a visual level. In the webcomic *AmazingSuperPowers* whole comic panels that add jokes or play with the comic content are hidden on the website.

At first glance, *AmazingSuperPowers* is a fairly traditional comic strip. It usually consists of three panels and cracks jokes about substance-abusing policemen or cynical goldfish in a crude but colorful style. The use of alt text is comparable to *A Softer World*. In the strip "Writer's Block" (Fig. 4) a man who seems to be unable to finish his own suicide note, instead makes up "some really crazy junk right at the end to justify everything" about robots and dinosaurs. This leads to two policemen discovering a suicide note reading: "Dear friends, I am sad to leave you, but I can be in this world no longer. Because, um...there was this clan of dragons, right? And I insulted their robot king or something [...]" When readers hover their mouse cursor over the image, the appearing alt text reads: "The official cause of death was listed as 'Deus Ex Machina'."



Fig. 4: AmazingSuperPowers "Writer's Block" with visible alt text.

Like A Softer World, the comic layers more gags in the image code, but AmazingSuperPowers hides even more content on the website. If a reader were to move the mouse cursor slightly to the right and above from the rightmost panel of each comic strip of AmazingSuperPowers, one can find a yellow question mark that becomes only visible if the mouse cursor "touches" it (Fig. 5). Clicking on the question mark opens a new web page in a new browser tab that displays an additional comic panel or alternative comic strip.



Fig. 5: AmazingSuperPowers "Writer's Block" with visible question mark for hyperlinked hidden panel.

Usually these comics contain only one panel with jokes that build upon the jokes made in the "main" comic and sometimes even the jokes or puns made in the alt text. Sometimes they also contain sketches with punch lines that could have been used instead of the ones in the main comic. The hidden comics of *AmazingSuperPowers* are of little use for readers who have no knowledge of the main comic, meaning that the "main" comic still has precedence. In the comic "Writer's Block" for instance, the hidden panel contains one of the two policemen who

found the suicide note trying to arrest a crudely sketched robot king and dragon, which, arguably, does not make much sense without knowledge of the main comic. But as with alt text it is the discovery of the hidden panels and the knowledge that one simple gag-strip can contain multilayered jokes that makes *AmazingSuperPowers* unique.

Whereas works such as *A Softer World* expand their comic image by textual means with alt text, *AmazingSuperPowers* extends the concept of alt text on a visual level. Because the comic is a "dominantly visual" (Groensteen 7) medium, this use of the hidden panel works especially well. It combines the effects of the process of discovery of alt text with visual comic content. This is only enhanced by the secrecy surrounding this feature of *AmazingSuperPowers*. The use of alt text and hidden panels is not referenced anywhere on the comic's website, although so much care went into the design of this particular function. One reason for that could be the effect the discovery of the hidden panel has on the reader. Discovering the hidden panel for the first time changes how the rest of the comic is perceived in hindsight. Reading *AmazingSuperPowers* is as much about the anticipation of the jokes the cartoonists layer on top of the comic as about laughing about the gags in the main comic panels.

Similar to the difficulty of properly translating the process of discovering alt texts in the print edition of *A Softer World*, it seems difficult to translate the concept of hidden panels into print. In the first print collection *Catalog of Regret: A Handpicked Assortment of AmazingSuperPowers Comics* the processes of the web are not translated at all. The alt text is simply printed under the comic image, without turning the letters on their heads, while hidden comics are only to be found in separate spreads at the end of the book (112-127). Except for a very general hint saying which hidden panels belong to which page saying "This spread: hidden comics for pages 6-15" (112) no further reference is given. I understand that this way, the print edition attempts to replicate the sense of discovery, because readers have to actually discover the hidden panels in the back of the book and then connect them to their original comics. But I would argue that this attempt is flawed as it misunderstands the experience of reading *AmazingSuperPowers*.

The hidden comic spreads at the end of the book foster a disconnect between main and hidden comic, because readers can't be expected to remember every comic they read along the way and instantly connect them to the highly irreverent hidden panels. The alternative of flicking between each strip and hidden comic spread on the other hand disrupts the linear experience of reading a comic book from front to end. As a comic, *AmazingSuperPowers* works on several layers. On the surface level, it is an irreverent comic strip, which is what the

printed edition represents. The coded level, the alt text, contains additional jokes or comments that work in conjunction with the main comic. The alt text is not, however, used to mock the strip or cast it in a different light like the alt text of A Softer World. The hidden panel on the other hand does not simply comment on the strip, but is used to expand it further. It works as a second punchline for the comic and as such relies on the short pause between the punchline of the last panel of a strip and the following click on the secret question marks that links to the hidden panel. According to Groensteen, a comic always follows a beat that depends on the panel layout of a strip (Groensteen, "Die Rhythmen des Comics" 5). The three panel joke structure of "Writer's Block" leads readers to believe that this will be a regular comic following a very proven beat (introduction, setup, punchline), but the hidden panel then disrupts this beat, surprising readers who might not have previous knowledge of the hidden panel. For experienced readers on the other hand the hidden panel changes how the beat of the main comic is perceived. The first punchline is not final, but rather a set-up for the hidden punchline to come. For AmazingSuperPowers there is always more jokes to be made off a single strip, often in surprising ways and it is this open-endedness that keeps readers engaged with the comic.

The *AmazingSuperPowers* print collection however shows the main comic as the final and most important part of any strip. This, in turn, marks hidden comics as secondary material that is not necessary for the enjoyment of the larger work. I would argue that it is the use of hidden comics as much as the style of drawing and humor that defines *AmazingSuperPowers*. Even quick sketches like in the "Writer's Block" strip help to expand the comic and make reading it an experience that is difficult to reproduce.

Still, even more is possible using text only. In the webcomic *Dinosaur Comics* the Canadian cartoonist Ryan North tackles topics as diverse as linguistics, faith or Batman by letting a group of stock image dinosaurs talk to each other (Fig. 6). The comic consists of six panels that are reused for every consequent strip on the site, only the text changes from strip to strip thereby often changing what is perceived as happening in the six generic images of cartoon-dinosaurs.⁷

⁶ "The Rhythms of Comics".

⁷ Most *Dinosaur Comics* strips look the same and only differ in what is written, however there are some exceptions to that if, for example, a different cartoonist creates a so called guest strip for *Dinosaur Comics*.

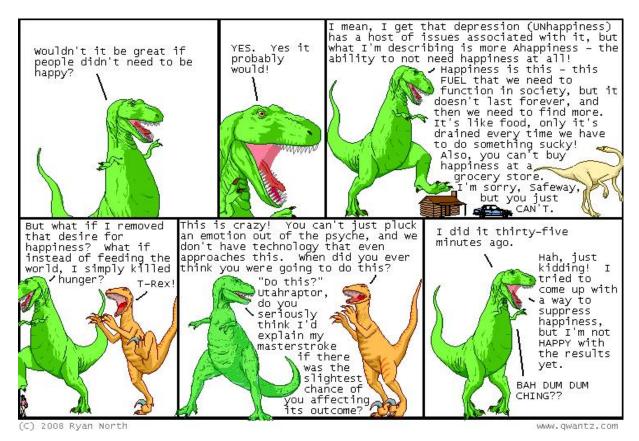


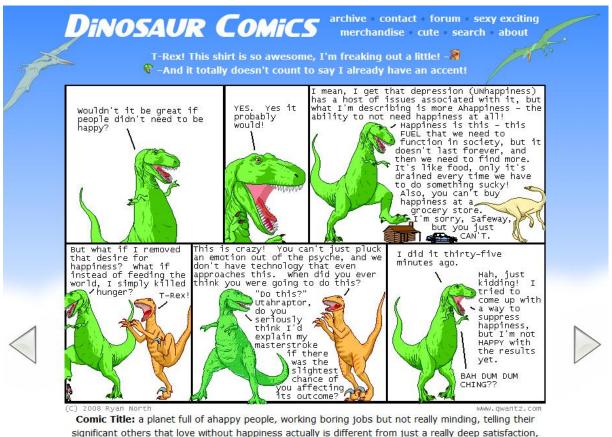
Fig. 6: Dinosaur Comics #1175.

Similar to A Softer World and Amazing SuperPowers, each strip in Dinosaur Comics uses alt text, here referred to as "comic title", as well, though creator Ryan North usually uses that space to expand upon the content of a comic, not to make fun of it. However, North goes even further by adding more hidden content to each strip to account for the diverse ways in which his readers consume the comic. Readers can read the comic on its website, they can subscribe to the comic's RSS feed that informs them when a new comic goes online and lets them view it in an RSS reader or they can subscribe via email and get each comic sent automatically to their inbox. Each method is a perfectly valid and viable way of reading *Dinosaur Comics* and each of those ways of reading it has its own secret message attached. RSS-readers get an RSS title and email subscribers get a new email contact subject, the alt text is viewable for both groups of readers if the image is opened in a program that supports alt text. These texts do not present the same information or relate the same jokes, but create additional meanings or gags for the comic and sometimes even build upon each other. In comic #1175 (Fig. 6) for example, the comic's protagonist T-Rex discusses his idea of the removal of the emotion of happiness from the human, or rather dinosaur, psyche through some yet-to-be-determined scientific means. The strip's title expands upon the premise of the comic and imagines a world without happiness:

a planet full of ahappy people, working boring jobs but not really minding, telling their significant others that love without happiness actually is different from just a really deep satisfaction, repeating it to themselves in the mirror every morning.

The email contact subject directly refers to the contents of the strip in which another character of the comic, Utahraptor, disputes T-Rex' idea of the possibility of ridding the world of happiness: "utahraptor thinks happiness and the desire for happiness is tied into a lot of sentient activity, what we need here is experimental proof." This is remarkable in itself as email subscribers would naturally read the subject first and the comic afterwards. In this case, the contact subject works in two ways: It gives background information on Utahraptor which then helps to understand his motivation in the comic, and second, and more likely, it is used to confuse the readers and, somewhat similar to how A Softer World uses alt text, give them pleasure when they finally understand what the obtuse email contact subject referred to. The RSS title on the other hand does not add context to the strip, but rather refers back to strip #1174 in which T-Rex discusses an idea for a skateboard treadmill with surprising results: "if anyone wants to make a new dinosaur comics game, the premise from yesterday's comic (trex using a giant fan to blow enemies off his lawn) seems as great a premise as any." In this case the RSS title becomes an extension of the blog post below the comic, in which Ryan North interacts with his readers. The use of additional resources like contact subject, RSS titles and title text allows North to communicate with his readers both through his comics and through hidden messages that convey a more familiar tone with his regular readers.

To understand a strip usually the information from the different hidden messages is not necessary, but I would argue that they are as much part of the comic as the surface image or text. *Dinosaur Comics* simply requires more conscious effort to find the hidden messages than most other comics. Their hidden nature does not make them less important. However, seeing all there is to see from any strip would require readers to subscribe to it via different channels. In order to counter this difficulty, readers have created a software solution. They can install the "Dinosaur Comics Easter Eggs" extension for Google's popular browser Chrome that will render *Dinosaur Comics* more user friendly (Fig. 7). Installing the extension changes the look and feel of the *Dinosaur Comics* website: The alt text, the email subject and the RSS title are displayed underneath each strip.



repeating it to themselves in the mirror every morning

RSS Title: if anyone wants to make a new dinosaur comics game, the premise from yesterday's comic

(t-rex using a giant fan to blow enemies off his lawn) seems as great a premise as any.
Contact Subject: utahraptor thinks happiness and the desire for happiness is tied into a lot of sentient activity. what we need here is experimental proof.

Fig. 7: Dinosaur Comics #1775 with "Dinosaur Comics Easter Eggs" Chrome extension.

In print, however, the sense of discovery of the various additional content of *Dinosaur Comics*: somewhat diminished. In the third print collection *Dinosaur Comics: fig. f Feelings are boring, kissing is awesome.* containing all strips that were originally published online in 2008, discovering hidden texts is almost as easy as with the "Dinosaur Comics Easter Eggs" extension. The RSS title of the aforementioned strip #1175 is placed in a light green box over the comic image, the comic title is placed underneath the comic. Comic title, RSS title and the text in the comic itself are set apart typographically, but no references are made to the origin of those additional texts. In contrast to the Easter Eggs web edition of the comic, the email contact subject is missing. These texts are instead contained chronologically in a separate appendix, "Index Alpha" (n.p.), featuring the suggested use: "for when you need to write me about what you have just read", which is ironic given that North used these subjects to send those comics to his readers' inboxes.

What the third *Dinosaur Comic* print edition shows is a value judgment of sorts. The hidden texts contained in the digital image file, are valued for their content, their "linguistic codes" (Hayles, "Translating Media" 263), but not for the process that readers need to go

through to get to them. Reading the additional texts of the online edition of *Dinosaur Comics* requires "nontrivial" (Aarseth 1) effort, a familiarity with the webcomics form; finding the same texts in the print edition is trivial. This approach implies that there is a *Dinosaur Comics* "essence" that needs to be translated to the page and this essence includes the linguistic codes, but not the processes that *Dinosaur Comics* is embedded in online. I would argue that this approach is somewhat short-sighted as it ignores properties of webcomics that are essential to experiencing it.

Though the same criticism could be leveled against the Easter Eggs extension, I would not judge it so harshly. As with the print edition it removes the sense of discovery of the hidden content of a comic, but it illustrates another specificity of webcomics. The digital nature of webcomics makes their code malleable. They can be repurposed, rearranged and changed to fit reader' needs.

If, as Hayles puts it in her proposal for Media-Specific-Analysis, "print is flat" and "code is deep", webcomics such as *A Softer World*, *AmazingSuperPowers* or *Dinosaur Comics* are what I would call "deep comics". Their images and websites can be encoded with additional layers of information or, as *Dinosaur Comics* shows, their content can be spread through different channels of one single website.

This makes webcomics quite different from print comics, as it makes it necessary to understand them not as "isolated objects" but as an "electronic process" (Hayles 270) that requires a nontrivial effort to read. Although I would argue that webcomics still conform to Groensteen's view of the primacy of the image over text (3), meaning that it is still the comic image that transports most information for readers, webcomics can expand upon the traditional image-text duality. Webcomics add a coded level to image and text and challenge readers to fuse these three levels to fully understand a webcomic.

The use of alt text in comics such as *A Softer World* goes beyond the intended use of alt text as image description or added information: It represents a dialogue between creator and comic, it is a sort of preemptive comment on the own work resulting in a very playful, yet personal addition to the comic. Finding these comments and layered jokes challenges and rewards readers. As the comparison of *A Softer World*, *AmazingSuperPowers* and *Dinosaur Comics* print and web editions show, it is precisely the coded level that is difficult to translate from one medium to another. But the close reading of the analyzed webcomics shows that it is exactly the coded level and the processes of the web that shape so much of the reading experience.

