

“Enhanced Webcomics¹”: An Exploration of the Hybrid Form of Comics on the Digital Medium

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Abstract

Having found their way onto the computer screens, comics soon branched into webcomics. These kept a lot of the characteristics of print comic books, but gradually adapted new unexplored modes of representation. Three relatively new ‘enhancements’ to the medium of comics are presented in this article: webcomics enhanced through the use of the infinite canvas, as proposed by Scott McCloud, those enhanced with videos and/or sound, and lastly those enhanced with interactive and ludic elements. All of the mentioned push the medium of comics into new waters, and by doing so they add new layers of meaning and modify their structure based on the make-up of the implemented features. Infinite canvas manages to lift some limitations of print comics without changing the overall feel too drastically, while animated and voiced webcomics, as well as interactive or game comics, have a much higher inclination to transgress into domains of other media and transform themselves in order to accommodate and integrate these novel foreign features.

Résumé

Une fois qu’elles avaient trouvé leur chemin vers les écrans d’ordinateur, les bandes dessinées ont vite suscité une branche particulière, les bandes dessinées numériques. Celles-ci conservaient bien des aspects des bandes dessinées imprimées, mais peu à peu elles ont développé de nouvelles formes de représentation. Trois types d’ « expansion » relativement nouveaux sont discutés dans cet articles : les œuvres numériques enrichies par le recours à une grille « infinie », comme chez Scott McCloud ; celles complétées par des éléments vidéo et/ou sonores ; enfin celles enrichies par des éléments ludiques et interactifs. Chacune de ces nouvelles formes élargit le potentiel du médium et ajoute de nouvelles couches de sens tout en modifiant la structure de base de l’ensemble des éléments et de leur combinaison. Les grilles infinies parviennent à dépasser certaines limites de l’imprimé, sans trop changer l’expérience fondamentale du médium, cependant que les bandes dessinées numériques animées et sonorisées, puis interactives et ludiques, tendent à pousser le médium vers de tout autres formes et à se transformer elles-mêmes afin de pouvoir accueillir ces nouveaux apports.

Keywords

new media; (enhanced) webcomics; intermediality; infinite canvas; animation; interactivity

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The comics medium was able to find its way onto computer screens once the digital revolution took over in the second part of 20th century. Comics appeared as webcomics, still resembling their initial printed form in that they preserved the layout dimensions they had in print and merely reproduced them on the computer screen. However, as time passed and computer technology became more advanced and offered more creative possibilities, they started to evolve and branch out into different directions. One can differentiate between two basic categories of webcomics: webcomics intended to be printed, which use digital distribution as a support and promotion of the printed comic; and those intended for digital viewing, and use the Internet and computer-based technologies as their main host and distribution platform. What is crucial in their difference is the intention of the webcomic creator, and their engagement with the medium. There are numerous ways in which the latter can happen: HTML mark-up language, for example, can change how an image is displayed if hovered over with the mouse, and sound effects can be embedded within the code of the webcomic and played in the background. Comics can contaminate and be contaminated by other media agglomerated onto the computer technologies, which lead to an ambiguous and uncertain blend of different media. Throughout this paper, I will use the term enhanced webcomics to refer to all of these different varieties of webcomics which are “enhanced” by the use of digital properties, tools, and effects and as a part of their form, and which thus attempt to “enhance” user experience.

I conceive enhanced webcomics as belonging to the category of web-comics, but which have “something more,” which are “enhanced” through some recourse to approaches possible in the digital realm. In other words, while all enhanced webcomics are also webcomics, not all webcomics are “enhanced.” To exemplify, a webcomic organised in panels and with no other special features can be translated into a print format without losing much of its specificity; due to the limitations of standard page sizes, some panels might be placed on different pages, but meaning and effect would stay almost entirely unaltered. An enhanced webcomic that contains interactive elements, on the other hand, would have much more trouble being separated from its digital host, as the interactive digital specificity would be, possibly entirely, lost. Thus, the comics under analysis will be those which would not be representable in a verisimilar or complete way in print, as they would lose a crucial part of their new media specificity. Having that in mind, my task here is to determine the typical techniques used in the creation of enhanced webcomics, and the way in which they contribute (if they do), both formally and semantically, to the overall value of this digital creation. I will clarify to what extent can enhanced webcomics be considered a continuation of the medium of comics as their characteristic new media form, separate from other digital media, such as videogames and animation.

