

# Open Research Online

---

The Open University's repository of research publications and other research outputs

## Circuits, Cycles, Configurations: an Interaction Model of Web Comics

Conference or Workshop Item

How to cite:

Antonini, Alessio; Brooker, Sam and Benatti, Francesca Circuits, Cycles, Configurations: an Interaction Model of Web Comics. In: The 13th International Conference on Interactive Digital Storytelling, 3-6 Nov 2020, Bournemouth, UK.

For guidance on citations see [FAQs](#).

© [not recorded]



<https://creativecommons.org/licenses/by-nc-nd/4.0/>

Version: Accepted Manuscript

Link(s) to article on publisher's website:

<https://icids2020.bournemouth.ac.uk/#: :text=About%20ICIDS%202020,technological%2C%20and%20applied%20design%20pr>

---

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data [policy](#) on reuse of materials please consult the policies page.

---

[oro.open.ac.uk](https://oro.open.ac.uk)

# Circuits, Cycles, Configurations: an Interaction Model of Web Comics

Alessio Antonini<sup>1</sup>, Sam Brooker<sup>2</sup> and Francesca Benatti<sup>1</sup>

<sup>1</sup> The Open University, Milton Keynes, MK7 6AA, UK  
[alessio.antonini@open.ac.uk](mailto:alessio.antonini@open.ac.uk), [francesca.benatti@open.ac.uk](mailto:francesca.benatti@open.ac.uk)

<sup>2</sup> Richmond University, London, TW10 6JP, UK  
[sam.brooker@richmond.ac.uk](mailto:sam.brooker@richmond.ac.uk)

**Abstract.** We are accustomed to thinking about multimedia technologies as a coming-together: consider the convergence of still images and sound in film, for example. This approach, however, struggles to accommodate the slippery distinction between different components in a digital space. This paper approaches new technology as a perceptually-generated matrix holding discrete components in relation to one another. These temporary formation of interacting components facilitate a unique structure which is *other* than the sum of its component parts. It outlines the unique lifecycle of the webcomic, and its relationship with infrastructures both of feedback and distribution, through the systematic evaluation of the specific calibration of technology-based interaction found in the medium.

**Keywords:** Webcomics, Interactive Narrative, Content Technology

## 1 Introduction

Gestalt, from the German word meaning *form*, refers to a pattern or shape – the sense of something being whole. This name was adopted by predominantly Austrian and German psychologists of the early 20<sup>th</sup> century, to explain (among other things) our perception of individual components as forming part of a pattern. One famous example shows what appears to be an abstract field of black marks; upon recognising it as a dog, the entire image resolves itself in the mind of the viewer. This coming-together of individual components to form a gestalt is embodied in psychologist Kurt Koffka’s well-known phrase “the whole is other than the sum of its parts”. Well-known but often mis-translated, with *greater* substituted for *other*. The whole is not *greater* than the sum of its parts - “this is not a principle of addition,” as Koffka adds - but something different. This new form has a being apart from the individual elements, one recognised by the drawing-together of single components into one perceptual system.

This approach provides us with a convenient way to talk about new technologies. We are already accustomed to thinking about multimedia technologies as a coming-together: consider the convergence of still images and sound in film, for example. This approach, however, struggles to accommodate the slippery distinction between different components in a digital space. Web technologies, for example, facilitate fast-paced generative spaces in which tools and approaches are continuously combined and recombined, and where static or formalist definitions of a particular configuration seem

obsolete. Instead this paper approaches new technology as a perceptually-generated matrix holding discrete components in relation to one another. These temporary formation of interacting components facilitate a unique structure which is *other* than the sum of its component parts. It is a framework general enough to describe the technology-mediate interactions between actors involved in the content lifecycle whilst remaining agnostic to specific platforms.

By way of illustration this paper situates the webcomic not as a discrete entity, a JPEG on a screen, or as a transmedial component in a greater distributed story. Instead it sees the webcomic as a formation of discrete interactions which take place in a variety of spaces. These interactions blend together in a continuous experience that manifests across multiple platforms: reading apps, mailing lists, comment forums, funding platforms, conventions etc. They also exist between the user and the content, in operations which exist solely in the narrative spaces. The affordances of the “digital first” reading experience facilitated by webcomics in turn permits the formation of this integrative, aggregate model.