4.2 Webcomics as process

Having established that webcomics can be understood as a process, a mixture between comics and image code, I would like to turn to another way in which webcomics resemble a process: The slow build-up of an archive of the development and growth of a cartoonist. The editorial nature of mainstream comics publishing means that books or comic issues of one artist or a team of artists tend to keep a consistent style both visually and in terms of narrative. Though certainly, variations and changes of style do occur, usually these changes occur between books and projects and mark big turning points – or exclamation marks at the least – in an artists' career. Comic books like Spiegelman's Maus have a consistent style, one that might differ from his previous works but that is kept throughout the book. Progressing through the book's pages does not showcase a visible artistic growth of the artist. A comic book's style does not suddenly change halfway through the book, or if it does, it does so deliberately. Small improvements, alterations might be found, but overall major changes are kept to a minimum by editors and artists themselves to keep a work consistent. Webcomics at large on the other hand do not have to go through an editorial process, they don't have to be printed and shipped across states and countries. All they require is an artist willing to upload digital image files of comics, produced digitally or otherwise, onto a website and it shows in the way that works like Questionable Content or The Order of the Stick change over time.

4.2.1 From indie rock to sitcom: Questionable Content

The lack of an editorial control and the low costs of producing and publishing a webcomic compared to mainstream comics publishing has an interesting effect: Webcomics tend to be started by young or aspiring cartoonists, who have not yet made a name for themselves in mainstream publishing; they run for a long time⁸; and in their entirety represent the growth of one artist although they remain one comic or website. An interesting example that fuses both ongoing artistic and thematic changes throughout publication is Jeph Jacques' *Questionable Content* that is updated with new comic pages five times a week. It began in 2003 as a crudely drawn strip about the depressed twenty-something indie rock fan Marten Reed and his robot friend Pintsize. The longer Jacques kept working on *Questionable Content* the more the focus of the strip shifted. From jokes about indie rock music ("Number Seven: Indie Bonding") it

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⁸One of the oldest "modern" webcomics (that is: not published on a BBS or bulletin board system), the academia-themed *Piled Higher and Deeper* is being published since 1997, most comics discussed in this thesis began publication in the early 00s and are still running.

went to become a comic about romance after around 200 strips ("Number 200: Look On The Bright Sight") and is currently exploring the various characters living in a world with sentient AI ("Number 2000: Yaoizone.cx"). During this development, Jacques' style first changed gradually, visibly improving over time and at later points dramatically. It is, I would argue, difficult to realize that the loose cartoon style of the *Questionable Content* of 2005 ("Number 400: Hint Hint") represents the same world and characters as the more manga styled *Questionable Content* of 2008 ("Number 1200: Don't Even Mention Dvorak") or the *Questionable Content* of 2012 where Jacques starts experimenting more with panel layout and perspective.

In this regard, a webcomic like *Questionable Content* resembles the changes in style of a personal blog more than the artistic changes between books of a single comic artist. This process of change is at the core of *Questionable Content* and only in reading it as an unfinished work the numerous changes fit into a broader idea of the comic. According to Jill Rettberg blogs, too rely on a long time-investment from readers:

To really understand blogs, you need to read them over time. Following a blog is like getting to know someone, or like watching a television series. Because blogging is a cumulative process, most posts presuppose some knowledge of the history of the blog, and they fit into a larger story. There's a very different sense of rhythm and continuity when you follow a blog, or a group of blogs, over time, compared to simply reading a single post that you've found through a search engine or by following a link from another Web site. (4)

Similarly, reading a webcomic from beginning to the latest strip can make understand he artistic growth of a cartoonist much like a personal blog can help understand the changes in style and experience of an author. Read over time these slow changes in style and ability accumulate towards a sense of familiarity with a webcomic and its author that is not comparable to the process of reading a single comic book from beginning to end. This process of reading a webcomic over time relies on "a different sense of rhythm and continuity" (ibid.) that makes witnessing an evolving personal style of great importance.

This different way of reading is acknowledged in the first print collection of *Questionable Content*. Prior to release of the book, Jacques announced that he would redraw some older strips of his comic, because he missed the original high-resolution image files for some of the first strips (Jacques, "Then and Now"). For Jacques this could have been a way to revise his first efforts, and create a book with a consistent style that would meet the expectations of comic book readers. Instead Jacques decided to only revise a small portion of his older strips in the style he used for the webcomic during the production of the book in 2010 and include the revised strips alongside the original old strips:

A couple notes about this book: you will notice that a few strips have drastically different, more modern artwork than the rest of this collection – those were comics I had to re-draw because I had

lost the original hi-resolution artwork for them. It felt silly to try and ape my old style, so I redrew them the way I draw now. (Think of it like a band remixing one of their earlier songs.) But on the next few pages, you can see the original lo-res versions and if you like, flip ahead to compare them with the new ones. What a contrast! (Jacques, "Questionable Content Vol. 1" 5)

The original versions of the redrawn old strips are all included for reference at the beginning of the book and the redrawn strips appear irregularly alongside Jacques' old comics. This has a peculiar effect on the book: It heightens the reader's awareness towards the stylistic changes (Fig. 8).

In the Questionable Content print edition, two strips are printed per page, which makes it easier to compare strips with one another. On pages 8-9 the first three strips of Questionable Content are redrawn in Jacques' more modern style and immediately clash with the fourth strip which uses the original artwork. As Jacques mentions in the book's introduction, it is quite a contrast. In "Number Three: True Professionals" (Jacques 9) Marten and his friend Steve are hanging out in a bar, in the background of each panel are details like posters or signs. Although the four panel strip maintains a central perspective of Marten and Steve walking up to the bar and sitting down at the bar, there is lots of movement around the two characters. Marten and Steve first enter the first panel from the left, they order drinks from a female bartender and Marten's facial expression changes from sullen to interested when Faye, another recurring character in the comic, passes him by. In the following original strip "Number Four: Faye Cuts to the Chase" on the same page the differences are quite pronounced. The bar is only represented by a dark grey background color, the characters' drinks and a table or bar in front of Marten, Steve and Faye. There are no other characters except for the three friends. Jacques' grasp of facial expressions is still very rudimentary and he relies heavily on text to convey the feelings of his characters. Marten and Steve share the same facial expressions, while Faye's expression only hints at the feelings Jacques tries to convey. The contrast between the two styles of the four strips brings attention to Jacques' growth as a cartoonist.

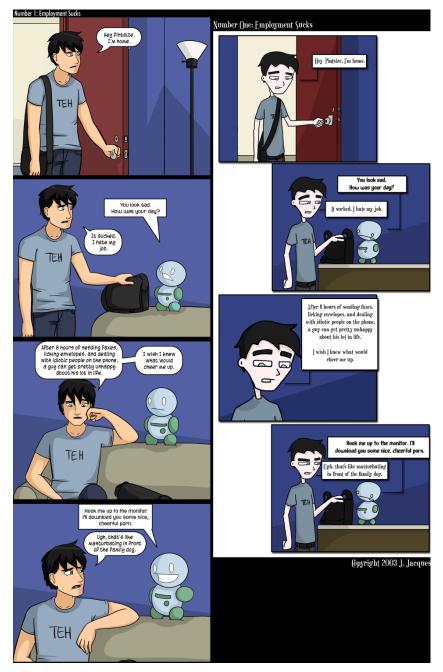


Fig. 8: A comparison of Jeph Jacques' style in 2003 and 2010 (Jacques, "Then and Now").

Missing from the print edition of *Questionable Content* are the news updates that Jacques includes in most strips. Under each strip is a small text box that Jacques uses as a blog of sorts. Some updates comment on the strip such as the news post under "Number 2215: Give It Your All" in which Marten realizes he should try to make the most of his job even if he doesn't like it. Jacques comment reads: "I really could have used this advice at my last real job." Most of the time however, the space under the comic is used to inform readers about upcoming appearances at comic festivals or new merchandise such as shirts or new books being available in his online store. At other times Jacques uses the news posts to apologize for not being able to draw a new comic: "Sorry, everybody. Had a health problem in the family

that has left me in no shape to write a comic. Things are going to be fine, it's just been a rough evening." (Jacques, "Number 2225: Oh God, Filler Art").

What replaces those news updates in the print edition are comments under each strip that are written more in the style of alt text in other webcomics. Here Jacques comments on his own work, gives insight into his process and cracks jokes that rely on the familiarity of the reader with the online edition of the comic. In "Number 224: ID Please" (116) in which the 24-year old Steve finds out that his new girlfriend Ellen is only 17 year old, Jacques writes: "Given the slow pace of the comic, Steve is probably STILL 24. It's interesting how my perspective on the characters has changed now that I'm older than all of them." This comment illustrates not only Jacques self-deprecating sense of humor, but also the changes in focus the comic had. Whereas earlier comics were clearly sympathizing with Marten's hopelessness regarding his career choices and love life, later comics show a much more nuanced view and mock Marten as much as pity him and his equally downbeat friends. Similarly, the comments under the strips give an interesting insight into Jacques' evolving style. In the comment under "Number Forty-Two: Not Sexy After All?" (32) Jacques directly references the news update for the comic on the website: "In the newspost for this comic, I go on and on about how much time I spent drawing the hands. Looking at it now, I can only shudder. Such is the price of hindsight (and slowly improving art)."

With these comments, the *Questionable Content* print edition acknowledges the time gap between publishing a webcomic and a comic book as well as the artistic growth of Jacques. In fact, I would argue, that at points the layout of the print edition enables reader to see the changes in Jacques' artwork and comic style more clearly than in the web edition. This is due to the layout of the print edition with two strips per page or four strips per double page. According to Groensteen "the part of the support (magazine or book), and the segment of the work, that is offered to the reader's gaze is a double page. From the point of view of perception, the double page constitutes a pertinent unit and merits our attention at this time" ("The System of Comics" 35). This is quite important for the reading process of a comic as "pages situated opposite each other are dependent on a natural solidarity, and predisposed to speak to each other", which is something that authors take into account and thus "conceptualize their pages two at a time" (ibid.) Because each double page contains four comic strips, the differences between them, even small ones, become more apparent in direct comparison. Whereas the online edition of *Questionable Content* separates each strip, the print edition lets them "speak to each other" (ibid.).

This is not to suggest that the print edition of *Questionable Content* is in some way "better" than the web edition, but to show that it uses the possibilities of print to illustrate what makes the web edition special. Reading *Questionable Content* online lets readers only slowly notice the comic's changes. Only when Jacques makes a dramatic change of his art style, a review of older strips might cause readers to notice that Jacques has been altering his style all the while. The book on the other hand lets readers discover this process more quickly. It serves, in a way, as a companion piece to the web edition. As an edition that helps bring certain elements of the work into focus while translating it to a different medium.

4.2.2 From roleplaying insider jokes to fantasy epic: The Order of the Stick

Questionable Content is a webcomic that makes its process of change and alteration quite apparent through changes in art style, other webcomics might keep a consistent art style but change in other ways. In the long-running webcomic *The Order of the Stick* by Rich Burlew the overall style has remained consistent since the start of the comic in 2003, the changes in narrative design, however, have been subtle yet very important for the comic's identity.

The Order of the Stick (abbreviated as OOTS) is a satirical webcomic about a self-aware group of fantasy heroes travelling and fighting through a realm that is based on the rules and peculiarities of the popular pen & paper roleplaying game Dungeons and Dragons. The characters break the narrative fourth wall frequently, referring to being in a comic and discussing the rules of the pen & paper game. But the most striking feature of the strip is its art style. Burlew uses a very simplified, stick figure style with bright colors and only few details to identify characters. It is a very playful and simple style, owed in part to the visual clarity it provides and in part because it makes it possible to create new strips much quicker, as Burlew explains in the frequently asked questions (FAQ) section of his website:

I use Adobe Illustrator, a high-end vector-based graphics program. Believe it or not, creating those little stick figures require an expensive design program and years of experience. Illustrator gives me the smooth blocks of color and nice lines that I think add a lot to the OOTS look. Plus, it allows me to save a series of frequently-used poses, which cuts down my production time. (Burlew, "FAQ")

The Order of the Stick started out as a fairly light, comedy strips with jokes about conventions of roleplaying games for a mostly insider audience that would "get" the punchlines. In the same FAQ mentioned earlier, Burlew writes that although *The Order of the Stick* "has a jokea-day", meaning that the most of the strips are based around jokes and punchlines, "it has plotlines that are set up far in advance of their resolution." However, there was little in the comic to suggest sweeping plotlines in the early strips. The group of fantasy heroes was trying

to hunt down the evil undead mage Xykon and steal his treasure, which as far as roleplaying games go, is the most basic of story outlines.

Over 800 strips later, *The Order of the Stick* now presents a comic filled with fleshed out characters with their own motivations and crisscrossing storylines about magic gates, kidnapped relatives and city sieges. In the almost ten year long history of publication, *The Order of the Stick* transformed from a joke-a-day comic for roleplaying fans to an epic fantasy tale of its own.

This slow change shows in the way *The Order of the Stick* uses punchlines. In his yet unpublished doctoral thesis *Piecing the Parts: An Analysis of Narrative Strategies and Textual Elements in Microserialized Webcomics* the comics scholar Gabriel E. Romaguera Rodrigues finds that the structure of Burlew comic changes significantly the longer the story keeps going:

The number of installments where a punchline is absent steadily increases as the narrative goes on. All of the first fifty issues have a punchline. Up until issue #350 less than 10% of the issues do not have a punchline. From then on out, the percentage of non-funny endings rises to a quarter and in some ranges almost up to a third of the installments. The majority of the issues still contain a punchline regardless of this increase; however, the change in the direction of the webcomic's style is clear. (114)

This change in using punchlines as endings for strips and thus going for endings that keep readers coming back to see the story unfold reveals the changing direction of the comic. It would be difficult to tell from art alone that Burlew has shifted focus as his stick figure style has remained largely unchanged safe for increase of details on scenery and characters.

Another aspect of the comic that illustrates this shift in tone well is Burlew's use of non-traditional page layout. According to Rodriguez, Burlew has first started to experiment with non-traditional page layouts but later decided to use them more sparingly to stress important moments in the comic's story.

If anything it shows that Burlew's narrative planning has become more concise as each one page installment provides more information than earlier double or triple pagers. When breaks in the traditional page format do occur, they provide more meaning and visually communicate that it is a special moment or turning point in the narrative. (115)

The ease and low costs of publishing an online comic have provided Burlew with the possibility to explore his ideas for a comic and to slowly build up his world of stick figures and fantasy magic. The early strips, though similar in style of drawing, are a different, more irreverent comic compared to the more story-driven later strips.

Of course, not all webcomics do change in significant ways and not all webcomics handle change as well as *Questionable Content* or *The Order of the Stick*. In Tim Buckley's popular comic *Ctrl+Alt+Del* (or *CAD*) a dramatic shift in tone has led to fan outcry and

derision. *Ctrl+Alt+Del* is a long running webcomic about video game fan and slacker Ethan and his friends. It features a very regular panel layout of four equal sized panels with a punchline in the fourth panel. While not a very sophisticated or unusual setup for a webcomic, *CAD* has managed to become one of the biggest games-related webcomics since debuting in 2002. Always light on serious themes, Buckley made heavy use of non-sequitur jokes ("Day Nine"), used the comic to comment on topics related to videogames (Buckley "Metal Gear Boobies") or to celebrate videogame culture with his made up gaming holiday Winter-eenmas ("Winter-een-mas").