Infinite Canvas

The concept of the *infinite canvas* was first introduced and popularised by Scott McCloud in *Reinventing Comics* (2000), a follow-up book to his popular *Understanding Comics* (1993). He observes that, once comics artists start to exploit the virtual advantages of the computer, they will be free from the layout constraints of the printed page. It is clear that McCloud envisioned the infinite canvas as a liberating and empowering mechanism of the digital technology that has the potential to reveal a myriad of options for comics creators. Although it might not yield the revolutionary changes in webcomics that McCloud anticipated, infinite canvas still stands as a relatively fresh option, which creators of online comics can use to explore the possibilities

of digital media. It has become a fairly well-known idea in the domain of webcomics and some authors have found ways of putting it to good use.

The implementation of the concept of infinite canvas can be found in several numbers of the *xkcd* webcomic. Claiming to be “a webcomic of romance, sarcasm, math, and language” (Munroe), *xkcd* often experiments with elaborated strategies and ideas to present a unique enhanced webcomic experience. In the strip entitled “Height”², Munroe draws a single panel of large vertical size, at least in comparison to his other regular strips. The comic shows “the observable universe, from top to bottom - on a log scale” (Munroe), and one has to spend quite some time to scroll and observe all the information he has put in. Using the infinite canvas, Munroe, quite appropriately, attempts to illustrate the entire universe known to man (up to 46 billion light-years of distance from Earth), incorporating distances from Earth’s surface of Eiffel tower, the moon, the stars and the galaxies. The use of infinite canvas is not chosen arbitrarily, but rather purposefully to emphasise the spatial distance covered within the comic. Scrolling through the comic gives the reader the impression of quite literally travelling through space on the webpage.



Figure 1 The flying saucers appear as the background in the second panel, while the penultimate (here third) panel has all the previous as the background. © Neil Gaiman & Jouni Koponen

² <https://xkcd.com/482/>.

Instead of creating large image files to be explored on a two-dimensional plane by scrolling horizontally and vertically, one can also opt to place the images one on top of the other, and allow the viewer to scroll “through” them, creating the effect of moving deeper into the comic. Neil Gaiman’s poem *The Day the Saucers Came*³ was illustrated by Jouni Koponen in order to achieve such an effect. It was created within the internet browser as an interactive web application using JGate⁴, and it allows the user to navigate through the content by either scrolling or clicking on the arrow buttons. *The Day the Saucers Came* consists of screen-wide rectangular panels, containing both images and text, which are programmed to fade out and be enveloped by the following image once the user clicks “next” (Figure 1). The animated transition moves the initial image into the background of the next image (the flying saucers are first in the foreground, but appear in the background once one proceeds to the next panel), thus creating the impression of virtually moving backwards through the depth of the computer monitor. This process is applied to each following panel (except the last one), so that the penultimate one contains traces of each of the previous ones in the background. The method of taking advantage of the infinite canvas in this example is the inverse of the one McCloud hinted at in *Reinventing Comics*: “Navigating through a series of panels embedded in each previous panel may create a sense of diving deeper into a story” (2000, 227), and the same one he used to create *The Right Number*⁵. The multimodal nature of webcomics can here be fully expressed with only one (the last) panel, as it quite literally contains all the previous ones. The sense of space and distance is also clearly expressed, as the transition gives the illusion of moving further away from the initial image.

The use of programming languages and other code-based structures as a means to enhance the presentation and the functionality of online content is something that has become common practice. HTML, CSS and JavaScript already offer a myriad of customisable options regarding how the content of the webpage is to be displayed on the screen. Their advanced use allow for a greater control, and more flexibility. In the previous example, these have been used to create transitions in-between the panels, but that is only scratching the surface. Stevan Živadinović’s *Hobo Lobo of Hamelin*⁶ is an example of an enhanced webcomic that uses a complex combination of code manipulation in order to create impressive visual results on the front-end. *Hobo Lobo* is an interactive story about the small village of Hamelin and its inhabitants, and it uses a “Parallex framework” on a McCloudian infinite canvas to create the illusion of motion in a three-dimensional space. The author admits to being inspired by Andrew Hussie’s *MS Paint Adventures*, and he realised that “in this day and age, there is little justification in keeping comics within the constraints of early 20th century offset printing” (Živadinović 2011). As the reader scrolls horizontally through the webcomic, the different layers on the webpage start to move across the screen at different speeds and react differently to the scrolling. The background layer, for example, is placed “behind” the front layers, which are closer to the point-of-view, and it moves across the screen slower than the layers in the foreground. Živadinović’s enhanced webcomic uses the infinite canvas, and several other features of web technologies, in a very dynamic way to create an appealing story, which could not be accurately represented in the classic comic book format without losing its defining peculiarities.