The specific configuration of the current webcomics ecosystem create a new interaction space that in turn configures the relations between all actors (readers, authors, editors etc.) The value of this investigation is threefold:

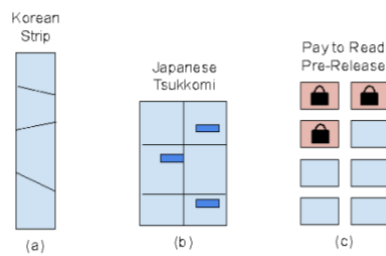
1. It permits a better understanding of a web-native models of interaction, which goes beyond speculation about specific platforms
2. It explores the combination of diegetic (within) interaction with non-diegetic (out) interaction combining reading and authorial space.
3. It is beneficial both to readers and authors of webcomics: readers are recognised for the ways in which the discrete components of their experience are drawn together, while authors can better understand the relationship between readers and funders, an essential part of the content creation experience.

This contribution presents a technological analysis of webcomics as an integrated ecosystem of authorial, editorial, funding and reading tools, mediating a complex network of interrelation between the key actors of the webcomics life cycle. The analysis highlights the technology-mediated interactions within the specific anatomy of webcomics, breaking the traditional separation in phases of the content industry, and the differentiation between the diegetic space of content experience and the nondiegetic spaces of content creation. The study of webcomics provides the opportunity to outline a general framework of analysis that can be used to guide the design and assessment of content technologies.

## 2 Background

The differences between the communication circuit of print comics and webcomics have been discussed in Benatti [1]. In print comics and by extension in digital versions of print comics, the agents invested with the most significant amount of influence are publishers and distributors. Webcomics by contrast develop a different communication circuit that enables the emergence of alternative genres, formats, authors and readers. This broadening of the audience of comics is also enabled by webcomic creators’

preference for microtransactions. Unlike print comics, webcomics are often free to read and employ crowdfunding platforms such as Kickstarter and Patreon to support creators through small voluntary transactions. These often use as an enticement additional interaction possibilities, such as pre-release access to new content or more direct involvement in the content creation process, from naming new characters to having the reader's likeness included within the narrative. Additionally, webcomics also allow readers to interact with other readers by inscribing their views as comments in the margin of the page or even upon the page itself (such as in Japanese tsukkomi). Finally, webcomics experiment with digital-native page layouts optimised for mobile interfaces, such as the vertical strip of the Korean platform Webtoons, which enable new haptic interface possibilities (see Fig. 1).



**Figure 1.** Korean long-strip (a) is optimised for continuous scrolling; Japanese tsukkomi (b) enable comments on the comic boards; micropayments (c) grant sponsors pre-release access.

One consequence of this shift to a more creator-centric approach to publication is a desire for immediacy in the interactions between consumers and creators of content, which is also evident in other sections of the digital literary sphere [2]. Maintenance of an online persona becomes a *de facto* requirement as webcomics creators take responsibility for what might previously have the role of a publisher, including marketing. Combined with a frequent posting schedule (daily or weekly) and the emotional investment that often comes with financial ones, webcomics producers become obvious candidates for the formation of parasocial relationships, imagined relationship consumers have with the producers of content. The formation of these relationships represents a significant part of our conversation around online media, where consistency of persona permits the relationship to form.

In his exploration of audience types, theorist Gamson identifies five ways to experience celebrity, of which four position the relationship as antagonistic to some degree [3]. Audiences are seen as probing or testing the reality of the celebrity persona as articulated either through their work or behaviour (the former being a component of the latter) in a relationship analogous to the play between comic creator and audience. Audiences both test the persona, seeking inconsistency in identity, but also seek to define (or redefine) the persona, policing the identity presented by the creator. This tension between the demands of the reader and the willingness of the author to acquiesce in turn manifests itself in the nature and form of interactions resulting from that tension.

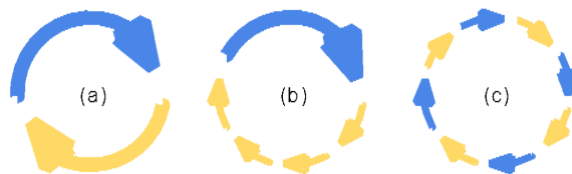
## 2.1 Content Lifecycle.

As theorised by Darnton [4], the “communications circuit” of print book production has a clear distinction between phases. Once printed, works cannot be amended unless published in a new edition. The work requires significant production time and a material outlet (bookshops) for distribution, after which the reader’s role in the feedback mechanism is historically confined primarily to indirect sources (such as sales). Print comics have a shorter life cycle, which is dominated by their serial publication, usually through monthly issues. Further periodicity also exists, for example through annual conventions such as Comic-Con, Lucca Comics and the Angoulême Festival.