It came as a sudden surprise when after six years of silly jokes, Buckley published the strip "Loss" in 2008 in which Ethan's girlfriend Lilah suffers a miscarriage. The miscarriage changes the tone of the comic for a long time to come and *CAD* suddenly becomes a story of a couple suffering through loss. This led to heavy criticism with the way the comic has suddenly shifted tone and dealt with a serious topic. Most notably the games critic Ben "Yahtzee" Croshaw devoted an entire episode of his popular web video series "Zero Punctuation" to call out Buckley's use of the miscarriage as an easy way to generate attention through shock in an otherwise bland comic ("Webcomics"). The shift in *CAD* resulted in an internet image meme called "CADbortion" in which the last panel of the "Loss" strip (Ethan's girlfriend Lilah, crying and in pain) was used as the punchline panel in previous *CAD* comics. On the meme-tracking website Know Your Meme the thought behind this way of remixing was summarized as "Any CAD strip will become funnier by replacing the fourth and final panel with the last panel of the miscarriage strip." ("CADBortion").

While this is certainly a very crude way of criticism, it draws attention to the problems of change in webcomics. For readers, change has to feel organic. A humor comic cannot suddenly shift tone by forcefully including one shocking or tragic issue into a storyline about robots and videogames. *Questionable Content* handled this process well when Jeph Jacques revealed that the reason for the aloof and distanced behavior of the character Faye was a suicide in the family (Jacques "Number 505: The Talk, Part 6"). Suicide is a very sensible topic and, given the irreverent jokes about music and robots that characterized early *Questionable Content*, one that Jacques could have handled in a crude manner. But in contrast to Buckley's miscarriage storyline, the suicide storyline was carefully hinted at in earlier strips. Four years after the miscarriage in *CAD*, Buckley's comic is again as silly and non-sequitur as when it began. The tragic event did not change the comic, but proved to be a dark punchline after which the comic continued as if nothing happened. The suicide of Faye's father in *Questionable Content* on the other hand is still a central issue in the comic and one

that informs the character of Faye and her relationships with her friends. The suicide storyline showed how much thought Jeph Jacques puts into his world and his characters, Buckley's "Loss" on the other hand shows how little this matters to *CAD*.

Thus, it is difficult to see webcomics as finished works when so many changes can happen through a lifespan of a webcomic. According to Rich Burlew's FAQ, *The Order of the Stick* "does indeed have a finite lifespan, however, and I already know what the last panel of the comic will be", but the path to that end is still unwritten. I would argue that his comic will be a different one when it reaches that last panel. Maybe it will be darker, or lighter or deal with more serious topics than the early days of fighting evil and looting dungeons. Webcomics without clear-cut divisions between big changes, it seems, can only be understood as finished works when their creators say they are finished or simply stop working on them. Before that point, many webcomics are comics in progress, an unfinished process of finding the right style, the right words, the right layout, the right tone to create a work that the cartoonist deems right.

4.3. Remediating Weekly Comics

Academic discourse surrounding webcomics, scarce as it is, often relies on playing up the possibilities webcomics give to revolutionize or change the comics field at large. In his book on webcomics Reinventing Comics, Scott McCloud famously claimed that webcomics would change the way comics are produced and consumed as well as what comics are understood to be: "Within a decade, anyone with modest means and sufficient desire will be ready and able to reinvent the look of comics forever" (153). Even more critical scholars like Fenty et al. who see McCloud's ideas as "hyperbolic proclamations about the internet as an inevitable site of radical aesthetic evolution and economic revolution for comics," are not completely resistant to the promises about revolutionizing, or at least changing, the comics field. In their paper "Webcomics: The Influence and Continuation of the Comix Revolution" they propose that webcomics are ideologically related to underground comix of the 1960s. This is, they argue, reflected in webcomic's "subversion of comic book conventions and their freedom of expression in content and form," and in their ability to offer "new avenues of aesthetic experimentation for comic artists." According to Fenty et al. webcomics give the "freedom to release comics that the mainstream industry and audience would reject" for reasons such as "questioning of gender norms" and the discussion of causes related to software and copyright such as "Open Source and Copyleft." Scholars like Marianne Hicks eschew the

sensationalism, but place webcomics "firmly within the realm of Web 2.0 ideology," offering new ways of connecting audience and cartoonist. In a way, this view still positions webcomics as a very "new" medium that has more in common with Facebook and YouTube than with a comic book. Although far less sensationalist than McCloud, the analyses of Fenty et al. and Hicks construct webcomics as being ideologically in opposition to a largely undefined "mainstream" as well as being part of something new, a Web 2.0 movement or a continuation of underground resistance. Though these ideas about webcomic ideologies are not without merit and can be applied to numerous webcomics, they somewhat ignore other, older influences on webcomics that are less politically and ideologically charged. I would argue that one major, if not the major, influence on webcomics is the newspaper comic strip of the 20th century.

4.3.1 Strips and books: The two forms of comics language

According to Bolter and Grusin all media finds itself in a complex relationship of remediation, meaning that older and newer forms of media influence and, in turn, change each other. For Bolter and Grusin, remediation is a central part of what constitutes a medium, leading to the definition: "a medium is that which remediates," (65) that is, they borrow certain elements from older forms of media and influence emergent forms of media. The various arguments by scholars like McCloud, Fenty et al. and Hicks show, it is tempting to see a fairly new medium, such as webcomics, as being innovative in all regards because a new medium is expected "to justify itself by improving on a predecessor" (Bolter and Grusin 59). But as much as webcomics innovate the comics genre, they also borrow extensively from the principles of newspaper comic strips.

At first, this might sound trivial. Certainly, newspaper cartoons or "the funny pages" were a major influence on any form of sequential storytelling. In the US, newspaper strips were the first example of widely published and widely available comics. The first step towards a comics industry and a comics culture was the syndication of cartoonists in newspapers. In his comic history *The Evolution of the American Comic Book* Paul Lopes cites newspaper comic strips as the one form of comics that enabled the rise of comic books:

Newspaper comic strips would seem the most obvious influence on the comic book: the comic strip craft of combining paneled illustration with text is the fundamental craft of comic books. The comic strip had entertained newspaper readers since the 1890s. It continued to grow in popularity into the twentieth century. Comic strips witnessed a boom of new strips and genres in the 1920s and 1930s. The first comic books in the 1930s actually were reprints of popular comic strips found in newspapers across the country. Early comic book artists' original work

was unquestionably influenced by comic strips and their popular artists. And a number of artists who began in comic books eventually would produce newspaper comic strips. (3)

But while newspaper comic strips might have been the beginning of the US comics culture and industry, they were just one step in the evolution of the medium. Only when comics started to be distributed in book and magazine format they have become a truly popular medium. The comic scholars Randy Duncan and Matthew J. Smith see the evolution of the US comics industry as a combination of newspaper strips and pulp novels:

The American comic book industry subsequently grew out of two roots: newspaper comic strips and pulp magazines. The format and commercial infrastructure grew primarily out of a repackaging of the comic book's closest cousin, the comic strip. Part of the investment capital, the talent, and even some of the heroic archetypes were diverted from the pulps. (26)

If the newspaper strip has been the beginning of modern comics and comic books its continuation, then, in Bolter and Grusin's terms, it makes only sense to see webcomics as comics' next step, as the "[improvement] on a predecessor" (59). But this simple line of progress does not correspond to the actual development of the comic medium. According to comic historian Joseph Witek the comic book and the comic strip are both part of sequential art, but differ in key elements. For Witek, comic books and comic strips are not stages of a comic evolution, but formats in their own right:

The difference between comic strips and comic books seems at first to be one simply of length: a comic strip is a brief series of panels, a comic book a longer one. Indeed, comic books began life in the 1930s as anthologies of reprinted newspaper comic strips. But comic books have evolved their own generic, narrative, and formal conventions; they are not simply bloated comic strips. While comic strips and comic books share a common narrative vocabulary and grammar they diverge so fundamentally as to constitute different literary forms. They differ in their situations in the marketplace, in their cultural status, in their physical mode of presentation and in the reading conventions they evoke. (6)

Witek argues that there are key formal and cultural differences between comic strips and comic books. Comic strips are "brief" and are mostly "'gag' strips usually three or four panels […] ending each day with a humorous punch line" coming to readers as "unbidden […] supplementary features" (Witek 6) of a newspaper. Apart from a different role in US culture, comic books "work in much larger and longer segments" structured around print conventions like double pages and stories being told in larger units (Witek 9). Comic books can be visually as well as narratively complex and can be considered "adult literature" with "no apologies" (Witek 10), whereas the strip has to be short to "surprise and please" (Witek 8).

If this sounds judgmental against the comic strip, it is because Witek is indeed judgmental. Witek admits that aside from the usual newspaper fare of "domestic comedy and soap-opera melodrama" the comic strip "has produced some of its greatest achievements in other styles and genres such as the stunning visual displays of Winsor McCay's *Little Nemo*

in Slumberland" (7-8) and others. But other than that Witek sees these strips "moribound today as epic poetry" (8):

Since at least the end of the 1950s, the potential in the sequential art medium for visual impact and narrative drive has been increasingly displaced from strips onto comic books. The most obvious reasons for the formal shift is the growing technical restrictions to which newspaper strips have been subjected. (8)

While the comic book has seen a slow rise in cultural importance with works like Art Spiegelman's *Maus*, the comic strip, however, has been held back from reaching its potential by being embedded in newspapers. Strips suffered from technical limitations like paper quality of newspaper print and the demands of layout editors who needed to place strips among news stories. Witek concludes that in newspaper strips "visual detail and closely plotted action thus of necessity gives way to broadly caricatured figures and primarily verbal humor" (8).

So if comic strips seem inferior to comic books it is only because of technical and cultural constraints, not because the comic book is an inherently better, newer or improved form of the strip. The strip is a different form of sequential art. It requires a different set of skills and a different way of using the comics medium. For webcomics, it seems that publishing on the web, however, has freed cartoonists from the limitations of the newspaper print business and allowed them to continue exploring the comic strip as a valuable form of comics.

4.3.2 The webcomic strip

Looking back at the comics I already discussed in this thesis it becomes apparent that most of them belong to the comic strip format. *Dinosaur Comics*, *A Softer World AmazingSuperPowers*, *Questionable Content*, *CAD* are all comic strips. Even in their print edition they resemble early print collections of newspaper strips more than full-fledged comic books in Witek's sense. So far, only *Order of the Stick* could be seen closer to a comic book than to the comic strip, but even that only because Rich Burlew changed direction from gagbased comic to comedic epic fantasy narrative. So, are all webcomics strips?

Of the Wikipedia list of the 42 currently running webcomics listed as successful enough as to support their authors financially, only 12 can be identified as following Witek's comic book model ("List of professional webcomic artists"). Of course, this is only a rough estimate. The *Wikipedia* list only includes webcomic artists from the US, the UK and Canada and relies on FAQs about the income of cartoonists found on their own websites as well as news reports about webcomics and interviews with creators. That said, it is still a good

indicator of relative success and it shows that overall, webcomics in the strip category are somewhat more popular than the ones that follow a comic book model.

The popularity and importance of humor based webcomic strips is further stressed in Steve Horton and Sam Romero's *Webcomics 2.0: An Insider's Guide to Writing, Drawing, and Promoting Your Own Webcomics*. In the guide Horton and Romero write about practical matters, such as which internet host an aspiring cartoonist should select for their first webcomic website, but also about genres of webcomics. According to *Webcomics 2.0*, strip style comics are one of the most versatile and most recommended formats for cartoonists to use:

Has anyone ever e-mailed you a link to a webcomic? Odds are, they sent it to you because it was funny and relevant. Many of the best and most popular webcomics on the net, like many newspaper comic strips, are purely humor based or contain strong humor elements. Unlike newspaper strips, though, humor webcomics are not confined to three or four postage stamp—size panels. Humor webcomics are also not subject to the sensibilities of newspaper demographics, which can skew much older than the average webcomics fan, and are not subject to severe restrictions on content imposed by newspapers and print syndicates. Many creators use the canvas of the Web to create comics of all shapes and sizes—sometimes varying that size from day to day! Humor comes in infinite forms in webcomics, but as far as popularity goes, subject matter has seemed to settle on several distinct forms. That's not to say that you have to fit into one of those niches. In fact, the existence of these popular types might serve as a warning to try something different— or risk drowning in a sea of look-alikes! (3)

For Horton and Romero, the main advantage for webcomic strips is their freedom in terms of size, layout and theme. The web allows for strips "of all shapes and sizes" as opposed to "four postage stamp-size panels" in newspapers and the content does not have to entertain the "sensibilities of newspaper demographics." They admit, however, that the freedom in terms of theme comes at a price. Because "webcomics fans are younger and more interested in Internet culture" such as "gaming, blogging, MySpace, and satire" (18), cartoonist that want to be popular should work with these themes. Instead of domestic comedy for older readers of newspapers, webcomic strips therefore should fit the tastes of a younger demographic. The advantages of the web for comics do not sound very groundbreaking here.

The freedom to use any kind of layout and size is relativized later on in *Webcomics 2.0* as well. In a chapter on comic script writing Horton and Romero remind readers that "if you're doing a comic strip rather than a comic book for the Web, there may be only a few panels per installment to work with, so your script if you do one at all, will be only a page or so" (57). This further strengthens the implied advice that if you should publish a webcomic strip, panel layout should be kept short and simple.

The advice for aspiring artists found in *Webcomics 2.0* is largely based on experiences of successful cartoonists. It is therefore not surprising at all that the description of webcomic

strips fits the comics previously discussed in this thesis. In fact, Horton and Romero's description of webcomic strips and Witek's definition of newspaper strips does not differ that much at all. In Duncan and Smith's comic studies text book *The Power of Comics* Witek's definitions of comic books and comic strips are juxtaposed, placed into distinct categories and used to discuss the properties of the different formats. Using this framework on the webcomics previously discussed in this thesis shows them clearly as strips or, at least, heavily influenced by the strip format, but it also reveals much clearer than the jovial discussion of the strip format in *Webcomics* 2.0 how webcomics expand upon Witek's model.

From an art perspective, comic strips have very few panels; use only the panel for so called encapsulation or "the selection of key moments of action"; have a rigid layout and a simple composition (Duncan and Smith 6). This is contrasted with comic books which can have many panels; complex units of encapsulation like "the page, the two page spread and inset panels"; creative layouts and complex composition.