Horizontal scrolling is usually strongly discouraged as a design choice on the internet, because the user typically does not expect it, and, in combination with vertical scrolling, it can create unnecessary accessibility

3 <http://infinitecanvas.jgate.de/view?name=The%20Day%20the%20Saucers%20Came>.

4 <http://apps.jgate.de/>.

5 <http://scottmccloud.com/1-webcomics/trn-intro/index.html>.

6 <http://hobolobo.net/>.

issues (Nielsen Norman Group 2005). However, it can be very effective if used with caution in order to create a meaningful effect. Cody Coltharp's *The Pale*⁷ (Figure 2) scrolls horizontally in the browser, but, unlike *Hobo Lobo of Hamelin*, it does not separate pages or chapters onto different webpages. This story of a doctor and his endeavours to help a young girl overcome her dream terrors is told on a single webpage, in a single continuous horizontal scrolling strip. There are no clear-cut demarcations of panel edges; instead the author uses diegetical elements within the story to separate the single situations. The gutter, thus, sometime appears as a lamp post, or any other vertical line that splits the strip in two, and divides one area of action from the next one. There are no clear contour lines in the comic, and all the brush strokes seem washed out and blurry.



Figure 2 Example of the blurred gutter in Coltharp's *The Pale*. © Cody Coltharp

This works surprisingly well, as the author is able to transition seamlessly between two very different settings, simply by blending the colours together. As a result, it becomes easy to glide through the comic, and the panels “bleed” into each other, encouraging the reader to scroll on. The sense of the canvas being infinite is very much perceptible in *The Pale*, as there are no breaks in between the chapters, nor a way to bookmark a place in the story and revisit it again at a later point. Unless one reads the story from beginning to end in one take, there is a great risk of losing oneself in this immense horizontal strip. It resembles a film reel, and to some extent it shares resemblances with film. As a temporal medium, film does not allow the viewer to move back in the story and re-watch past events (unless it is stopped and manipulated using a technological device). It naturally moves forward, and just like in *The Pale*, going backwards is strongly discouraged. In contrast to traditional comic books, where one can quickly flip through the pages and get an overview by glancing at the pages and page numbers, in long horizontal scrolling enhanced webcomics like *The Pale*, regressing to a specific point in the narrative is much harder. The only indicator of spatial progress in *The Pale* is the horizontal scroll bar that sits at the bottom of the browser window. This choice might have been a stylistic one, in order to immerse readers into the story and push them to read further. However, it is also an example of how the use of the virtually infinite digital space may backfire in terms of a clear overview of the content.

⁷ <http://www.thepale.net/>.

The use of infinite canvas in enhanced comics appears to be one of the most logical routes traditional comics take when transferred onto the digital medium. Having been enclosed by the borders of the printed page since their popularisation, comics exhibited a natural need to free themselves from the imposed format once the opportunity presented itself. Unless a webcomic enhanced through the use of the infinite canvas is using another way to “enhance” its presentation, it does not seem to distance itself too far from the form of traditional print comics. The only major difference between the two forms concerns the layout and the arrangement of the various comics-specific modes, which generally remain the same. It is then fair to say that infinite canvas webcomics can still be considered a continuation of the comics medium.

Moving Image (and Sound)

One simple technique with which a sense of duration can be achieved in webcomics involves using animated gifs⁸ (Graphics Interchange Formats) as substitutes for static images. In *Thunderpaw*⁹, gifs are used throughout the comic in almost every panel where there is motion involved or a change of colour. These images have a short duration, and are mainly used to create a more atmospheric feel for the environment and the characters in the story. Sometimes, the artist also includes more elaborate panels, which are wholly animated, as in the cases when the two main protagonists, Bruno and Ollie, are running or walking. This does not happen often however, and is reserved for “important” situations, which might be crucial to advancing the plot. It happens, for example on page three in the second chapter¹⁰, where Bruno and Ollie dig a hole and eventually end up in another location called “Pinemeade Heights,” where the whole chapter takes place. The background here is a large animated gif image depicting blinking eyes of various sizes. It occupies the whole screen, and it becomes a very engaging and eye-catching experience in conjunction with the three out of four panels on the page being gif images as well. These small animations do not substitute for the interpretative cognitive effort that is required in traditional print comics. There is still a gutter in-between the panels, and the readers are required to use the same hermeneutic process to connect the story bits as they would in comics with static images. The animated gifs here are merely an aesthetic enhancement, rather than a “cheating device” used in order to facilitate the absorption of information.