Digital technology does not introduce new elements to the content life cycle, but it can blur its shape and distinctions between phases. It is worth highlighting that the current model we consider as a baseline is the result of the industrialisation of content creation, which rationalised phases and roles so that they achieve predictable outcomes. In general, we generalised at least three different lifecycle models (see **Figure 2**):

1. A book-like life cycle is distinguished by long creation and distribution phases; book writing can take a span of years, and its fruition can span decades or centuries
2. A serialization-like life cycle is distinguished by a long creation phase and a distribution broken-down in periodical issues, i.e. weekly or monthly episodes
3. A webcomics-like life cycle is distinguished by a broken-down creation phase which generates small units of interdependent contents, that are distributed before the ending of the overall creative process

The differences between the first two models concern mostly the distribution channels and media used. On the one side, books are expensive to produce and their distribution through a network of bookshops and libraries is relatively slow. On the other side, magazines have a lower cost of production and they can rely on the distribution network of newsagents.

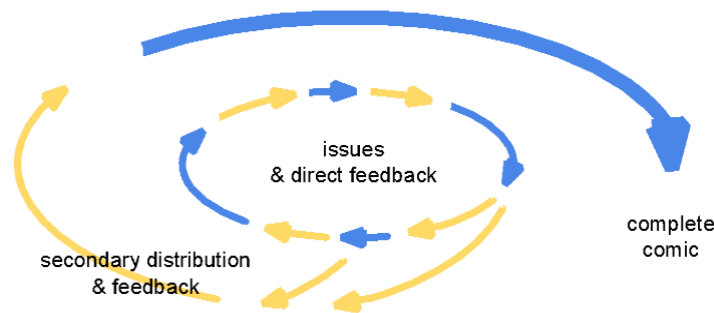


**Figure 2.** Different life cycles: (a) book-like, linear creation and linear content experience, (b) serialization-like, a linear creation and experience in episodes, and (c) inter-waved creation and experience.

In contrast, the model of webcomics is justified by the need to support the ongoing creation process, by monetization and rapid assessment of the validity of the creative work. Webcomics are not usually like magazine strips, short and self-conclusive works, but often lengthy works of hundreds or thousands of issues. As independent publications, webcomics are not overseen by professional editors, but supported by self-organised volunteers or para-professional groups. Thus, both the author and the

support groups are limited and cannot sustain years or months necessary to “complete” a work, but must monetize as soon as possible by publishing on a weekly basis.

In a short time, a new issue is created, translated, distributed, monetised, read, commented and discussed. Readers can play multiple roles: contributing to translations for the benefit of other communities, funding the author, providing feedback, publicising the contents through social media, recommending and rating contents, commenting on the issue or commissioning new issues. While reading, users contribute both indirectly (through generation of ad revenue, for example) and directly (through micro-payments, rating, comments, commissions and suggestions). The parasocial relationship developed by an author discussing their lives and motivations with an interested audience deepens the engagement, a positive feedback loop. Such interactions can be detrimental, of course: the emotional labour of addressing fans, for example, or the scraping of new content for distribution in other platforms (with the author attribution removed.) All form part of the aggregate technology of the webcomic.



**Figure 3.** Webcomics life cycle.

Overall, the webcomics life cycle has two distinct circuits: a reciprocal circuit in which rapid switching of roles and phases is necessary to support creation, and a terminal circuit more akin to magazines in the mid-term and books in the long term (see **Figure 3**). Indeed, webcomic issues are collected in arcs which can be seen as major narrative milestones or partially independent storylines, which in the long term constitutes a coherent work in the light of an overall plot.

## 2.2 Content Technology

The disruptive, disintermediating effect of web technologies create the conditions under which webcomics can exist. The activities of each actor (author, reader, editor, publisher) is to an extent regulated by aggregate components of this technological gestalt. The combination of interactions represented by webcomics can be aligned with what this paper considers the four components of the mainstream content industry:

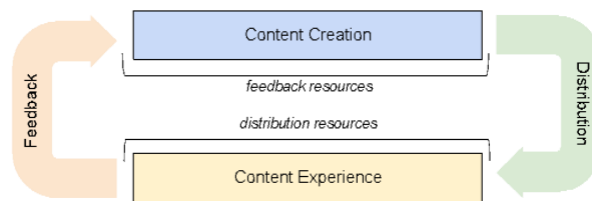
1. *Publishing systems*, in which the content is published first to the core reader base

2. *Distribution systems*, in which new content propagates across portals, newsfeeds and notification systems to secondary pool of consumers, which recontextualises the material
3. *Reading systems* (or consumer system), represented by multimodal, multi-channel web reading structures
4. *Feedback systems*, which connect authors, publishers and readers. This might be through comments, for example, or mechanisms of micro-funding based on early access to content and on ads.

