

**'From writer to reader: An examination of the history of
New Zealand comics online and how web-based tools
facilitate the interaction of communities.'**

by

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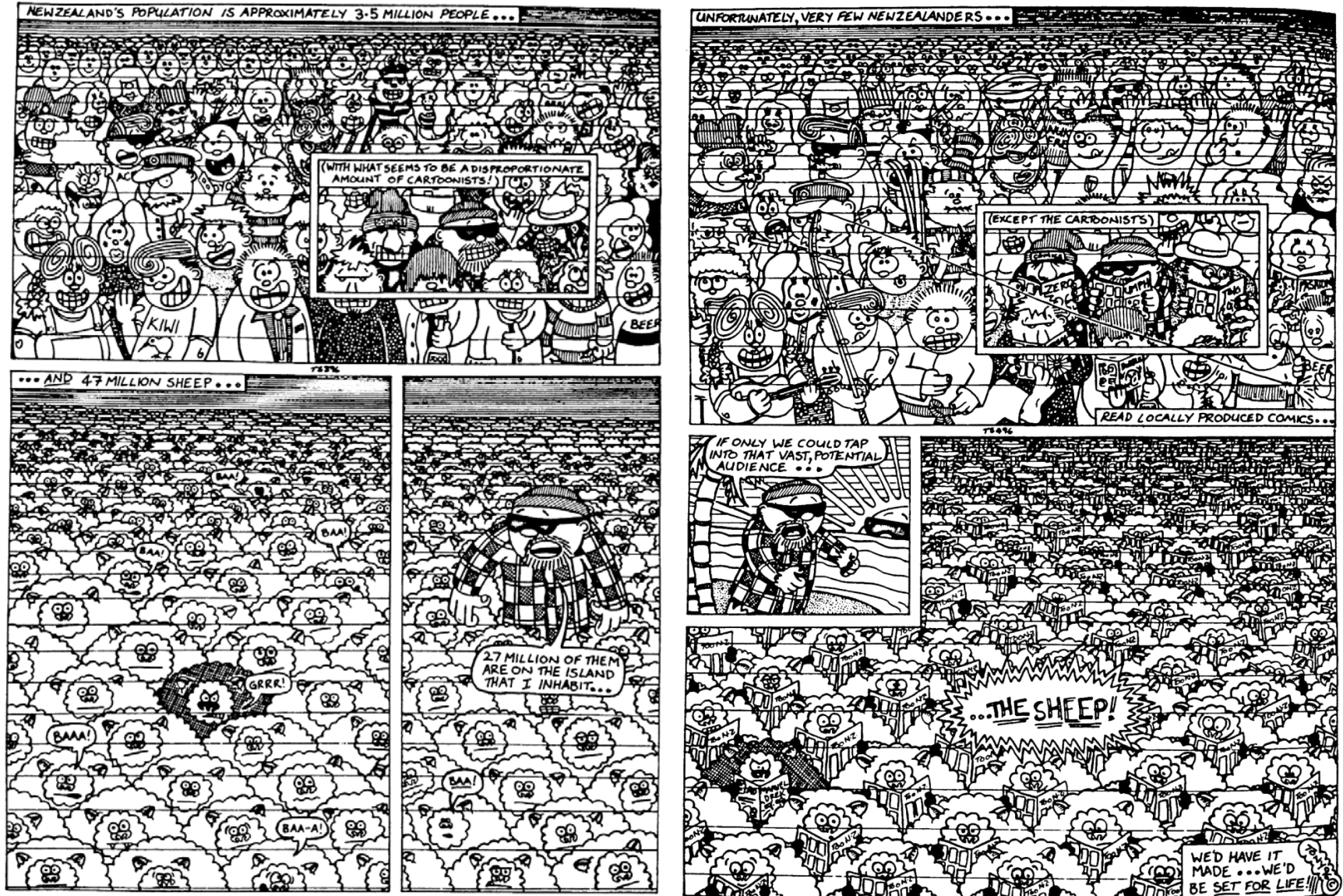
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Property of Tony Renouf. Originally published in *Nga Pakiwaituhi o Aotearoa: New Zealand Comics* by Horrocks, Bollinger & Renouf (1998). Reproduced with author's consent.

ABSTRACT

Purpose: This research project has focused on examining the developments of web-based texts and the ways people use these tools to socialise and communicate. It is hoped to provide valuable information on the impact of digital technologies on communication history.