There are other forms of digital comics that use animation in a more absolute way. “Motion comics,” for instance, rely substantially on animation in their presentation. These comics are in a large part produced by prominent comic book publishing houses, such as *Marvel*, *DC Comics*, and *Dark Horse Comics*, and they are usually entirely animated, and supplemented with a soundtrack, sound effects, and dialogue. Strictly speaking, they are videos or long flash animations, and as such they usually come in a video format, such as mp4, avi, or flv. But unlike works that originate as animations, motion comics appear as forcefully altered series of images, with the only purpose being that of creating motion from a static format. While adapting works of art to different media is a common and sometimes fruitful endeavour, forcing such transitions can sometimes create confusing and controversial results. In Japan, the transition from the static print form of comics (manga) onto the screen as animated series (anime), achieved great success in the 1990s and is still strong to this

⁸ An animated gif is “an image file format commonly used for images on the web and sprites in software programs,” which “support[s] animations by allowing a stream of images to be stored in a single file”. (Techterms parr. 1-2).

⁹ <http://thunderpaw.co/>.

¹⁰ <http://thunderpaw.co/comic/ch2/0203.html>.

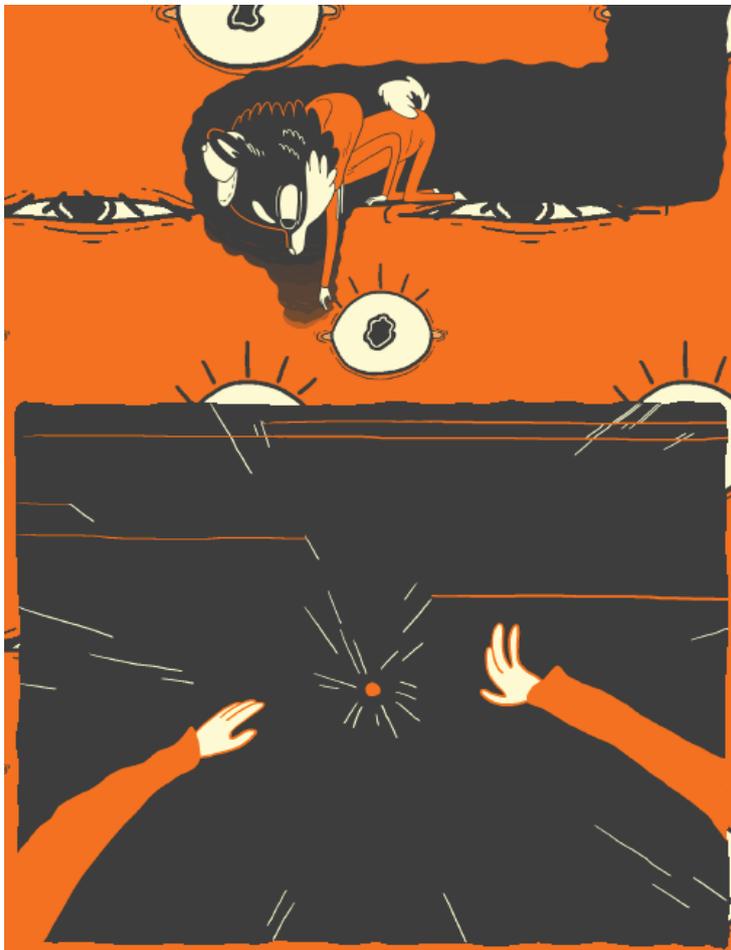


Figure 3 Screenshot from *Thunderpaw*. The top part is a static image, while the lower panel and the blinking eyes in the background are animated gifs. © Jen Lee