This rather linear model can be simplified to consider the way in which a content technology “infrastructures” the content lifecycle. This in turn simplifies our understanding to something more akin to the traditional model of distribution and feedback found in the study of communications (see **Figure 4**) which highlights two main phases:

1. *Distribution infrastructure*, in which content is delivered to users. This accommodates shops, websites, e-reader software, collected volumes etc.
2. *Feedback infrastructure*, which delivers resources necessary for the creative process: comments, ideas, criticism and (crucially) payment.

*Content creation* is motivated by the author but constrained by the resources provided by the feedback infrastructure. *Content experience* is instead motivated by reader curiosity but constrained by the resources provided by the distribution infrastructure.



**Figure 4.** Distribution and feedback infrastructures.

In summary, the content life cycle is defined by two components: the infrastructures of distribution and of feedback.

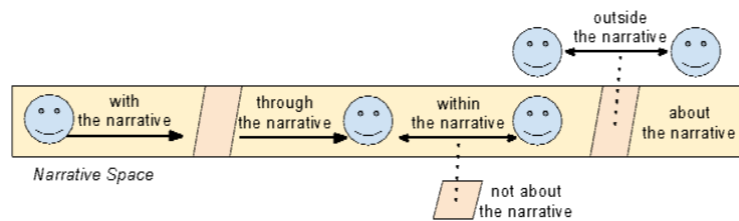
### 3 A Framework for Content Technologies

A particular configuration of distribution and feedback infrastructures supports a particular content life cycle, which in turn exerts an influence over the actors participating in that life cycle. This drawing-together represents in some respects a causality dilemma: are webcomics creators more engaged with fans because technology encourages this behaviour, or because it permits it? Would the current configuration which we recognise as the common webcomics experience exist, were these technologies transplanted to a century ago?

Such questions are beyond the scope of this paper. What can be considered, however, is the particular circumstances which the current configuration of technology-mediated interactions creates. The frenetic lifecycle of the webcomic (combined with tools for social interaction) permit readers to develop a close relationship with the work, for example. What likely forms of interaction arise from the alignment of different actors within this matrix?

As discussed above, the content lifecycle involves a wide range of interactions: author-editor, editor-distributor, user-user, user-distributor and user-author. These interactions are supported either by feedback or distribution infrastructures. Focussing first on the former, it is possible to split interactions into two parts: diegetic interactions, which concern elements of the narrative world; non-diegetic, which concerns elements tangential to it. Which a reader favours has an impact on the manner in which they interact with the author. Some readers, for example, may object to Patreon announcements or the author's discussion of their personal politics – issues which they feel are unrelated to the world of the narrative. Digital technologies often place all user-to-user interactions within the same physical space, resulting in the interleaving of these conversations, much as game chat interrelates conversations about in-game currencies, difference-based bullying and more mundane social matters [5].

Interactions may be classified as regarding the narrative (N); tangential to the narrative (NN); part of the content experience (E); part of content creation (P). Each of these categories may benefit a different actor (editors are more likely to be involved in content creation, for example) and each is likely to perceive object of study in a different way. See **Figure 5**.

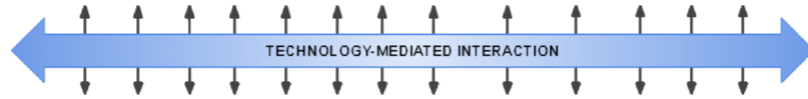


**Figure 5.** Features of interactions: (N) about the narrative, (NN) not about the narrative, (E) part of the content experience, (P) part of the content creation.

As a content technology, webcomics mediate a wide range of interactions. In this regard, we can identify at least five main types of actors: author, reader, publisher, editor and patron. This results in 25 points of potential interaction between actors. **Table 2** identifies a representative set of interactions characterized by the features of interactions identified.

The language for these interactions is derived from an earlier work on the nature of technology mediated interaction [6] which seeks to identify appropriate binary dimensions which can be used to calibrate expectations around a particular technology. These dimensions are used as scales in describing in which direction the technology is pushing the interaction (see **Appendix, Table 1**).





**Figure 6.** Dimensions of mediation of technologies-based interactions.<sup>1</sup>

**Table 1.** Features of the interactions between actors. Legend: (N) about the narrative, (NN) not about the narrative, (E) part of the content experience, (C) part of the content creation, (F) supported by feedback infrastructure or (P) distribution infrastructure.