Webcomics like *Questionable Content*, *A Softer World*, *AmazingSuperPowers*, *Dinosaur Comics* and *CAD* all have a fairly rigid panel layout with few (usually around four) panels, although, theoretically, an often changing layout would be possible. Accounting for the composition is somewhat more difficult. Though, for example, early strips of *Questionable Content* had mostly characters drawn from the waist up talking to each other while still facing the reader, in later strips Jacques used more complex arrangements like different perspectives and changing environments. *AmazingSuperPowers* and *A Softer World* only ever change their layout on special occasions while the main feature of *DinosaurComics* is that only the text differs from strip to strip while everything else stays the same.

But the biggest difference between comic books and strips lies not necessarily in their art and layout, but in their different cultures. Strips and books "exist for different reasons and serve different audiences and purposes" (Duncan and Smith 5). In Witek's model as summarized by Duncan and Smith comic books exists as "products in their own right" that can serve as forms of literary and artistic expression; they must be actively sought out by readers; thus they have "fewer and fewer" readers but can nonetheless foster a "fandom subculture" (Duncan and Smith 7). Comic strips on the other hand only exist to be sold to newspapers. They are not a way of literary or artistic expression, but just a mundane way of paying bills for cartoonists. This shows in the way they are distributed: "unbidden" as newspaper supplements for many readers, who only derive brief pleasure "and go on about their lives" (ibid.).

If the biggest difference between comic books and strips are their respective cultures, then webcomics can be used to bridge that difference, to foster comic strip culture. Webcomics deviate significantly from Witek's cultural comic strip traits. Though some webcomics do exist to be sold as promotional material to websites that have little to do with comics, most webcomics are "products in their own right" serving both as a modest means of paying bills for cartoonists as well as literary and artistic expression. As I showed earlier, for the creator of *Questionable Content* the comic became a way to grow artistically and to express shifting interests from indie rock to romance and futurism. Unlike newspaper comic strips, webcomics do not come to readers "unbidden." In fact they don't come to readers at all. Like comic books, most webcomics have to be sought out by readers.

Still, like with newspaper strips, webcomic readers might only derive brief pleasure from reading a strip and then "go on about their lives", for example when somebody "emailed you a link to a webcomic" or "sent it to you because it was funny and relevant" (Horton and Romero 3). However, it seems that for many readers they are more than that. It is of course very difficult to attest to the existence of a "fandom subculture" that Witek sees as a qualifier for the merit of comic books, but there are certain pointers towards the existence of a webcomic fandom subculture like the inclusion of webcomics into comic festivals like the Toronto Comics Art Festival (TCAF) or the existence of webcomic publishers like TopatoCo that sell shirts, books and toys related to popular webcomics.

Unlike comic books though, it seems that webcomics are not a form of cultural expression that struggles to find an audience. They get more and more readers the longer they are published. In an interview in *Webcomics 2.0* Jeph Jacques says that he made the comic his full time job when he started having "about 30.000 readers per day" (49). Though the biggest reason for that is probably that most webcomics are available to read without charge on the Internet, I would argue that the two most important reasons for the popularity of webcomics are connected to their use of the internet and their use of comic strip culture and aesthetic.

In his close reading of *Order of the Stick*, Rodriguez shows that webcomics are embedded in websites and consist of many elements besides the actual comic. They feature elements that help creators connect with readers such as forums, blogs, frequently asked questions (FAQ) or shops. One element that Rodriguez notes as being "exclusive" (76) to webcomics and the web is the ability to link to other media:

The webcomic cartoonist can provide hyperlinks to just about anything he/she wants to for the readers to follow. These optional texts include different sections, such as other writings by the author, guest strips, other webcomics, and even thoughts and writings that they believe have their own place outside the blog page. (75)

Webcomics take advantage of that exclusive ability by linking to other work and thereby establishing a network of sorts. This network is somewhat looser than more traditional artist collectives, teams or publishers, but it keeps readers discovering new comics easily while reading their favorite webcomic. On his website *questionablecontent.net* Jeph Jacques uses a link list titled "Other Good Comics" to recommend comics such as *A Softer World* and *Dinosaur Comics* among others.

Still, linking to other comics is only a small part of why some webcomics can have a steadily increasing readership. I would argue that it is specifically its linkability, or the ability to easily link to specific content, that allows Questionable Content to thrive. Readers who open the Questionable Content website, will find the current strip. By clicking on the "Previous" button above the comic image, readers can "go back" to previous strips. But unlike turning pages in a book, looking at a new strip means going to a new subpage of the questionablecontent.net website. complete with its own URL like [http://questionablecontent.net/view.php?comic=2261] which would link to strip 2261. Stripped from the comic context in which they are mostly discussed, webcomics are thus structurally more similar to blogs, meaning they are "frequently updated Web [sites] consisting of dated entries arranged in reverse chronological order so the most recent post appears first" (Rettberg 19).

Webcomics' similarity to blogs is very important to understand them structurally. While comic books and comic issues are most often recommended as a whole (i.e.: "You have to read this book!"), webcomics can be linked to a specific strip that showcases the strengths of the comic to a new reader. However, few webcomic creators use this to their advantage. Jeph Jacques does not link to specific strips, but rather to other webcomic sites as a whole. Readers who click on his link to *Dinosaur Comic* will find the most recent strip, not one that Jacques thinks is especially good or recommendable. And this is understandable, too. These links to other works are recommendation of other comics as a whole, not of single strips.

This presents a unique challenge to webcomic creators. New readers will, probably, only see the latest page of their comic. But if the latest page will not appear "funny and relevant" (Horton and Romero) to new readers, they are not likely to stick around. If cartoonists want to increase their readership, every strip must be similarly good and linkable. For this, the comic strip presents a very useful form. Strips eschew complex page layouts and units of encapsulation which would take full advantage of a printed book, but use a simple layout of a few uniform panels to show new readers what to expect from a comic from one single strip. Strips are short as well, which means that new readers need only little time to

assess the quality of a comic before deciding whether they should continue reading it. Most importantly though, traditional comic strips are self-contained, which means that only little knowledge of a comic's characters, story or setting is needed to derive pleasure from a single strip.

If the 2262nd *Questionable Content* strip "Number 2262: A Beer, Please" would be the first strip a new reader would encounter, it would still work as a humorous slice-of-life comic. To derive pleasure from Marten's annoyed reaction to his over-concerned friends, a new reader does not need to know that in this strip Marten is talking to his ex-crush Faye about his ex-girlfriend Dora who is now going out with his boss at the library Tai. The importance of this style of creating comic strips for a webcomic to grow is evident in Rodriguez analysis of Burlew's *The Order of the Stick*. According to Rodriguez, up until the 350th strip "less than 10% of the issues do not have a punchline" (114), meaning that 90% of the strips up to that point are intended to work both as self-contained humorous strips as well as parts in a larger narrative.

Certainly, webcomics that grow popular and establish a large core readership like *The Order of the Stick* might change this way of writing, but self-contained strips seem like a very efficient way of publishing comics on the web and it explains why so many webcomics adhere to this style. Comics like *Dinosaur Comics* and *A Softer World* use the strip format to adapt to the possibilities and peculiarities of the web as well as to the reading habits of web users. By remediating strips online, webcomics highlight the advantages of a medium that scholars like Witek saw as inferior to the comic book back when strips were published in newspapers.

4.4 On Clicking Next

Many webcomics have found a viable way of presenting comics on the web through the remediation of self-contained, linkable, short comic strips. Webcomics show that Witek's model of strips as an inferior way of making comics is not so much linked to the strip format as to the unique situation cartoonists have found themselves in while publishing their strips in newspapers. But while webcomics such as *A Softer World, Dinosaur Comics* or *Questionable Content* show that the strip format can be utilized in diverse ways, the very same properties that make webcomics work well within the strip format make it harder for them to remediate long form comic books just as well as strips. Are webcomics just not suited for the kinds of long form, complex works that are being published in the comic book space?

4.4.1 The webcomic as comic book

As *The Order of the Stick* shows, webcomics that try to go beyond the strip format exist. But trying to recreate a comic book on the Web has its own set of challenges that is reflected in long form webcomics. According to Witek's model as summarized by Duncan and Smith the main traits of comic books are a creative use of layout, many panels and complex units of encapsulation that uses the printed book for various compositions. At first, this might not sound problematic for a webcomic at all. It is certainly possible for a cartoonist to use the "language" (Duncan and Smith 6) of the comic book when creating a webcomic, because on a very basic level a webcomic consists of digital image files. A cartoonist could, theoretically, publish a webcomic that uses complex units of encapsulation, double page layouts and many panels. Utilizing digital tools a cartoonist could even go beyond what is possible for an artist who works with the printed page by freely switching art styles that would depend on a certain type of paper, book format or page layout. But this happens only very rarely. In *Reinventing Comics* Scott McCloud notes that using such an eclectic method would only result in bad art:

Seasoned professionals can often spot "newbies" by their tendency to overdo it; using multiple effects filters on a single image for example. Most learn what "works" and what doesn't "work" in due time and gradually back away from this vortex of bad art. (McCloud 146)

Besides the somewhat vague concept of the threat of "bad art" there are very understandable reasons as for why most webcomics keep their layouts and styles more simple. For this it is important to consider the actual reading experiences of a webcomic. As mentioned before, most webcomics are structured like blogs, so new readers will most probably encounter the latest page or strip first. Displaying the latest entry first, new readers might get a confusing first impression when opening a webcomic site for the very first time. A complex double page spread of a fight scene or heated dialogue would make for a difficult entry point when reading a new webcomic. Using a more or less regular layout instead ensures that readers can understand the overall style of the comic better. Combined with recurring characters and themes in the strip format, webcomic strips like *Dinosaur Comics* or *A Softer World* enable readers to quickly see the main concepts of a comic they might be interested in reading.

Assuming that a webcomic does not follow the strip premise of self-contained strips in a slowly evolving frame narrative (or no frame narrative at all), the webcomic format poses a significant challenge for the pacing of comic book style webcomics. As mentioned before, I would place webcomics into the category of ergodic texts in Espen Aarseth's sense, meaning that they require a "nontrivial effort [...] to allow the reader to traverse the text" (1) through the use of archives, alt texts and other digital tools. As a mostly linear, non-digital form of

media on the other hand, I would argue that comic books in Witek's understanding are non-ergodic and require only trivial effort from the reader such as eye movement or turning pages. Although, according to Groensteen, actually reading a comic constitutes a "very elaborate" mode of reading (*The System of Comics* 160) in which readers have to decipher "an organic totality that associates a complex combination of elements, parameters, and multiple procedures" (*The System of Comics* 159), the basic acts of using a comic book (turning pages, moving eyes) is similar to the one employed when reading a book. This difference between ergodic webcomics and non-ergodic comic books results in a very different "rhythm" of reading that, according to Groensteen, lies at the very core of reading comics:

The "text" of comics obeys a rhythm that is imposed on it by the succession of frames— a basic heartbeat that, as is seen in music, can be developed, nuanced, and recovered by more elaborate rhythmic effects stressed by other "instruments" (parameters), like those of the distribution of word balloons, the opposition of colors, or even the play of the graphic forms. (Groensteen, *The System of Comics* 45)

For webcomics rhythm comes not only from the elements Groensteen named – word balloons, colors, graphic forms, page layout – but also from the way readers traverse their pages. In order to read the online edition of *Questionable Content*, readers cannot simply and trivially "turn" a page, but have to click a "next" button above the comic image to get from "Number One: Employment Sucks" to "Number Two: While You Were Out..." Admittedly, the difference between one simple click on a prominent button above the comic image and one flick of the hand to turn a page, does not sound like it would change the reading experience too much, but it does prove significant in the long run. Due to technical constraints like network quality, internet connection or bandwith the loading between one webcomic page and the other can take between several seconds. This might not matter much if a reader only clicks next between ten or so comic pages, but it is a taxing and disruptive experience when attempting to read more than 2000 pages worth of *Questionable Content*.

For cartoonists this has one serious economic advantage. Because each comic page constitutes its own sub-page on a website, splitting a comic into hundreds or thousands of single sites within a site helps to increase page impressions which are in turn calculated to help determine how much money a cartoonist would get from the advertisement placed around his or her comic. Unfortunately, what benefits creators financially does not necessarily help the comic book format on the web. Reading a long webcomic page for page online is not an experience that is comparable to the trivial turning of pages. Because of the disruptive experience that clicking "Next" creates, webcomic readers often rely on outside tools to mitigate this effect and to create a smoother reading experience:

Going to the next or previous installments is often simplified with quick access hyperlinks found in the margin though there are ways to circumvent this method, as with the Mozilla Firefox add-on AutoPager created by Wind Li. This program allows the following installment to load below the one you are currently reading every time you reach the bottom of the current page, making it unnecessary to load individual pages. This type of reading works for readers who wish to see the webcomic in its entirety, rather than those who read only the most current installments as they are published. (Rodriguez 64)

But although the fact that digital tools like the AutoPager are proof of the malleable nature of webcomics, they do not change how webcomics are written, drawn and conceptualized. According to Rodriguez, the technical constraints of the web are mirrored in the way webcomics structure their narrative:

The narrative has to be adjusted to the technological aspects of its digital medium and overcome the challenges of its serialized publication format. Narrative strategies employed in webcomics have to be shaped to work in this framework (Rodriguez 4)

Because webcomics tend to continue publication for a long time, are dependent on page impressions for income from advertisement and rely on a quick first impression of the latest page to convince readers to read the previous entries as well as to stay for the next installments webcomic strips are rarely used to tell the kinds of long form, literary stories that Witek values in comic books. This is a recurring theme in the advice for young cartoonists by Steve Horton and Sam Romero. According to Horton and Romero, webcomic artists should concern themselves less with telling a concise story, than to keep it more thematically focused:

Unlike a print comic book or graphic novel, webcomics have no finite page count. Your beginning, middle, and end need not fit between the staples of a 22-page comic book. You don't need to write a story that's exactly six issues in length to fit into a trade paperback. This freedom from rigid page counts, though, means that you have to be twice as aware of story structure. Just because your installment or page count is open ended doesn't mean your story shouldn't go somewhere. (104)

This approach is visible in comics like *Questionable Content* that have long story arcs that take time to resolve, but usually concentrate on short episodes and daily jokes to keep readers entertained. More rarely, webcomics transition from one style to the other. As noted before, *The Order of the Stick* started out as a joke based strip but then transitioned into a more storycentric comic concentrating on characters and long story arcs that fit the long-running webcomic form. In the specific case of *The Order of the Stick* the transition became very visible within the comic as it became apparent that the strip format was too limiting for Burlew to tell a heroic story and character-centric narrative in short self-contained installments of one "page" with a relatively regular layout. Rodriguez notes that after the 200th strip more and more updates broke with the previously established format and were conceptualized as double or even triple pages:

Issue #200 "The Confrontation" is another landmark in the webcomic and it is a "quadruple pager", a format that has not been used in any other installment so far. From that point on, more installments were produced as double and triple pagers until the aforementioned peak when almost half of the issues within this group went beyond the traditional page format. This can be attributed to the fact that this group recounts the end of the epic war for Azure City and the beginning of the Roy in the afterlife story arc, and thus a single page was not enough space to convey all the necessary information needed per installment.