day (Mangold 2007). The manga elements and style were still very perceptible in anime, but the medium of animation was clearly distinct from its print counterpart. Motion comics, such as *Hellboy: the Fury*¹¹ (Mignola & Fegredo 2012), still try to preserve the essential qualities of static comic books while presenting them as animations. This, however, results in somewhat awkward scenes, where the moving objects appear like paper cut-outs moving across the screen. While in *Hobo Lobo of Hamelin* this was intended, and was at the basic focus of the comic, in *Hellboy* this seems to be a by-product of the clash of the two media. Already in 2000, McCloud wondered: “If partial sound and motion can help create an immersive experience — won’t full sound and motion do the job more effectively?”, and if one adds a more detailed dimension of time (through sound and motion), then comics’ unique “multi-image structure [...] becomes superfluous, if not a nuisance, and is not likely to endure” (210). In *Thunderpaw* the animated gifs were meant to be *noticed* and *glanced* at quickly while reading in order to give a slightly more accurate depiction of the motion happening in the panels, in *Hellboy* and similar motion comics the animation is an essential part of the work and the ‘reader’ is required to *watch* and *listen* to it.

There is a fundamental difference between the two, and it raises the question of whether the second example can be considered a part of the comics medium at all. As Priego states, “The absence of real sound and real-time animation reveal that comics may do things on the screen that cannot be done on paper and vice

11 <http://www.darkhorse.com/Blog/958/hellboy-fury-part-1-motion-comic>.

versa, but that synchronous animation with sound belongs to a different realm in which comics stop being comics” (276-7). Rather than using new media technologies in order to advance the medium of comics, these motion comics resort to sensational effects associated with the lucrative media of animation and cinema. This behaviour points to the lack of self-worth in the medium of comics, which in the second part of the 20th century saw comics authors attempting to legitimise their work by measuring it against the standards of literary prose (the advent of graphic *novel*). The art style of *Hellboy* and several other motion comics is undoubtedly that of comic books (more precisely graphic novels), which can be enjoyable to watch to a certain extent. The stark contrast within panels, the stylised brushstrokes, and the use of textures and digital colouring all manage to evoke the appeal of a graphic novel. However, such partial inclusion of “aesthetics of comics in other visual arts such as film or painting creates the impression that comics is a genre” (Samanci and Tewari 28), and that superhero narratives are all comics are good for. The motion comic *Hellboy* can then be seen as an example of intermedia (Spielmann 2001), characterised by a transformation, that is, a “new visible form that results from collision and exchange,” by which “different elements are connected and merged into each other, thereby creating a new form” (59). In the case of *Hellboy*, the new transformed form would be the result of animating static images taken from the comic book, which is still strictly an animation. The form of the comics is lost, and there remains only a decorative comics feeling, which can be equated to genre. Enhanced webcomics have a lot of potential and tools at their disposal to dispel this misconception and help the medium reach a higher state of authority. However, exaggerating the cross-influence with other media productions risks being a step backwards.

Interactivity

Daniel Goodbrey, a pioneer in interactive webcomics, has been experimenting with the different ways comics and video games can come into contact with each other. His starting point are “hypercomics,” a union of “hypertext” and “comics,” which he considers comics “with a multicursal narrative structure” (Goodbrey 2013). He goes further and proposes his original “game comics” as an even newer hybrid form, which contains elements of both comics and games, beyond the mere use of hypertext. His game comic *Icarus Needs*¹² stars the polygonal-shaped character Icarus, who is trapped in a dream, and finds himself in a maze-like world that he needs to find a way out of. The user immediately assumes control of Icarus and is prompted to explore the world and solve puzzles in order to progress further. By using the directional buttons on the keyboard, the user is able to move Icarus to the next panel, collect items found on the way, and interact with various characters and objects that he encounters. By finding the key and entering the panel with the figure guarding a door, Icarus, and also the user, are able to proceed further. The panels in this enhanced comic are all of equal shape and size, arranged evenly on the screen in a 3x3 grid, with the centre one always being where the action happens. The shift to the next panel that occurs at the press of a directional button appears as animated motion, even though the images are all static. The transitions also trigger speech bubbles, usually when Icarus finds an item, or when he meets another character. All of the panels are retraceable, meaning that one can always go back and revisit the previous environments at least once, but Icarus’s thoughts and interactions are one-time-only.

This emphasis on discovery seems to be the main point where comics and games meet in Goodbrey’s game

12 <http://www.kongregate.com/games/stillmerlin/icarus-needs>.