Source/ Target	Author	Reader	Publisher	Editor	Patron
Author	[NN,C,P] public support	[N,E,P] diary of the serialization	[NN,C,P] self-publishing	[N,C,P] support to translation	[N,E,P] content preview
Reader	[N,E,F] questions and suggestions	[N,E,F] comments	[N,E,P] micro-payment	[NN,E,P] impressions	[N,E,F] opinions
Publisher	[NN,C,P] payment and analytics	[NN,E,F] recommendations	[NN,C,P] reprint	[NN,C,P] download raw files	[N,E,F] offer of pay for benefits
Editor	[N,C,F] request for clarification and suggestions	[N,E,P] offer of explanations, comparison with other works	[NN,C,P] revised versions	[NN,C,P] collaborative editing	[NN,C,P] contribute to distribution of funded content
Patron	[NN,C,F] commissions	[N,C,P] pay for early release	[N,E,F] support series	[NN,C,P] pay for early release	[N,C,F] co-funding

By way of illustration, we may consider three examples of interactions between identified agents:

**Example 1: Author to Reader / diary of a serial**

The *diary of a serial* is an appendix included at the end of a webcomic issue. In these extra panels, authors share with readers their plan for the progression of the comic, the timing of the next issues and the difficulties they are facing.

The diary also provides a view on the sources of inspiration for the story, doubts and other insights which enrich the reading experience. The diary is coupled by the comment features and contacts of the author, such as upcoming convention appearances, which are used by readers to engage with the author.

<sup>1</sup> The original work of Antonini & Brooker identifies twelve dimensions, this contribution extends this list with three extra dimensions: negotiate/declarative, one-time/recurrent and structured/unstructured.

The diary exploits the same publishing mechanism of the comic. This interaction is configured as described in **Appendix, Table 3**.

**Example 2: Publisher to Publisher / reprint.**

Content is published on a main platform while other specialised publishers monitor for updates and extracts content to create reprint publications on other portals. This interaction is configured as described in **Appendix, Table 4**.

The reprint of contents of alternative portals is used by other publishers to harvest and monetize part of the success of a webcomic, but also to provide new contents to the audience of their portal. For instance, portals specialising in Korean authors may replicate successful contents from Chinese or Japanese portals.

While in some cases the reprint does not add any value to the content, in other cases it requires a form of editing, such as translation of the comic.

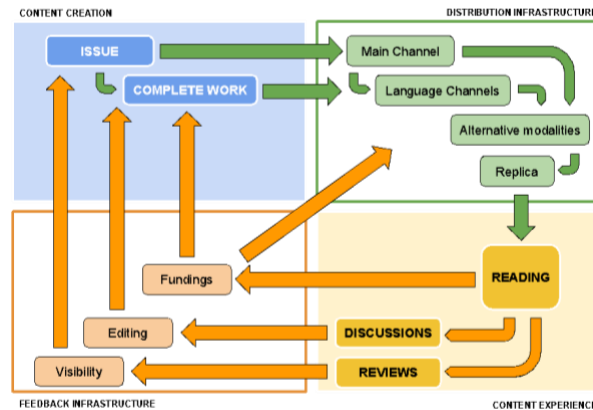
**Example 3: Patron to Reader / payment for early release.**

Webcomics issues are often free to read, but additional features or preferential early access may be locked under a pay to read condition. This interaction is configured as described in **Appendix, Table 5**. Payment for early release is a mechanism provided to readers who want to support an issue. Readers can take turns supporting the author knowing that their contribution to the community will be compensated by other members. Furthermore, this mechanism creates over time a fan club of readers sharing the burden of supporting the author.

In summary, narrative-mediated interactions between users (with the narrative and through the narrative) are likely to be diegetic interactions, while interactions within the narrative may or may not concern the narrative. Lastly, interactions outside the narrative are likely to be non-diegetic, but could still concern aspects of the narrative (e.g. critique, translations, or editorial contribution).

The preceding section considered one way in which interactions are regulated by a specific feedback infrastructure. We now move to consider how distribution infrastructure can impact on content distribution.

As discussed above, the webcomics technology ecosystem supports a frenetic life cycle. Phases that require years in print publication take place in weeks but are followed by a commensurate long tail of other activities. For instance, payment for early release accelerates the distribution to readers and the creation of new contents, while reprints broaden the distribution outside the author's channels. These interactions occur either during the creation or experience of contents, as input or output of the distribution or feedback infrastructures (see **Figure 7**) with a commensurate effect on the speed of distribution.