The more complex the saga of *The Order of the Stick* got, the more Burlew needed to break away from his established format. The clarity and simplicity of the webcomic strip format that help new readers ease into a new webcomic, became a hindrance for creating a comic book in Witek's sense. But it is not only the amount of information per strip, page or installment that cartoonists want to relay to their readers that is shaping the way webcomics are conceptualized, but also the constraints of time.

Usually, webcomics have an "update schedule" for new installments to go online. For instance, a new *Questionable Content* strip is published every week day, while *A Softer World* is updated three times a week. Some webcomics are only updated once a week, once a month, or just whenever the cartoonist had time to publish a new installment. Creating a regular schedule is one of the most common advices for new cartoonists:

Get yourself in the habit, get a regular schedule, and stick to it! Start with one a week and increase in frequency if you can. The important thing is not to miss updates. Write, draw, and post your comic regularly, and you won't hamstring yourself on the way to growing an audience. (Horton and Romero 210)

Though there is no hard data on the importance of regular updates over irregular updates and their effect on the popularity of webcomics or the satisfaction of the readers, most webcomic authors tend to decide on a regular publishing rhythm. It is fair to say that this publishing rhythm in turn influences the way a comic is written and read. Horton and Romero advice writers of a "dramatic" webcomic (107) to always "consider the concept of rising action" (ibid.) when writing a webcomic:

Each of the key scenes or "beats" in your story arc should generally be more important than the last. That is, begin the arc with smaller drama. Save your second most dramatic scene for the middle of the arc, during Act Two, and your most dramatic scene for the end of Act Three. By not dropping the bomb too early, you ensure that people come back for more. (ibid.)

The concept of "rising action" is certainly evident in *The Order of the Stick* that starts out as a fairly unexceptional adventure for a group of fantasy heroes and then continually ramps up to become an epic story with the fate of the whole world resting on the shoulders of the heroes. But unlike a comic book that can build suspense in various ways to keep reader engaged, webcomic creators have to ensure that readers remember to come back to the website even if the next installment will only be published a day or two or maybe even a week after the current installment. Like Rodriguez analysis of *The Order of the Stick* shows, webcomics can

be heavily influenced by being structured around a regular update schedule and this affects how they structure narrative:

Each installment must be significant enough to be a standalone text while still being cohesive with the previous and following texts that can be found in the ever growing documents of the ongoing work. Above all else, what distinguishes the ongoing serial narratives of webcomics that do not engage in narrative redundancy is the clear effort to maintain narrative continuity throughout the work. (Rodriguez 98)

Webcomic creators have to end each installment in a way that "[ensures] that people come back for more" (ibid.), be it through cliffhangers, jokes or through resolving conflicts while at the same time setting up new conflicts. According to Rodriguez " [up] until issue #350 less than 10% of the issues do not have a punchline" (114), meaning: The majority of the early installments of *The Order of the Stick* end in a way that is intended to be pleasing and conclusive for the reader. The priority seems to make the readers laugh, not to tell an epic story.

Unlike comic books whose units of encapsulation not only include the panel, but also pages and double pages to create a complex experience, webcomics usually work only within a few panels or a single page. Certainly, like the double and triple page installments of *The Order of the Stick* show it is possible to break away from this, but for various reasons this happens only rarely. Webcomics are mostly self-published and funded through merchandise and advertising on their websites. Double and triple page entries are not likely to suddenly increase site impressions or visitor numbers and thus increase advertising revenue. Instead, spreading out updates and splitting them into more installments helps to keep a regular update schedule and increase website impressions.

From the constraints of the web and the economic realities of self-publishing comics online it follows that remediating the comic book online has a broad set of difficulties which make the utopian claims that webcomics are "the future of independent, creator owned comics" (Horton and Romero 209) somewhat doubtful. Judging from the comics previously discussed in this thesis, it seems more like they are the future of a very specific type of comic, namely, the webcomic. Rodriguez calls this type of comic "microserialized" (89) and notes that this type of comic puts "importance on the composition of each particular installment" and a "successful cohesion between updates" (ibid.) with the need to make every single update "significant enough to be a standalone text" (98).

I would argue that this leads to a certain repetitive rhythm, one where each page has to provide closure through punchlines or use cliffhangers to keep readers coming back. As McCloud notes, this is also evident in print comic books where writers have "learned to tailor the last panel on the right hand page to act as a tease for the next page (whether the story

requires it or not)" (McCloud, *Reinventing Comics* 221), but whereas in print roughly half the pages would end in a "tease", webcomics need a structure that supports at least one "tease" per page. As an issue, this becomes especially visible when webcomics transition from web to print. The print edition of *Questionable Content* works well as a traditional collection of strips, but does not work well as an ongoing, continuous comic book story. For *Order of the Stick*, Rich Burlew has tried to not only publish collections of his online strips, but also provide original print-only comic books with the *Order of the Stick* characters that work as books, but would not fit the webcomic format.

4.4.2 Challenging the webcomic strip

Far from the supposed "freedom of expression" (Hicks 11.6) and "freedom of expression in content and form" (Fenty et al.) it seems that webcomics are governed by a very strict set of rules – not unlike newspaper strips or any other form of media for that matter – depending on the constraints of publishing on the Web and webcomic culture. But that is not to say that no attempts have been made to challenge these rules of creating webcomics that can expand upon the concept of the comic book just as well as of the comic strip.

One especially interesting attempt is *FreakAngels*, a web- and print comic about a gang of teens with psychic powers in a post-apocalyptic flooded London by the renowned comics author Warren Ellis and artist Paul Duffield. For a webcomic, *FreakAngels* is a special case that challenges common definitions of webcomics. Scholars such as Hicks define webcomics as "comics produced primarily for the web, rather than for print" (Hicks 11.3) and "made by an independent creator or creators, without an original 'print version' or corporate sponsorship" (ibid.). *FreakAngels*, however, is being published by Avatar Press and was intended as both a free webcomic and a print comic book, thus showing that this definition is somewhat limited.

More important than the business side of publishing and the question whether *FreakAngels* is a webcomic at all, is Ellis and Duffield's take on rhythm and updating schedule in webcomics and its effect on the design of the narrative structure. In the three years that *FreakAngels* was published online and in print, the comic was updated only once a week on its website with a so called "Episode." These updates included six pages, each on its own subpage, meaning that only one page is visible at a time. Pages in an episode can be viewed by clicking the hyperlinks at the bottom of the comic image leading to page 1-6 of one installment. Some of the pages use the webcomic's regular layout of two rows of two

rectangular panels each and some break with the regular layout in favor of full page artwork. Adding to the more comic book like experience is the fact that *FreakAngels* was not intended as an ongoing project like most webcomic strips, but as a coherent, self-contained work comprised out of 144 episodes or six print comic books. For a webcomic, this approach is quite unusual as most cartoonists try to create a long-running comic with a dedicated fan base because creating "a new webcomic and keeping the old audience is a challenge" (Horton and Romero 110) and might cause readers to "rebel" (ibid.) against the author if a webcomic should come to an end so that a new one can be made. This investment in a webcomic, as well as the economic realities of needing a large, regular readership to finance a self-published comic through merchandising and advertisement, is certainly one aspect that makes it harder for comic books on the web.

It would have certainly been possible to update *FreakAngels* six times a week with a single page for each update, but the different update schedule allowed for an experience with a slower rhythm more akin to comic book which is rare in the webcomic space. In the first episode this is already used to great effect. The first page establishes flooded London with a big panel that uses the space of two of the regular panels, and then introduces the rectangular panels of the regular panel layout that will be used throughout the comic. Pages 2-5 of the first episode then utilize the regular layout of 4 rectangular panels and the episodes closes again with a double sized panel of heroine KK flying over flooded London in her makeshift helicopter.

In contrast to webcomics such as *Questionable Content* the single pages of *FreakAngels* do not usually end in punchlines and cliffhangers but often in the middle of characters thinking ("Episode 0001 – Page 1") or in conversation ("Episode 0001 – Page 3"). Some pages break the regular panel layout all together to create striking imagery like in "Episode 0011 – Page 3" when the somewhat childish heroine Arkady stops the crook Luke by shattering both his mind and the panel layout until nothing but a white page and Luke's baffled expression remain on screen. The six page update schedule gives *FreakAngels* a slower, steadier rhythm that can support elements of comic book style storytelling with extended dialogues or panels establishing scenes instead of always sticking close to the main characters to give readers a quick impression of the comic. When in most webcomics the panel is the only unit of encapsulation, the update schedule of *FreakAngels* allows taking control of the pages as a unit as well.

Still, the influence of webcomic publishing conventions is palpable in *FreakAngels* as well. Like in most webcomics, the latest episode is displayed first when visiting the main site,

prompting the reader not to read from the beginning, but to try and understand the episode on display. Even though its single pages provide an experience more similar to the slower, less repetitive rhythm of the comic book, each six page episode still follows the principle that it needs to be "standalone" (Rodriguez 98) or self-contained and provide some degree of closure for readers, or at least intriguing them more than confusing them and turning them away from the comic.

Thus, each *FreakAngels* episode works as a very short, self-contained comic book issue tying into a larger series. The limitations of this approach become visible when examining the *FreakAngels* print edition. There is not much in the print edition that hints at the webcomic origin of *FreakAngels*. The transition from episode to episode is not marked in any obvious way. The print page of *FreakAngels* is used almost completely for the comic image, without much white space like in the print edition of *Questionable Content* due to either low resolution image files or comic images that were optimized for viewing on screen, but not on page. Missing from the print editions as well are the Interludes or "skip [weeks]" ("Interlude – Page 2") that appeared irregularly instead of a 6-page update when Ellis and Duffield needed a break or lost progress on the comic due to various reasons. Beginning with the second interlude, the space between regular episodes is used to advertise *FreakAngels* merchandising. The omission of the interlude in the *FreakAngels* print edition further helps draw attention away from the fact that the comic began on the Web, but is understandable due to its very specific use as an apology or explanation for the lack of a regular update as well as an advertisement to buy *FreakAngels* products such as the print edition.

However, subtle nods to the webcomic origin of *FreakAngels* become apparent upon closer examination. Because every intsallment is conceptualized as a self-contained episode as well as a part in the larger story, it is written, drawn and colored in a specific way to give every episode an identity or common "feel." Especially the color palette of each episode reflects this. The first episode is mostly cool greys and faint reds to underline the early morning atmosphere of the post-apocalyptic London. In "Episode 0003", in which *FreakAngels* introduces Karl, an anti-social gardener and one of the psychic heroes of the comic, the color palette is mostly warm browns, off-whites and lush greens and reds to emphasize the symbolism of the garden amidst the grey post-apocalypse.

Almost every installment uses color palettes to tie single pages together into a standalone episode. In the web edition, however, this is more difficult to notice than in the print edition. While the *FreakAngels* online edition shows only one page at a time, the *FreakAngels* book contains double pages which helps readers to notice the similarities and

contrasts in color and composition because from "the point of view of perception, the double page constitutes a pertinent unit and merits our attention at this time" (Groensteen, *System of Comics* 35). Apart from the display of single pages only in the web edition, the load time between pages in the further conceal the complex color work by Duffield. As every single page takes a moment to load in a browser depending on connection quality, it becomes harder and harder to draw connections and comparisons between pages just viewed, while flicking between pages back and forth is tedious. In this regard it has a similar effect as the *Questionable Content* print edition that helps highlight the progress of cartoonist Jeph Jacques as an artist through his comic by juxtaposing older and newer strips.

Another, more difficult to spot hint at the webcomic origins of *FreakAngels* is its panel layout of two rows of two rectangular panels per page. According to author Ellis himself, the panel layout of *FreakAngels* was developed to provide both an intuitive reading experience on the web and on the printed page:

That's why I developed the two-tier structure of FREAKANGELS pages. You go left to right, then down and left to right again. The two-tier structure makes it easy to scroll down to and easy to figure out, without elaborate coding. On my iPhone, I found that one regular-sized panel (the page was usually quartered) filled a screen nicely. ("The Shape Of The New Webcomics")

Readers who open a *FreakAngels* page will only see the upper two panels without scrolling down in their browsers. But because "you have to scroll most everything you want to read on the internet" (Ellis, "The Shape") Ellis and Duffield have decided to create a panel layout that relies on scrolling as an intuitive way of reading a comic on the web. At the same time, *FreakAngels*, the webcomic, is highly conscious of its nature as a printed comic book. Ellis and Duffield published "print-ready pages" (Ellis, "The Shape") as opposed to pages that were only intended for online use:

When preparing digital files for print collections, there's an important concept to keep in mind, and no, it's not painful. The bleed is the extra art around the border of a comic that is lost when the printing machines make the book. During the page-cutting process, you'll lose a certain amount of art around the edges. There are two solutions to the bleed issue. The first is to continue to draw all the way to the edge of the paper, but make sure that no important details appear on the edges and no speech balloons or captions would be cut off. This is called full bleed art. The other solution is to inset the artwork in the center of the page and put a thick border around it, .125 inches from the edge. The cutting will all happen outside of this border, so you don't lose any art. This is called bordered art. (Horton and Romero 133)

Whereas comics like *Questionable Content* need to have extra space around the comic image to fit it on a page without cutting off parts of the image in the printing process, *FreakAngels* was published online in the form it would go to the printer except for the file size of the comic images. Though readers who know only little of the comic publishing process will most probably overlook this aspect of *FreakAngels* it shows that it was created as an intersection

between webcomic and comic book. This hybridity of *FreakAngels* is part of what enables it to use an approach to comics found more often in comic books than in webcomics.

Certainly, there are numerous examples of long form narratives in webcomics that do not address the difficulties of publishing comic book style comics on the Web. The longrunning The Adventures of Dr.McNinja by Christopher Hastings for example is a popular webcomic that consists of numerous comic books or issues with a page count between 20 and 90 pages per issue, updated with a new page three times a week. In Dr. McNinja Hastings tells stories about Dr.McNinja, who is a doctor but also a ninja and battles various mystical foes with the help of his orangutan assistant Judy. Though the whole comic maintains a quite humorous style, Hastings does not generally follow the webcomic strip principle of ending each page on cliffhangers or punchlines. Dr.McNinja is a quite traditional comic book published on the web with some concessions to the general webcomic format such as the lack of double page spreads. Another example for the approach of somewhat ignoring web limitations and peculiarities is the romance comic anders loves maria by Rene Engström about a young Swedish couple expecting a child self-published online between 2007 and 2010. For the first 27 installments, Engström started working in a webcomic strip format, though occasionally breaking it for a more comic book style page ("#024 – 2007-02-19"), and then transitioned to full page layout until the end of anders loves maria more than 200 installments later.