Design/methodology/approach: This project involved a micro analysis on New Zealand comics websites. Qualitative content analysis was used to examine a sample of seven topics and 31 websites. Data was collected at various points over an 11 year time span, with the majority of data collected from historical websites archived in Internet Archive's Wayback Machine.

Findings: Web-based communication follows a similar cycle to that proposed by Darnton (1993); however there have been significant changes in how New Zealand comics websites are produced, disseminated and received. These changes have altered the way writers and readers communicate, allowing readers greater power to influence creators' work, reorganise and even alter online texts.

Research limitations/implications: Despite the small sample size and impact of researcher interpretations, this project has provided valuable information on the communication processes which take place in both print and digital forums, and will interest scholars and practitioners in the library and information studies fields, along with others interested in the dynamics of human communication.

Originality/value: Very little research has been conducted on this topic. The findings of this project reinforce the conclusions made by previous theorists, as well as contributing findings which may be explored in future research.

Keywords: *Digital Technologies, Information History, New Zealand Comics, and World Wide Web.*

1. INTRODUCTION

The purpose of this qualitative study has been to examine the history of web-based texts and the ways communities have used these tools to socialise and communicate. Theorists such as Carrington (2009), Ford (2008) and Lewis, Koston, Quartley and Adsit (2010) described that way web-based tools and social media effect the formation of communities and the construction of social identity. However, few of the previous writers have collected data to support their claims, and none have incorporated the theories of communication developed by writers like Darnton (1993 and 2009) and Hillesund (2007) into their exploration of this topic. Darnton and Hillesund theorised that an understanding of the history of communication is key to understanding the role technology plays in our social world. In this project I have used qualitative content analysis to examine a subset of New Zealand comics websites as presented over various periods of time, resulting in the development of an integrated model of developments in digital texts and their relationship to the history of communication. The outcomes of this research will interest to librarians, writers, publishers, booksellers, readers and anyone who is interested in the role that digital technology plays in our lives.

1.1 RESEARCH OBJECTIVES

The goals of this research project have been to explore digital history, publishing, distribution, preservation and reception online, along with their implications for communication and society. This has involved examining a small online community on New Zealand comics artists and fans. This approach, which is sometimes called micro research, relies on the belief that patterns in a smaller micro, or local context, reflect and even shape developments in greater society (Carrington, 2009; Gibbons, 2003). The following research questions have been used to guide this research:

1.2 RESEARCH QUESTIONS

- How has web-based communication influenced the production, dissemination, and reception of New Zealand comics?
- How have the technology, architecture and design of New Zealand comics websites changed over time?
- How have changing technologies effected the ways readers have gathered and consumed comics?
- How have communities of practice, comic fans and user groups used web-based tools to socialise and communicate?
- What impact do these changing textual objects have on our understanding of textual communication, both print and online?

1.3 DEFINITIONS

In the following list I have provided several definitions which will assist the reader with interpreting this report:

- *New Zealand comics websites* refers to any website which is created to publish, describe or discuss New Zealand comics or their creators. New Zealand creators are defined as artists either living in New Zealand, or who represent themselves as a New Zealanders.
- *Comics* is an overarching term which is frequently used to describe forms of sequential visual media, ranging from graphic novels to comic strips found in newspapers or magazines (Fingerroth, 2008).
- *Webcomics* are comics which have been produced for the express purpose of being distributed online, often using digital tools.

The terms websites and webpages are frequently used interchangeably to describe a variety of web-based objects. Therefore the following terms have been used to describe the various levels of object discussed in this report:

- The term *webpage* is used to refer to each individual web-based object as it is displayed at a specific point in time. Examples include <http://www.cherrybombcomics.co.nz/find-us> and <http://www.cherrybombcomics.co.nz/manifesta-history>
- *Websites* or *sites* refers to a Web portal which may contain any number of individual webpages, but has some form of origin to which all these pages link (usually a homepage). Examples include <http://www.cherrybombcomics.co.nz/> and <http://www.myspace.com/cherrybombcomics>
- *Topics* refer to a collection of websites based around one topic or text. They may incorporate blogs, general information websites, social media and stores. In this case the topic in question would be the *Cherry Bomb Comics* store.

In the following sections I will describe the literature used to guide research into this topic, moving on to the research methods, findings and conclusions resulting from this project.