**Figure 7.** Lifecycle activities in web comics

The lifecycle is the result of numerous interactions between different subset of actors. The overall functioning of this technology-enhanced lifecycle is the result of the quality of the interactions, which the technology can support or hinder. Each activity requires alignment and compatibility between actors, specifically in regard to:

1. *Power structure* between the actors
3. The interviewing of actors' *Activity Schedules*
4. *Resource management*, i.e. access and use of resources among actors
5. Synergies between actors' *Goals*

Indeed, the features of the technology-mediated interaction provide a specific configuration for each activity. For instance, in **Example 1**, there is an alignment of goal and schedule between author and readers. The technology is reflective and negotiative, recurrent and about control, supporting the author in iteratively managing the alignment between their views and audience expectations. Both reading goal and production schedule are therefore kept in a tight engagement. In **Example 2**, there is an asymmetry in the power structure, which eventually reaches a balance. Even the publishers whose comics are reprinted are in turn capable of reprinting other publishers' comics. There is an exchange between subjects, who change their role. The technology is actionable and synchronous, resulting in a mutual enrichment of publishers' catalogues and an expansion towards new reader communities. In **Example 3**, the technology enables readers to take turns in sharing the burden of providing resources to the author. This happens by establishing a temporary power structure where readers take on the role of patron temporarily. No content creation, distribution, experience and feedback is possible without interaction, and with its lack of oversight, webcomics is an emblematic example.

Webcomics development becomes profoundly open, even where the author does not wish it to be so. If we see webcomics not as images on a website, but a complex ecosystem of interaction modalities held in matrix, then the various pressures exerting themselves upon the creator become manifest. Tensions emerge between the author as autonomous creative and an invested audience with a desire to shape the content. The

non-diegetic element of the author's persona becomes enmeshed with the diegetic components of the story, in a manner which would likely distress Roland Barthes. The author in turn seeks to actively shape their audience both diegetically (through the content of their work) and non-diegetically (their online persona). By way of illustration we may consider the cases of webcomics Ctrl-Alt-Del and Stonetoss.

Ctrl-Alt-Del is a long-standing webcomic by artist and writer Tim Buckley [7]. A videogames-oriented webcomic in a model popular in the early 2000s (see also Penny Arcade [8] and PVP Online [9]) the tone was irreverent and disinterested in longer-standing narrative. On June 2<sup>nd</sup> 2008 Buckley posted a comic entitle *Loss*, which wordlessly depicted the miscarriage of main character Ethan's fiancée Lilah. "I know that everybody has their own idea of what Ctrl+Alt+Del is "supposed" to be," explained Buckley in a contemporary blog post, and this was certainly the case. Fellow webcomics creators jokingly described him as "the antichrist" and the comic received such widespread derision that it became a widely popular meme – one which Buckley subsequently engaged with. Certainly the comic never returned to similar subject matter. Buckley sought to challenge his audience, and lost.

Stonetoss represents an interesting counterpoint to Buckley's experience [10]. Within weeks of launching it became a popular mainstay of Reddit's front page, an irreverent and caustic comic designed for easy distribution and circulation. Once its audience was established, however, the author's content began to address subjects felt by some to fall within the purview of the then-emergent Alt Right. The author denies this, stating that his work is simply transgressive. This latter example represents a successful use of the interaction opportunities afforded by the ecosystem in which webcomics operates, regardless of content.

## 4 Discussion and Conclusions

"It is important," write Paul Duguid, "to think not idealistically about information, but materially" [11]. The novel emerged as the first print-native literary genre in the seventeenth and eighteenth centuries, simultaneously constrained and enabled by the technologies of print production and distribution [12]. In the nineteenth century Charles Dickens attempted to take control of the communications circuit by publishing his novels in the periodicals that he owned and edited, *Household Words* and *All the Year Round* [13]. However, the technological circumstances of print limited the opportunities for rapid response to reader feedback. Dickens sought to engage with his audience through an extensive programme of public readings, which spanned several countries and forced him into punitive workloads, potentially hastening his death. The rapid production, distribution and feedback infrastructures of webcomics are establishing the motivated cycle that eluded content creators like Dickens, who sought to cultivate those types of audience interaction that would better suit their needs. At the same time, readers become central to the distribution and feedback infrastructure, intervening into the storytelling process by taking over the roles of editors, translators and funders. The content experience of webcomics is therefore permeated by the diegetic and non-diegetic interactions enabled by this unique technological configuration.