Although not acknowledging the difficulties of publishing a comic book on the web as opposed to a comic strip, is certainly one possible way of dealing with the inherent difficulties of creating long form comics online, I would argue that it is somewhat problematic. By not taking into account issues such as load times, the separation of pages from one another, the need to fit a comic story into a regular update schedule and the difficulty to create different works as opposed to one never-ending comic, the webcomics format can seriously limit cartoonists. Something as simple as clicking next to read the next page can change the way comics are written and read. As *FreakAngels* shows, long form, comic book style narrative can work in the webcomic space when the format, the medium a comic is published in, and the desired narrative effect is taken into consideration.

4.5 Beyond the Infinite Canvas

If webcomics were supposed to enable cartoonists to "reinvent the look of comics forever" (McCloud, *Reinventing Comics* 153), then the comics discussed in this thesis so far have not lived up to that promise. While the web has certainly influenced the look and the culture of comics, I would not say that comics such as *Questionable Content*, *Dinosaur Comics* or even *FreakAngels* have "reinvented" comics. Though webcomics can constitute an own "language" (Duncan and Smith 6) like comic strips and comic books, they share the "vocabulary" (ibid.) of comics just as much as they build upon it. According to McCloud, these comics can be referred to as being "repurposed' print at heart" (*Reinventing Comics* 203):

One of the more obvious solutions is to treat the screen as a page, alongside a link to the following page. To compensate for the low resolution and screen shape, each page has roughly the same amount of visual information as a half page of printed comics. (McCloud, *Reinventing Comics* 214)

Cutting a print comic page in half for it to fit on screen makes sense, as most printed pages are longer than they are wide, whereas most modern screens are wider than they are long. Many long form narrative webcomics such as Engström's *anders loves maria* use or used this approach to make comic pages fit on screen. Essentially treating webcomics as print comics on half a page is certainly one way of acknowledging the technical constraints of screen sizes when publishing on the Web, but I would not say that this approach takes much advantage from the Web. Similarly, even comics like *The Order of the Stick* and *FreakAngels* that do not cut their pages in half still try to soften the impact of constraints of the online publishing on their storytelling instead of using the possibilities of the web to improve it. However, there is a small set of comic artist that try to create new forms of comics instead of remediating older formats and fitting them to the web.

4.5.1 Rediscovering the Infinite Canvas

One very popular approach of "reinventing" comics is what Scott McCloud has termed the "Infinite Canvas". A comic that uses the Infinite Canvas would abandon the structure of the printed page and instead use the infinitely scrollable browser window as its "canvas". Instead of clicking next and waiting for a page to load or flicking a printed page, a reader would only need to scroll to progress through the comic:

In a digital environment, there's no reason a 500 panel story can't be told vertically [...] or horizontally like a great graphic storyline. We could indulge our left-to-right and up-to-down habits from beginning to end in a giant descending staircase [...] or pack it all into a slowly revolving cube. In a digital environment, comics can take virtually any size and shape as the

temporal map – comics' conceptual DNA – grows in its new dish. (McCloud, *Reinventing Comics* 223)

If only comic authors would abandon the printed page as a point of reference for creating comics, then, McCloud argues, it would be possible to truly use the web "to change [comics'] shape" (*Reinventing Comics* 202). McCloud himself demonstrated the possibilities of the Infinite Canvas in *Zot! Online: "Hearts and Minds"*, an "original graphic novella" about his superhero Zot "totaling over 440 panels in 16 weekly installments" ("Zot! Online: "Hearts and Minds"). For McCloud, *Zot! Online* was an "opportunity to test-drive some of [the] screen-as-window design ideas for online comics" (ibid.).

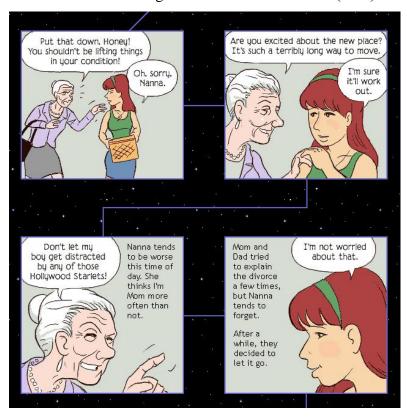


Fig. 9: Screenshot from the first episode of McCloud's Zot! Online.

However, McCloud's own attempts at Infinite Canvas storytelling feel somewhat underdeveloped. *Zot! Online* consists of single panels connected through purple lines that show the reading order of the panels (Fig. 9). Most panels are relatively isolated from one another and the space between each panel varies "to influence pacing" (ibid.). Strangely enough, isolating panels from one another is one of the approaches to creating webcomics that McCloud heavily criticized in *Reinventing Comics*:

[In] the temporal map of comics, every element of the work has a spatial relationship to every other element at all times. To break a comic down into single pictures is to tear that map to shreds [...] and with it, the very fabric of comics' core identity. (215)

Though the panels of *Zot! Online* are connected through thin purple lines, the effect is at times similar to breaking the comic down into single pictures. Still, numerous times, McCloud uses

the Infinite Canvas in novel and interesting ways that fit the comic and its narrative. In the eight installment, Zot fights a group of anti-technology terrorists attacking an ice cream parlor by blasting the floor and letting the attackers fall into a pot of whipped cream conveniently placed in the basement. In that instance the panel takes the two-dimensional form of the ice cream parlor and thus conveys the place, as improbable it should be, very well (Fig. 10). Even the separation of the single panels works in favor of the comic sometimes, as, in the same episode, a grenade explodes in Zot's hand and McCloud cuts to the shocked faces of the visitors of the parlor and forces the reader to scroll further down to learn Zot's fate.



Fig. 10: Screenshot from the episode eight of McCloud's Zot! Online.

Arguably, the best use of the Infinite Canvas occurs in the third episode when Zot and his friend Jenny are blasted out of their airship by a gun turret. More than half of the episode consists of Jenny and Zot falling out of the sky towards the ground. Scrolling down the reader has the chance to see Jenny's desperate attempts of waking the unconscious superhero Zot so he can save them both. All the while, the narrator of the comic comments dryly on the dramatic events: "Did I mention that Zot's world can be a dangerous place?" Scrolling serves as a way to mark the progression of time during the fall, it builds suspense as both the reader and the heroes rush to the ground and it provides a satisfying conclusion when the narrow, 600 pixel long fall suddenly ends in a square panel of the ground and Jenny is saved by Zot moments before hitting the ground. This instance of the Infinite Canvas is a great example of the promise it carries as it matches the storytelling and the pace of the scene and actually

enhances an already thrilling moment in the comic. It is, however, the only moment where the Infinite Canvas is put to such effective use. McCloud intended *Zot! Online* as "a more-or-less straightforward story" ("Zot! Online: "Hearts and Minds") and I would argue that this is the reason why the Infinite Canvas does not work as well for it as it should according to McCloud. *Zot! Online* is a straightforward story that was translated to the Infinite Canvas, but, some impressive but singular examples aside, it is not a comic that needs the Infinite Canvas.

I would argue that the Infinite Canvas is a useful tool for comic storytelling, but one that needs a certain kind of comic. The limited use in *Zot! Online* shows that the Infinite Canvas is far from a universal solution to "reinvent comics". Just as the regularly updated webcomic strip is difficult to use as a framework for comic book like narratives, the Infinite Canvas does not lend itself easily for straightforward stories. It emphasizes spatiality, movement and flow and can make complex use of scrolling to build suspense, but it seems to have no clear advantages over the page. It might of course be possible that the Infinite Canvas just needs more time to establish itself as a popular way of making comics. According to McCloud comic readers have a certain positive bias towards the print page layout because with "only printed comics to refer to, our era's readers have had little comparative basis to judge how much comics changed its shape for print" (*Reinventing Comics* 202). It is difficult to deny this, but I would argue that just as print shaped and restricted comics, it gave authors a framework to work in that has led to the creation of numerous important and culturally relevant works. It could even be said that the printed page was what made it possible for comics to become more "literary" in Witek's model of comic books.

For all the promise that the Infinite Canvas carried for McCloud in 2000, it has failed to become a widespread technique. This is not to say, that it was not used at all. In *The Wormworld Saga* the German illustrator Daniel Lieske uses the Infinite Canvas to tell an episodic story about the boy Jonas, who travels into a magic forest hidden behind a curtain in his grandmother's attic. Similarly to *Zot! Online*, Lieske's *Wormworld Saga* utilizes scrolling as its main principle of moving the story forward. But in contrast to *Zot! Online*, which consists mostly of loosely connected single panels, *Wormworld Saga* transitions seamlessly between large establishing shots that rely on scrolling and a more traditional comic layout for short scenes. The first episode starts out with a long scroll guiding the reader from a lush illustrated sky over the skyline of a small German city through the thicket of trees blocking sight, past the comic's logo and finally settling on a shot of Jonas' school building on the last day before the summer break. The comic then transitions into a more traditional panel layout with a scene roughly the size of a print page, in which Jonas has a short chat with his teacher

Mrs. Rubens. Like *FreakAngels* the comic thus starts with an establishing shot, but *Wormworld Saga* uses the Infinite Canvas to convey a sense of place in a very effective way. Instead of just showing where the comic takes place, the Infinite Canvas lets readers move through it by scrolling.

But the Infinite Canvas works well for Wormworld Saga not only because it lets Lieske establish magical forests as well as German cities, but because it matches the style of the story Lieske tells in the comic. Wormworld Saga is a tale about a boy who is drawn into a magic wonderland of enchanted forests and fantasy beasts. Beginning with "Chapter 3 - A Monstrous Forest" Jonas journeys through a fantastic landscape. A traditional panel layout is used either to show a quick sequence of events, such as when Jonas chases a bug, or to denote the passing of time whenever Jonas makes bigger progress in his passage through the magic forest. This regular layout however is punctuated with Infinite Canvas images that are larger than a regular print page when Jonas discovers impressive sights. After journeying through the forest for some time, Jonas finds a break in the thicket and sees a giant plant-like structure stretching towards the sky. The layout changes from comic page panels to Infinite Canvas and the reader first sees only the tip of the structure. Scrolling down, the size of it is slowly revealed and then set in contrast to the tiny Jonas who observes it from the forest clearing. In the same chapter, Jonas falls down a ravine trying to escape an attacking monster which gives Lieske the possibility to underline Jonas' fall through panel placement. Because Jonas bounces off various roots and plants, Lieske lets his hero fall from slanted panel to slanted panel (Fig. 11), emphasizing the uneven surface of the forest. The panels themselves are placed irregularly and are slanted in alternating directions. Just as Jonas lost his secure grip on his surroundings, the comic itself seems to fall apart. The sequence ends with a large panelless shot of Jonas falling off a ledge and rushing through the thicket of trees, similar to Zot's famous fall.



Fig. 11: Jonas' fall in Episode 3 of Lieske's Wormworld Saga.

Lieske's Wormworld Saga is proof that McCloud's Infinite Canvas can achieve a great effect when used in a way that fits the overall style of the comic. Jonas "falls" into a magic wonderland and so it makes sense to let the reader "fall" alongside the hero. Whenever scrolling to achieve this effect is not necessary – such as in conversations or in short, self-contained scenes – Lieske swaps back to a more traditional page layout embedded seamlessly in the "scrolls" of each episode. I would argue that this is a very efficient, forward thinking way of applying the Infinite Canvas to a comic. The Wormworld Saga thus shows that the freedom that publishing on the web allows in the structuring of a webcomic has not to lead to abandoning older techniques, but that both the Infinite Canvas and a print-centric traditional layout have their uses for certain kinds of comics. Scrolling can enrich comics, but it doesn't need to be the only way how readers can interact with a webcomic.

4.5.2 The infinite forms of the Infinite Canvas

For all its critical attention, Scrolling is only a small part of the Infinite Canvas. McCloud's theories about the Infinite Canvas have mostly been reduced to comics as scrolls, perhaps understandably so as it is a technique that is similar to how browsers work and the one that McCloud chose for *Zot! Online* to demonstrate his theories. Little attention has been brought to McCloud's somewhat more complex propositions of horizontal comics or comics shaped

like staircases, in short: comics that "can take virtually any size and shape" (McCloud, *Reinventing Comics* 223). McCloud did not call for comics shaped like infinite scrolls in a browser, but for comics that could take any shape an artist deemed necessary:

For nearly any narrative challenge, digital comics can offer potential solutions unlike anything ever attempted in print. [...] Navigating through a series of panels embedded in each previous panel may create a sense of diving deeper into a story. A series of panels turned at right angles may keep the reader off-guard, never knowing what to expect around the next corner. Giving a pictorial shape to whole stories may provide a unifying identity. Most important, the ability of creators to subdivide their work as before is undiminished but now the "page" – what Will Eisner calls the "meta-panel" – can take whatever size and shape a given scene warrants [...] no matter how strange [...] or how simple those sizes and shapes may be. (McCloud, *Reinventing Comics* 226-228)

After the release of *Reinventing Comics*, McCloud was criticized for advocating a world "free of those 'tiny boxes' and 'finite canvases'" (Fenty et al.), but this is not the case at all. McCloud was merely proposing new ways of making comics where tiny boxes and finite canvases could coexist with Infinite Canvases and comics of all shapes and sizes. In *Reinventing Comics*, McCloud can seem somewhat overexcited about the possibilities of the Web, so that he tends to obscure or ignore the still formidable possibilities of print and "repurposed" print at heart" (McCloud, *Reinventing Comics* 203).

One artist that tries to use a webcomic's structure and layout to strenghten its style and narrative is Emily Carroll. In her short webcomic pieces that she publishes online on her own website since 2010, Carroll experiments with different kinds of layouts to enhance her storytelling. In The Death of José Arcadio, Carroll takes on the mysterious death of José Arcadio, a character from Gabriel García Márquez' novel One Hundred Years of Solitude. The comic is structured as a quite short Infinite Canvas piece in roughly two parts. The first part is told in regular rectangular panels found often in webcomics such as Questionable Content. José Arcadio, his face never visible, walks into the panel, kisses (presumably) his wife, hangs up two gutted hares, walks into a room and dies from a gunshot that the reader only experiences through a red panel with the superimposed word "BANG". The second part of the comic begins with a thin line of blood trailing out from under the closed door, down a flight of stairs and through Arcadio's mansion. The panels themselves are arranged in a stairlike structure and the blood does not seem to follow any laws of physics, but is rather guided by the form and content of the single panels (Fig. 12). The comic ends when the blood arrives in the downstairs kitchen where it scares a woman. Scrolling here conveys a downwards path. The reader experiences Arcadio's mansion while travelling alongside his blood. The stair-like arrangement of the panels mirrors Carroll's narrative structure. In her later comics, this approach would become more prominent.