2. PREVIOUS RESEARCH AND LITERATURE

2.1 INTRODUCTION

Brown and Duguid (2000), Darnton (2009) and Hillesund (2007) have all observed that there is a fascination with the history of cultural objects that draws people to researching the topic of communication history. This is because an examination of the textual objects that a community has produced can provide valuable insights into their society and culture. At the moment western society is going through a period of transition which has had a significant impact on the way we view textual objects. After nearly 500 years experience of print an implicit understanding of the nature of text has been developed. However, the recent developments in digital texts both

usurp and challenge these assumptions, which is why studying them is so interesting.

In the following sections I will describe the findings and concepts writers have developed about this topic. Concepts I will explore include the history digital technologies and digital publishing, along with the processes of fandom by which social connections are formed. I will then move on to the history of the comics medium, and its significance for the community which I have examined; New Zealand Comics. The specific theories and models which I have used to guide research are outlined in the following section.

2.2 THE HISTORY OF COMPUTERS AND THE INTERNET

The first computerised systems resembling modern computers were developed in the late 1960s (Hall, 2011). According to Haigh (2006) most of the technological features of modern personal computers were actually developed before this point, however during the 1960s these features, which included binary code, alphabetic characters, keyboards, video screens, and word processing and layout programmes, were integrated into one system. As Haigh (2006) described "The fundamental hardware and software technologies needed for word processing were created for other purposes, and other social contexts" (p.25-6). During the subsequent decades computer systems decreased in price and slowly became available to a larger community of users, firstly commercial businesses, and then individual users and families (Haigh, 2006).

Technologies which may impact on our future use of computers are still being developed, with mobile devices and electronic paper proving new applications for existing technology over the last 2-3 years which had not hereto been anticipated (Hillesund, 2010; PricewaterhouseCoopers [PwC], 2010).

According to Bolter and Grusin (1999), and Weller (2008), internet communication systems evolved from the 19th century telegraph systems used by the British Empire. During the 1960s and 1970s dial-up networks were used to share data between computers, although these systems were plagued with errors (Haigh, 2006; Hall, 2011; Hillesund, 2007). Internet technologies continued to develop throughout the 1980s, culminating with the World Wide Web which was developed in 1991 (Hillesund, 2007). This web of information turned out to be an extremely popular and valuable tool, which continued to develop in the coming decades.

2.3 WEB 2.0 AND WEB AS SOCIAL DOMAIN

Web 2.0 is a concept first developed by Tim O'Reilly and associates to describe recent developments in Web technologies (Bowman, 2008; O'Reilly, 2005). As opposed to what Ford (2008) described as the 'passive' Web which came before, Web 2.0 tools provide users with new ways of creating, sharing and making sense of information (Bowman, 2008; Lewis et al., 2010). Bowman (2008) and O'Reilly (2005) describe seven key trends which make up the Web 2.0 movement. These are; content and updates which take place online, user made content, data gathering from users, software as service - not product, simple programme designs allowing modification, applications which take place on multiple devices and dynamic data display. Further developments in digital technology, such as multimedia, hyperlinks and interactivity have also been incorporated into Web 2.0 systems (Arthur, 2008; Carrington, 2009; Mangen, 2008).

The social Web and new forms of participation brought about by Web 2.0 have impacted on the way readers interact with digital texts. By leaving a post or comment, or making a link to the site, the reader his/herself becomes a textual producer (Carrington, 2009; Hillesund, 2010). Through this the textual

processes of production and reception are blurred. Web 2.0 digital texts are constructed using a collective process, with comments and collaborative structures allowing the social construction of knowledge and fostering the development of communities (Bowman, 2008; Kane, Fichman, Gallagher & Glaser, 2009; Lewis et al., 2010). It is this participatory element which makes modern digital technologies so immersive (Pearson, 2010).

2.4 FANDOM AND SOCIAL CONSUMPTION OF TEXTS

The term fandom is used to describe the relationships readers develop with texts of social significance, including music, television programmes, movies, games, websites and comics (Bowman, 2008; Ford, 2008). Through forming relationships around texts frequently defined as 'popular' (as opposed to high art) readers may resist traditional class and status based definitions of social and artistic value (Brown, 1997).

Fan texts are often consumed socially, and communities of shared interest may form around them (Bowman, 2008; Ford, 2008; Pearson, 2010). As large and diverse social groups, fan communities have substantial power to influence or at least interpret media. Although fandom is traditionally considered a form of consumption, it is also a form of production; with fans creating their own texts which both homage and re-interpret existing works (Carrington, 2009). Websites, magazines and other forms of fan production give these communities greater visibility, providing people with opportunities to challenge mainstream practices and ideals, and establish their own personal and social identities (Brown, 1997; Kane et al., 2009).