Webcomics are a web native genre innovating mainstream comics from several perspectives, such as disintermediating the author / reader relation, enabling user-driven editorial processes, self-organised distribution of contents, multi-modal and multi-channel redistribution and micro-payments. The most relevant distinguishing results of this setting are the fragmentation of the communications circuit, as there is no centralized oversight by any organisation, and the blending of creation and experience, for example combining reading with publishing, publishing with engaging readers and reading with social media activity.

With this work, we want to raise awareness of different types of diegetic and non-diegetic interactions and use webcomics as an example of how technologies can be used to promote (or hinder) them. Further work will reflect on how certain configurations of aggregate technologies precipitate certain kinds of interaction. The gestalt of integrated technologies that we call webcomics is held together in part by the perception of its audience as having a form. Cultural perceptions of a certain configuration of technologies then impose their logic on the environment and influence criteria for success, as discussed for example by Floridi on the ethics of infrastructure [14]. We need a system to study these functionalities in general, abstracting their effects in the interactions between actors, both diegetic and non-diegetic. This speaks to a potential area of discussion – that this paper assumes a financial imperative, which is used a proxy for the wider motivations felt by the author.

A particular configuration of distribution and feedback infrastructures supports a particular content life cycle, which in turn exerts an influence over the actors participating in that life cycle. In this view technology is not neutral – rather it configures a specific field for interaction which may facilitate or impede communication, collaboration or competition between actors. The image-based format of webcomics, for example, permits forms of predatory publishing which erode the income of the author, but also supports the reader base in providing translations and pushing the content to different communities. The combination of impression-based advertising, with the limited cost of content crawling and replication, pushes toward a competition between platforms for the fastest and more reliable service.

Identifying the outcome of a particular technological configuration poses significant social and technological challenges. The interaction between an array of components, technologies, actors and social structures frustrates such efforts. Developing a model for evaluating the mediating effects of technology-based interaction would be helpful in developing a better understanding of how unique technological configurations can generate commensurate interaction configurations.

## References

1. Benatti, F.: Superhero comics and the digital communications circuit: a case study of *Strong Female Protagonist*. *Journal of Graphic Novels and Comics*. 10, 306–319 (2019). <https://doi.org/10.1080/21504857.2018.1485720>.
2. Murray, S.: *The Digital Literary Sphere*. Johns Hopkins University Press, Baltimore (2018).
3. Gamson, J. *Freaks Talk Back: Tabloid Talk Shows and Sexual Nonconformity*. University of Chicago Press, Chicago; London (1998).
4. Darnton, R.: What Is the History of Books? *Daedalus*. 111, 65–83 (1982). <https://doi.org/10.2307/20024803>.

5. Sengün, S., Salminen, J., Mawhorter, P., Jung, S. G., & Jansen, B. (2019, September). Exploring the Relationship Between Game Content and Culture-based Toxicity: A Case Study of League of Legends and MENA Players. In *Proceedings of the 30th ACM Conference on Hypertext and Social Media* (pp. 87-95).
6. Antonini, A., Brooker, S. Mediation as Calibration: a Framework for Evaluating the Author/Reader Relation. In *Proceedings of HyperText 2020*. Orlando, Florida, July 2020. *In print*
7. Buckley, T.: Ctrl+Alt+Del Comic - A comic about video games!, <https://cad-comic.com/>, last accessed 2020/06/09.
8. Holkins, J., Krahulik, M.: Penny Arcade, <https://www.penny-arcade.com/>, last accessed 2020/06/09.
9. Kurtz, S., Meconis, D.: PVP Online, <http://pvponline.com/>, last accessed 2020/06/09.
10. Stonetoss: StoneToss, <http://stonetoss.com/comic/>, last accessed 2020/06/09.
11. Eliot, S., Rose, J. eds: *A companion to the history of the book*. Blackwell Pub, Malden, MA (2007).
12. Duguid, P. Material Matters: Aspects of the Past and Futurology of the Book. In *The Future of the Book*, edited by Nunberg, 63-102. Berkley, CA: University of California Press (1996).
13. Patten, R.L.: *Charles Dickens and His Publishers*. Oxford University Press, Oxford, New York (2018).
14. Floridi, L. Soft Ethics and the Governance of the Digital. *Philosophy & Technology* 31, 1-8 (2018).