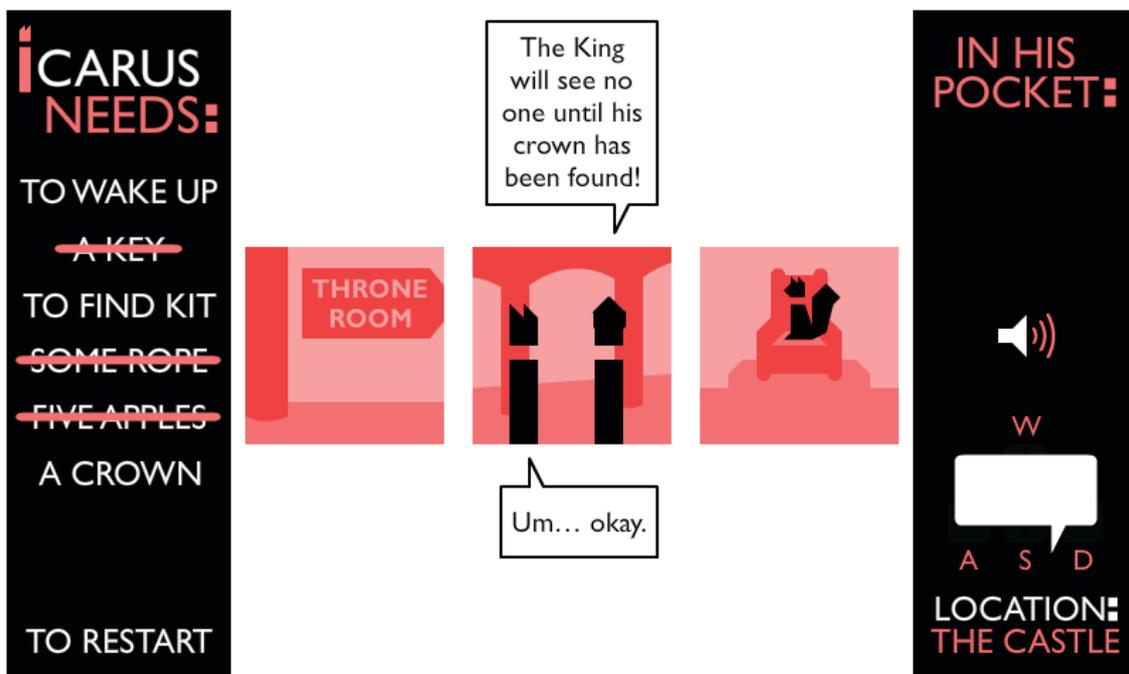


Figure 4 A screenshot from Goodbrey's *Icarus Needs*. The user is prompted to explore the panels and find a crown to proceed further. The list on the left shows the objectives that need to be completed. © Daniel Goodbrey

comics. In fact, Andrews et al. observe that “this makes comics comparable to games in the sense that games, too, encourage non-linear progression via their interaction and, whilst they may have a *preferred* reading, by their very nature encourage the exploration or creation of narratives” (1703). On a printed page the exploration occurs simply by glancing from one panel to another and mentally creating connections between them (what McCloud called closure and Groensteen *braiding*). In *Icarus Needs*, this happens more directly and in a much clearer way, as the transitions help to give a sense of movement. These, in conjunction with the “needs” that remain written on the left side of the screen, constitute a “‘constructionist’ approach,” which “views the reader as engaging in a ‘search after meaning’ which involves developing a set of goals to guide the reading (primarily in terms of the goals assigned to the characters in the story, but also to the role that the reader opts to take)” (Andrews et al. 1704). Goodbrey’s *Icarus Needs* is structurally and aesthetically a true hybrid of comics and games, so much so that one has trouble even finding an appropriate term to refer to the recipients of this enhanced comic (are they readers? viewers? players? users?). While it does have a lot of comics elements, *Icarus Needs* seems to be characterised by even more rules and features related to games, and could thus be called, perhaps more appropriately, a *comicstrip game*, rather than a *game comic*.

Icarus Needs requires one to use the keyboard to move the character and interact with the environment. Another way of engaging the reader would be to use the actions associated with the mouse cursor, such as hovering and clicking. These are used very frequently in enhanced webcomics, such as *The Art of Pho*¹³ by Julian Hanshaw, which was animated by the Dutch-based Submarine Channel, and *Murat*¹⁴ by Šeda and Novák, in order to solve simple puzzles and reveal more information. Though it originated in print, online *The Art of Pho* is an “interactive graphic novel [with] the dimensions of sound, music, animation and interactivity” (Hanshaw, “About Art of Pho”). It tells the story of Little Blue in his quest to make the perfect dish of Pho in

13 <http://artofpho.submarinechannel.com/>.