2.5 COMICS AND GRAPHIC LITERATURE

Writers such as Twyman (1994) have observed that early uses of sequential visual narrative date back to ancient history. Comic-like media have been found in such varying locations as ancient Egyptian tombs, Trojor's Column

from ancient Rome, tapestries from medieval Europe and picture scrolls from medieval Japan (Fingerroth, 2008). However Mainardi (2011) speculated that more recently the modern comic genre evolved from printed broadsheets and rural ephemera distributed during and prior to the 18th Century. During the 19th Century artists and printers began to experiment with more complex visual patterns and the techniques and narrative patterns characteristic of modern comics (such as a speech bubbles and a greater proportion of image to text) evolved. By the end of the 19th century comic strips had become an established media in both the USA and Europe (Mainardi, 2011; Twyman, 1994).

2.6 NEW ZEALAND COMICS

Comic publications in New Zealand have a long history of being seen as an 'alternative' artistic medium. There is a long history of stigma and censorship being directed towards comics in this country, originating both within New Zealand and imported from overseas (Fingerroth, 2008). Horrocks et al. (1998) described the New Zealand environment as being marked by isolation and cultural hostility towards the medium. According to Bollinger, "New Zealand comics have evolved despite, rather than because of their role in the popular consciousness" (Horrocks et al., 1998, n.p.). This was particularly prevalent in the 1950s, where popular publications and academics frequently cited Fredric Wertham's *Seduction of the Innocent*, which credited comics with causing many of the social ills perceived at the time (Fingerroth, 2008; Norcliffe & Rendace, 2003). As a result, comics have long been seen as an alternative or oppositional force, incorporating communities that are not reflected in mainstream culture (Horrocks et al., 1998; Larsson, 2007).

In New Zealand comics are frequently self-published, a cheap form of production and distribution which also allows artists to resist traditional forms of censorship (Fingerroth, 2008; Horrocks et al., 1998; Norcliffe & Rendace,

2003). However, there have been a few New Zealand artists who have received mainstream recognition and success. Artists like Dylan Horrocks and Rodger Langridge have received a number of international awards and have an international community of fans (The Harvey Awards, n.d.; Horrocks et al., 1998; Kinnaird, Healey, Horrocks, Slane & Sang, 2011). Digital technologies have emphasised this trend, with the World Wide Web providing artists and writers with an international audience the size of which they had not hereto experienced (Kinnaird et al., 2011; Norcliffe & Rendace, 2003; Walker, Mayer, Ling, Christer & Washam, 2011). However, even when distributed online, many of these texts may still have an alternative stance. At the presentation by Kinnaird et al. (2011) Horrocks discussed how he reached his greatest possible audience and peak notoriety after a satirical comic of his was placed on the homepage of *Pirate Bay*, a file-sharing website which (though this may not be acknowledged) supports the illegal distribution of content still in copyright.

2.7 WEBCOMICS

One of the ways digital technologies and comic production overlap is the genre of webcomics. Throughout the 20th century mainstream comics publishers have remained staunchly conservative; rejecting any experimentation with visual/narrative structures or themes which may challenge their established markets (Fingerroth, 2008; Kinnaird et al., 2011; Norcliffe & Rendace, 2003). As a response, webcomics have evolved as a medium which allows artists to experiment with visual structures and challenge mainstream norms (Fenty, Houp & Taylor, 2004; Fingerroth, 2008). According to Fingerroth (2008) and McLean (2009) this form of media may in the future develop into its own sub-genre; however, at the moment webcomics are still conceptualised as a sub-discipline of broader comics media, which is primarily print based.

2.8 CONCLUSION

While previous writers have developed a number of useful ideas of significance to the development of textual media, there are also a number of gaps in their examination of this topic, gaps which this project aims to fill. The first is a considerable lack of research based literature. This lack has led to an over emphasis on theory and 'common sense' conclusions, which has led to fragmentation within the academic community (Sutherland, 1988). It is particularly risky to make predictions about the future of the book without sufficient evidence, so without any research based findings, theorists will be unable to discuss the implications of textual change from anything other than a historical perspective. The increasing presence of newer forms of digital media, such as mobile devices and Web 2.0 mean that academics need to develop a more complete understanding of the impact of digital textual technologies before they can fully understand this topic. As described by Darnton (2009), "The explosion of electronic modes of communication is as revolutionary as the invention of print with movable type, and we are having as much difficulty in assimilating it as reader did in the fifteenth century when they confronted print texts" (p.xiv). Qualitative research has been recommended by Galey, Cunningham, Nelson, Siemens and Werstine (2009) as a necessary first stage in developing an integrated model for digital textual development.