## Appendix

**Table 2.** Dimensions of mediation of technologies-based interactions.

Dimensions	Poles	Description
1	Delegation	Technology supports devolving responsibilities and activities toward other parties
	Control	Technology supports exerts control over activities and responsibilities more commonly addressed by other actors
2	Legible	Technology expose the interaction
	Transparent	Technology hides the interaction
3	Self-contained	Technology supports the creation of self-contained contents
	Linked	Technology supports interconnectivity and interdependency with external sources
4	Structure	Technology enhances, changes or customizes the structure
	Content	Technology improves the experience of content
5	Replicable	Technology does not adapt to the user
	Unique	Technology adapts to the user
6	Actionable	Technology supporting action
	Reflective	Technology supporting reflection and analysis
7	Ambiguous	Technology supporting ambiguity of information and multiple interpretations

	Explicit	Technology supporting the disambiguation of information and unique interpretations
8	Synchronous	Technology coordinating the actors
	Asynchronous	Technology not coordinating the actors
	Displaced	Technology supporting interaction between actors from different physical locations
9	On site	Technology supporting interaction between actors from the same physical location
10	Mono-modal	Technology supporting only a modality of interaction
	Multi-modal	Technology supporting multiple modalities of interaction
11	Mono-platform	Technology based on a single software / tool
	Multi-platform	Technology based on a set of software / tools
12	Structured	Technology enforcing a specific protocol
	Unstructured	Technology supporting multiple protocols
13	Symmetric	Technology provides the same functionalities to both actors
	Asymmetric	Technology provides different functionalities to the involved actors
14	One time	Technology supports a one-time interaction
	Recurrent	Technology support recurrent interactions
15	Declarative	Technology support declarative exchanges between actors
	Negotiative	Technology support negotiation between actors

**Table 3.** Features of Author to Reader, diary of the serialization.

<b>Dimension</b>	<b>Pole</b>	<b>Description</b>
1	Control	Control of information and reader's expectations concerning the time of release and the construction of the author public profile
2	Legible	Legible interference of the author within the reading issues
3	Linked	Linked to the issue
4	Content	Content is central, it does not use any specific form
5	Replicable	Replicable by every reader
6	Reflective	Reflective on the work the author
7	Explicit	Explicit communication from the author to the reader
8	Synchronous	Synchronous as concerning the contingency of the author's life
9	Displaced	Displaced as readers and authors are remote
10	Mono-modal	Mono-modal in form of comics pages
11	Multi-platform	Multi-platform as annex to the content which is distributed on multiple platforms
12	Structured	Structured through the use of comics boards and the comment mechanisms

13	Asymmetric	Readers' can share their experience with the author but on a public channel (email) or on a public channel without being sure to get to the author
14	Recurrent	Annex of issues
15	Negotiative	The content of the diary is usually negotiative (with the readers' expectations) and built on the response of the weeks before

**Table 4.** Features of Publisher to Publisher, reprint.

Dimension	Pole	Description
1	Delegation	Delegation to each publisher in how justify and manage the replication of content
2	Transparent	Transparent process which is does not keep track of the original source
3	Self-contained	Self-contained reprint of content including its own social media contents and links
4	Content	Content is duplicated with the same structure of the original source
5	Replicable	<i>Replicable</i> process
6	Actionable	Views of the reprint portal and monetization through ads
7	Transparent	The reprint does not carry information about the source, the status of update (lagging behind or updated), and it does not inform if the source had been altered and how
8	Synchronous	Process aligned with the release of issues on the main distribution channel
9	Displaced	Publishers are remote
10	Mono-modal	Reprint are the same type of the source
11	Multi-platform	Reprint and sources are published on different platforms
12	Structured	Interaction constrained by the format of content publishing
13	Symmetric	Each publisher can replicate the content of others
14	Recurrent	It follows the schedule of issues
15	Declarative	It does allow replies

**Table 5.** Patron to Reader, pay for early release.

Dimension	Pole	Description
1	Control	Control over the time of publication
2	Legible	Patron is publicly acknowledged, contribution and rules for early release public
3	Linked	Create and maintains the link between the contribution and the sponsored issue
4	Structure	Integrates the release of issues and the funding mechanisms
5	Replicable	Any reader can be patron with the same rules and results
6	Actionable	Makes available for reading a new issue



7	Explicit	Explicit rules and outputs
8	Synchronous	It is connected to the regular release of issues, in the embargo period between creation and publication
9	Displaced	Patron and readers are remote
10	Mono-modal	Acknowledgments are published with the issue
11	Multi-platform	It involves a patron and publication platforms
12	Structured	The interaction is based on a rigid protocol, based on microtransactions and what-if rules
13	Asymmetric	Patrons have the acknowledgement while everyone can read
14	Recurrent	It can occur at each issue
15	Declarative	Readers can only acknowledge the support of the patron