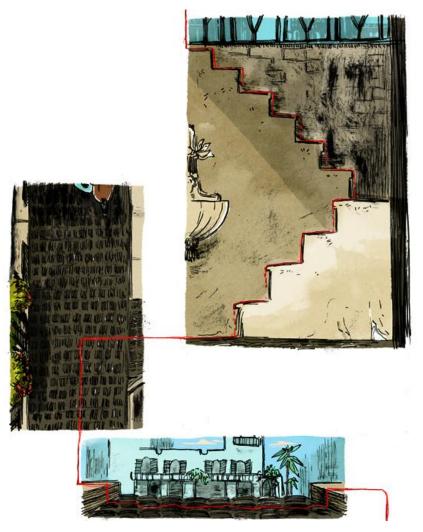


Fig. 12: Emily Carroll's The Death of Jose Arcadio

In *The Prince & The Sea: A Romance*, Carroll uses an Infinite Canvas to surprise her readers by suddenly changing a structure that she established beforehand. In the comic, a young prince falls in love with a mermaid who calls him to come to her realm under the sea. This is conveyed in a series of mostly static single panels in which only the characters move and speak while the background stays the same. To progress through the comic, the reader has to click the image. Each comic image is hyperlinked with the next panel, so each click on the comic presents a new panel and convinces the reader that a single panel with changing characters will be what Carroll uses to tell her story of the prince and the mermaid. Even when the prince leaves the mermaid for his castle, the comic does not cut to an interior shot of the castle, but rather darkens the overall image and highlights the castle between the branches of a tree by the pool. But the story soon takes a turn for the tragic when the prince is drowned in the pool by his uncle. In the last "panel" of the comic, the mermaid finds her prince with a grotesque bloated face from being both strangled and drowned. Defying readers' expectations,

the mermaid rejoices that the prince has finally found a way of staying with her under the sea and pulls him with her into the pool. The reader now can follow the prince and mermaid under the sea by scrolling down and, depending on screen size, to the left and right (Fig. 13). Carroll suddenly expands the "tiny box" of her single panel to become the infinitely deep underwater realm of the mermaid. It is a surprising use of the Infinite Canvas in a comic with an otherwise very regular layout. Carroll shows what the Infinite Canvas can accomplish when it is used sparingly and in ways that fit the overall style of the comic.

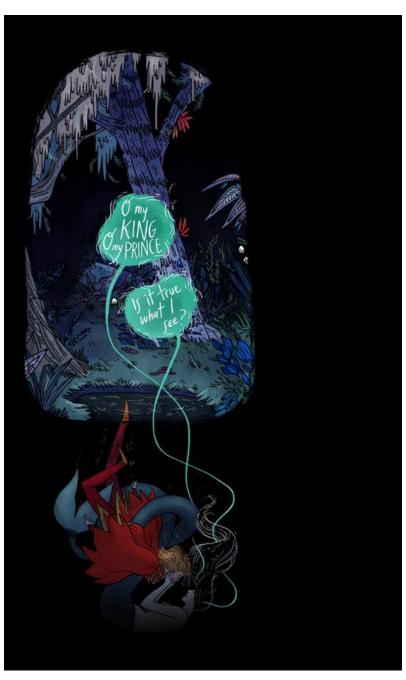


Fig. 13: Emily Carroll's The Prince & the Sea: A Romance.

But besides the Infinite Canvas, there are other new ways of making comics that McCloud addresses in *Reinventing Comics* and that have not received as much attention. According to McCloud, webcomics could offer a more interactive experience. In a quite forward-thinking argument, McCloud did not see much promise in multimedia comics enhanced with movement and sound, saying that "[if] partial sound and motion can help create an immersive experience [...] won't full sound and motion do the job more effectively?" (*Reinventing Comics* 210). What he did see promise in, however, was interactivity on comic's own terms:

To keep true to the simplicity of the temporal map, it may be necessary to eliminate the kind of autonomous sound and motion found in traditional multimedia [...] but the option of interactivity is by no means off-limits. In fact, it's crucial. Whether by choosing a path, revealing a hidden window or zooming in on a detail, there are countless ways to interact with sequential art in a digital environment. Most important, the mere act of "reading" – moving through – digital comics should be a deeply interactive process. Comics is a still life; mute, unmoving and passive in and of itself [...] but the act of reading comics – even though the technology you hold in your hands – is anything but. Comics in a digital environment will remain a still life [...] but a still life we explore dynamically! (McCloud, *Reinventing Comics* 228-229)

One comic that used this principle is Carroll's *Margot's Room*. Keeping in style with Carroll's other comics, *Margot's Room* is a quiet, dark and macabre horror story about a girl falling in love with a man who turns out to be a monster. The comic itself starts as a single image of the titular room (Fig. 14), bloodstained and in disarray, with a poem starting above and ending below the comic image. The poem reads: "first he gave me flowers / & second I made her a doll / but third he'd be gone for hours / & fourth we hit a wall. / LASTLY THERE WAS BLOOD, (rich & raw in the light of the moon) / I can't forget / I will always regret / what happened in / Margot's Room".



Fig. 14: Emily Carroll's Margot's Room.

Although nothing suggests that there is more to the comic than the single image and the poem, this is not the end of the comic. If examined with the mouse cursor, certain spots of the comic will show as links in the browser. More closely, each item Carroll mentions in the poem (flowers, doll, wall, blood) or alludes to (the open window for "him" being "gone for hours") contains a link to a chapter of the comic. Each chapter is a single Infinite Canvas comic in

Carroll's style. The "flowers" chapter tells how the female protagonist meets her future husband and is layouted with rectangular panels and needs to be scrolled down to be read. The "doll" chapter resembles Carroll's *The Prince & The Sea* in that the majority of the comic consists of panels showing the static interior of a room with only the characters changing positions or moving. In the room, the female protagonist stitches together a doll in remembrance of her daughter Margot. Instead of scrolling down, this chapter needs to be scrolled to the right. Carroll alternates her chapters between scrolling down and scrolling sideways, but the last chapter, the "blood" chapter fuses both these methods to a structure similar to a staircase leading to the final confrontation between wife and monstrous husband.

What is most striking about *Margot's Room* however, is the elegant use of interactivity. It is certainly not a multimedia comic in the sense of moving images or sound and film clips, but it allows readers to explore the room and the mysteries contained therein. Even though the poem and the chapter names (i.e. "part 1: flowers") imply a reading order, nothing in the comic itself forces the reader to progress through the comic in a linear fashion. Instead, clicking on items in a random order in the room is a perfectly valid way of reading *Margot's Room*. Though it can be argued that the story itself is linear – the female protagonist marries a man, grows unhappy and finds out he is a murderous monster – it is presented as loose fragments of a dysfunctional marriage ending in a bloodbath. *Margot's Room* is intentionally vague in revealing answers to its mysteries and thus works well within the "comic as hyperlinked room" structure. It does not reveal who the eponymous Margot is, or into what kind of monster the husband changes or if he changes into a monster at all or if the monstrous transformation serves as a metaphor. *Margot's Room* shows that even little interactive elements like choosing your own reading order or exploring a hyperlinked room can allow for novel ways of creating webcomics.

4.5.3 Moving Webcomics

Understandably, Carroll's somewhat experimental comics that play with the webcomic format, interactivity and the Infinite Canvas are rare. Her comics rely on scrolling, which is the mode of reading McCloud saw as being the future of webcomics. But recent webcomics seem to do away with the scrolling. According to author Warren Ellis "the new crop of high-profile webcomics projects are all about eliminating the scroll" ("The Shape"). In a short analysis of three current "high-profile webcomics" (ibid.), Ellis shows that all of them are following the older webcomics publishing model of treating the web as a "half page of printed

comics" (McCloud, *Reinventing Comics* 214) to fit computer screens without the need to scroll. In "The Shape of The New Webcomics" Ellis calls this "two-tier storytelling" and sees it both as an understandable approach to webcomics publishing and a limiting factor for artists who want to work on webcomics. According to Ellis, what is lost in the "two-tier storytelling" of modern webcomics are full page shots, double page spreads and other print specific techniques:

You've cut the print page in half. If you want each screen to make sense as a discrete entity, you have to respect the cut. If you want each screen to contain enough information to make it worth reading, you need a strategy to maximise (sic.) your panelling. And if you want to be able to stretch out and get a big picture in there while still maintaining storytelling coherency, you've kind of got to go wide on the page. [...] So, losing an entire screen to a single shot probably isn't so bad. It may, however, reinforce the imposed limitations of the format. [...] Accepting and exploiting new limitations is always part of a new format. These three projects, though, can't produce even a full-page spread without some serious scheming and dancing. [...] That's a lot to give up for the sake of "free" and notionally "more readable." (ibid.)

Using two-tier storytelling and eliminating the scroll is supposed to make comics more readable, or rather: effortlessly readable. It seems that scrolling is perceived as more taxing on the reader than clicking next to see the next half page of a webcomic. But it seems quite ironic that the Infinite Canvas of the web McCloud dreamt of turned out to be half the size of a printed page.

Seeing the two-tier storytelling structure as detriment to comic storytelling however would be highly unfair. For all the constraints that it puts on comic authors, it still allows a great deal of innovative ways of creating a webcomic. With Insufferable Mark Waid and Peter Krause try to publish a comic book style webcomic made "specifically for digital distribution" (Alverson). Insufferable is hosted on Waid's website Thrillbent.com which is built to be more of a platform for multiple comics rather than a website for a single webcomic. *Insufferable*, a dark superhero comic about a masked vigilante and his estranged sidekick and the first comic to launch on Thrillbent.com seems to share much with other comic book style webcomics at first glance. It uses the two-tier structure to be readable on screen without scrolling and, much like Ellis and Duffield's FreakAngels, is updated weekly with a new multi-page episode rather than a new page every day. What is most striking about Thrillbent.com and Insufferable is the rather interesting way that Waid and Krause dealt with the issue of loading times when publishing a comic book style work. Comic episodes on Thrillbent.com are published in a custom image viewer. Instead of putting each comic page on a sub-page of the main website like FreakAngels does, all images are loaded inside the custom comic viewer. New pages then appear with only a minimal load time whenever readers click next or push the left or right keyboard key to navigate each episode. This alone is quite a step forward for webcomics. As I

argued before, load times are a surprising hindrance for readers who want to appreciate the overall structure and design of a comic which is very hard to do when single pages are separated from each other in this way.

What *Insufferable* and other Thrillbent.com comics lose through this custom comic viewer however is linkability. Whereas with *FreakAngels* every page could be linked to with its own URL, only the whole weekly episode is linkable on Thrillbent.com. Readers can still copy an image URL via their browser and then link single pages in a new browser window or tab, but this is not an elegant process. A Thrillbent.com page linked in this way will be displayed outside of the comic viewer and thus decoupled from the comic. A linked to comic page from Thrillbent.com can be used to illustrate some certain image, but it is not useful as a link to the comic itself. This approach underlines the importance for the cohesion of single episodes and puts less importance on the single page. I would argue that this is a useful approach for comic book style webcomics, but rather problematic for webcomic strips that rely on easily shareable, self-contained strips to find new readers.

But aside from losing a degree of linkability, the custom image viewer technique allows Waid and Krause new ways of writing a webcomic. Because load time is almost nonexistent, the single pages of *Insufferable* often change only one panel or minor detail between otherwise identical pages. In the 19th episode of *Insufferable*, the superhero Nocturnus enters his apartment and finds the publicist of his son and former sidekick Jarod inside. Nocturnus asks her to "get out", and she then threatens him to go and reveal his secret identity to the press. The last panel of the page has Nocturnus staring at her intensely. Given the dark and gritty nature of the comic, readers can't expect to know what will happen next – bloodshed or peaceful resolution. The next page, however, is identical, safe for the last panel in which a speech bubble is added. Nocturnus gruffly asks "coffee?" and resolves the tension (Fig.15-Fig.16). Reading this scene on a printed page would be somewhat confusing, because two subsequent pages have the same images, except for one speech bubble. However, when reading this scene online in the custom image viewer, the quick progression and the slight changes in the scene results in a comic that feels almost animated. Insufferable uses these techniques quite often and many progressions from page to page feature only a slight change such as a new speech bubble or a character looking up from something he or she was working on.

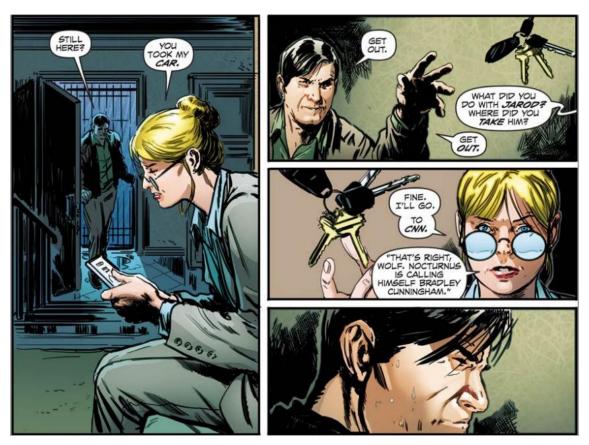


Fig. 15: Mark Waid and Peter Krause's Insufferable.



Fig. 16: Only the last panel changes between two pages in *Insufferable*.

According to McCloud, attempts have been made to make webcomics "'come alive'" through the use of "sound, motion and images" to "create an immersive experience" (Reinventing Comics 210). The cyberpunk webcomic Nawlz by Stuart Campbell for example "combines animation, interactivity, music and text to create a never before seen digital panoramic comic format" (Campbell, "About") that is specifically made as a Flash animation for desktop computers and as an iPad application that requires "a tap, tilt and swipe to explore" (ibid.). In Nawlz a young graffiti artist wanders the streets of a futuristic cyberpunk metropolis. Readers usually progress through the story by clicking on small arrows pointing to the right where new images will appear, although sometimes readers are presented with a choice of where to click next. Right at the beginning the protagonist is trying to make graffiti painting of a whale and just cannot get it right. The readers then can click on one of the three parts the artist should revise. It does not impact the comic much, however, because no matter what the reader clicks, the comic progresses in the same way. In some scenes, there are optional elements for readers to find by clicking. At one point in the first issue of Nawlz, the protagonist remembers seeing a tiny toy whale in a fishbowl. Right next to the fishbowl is a dark image of an ant-like creature to illustrate the proportions of the whale. Clicking on the insect lets a bigger, more detailed version of it appear on screen. All the while, background sound and music (but no voiceover) plays in each scene. Nawlz is a fascinating work and especially Campbell's use of animation to create a cyberpunk metropolis full of drugs, music and technology is astounding, but it is so far away from the language of comics as understood by scholars like Witek or Groensteen, that it is hard to call "comic" or "webcomic" at all. *Nawlz* is published in "issues" of varying length that all together make a "season." Some issues, like issue 1 of season 2 uses a style resembling a comic with panels, short webcomic-style pages that are revealed gradually by clicking on arrows pointing to the right and only the occasional sound and full motion sequence. Other issues such as issue 2 of season 2 on the other hand do not resemble comics at all, but fuse text, animation, images and interactive elements in its very own blend.