3. THEORETICAL FRAMEWORK

I have chosen several theories to use to guide research into this topic. These theories include information architecture, remediation and textual interpretation. Each theory has its own methods of analysis, which may be applied to the publishing cycle of production, dissemination and reception. According to Adams and Barker (1993), Darnton (1993), and Hillesund (2007), texts (both digital and print) go through a cyclical process where they are produced, consumed, and their ideas recycled. At each stage of the process barriers and facilitators to the communication of textual information

may be fleshed out, and through this process their relationship to economic, political, social and cultural forces is revealed (Darnton, 1993; Longworth, 2007, Sutherland, 1988). I will be using the following theories as tools which allow this process to take place.

3.1 INFORMATION ARCHITECTURE

As described by Batley (2007) and Rosenfeld and Morville (2002), information architecture is a system which describes the organisation of information in digital texts. It incorporates the systems of organisation, labelling and navigation, as well as its structural design and the ways information are linked. These systems effect the way digital texts are created and used (Chartier, 1995, as cited in Hillesund, 2007, Digital remediation of text, para.41; Carrington, 2009; Marshall & Ruotolo, 2002, as cited in Chen, 2003, p.15).

Information architecture is frequently perceived as acting in layers, some of which are more visible than others. Hillesund (2007) describes how in digital texts, content is coded at various levels, "in memory, at machine level abstractly using digits 0 and 1, in character codes and as communication signals and as pixel patterns temporarily forming letters on a screen" (The publishing firms' scepticism towards e-books, para.55). In order to examine these layers, researchers need to ask certain questions, including: What is this? How can I describe this? and What distinguishes this from other documents? (Batley, 2007).

3.2 REMEDIATION

According to Bolter and Grusin (1999), remediation is the representation of one media in another, usually as the result of technological change. If mediation is described as the use of technology to represent an alternative reality, then remediation is the representation of an alternative media. New technologies may represent the old, refashion the old or even absorb the old,

so features of older technologies are seen as part of the new. According to Bolter and Grusin (1999), the history of remediation dates back to the Renaissance, when artists used visual techniques to depict biblical stories. As such, the process of remediation is linked to social change, as changing technologies effect the way we interact and view ourselves and our social groups.

These processes continue to take place within modern digital media, including the World Wide Web (Hillesund, 2007). As described by Brown & Duguid (2000) "In their slow search for viability, electronic books slavishly copy features of the conventional book' (p.182). This change has resulted in what Bolter (2001, as cited in Hillesund, 2007) describes as "one of the most traumatic remediations in the history of western writing" (Digital remediation of text, para.41). Researchers and theorists may benefit from examining these developments, particularly at the point when new media forms are first developed.

3.3 READING TECHNOLOGY

While not a formally recognised theory, a great deal of research has been done examining the ways technologies impact on people's experience of reading and are even 'read' themselves. According to Hillesund (2010) and Mangan (2008), reading is not solely a cognitive task, but a multisensory, physical and tactile one. The process of reading is effected by its physical use, so that our experience of computers is effected by the way we type, click and scroll (Hillesund, 2010; Mangan, 2008).

On the cognitive side, the process of reading involves three distinct tasks; manipulation (the perception of the object), comprehension and interpretation (*HCI-Book Strategic Research Cluster*, 2007). As a result, new

forms of literacy are required to interact with new forms of text, such as websites and comics (Arthur, 2008; Hillesund, 2010; McLean, 2009).

4. METHODOLOGY

4.1 RESEARCH DESIGN

The techniques used in this research project are based on qualitative research methods, specifically qualitative content analysis. The goal of qualitative research is to explore a research topic and develop models or theories to describe it, particularly where there has been little previous research (Bryman, 2008; Stone, 2001). Qualitative content analysis involves the inductive development of codes and memos to describe features of the document or text being examined. In this case these techniques will be used to describe significant elements of the design and use of New Zealand comics websites, as seen at various points in time.