14 <http://nonstopbar.com/>.

the city of Saigon. Already in the first panel of the webcomic the reader is given the agency of participating in the unfolding of the narrative. The mouse cursor turns into a car key as one hovers over the panel, and upon inserting the key into the ignition, the car turns on and starts the animated sequence. It is possible to avoid interaction and move forward in the narrative by clicking on the timeline below the main window, but doing so would mean excluding relevant and rich information acquired by completing the aforementioned small tasks. Digital creations, such as the interactive *The Art of Pho* are the most connected to the web and the digital world, as they use many features unique to the digital medium on which they are hosted. Using web technologies to guide the reader through the narrative or provide supplementary information can result in an efficient and rich presentation. Likewise, any other function that uses the code in a creative way to display content can add to the reading experience of the comic and enhance the comics modes further. However, when the use of these possibilities becomes excessive, they compromise the identification of such a digital creation as a part of the comics medium. Comic-like digital works that require an excessive amount of user interaction tend to cross into the field of video games. If the story is told by solving puzzles or performing more complicated digital tasks, the comics elements risk acquiring a secondary status, and appear to be used mainly for aesthetic purposes. In such cases, the roles of the two combined mediums are switched: one cannot speak anymore of a comic enhanced by means of interactive and game elements, but more so of a game enhanced by means of comics elements.

Final word

What then do enhanced webcomics say about the medium of comics? Does their appearance on the scene benefit the medium or does it do it harm in any way? In order to answer these questions it is necessary to detach the notion of comics from the notion of comic books. The conceptualisation of comics as tied to the comic book is understandable, since the medium was born and popularised in print, and some of its main characteristics, such as the speech balloon, the motion lines, and the graphic sound effects, emerged precisely because of the limitations of print. But now that the medium has managed to become integrated on the digital realm, would it not be wise to take advantage of the temporal properties of the latter, and substitute the original traits of comics with the more realistic and natural ones offered by the digital media? Most comics scholars would probably vote against this procedure, as the “shortcomings” of print represent the characteristic appeal and form of classic comics. Yet, it might prove to be a fruitful endeavour to experiment with the ways to incorporate more realistic and innovative representations of space and time, and still preserve the original feeling of comics-specific elements. Of course, for the sake of developing the medium of comics, one would have to be careful not to venture too far away from its borders. Comics has already been chastised for attempting to find confirmation and approval in history and literature, by being treated narrowly as merely a genre, or by being generalised broadly to the point of losing a lot its specificity. However, with enhanced webcomics, comics authors and scholars have the opportunity to learn from previous mishaps and look for that golden mean, which could further the medium in terms of its authoritativeness as an art form.

As enhanced webcomics represent the meeting point of the medium of comics with other media that are able to take on the digital format, the main issue surrounding them is that regarding their hybridity. The interplay of the different media on computer screens raises the question of whether there is even a need to devise

a set of criteria to use in order to classify a certain new media product as belonging to one particular medium. Does it even make sense to divulge into meticulous deconstruction of the different aspects of a work, in which one can notice more than one medium in action? Would it make more sense to simply identify those works as a bizarre mash-up of formal and aesthetic principles, and attribute them to new impromptu medium, labeled as “uncategorised” or “other”? The answer, I think, varies depending on the starting point from which one sets out to analyse those works. Coming from a discipline of cinema or literary studies, having those hybrid creations put under the “uncategorised” label, or claiming them as belonging to their own media would not matter much in the end. Literature and film are already established and well defined, and would suffer little from being contaminated by other media. They hold a high level of authority, and run little risk of having to reassess their basic principles and core features. Comics, on the other hand, has to be much more careful in choosing how it defines itself—and in relation to what. The medium is still suffering from an identity crisis, as it has become clear with scholars’ continuing struggle to find an appropriate definition of what comics actually is. It has tried to lean on the visual arts, as well as literature, for support, to allow it to gain legitimacy as a form. However, this has caused even more confusion and disagreements among scholars regarding the origin, nature, and purpose of comics. Appropriating blindly any hybrid form containing comics elements as belonging to the medium of comics, then, would only complicate the matter further.

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