Motion, sound and interactivity are not only to be found at the fringe of webcomics. Major comic publishers like Marvel have tried to create "motion comics", a mix between cartoons and comic books: Essentially videos of comics where each scene is a panel with some animated parts, like a character walking down a street or pressing a button, as well as music and voice over for speech or narration. But exceptions like the critically acclaimed *Nawlz* aside, these attempts have failed to find a wider audience or impact the bigger comics field yet. For McCloud the reason is simple and holds today as it did at the turn of the millenium: "If partial sound and motion can help create an immersive experience – won't full

sound and motion do the job more effectively?" (*Reinventing Comics* 210). I find it hard to argue against that. While motion comics as envisioned by major publishers such as Marvel are still in their early stages and might change significantly, I do not see any advantages of making a work that is half static comic, half cartoon over a traditional comic or cartoon. Works like *Nawlz* on the other hand represent an exciting field mixing various different forms of expressions, from comics to games, but are hardly recognizable as comics.

Insufferable presents a very interesting alternative to motion comics or very experimental works like Nawlz. By utilizing the low load times of its image viewer and the update schedule of several pages per week, Insufferable can use some elements found in motion comics to underline tension, sudden movement or other important scenes, while still using the language of the comic. Essentially, Insufferable remediates the flip book, in which flicking through pages quickly results in the illusion of continuous motion and animation, but it uses this technique only when needed. As a print work, *Insufferable* would need to undergo a high amount of editing to both make use of the full page instead of the two-tier half page and find another way of dealing with scenes that rely on the image viewer for their effect. Very telling in that regard is the downloadable edition of the comic. Each episode of Insufferable can be downloaded in PDF and CBZ file format and opened with a PDF reader or a comic reader on a desktop computer, tablet or other device. But it is only really readable if the PDF reader or CBZ viewer can match the load times of the website's image viewer and depict one comic page "per screen". Read as a, for example, a simple PDF document that displays several (usually two) comic "pages" per page and needs to be scrolled down to be read, Insufferable is a confusing, repetitive work with pages that force the reader to spot the difference to progress through the narrative.

To my knowledge, *Insufferable* is the only webcomic, not based on video or flash animation, so far to make such an extensive and elaborate use of page load to animate certain parts of the comic. Still, other cartoonists have been experimenting with movement in webcomics as well. Jeph Jacques has been including GIF-images in *Questionable Content*, which are basically images with a short, looping animation. In "Number 2250: Color Gamut" the library intern Emily finds out that pressing the bellybutton of the cyborg Momo changes her hair color. The subsequent GIF-panel comprises of a loop of Emily pressing Momo's bellybutton. With each press Momo's hair changes color and she exclaims "Stop it". With this panel, Jacques illustrates an ongoing, unending process. A static panel with Emily pressing Momo's bellybutton could certainly show her glee at finding out the mysterious bellybutton function, but it wouldn't be able to convey the same way of unending joy at

pressing it again and again and again. Jacques would need to do a different, static panel or a number of panels to convey that unending motion and emotion.

In "Number 2162: They Enable Each Other", Jacques finds another use for gif panels. In the strip, Marten is having breakfast on a space station belonging to his friend's Hannelore scientist father. Hannelore and the space stations' sentient, holographic AI, conveniently called Station, stayed up all night. Subsequently, Hannelore is completely sleep deprived and just manages to stare blankly in front of her with bloodshot eyes while Station has managed to somehow overload his system. The last two panels of the strip are gif images in which Station seems to be unable to keep his holographic form stable. In the second to last panel he turns blurry and pixelated from time to time; in the last panel he becomes a placeholder image to indicate that his systems are so strained he can't even keep up the holographic human form. Here, Jacques uses the looping gif animation to indicate the condition that Station is in.

Whereas *Insufferable* remediates the flip book with the specificities of the web and its custom image viewer to create simple animated sequences to show quick change in a scene or to create or resolve tension, looping GIF-panels like in *Questionable Content* can be used to indicate conditions or constant motion. What both GIF-panels and the animations of *Insufferable* share, however, is being firmly based in the language of comics. A comic exclusively based around moment to moment flip-book-like animations would only be useful for certain kinds of storytelling, just like a comic based entirely around GIF-images would be very limited in what it is able to show. But by using these techniques when appropriate, webcomics can present new ways to make comics, to crack jokes and tell stories.

Artists like Waid, Kraus and Jacques or Carroll and Lieske are not attempting to create a "future" of comics, but to enrich comics by using techniques that publishing comics on the Web makes possible. New webcomics show that it is possible to innovate, to further push the comics medium by blending it with the possibilities of the Web or even by remediating older techniques or older formats that are made viable through web publishing. To be the "future" of comics, webcomics don't have to evolve into something else entirely, like *Nawlz*, but to use the foundation of the comics language and build upon it.

5. Conclusion

In this thesis I hope to have shown that while webcomics can be viewed and analyzed through such diverse lenses as "hacker" ethics (Fenty et al.) or "participatory culture" (Hicks 11.12), it is their contribution to the language of comics that is yet little explored but so very crucial in understanding this form of comics. Previous research has concentrated on a small sample of comics from which conclusions have been drawn about their creators, their audience, politics, ethics and influences, but not about the comics themselves. I have analyzed a small set of mostly independent but popular webcomics. Though they are largely humorous, it was important to me that they feature a diverse range of topics as well as offer print counterparts which I could analyze. In contrast to previous claims about artistic freedom for comic creators on the web, these comics certainly do not appear to be completely free from economic and cultural constraints, but exist in a form that relies very much on the expectations of an audience to be entertained in short installments. It is possible that there are webcomics that are not relying on advertising or merchandising and a growing reader base, but it is exactly those reasons that make the webcomics I have analyzed here so interesting. They constitute a form that needs to use the comics medium on the web as a popular form of cultural expression and it is interesting to see how this need influences the comics medium. It is, surprisingly, not the way that comics scholars have envisioned it to be.

In 2000 Scott McCloud made optimistic projections about how webcomics would allow "anyone with modest means and sufficient desire [...] to reinvent the look of comics forever" (*Reinventing Comics* 153). He proposed some reinvented looks for the comic, most famously the Infinite Canvas, a technique that would allow comic artists to create a work that can take any shape – infinitely long scroll, box, staircase, vertical or horizontal panels – as long as it would remain readable on the screen. But McCloud's future of comics remains yet to happen as most webcomics are, on first glance, still very much influenced by the printed page. But while possibly hasty and overexcited by the seemingly endless possibilities of the web at the turn of the century, McCloud's ideas about new aesthetics of webcomics have remained the only example of academic research on the aesthetics of webcomics. Four years later, Fenty et al. criticized McCloud for his endorsement of the web as a limitless playground for new comic creators and their works. They argued that "digital technology offers new avenues of aesthetic experimentation for artist" but that the "obvious benefit of the internet as a distribution medium for many webcomic artists is the freedom to release comics that the mainstream industry and audience would reject." Like the underground comix of the 60s

webcomics can address unpopular topics like "politics, sex, and drugs" and recent "unpopular" topics like "video games" and "Open Source". Fenty et al. see the constraints of the web such as "screen sizes, pixel depth, and download times" as limiting the "revolution in possibilities" but state that these constraints are "equal to those seen by Underground Comix, in terms of page layout and feasible page sizes." While their critique of McCloud is sound, Fenty et al. never address what they define as mainstream as opposed to the underground of webcomics and what exactly the freedom and possibilities for "aesthetic experimentation" has brought to the wider comics field. For Marianne Hicks webcomics have brought a degree of "civic engagement and participation" to webcomic readers, but her research does not show how comics as a medium specifically influence that, if at all. She defines webcomics as "comics produced primarily for the web" and "made by an independent creator or creators without an original 'print version' or corporate sponsorship" (11.3). But this only defines webcomics through their production process, not through their form, their aesthetics, their content. So far, only Rodriguez' deep literary analysis of The Order of the Stick has shown that webcomics are complex works influenced in their narrative and formal structure by being published on the Web.

But *The Order of the Stick* is only one comic among thousands of different works and its methods for storytelling and creating comics not representational for the whole field. Instead of mistaking one webcomic or one small group of webcomics for the whole and making judgments about the goals, the ethics, the business practices of its creators, I analyzed a limited number of webcomics. Using theories of both comic studies and digital culture, I aimed to find common narrative strategies, common traits that are exclusive to webcomics and common constraints. Perhaps unsurprisingly, webcomics are a rich field for comic scholarship. Webcomics are not only comics on the web, but they constitute an own unique format, just like the comic book or the comic strip, and are shaped by the web as much as they are shaped by the history of the medium of comics.

Works like the morbidly funny *A Softer World* and the irreverent and eclectic *Dinosaur Comics* show that while webcomics might look like traditional comic strips, they do not necessarily employ the same methods for humor. Through the use of alt text, which readers have to discover by hovering their mouse cursor over the image or tapping it in case of a touch screen device, webcomic authors engage in a playful use of hidden messages and double meanings for their readers to discover. The webcomic *AmazingSuperPowers* takes this even further by using hyperlinked hidden panels to elaborate on jokes made or to twist them in new ways. While not all webcomics use these techniques, it shows that webcomics have to

be understood as malleable image files on the web in addition to being comics. Their jokes, their messages, their narratives are not only to be found on the image surface – in their panels, their speech bubbles – but in the image code itself.

Like Rodriguez' analysis of *The Order of the Stick* has shown, a webcomic can undergo significant changes through the years it is published. Because of the relative low cost of publishing a comic on the web instead of going through traditional print publishers and the expectation of the online audience that webcomics are works without a clear end, creators have an incentive to keep working on their comic. When discussing a webcomic, it is difficult to talk of "the comic", because webcomic authors are altering their work in a myriad of ways, from tweaking its art style to completely changing direction during the years a comic is published on the Web. The Questionable Content from 2003 or The Order of the Stick from 2003 might share the name and the characters with the current editions of these comics, but they are very different works. Questionable Content began as an irreverent and somewhat amateurish comic strip about indie rock and evolved into a comic about friendship and romance with a distinct art style. The Order of the Stick began as a humorous comic for fans of pen & paper roleplaying games complete with jokes about rules and dice rolls and became a sprawling epic about heroes trying to save the world. While print comics can be viewed in terms of books, issues or reprint collections, webcomics most usually remain a single website. There is nothing except the publication date that marks the difference between an older and a newer webcomic installment. However, the changes that webcomics undergo, tend to be somewhat obscured by what Rodriguez calls micro-serialization. Because webcomics are published in regular installments of usually short updates, progress and changes in art style and direction only ever become clear in retrospect, except when changes are dramatic such as the sudden shift in tone from non-sequitur gamer humor to relationship drama in CAD.

What is often lost in speculative discussion over the future of comics on the web, however, is a more grounded analysis of how webcomics fit into the wider field and history of comics. Far from trying to become an entirely new form of comics, many webcomic authors are successfully remediating the comic strip, which the scholar Witek believes to have lost most of its influence on comics culture due to publishing constraints of newspapers, and fusing it with a blog structure. Webcomic strips can reach new readers easily, because they are easy to link to when they are "funny and relevant" (Horton and Romero 3) and easy to understand, because readers do not necessarily need to know the complete history of a comic strip to laugh at a joke in a specific strip. The uniform layout of the comic strip works well for being published on the web as it guarantees that even readers who only accidentally discover

the comic and thus only see the latest installment will understand its major themes, see its structure and characters. But while the web works well for the comic strip, it makes it harder to publish a comic book style webcomic with longer, more complex layouts and narratives.

Most webcomics use a blog style website format where the latest installment is always the first (and often the only comic) visible. To read the next or previous page, readers must click hyperlinks leading to other pages and then wait until the new page is loaded. To start at the latest installment makes it difficult for readers to orient and familiarize themselves with a long form, comic book style webcomic. When the entry point is in the middle of the story, the comic needs a reader who is familiar with characters and setting. Adding to this, the loading times between pages in turn make it inconvenient to read through many pages of a webcomic from the beginning to the latest installment. But even if readers would manage to read through all the previous installments, there most likely would be no satisfying conclusion. Webcomics tend to be long works, published over years on end. Their installments are spread out due to the need of a regular update schedule. When a comic is being updated three times a week with one new page, this limits the kinds of stories a comic author can sensibly tell within the format. This in turn adds even more to the relative separation of individual pages from each other due to the loading times between pages, making it hard to appreciate the overall structuring of the panels and the page. Whereas books can make use of the natural juxtaposition of images on the double page, the webcomic only has one page at the same time. Other issues are screen size and format which forces cartoonist to adapt a "two-tier structure" (Ellis, "The Shape of The New Webcomics") of the page, meaning that most webcomic pages are half the size of a regular print page, and thus cannot use full page artwork or deviate much from a uniform panel layout. Because of these issues, comic book style webcomic are very much influenced by their constraints in their style and content. Even long form epics like *The* Order of the Stick tend to end each page in a punchline or cliffhanger (or both) to entertain readers with each installment and keep them coming back for more when new installments are published.

In stark contrast to the claims about webcomics as the future of comics, it seems that they are by far not an ideal, flawless format for the comic as a medium. Just like the newspaper or the book, the Web poses technological and cultural constraints for webcomic authors. While some formats, like the comic strip, can be adapted with relative ease, others face constraints that need to be considered when conceptualizing a work. Some authors like Burlew of *The Order of the Stick* try to work around that by deviating from their regular update schedule and rhythm and making multi-page installments to help with their story and

comic structure, other authors try to innovate within webcomics. A whole new strand of comic book style comics by authors like Warren Ellis with *FreakAngels* and, most notably, Mark Waid and Peter Krause with *Insufferable* try to address the constraints that webcomics face and try to find innovative solutions. Ellis has introduced a weekly, multi-page update schedule to his comic *FreakAngels*, which allowed him to write self-contained installments that could tell short pieces of the overarching story over multiple pages. Waid and Krause on the other hand opted for a more technical solution. They created a custom image loader which does away with load times between individual pages and combined this with Ellis's style of weekly updates. Not only did this allow them to create a complex story more akin to a comic book, but the short load times between pages even made it possible to create simple animations in the comic by remediating the mechanics of the flip book.

But while authors like Ellis, Waid and Krause are trying to innovate from within the established conception of what a webcomic is, other authors are trying to push the medium even further. Although McCloud's future of the Infinite Canvas did not become the dominant model for webcomics, his ideas about it are still present in some works. Authors like Daniel Lieske and his *Wormworld Saga* show that the Infinite Canvas has not become the universal future for webcomics, because it is useful only for certain styles of comics. His comic thus fuses the Infinite Canvas with more traditional page layout to tell a compelling story in a way that would be impossible to do in print. Emily Carroll on the other hand explores how techniques exclusive to the web like hyperlinks and the Infinite Canvas can be contrasted and juxtaposed with traditional comic storytelling for great effect.

What is common with all these examples of webcomics is how grounded they are in what Groensteen has called the "language" (*The System of Comics* 2) of comics. Webcomics are not at all that different from comics in print. They are not the future of comics or a means to promote participatory culture or hacker culture. What webcomics are then, ultimately, is comics, but enriched and at the same time constrained by the Web in various ways.

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