The key source of the textual content examined in this project is Internet Archive's archiving service called the Wayback Machine (Internet Archive, 2011). The Wayback Machine is a service which provides snapshots of websites at a specific point in time. Since the late 1990s the Wayback Machine has performed regular crawls of the publicly accessible World Wide Web. The data retrieved may show patterns of change and developments over time. The Wayback Machine does not simply archive an image of the site, but also records the links made to other pages of the time, thus allowing users to navigate a historical version of the Web as it existed at that point in time. The Wayback Machine was recommended by Pack (2009) as "useful to anyone who wants to research trends and events that have been chronicled on the Web." (p.39).

While the Wayback Machine provides a number of services which facilitate research into this topic, there are a number of limitations which impact on the

data derived from this source. Because of the age and software which may have been used to develop content at certain periods of time, the content accessible on the Wayback Machine does contain frequent errors, including dead links; inaccessible pages, where the archived site is non-existent or broken; displays which are missing images; and other 'broken' aspect of site design. This was particularly prevalent in the older versions dating prior to 2005. These errors have had a significant impact of the data I was able to collect and meant that it was difficult to examine sampled sties as a contemporary user would have done. It also meant that some of the history and development of these sites was left out, with some sites showing evidence of earlier history and development than the Wayback Machine was able to record. This may have impacted on the data analysis and in particular the examination of changes over time.

4.2 RESERACH SAMPLE

In order to develop a sample with which to explore in this research topic, my first task was to gather a population of New Zealand comics websites and topics. This population was then organised by a number of categories, firstly the date in which the earliest version of the site was available, and secondly by the function which I perceived the site to be performing. These functions included the following categories:

- Artists/Comics
- Webcomics/Animation
- Social Media
- General/Reference
- Publishers/Collectives
- Stores.

These categories were revised over time, and there may have been some overlap between these groups, therefore they only represent the general

goals of the site. Their key purpose was to assist with sampling and ensure sufficient variety of content.

From this sample I then chose 7 topics to examine. These included the following:

- *ActionMan Adam* – A webcomic set in Christchurch.
- *Cherry Bomb Comics* – An online comics store with a focus on distributing women's works.
- *ComicBook Factory* – The website of alternative artist Karl Willis.
- *From Earth's End* – A blog focusing on New Zealand comics.
- *Funtime Comics* – A collective of New Zealand artists who produce a regular anthology.
- *Moas¹* – A comic set in a fictionalised version of New Zealand's archaeological past.
- *Sheehan Brothers* – A website describing the work of the artistic duo.

This sample was developed incrementally over time and included topics from each of the selection categories.

The coding and analysis of these sites took place at two stages: the pilot stage, where I developed my initial codes and concepts and experimented with data collection processes; and the second stage where I elaborated on significant concepts and refined the categories and codes.

While I initially anticipated that the each sample would contain only one website for each topic, during data collection I found that each topic contained several different websites. Therefore, I found that for each topic I actually examined a number of different websites, each of these mapped at various points in time, preferably with at least one sample for each of the

¹ The title of this comic and associated websites has subsequently been changed to *Moa*.

following periods; prior to 2005, 2005 to 2008, and 2009 on². Full details of the sample can be found in Appendix A.

4.3 DATA COLLECTION AND ANALYSIS

During both the pilot and second stages of data collection used in this project, I used a specific process of coding and analysis. First, I visited the main website for each topic and navigated throughout the entire site as archived at that specific point in time; viewing as many pages as I could and navigating to additional linked pages on the same topic (for example, relevant social media pages). Each individual webpage was saved to Zotero, a cloud based document management service, accessible through <https://www.zotero.org/>. I used tags and notes within the Zotero infrastructure to organise the data. With each archive made by Zotero, it also took a visual 'snapshot' of the saved webpage. I then added annotations to each of these snapshots, and thus developed my preliminary codes. An example can be seen in *Figure 1*³. These codes were derived from observations and ideas indicated by the data.

² This category included pages not archived in the Wayback Machine

³ I have included URL-links for this and all other images and examples provided in this report. A full reference list of all of these locations can be at *References: Images and Examples* on p.56.

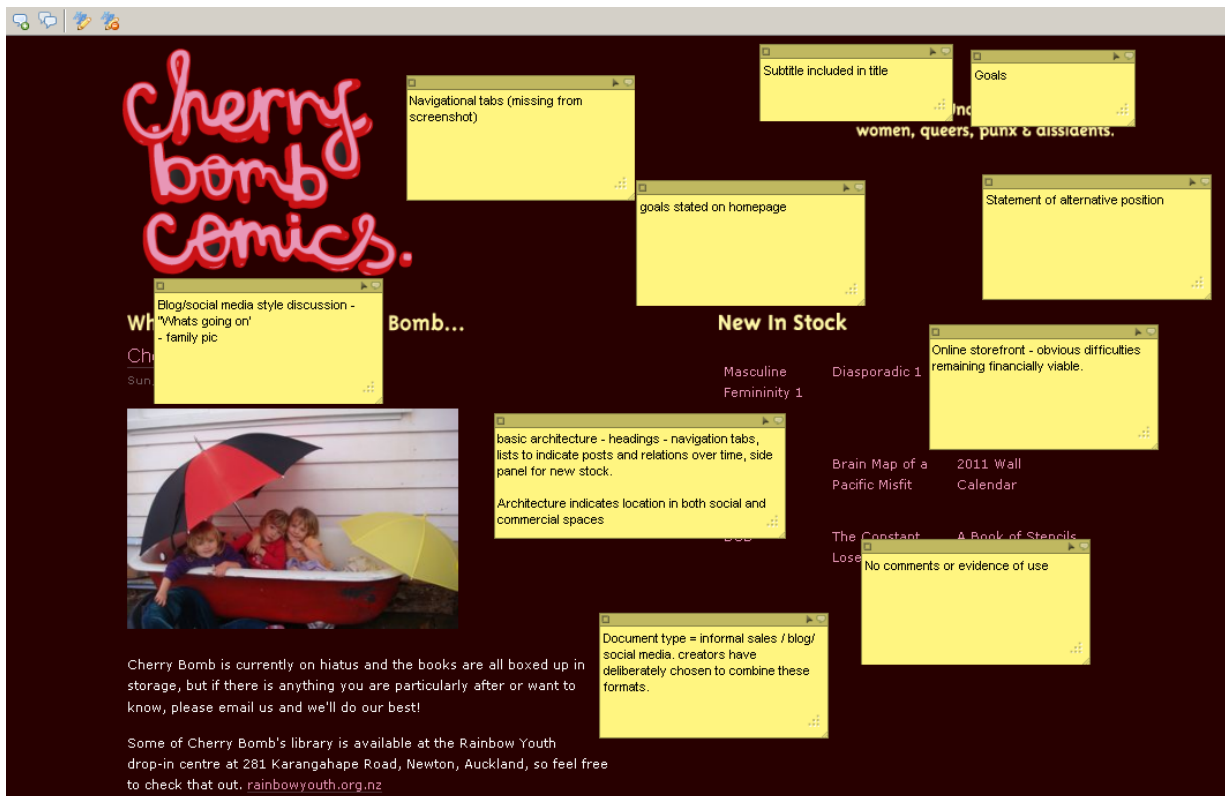


Figure 1: Annotation process, as seen on *Cherry Bomb Comics* homepage, 2012⁴.

After data was collected from relevant webpages, I organised and condensed these codes by placing them in a spreadsheet. Each code was given a title, and then organised into a number of subthemes, each containing a description, location information and date. The process took place after each of the two stages of data collection, so the findings were organised into two sets of codes, one for the pilot stage, and another for the second. In order to organise the vast amount of data collected, I printed the spreadsheet, cut-up the individual codes and subthemes, reorganised and discarded, based on relevance to the topic and research questions. I then organised the data into a series of memos, the key themes of which are described in *Table 1*. These themes were further revised during the process of

⁴ <http://www.cherrybombcomics.co.nz/>

writing this report. A detailed example of one of these themes can be found in Appendix B.

Theme	Question
Production	Q1
Dissemination	Q1
Reception	Q1
Preservation	Q1
Technology, Architecture and Design	Q2
Change Over Time: Social Media	Q2
Retextualisation	Q2 Q3
Private and Public Sphere	Q4
Socialisation and Interaction	Q3 Q4
Identity and Creativity	Q4
Experimentation	Q4 Q5
Remediation	Q2 Q5

Table 1: Summary of key themes as coded.

This process of constant revision is a key part of any exploratory research process. The results of this project and their implications for research and practice are presented in section five.

4.4 LINK ANALYSIS

As well as analysing the themes which emerged from the data, I also conducted an analysis of the links present in each of the sampled sites. I listed each of the links present in the topic and provided each with a code reflecting the goals of the site. An example of this coding can be found in Appendix C. These codes reflected the following categories: New Zealand,

Comics, Alternative, Feminist, Webcomics, Queer⁵, Arts, Stores, Publishers, Music, Hosts, Humour and Technology. These categories demonstrate that rather than only linking to sites within the community of New Zealand comics, the sampled sites linked to a diverse range of topics and social connections.

4.5 ETHICAL CONSIDERATIONS

The key ethical issue involved in researching this project is the fact that the internet is both a public and private space. Participants in the online forums may not be fully mindful that their comments or behaviour could be observed or recorded. Therefore, I have followed the guidance provided by Bryman (2008) to ensure any sensitive information is dealt with appropriately, and, where necessary, confidentiality is maintained.

4.6 LIMITATIONS

There are several limitations which impact on this project and its findings. Firstly, while this project has hopefully made a positive contribution to our understanding of this topic, further research may be needed to examine digital texts in other contexts. Findings based on trends derived from one environment, such as New Zealand comics, may not be transferrable to another. Recent changes in digital technology may also render these findings obsolete.

Another possible limitation is the size and nature of the sample. It is unlikely that the seven topics examined represent the variety of strategies and materials present in New Zealand comics, let alone the World Wide Web!

⁵ There are a number of terms used to describe GLBT identity. I chose the term queer as I felt it to be the most appropriate term for this context. It incorporates a number of sexual preferences and identities, without categorising or pigeonholing the participant. However, I am aware that there are some tensions with the use of this term, so I wish to clarify that I use it with respect.

However, this limitation was weighed against the detailed examination and analysis needed to answer the project's research questions.

Finally, the majority of data collected in this project is based on my experiences as a user. While features like colour, layout, links, content, comments and metadata may be apparent to any observer, the meaning of these features not. Therefore, many of the codes and themes developed were derived from judgments I have made based on my personal experience and contact with literature on this topic. The replicability and transferability of these interpretations is low, and it is possible and indeed probable that other researchers examining the sample may have different conclusions. While I have tried to be transparent in my processes and back up my findings with examples, readers will need to be cognisant of this.

However, despite the previous limitations, I feel this research project to be a positive contribution to the field. It has provided new information against with existing theories and new developments in digital texts may be compared. Even knowledge derived from a small sample in a local context can give us valuable insights into the impact of digital technologies on people's lives. The New Zealand comics community is ripe with allegories for creativity and production. As *HCI-Book Strategic Research Cluster (2007)* described "there is much still to know about this new media form. Such knowledge is necessary to the end of ensuring that we make the best use all that the digital has to offer us" (Contexts for electronic book research, para.2).

5. RESULTS AND DISCUSSION

5.1 INTRODUCTION

In this section I will outline and discuss the key findings that have come out of this project. These findings and conclusions have been organised around a number of key themes derived from the collected data. In a final section I will

outline the findings which require further examination and may provide topics for further research.

5.2 COMMUNICATIONS CYCLE

Throughout the research into this project I found evidence of a communication cycle which support the findings of previous theorists (including Adams & Barker, 1993; Darnton, 1993 and Hillesund, 2007). The communications cycle, as demonstrated in this project, encompasses the processes of production, dissemination, reception and preservation. However, there are a number of codes and themes which indicate the need for revision of how communication processes have been viewed.

In the following sections I will describe the ways web-based technologies have altered the traditional communications cycle.

5.2.1 PRODUCTION

The topics examined in this project evidenced a variety of forms of production, all of which have been influenced by the development of the World Wide Web. New forms of production which web-based technologies have facilitated include webcomics, videos and multimedia art forms. However, there is also evidence that traditional print comics still continue to be produced, and many sampled sites, including *Cherry Bomb Comics*, *From Earth's End* and *Moas*, were developed to support this print object. The implications of the development of web-based forums go further than the production of new media forms, as I will describe:

Recent developments in digital technology have provided new opportunities for comic artists, allowing them to access tools and technologies which may be incorporated into their artistic projects, providing opportunities for artistic and creative use. In a number of sampled topics, including *ActionMan*

Adam, *ComicBook Factory* and *Moas*, artists have utilised new software applications and digital tools to create art. Digital tools, such as tablets and stylus allow artists to create digital images from scratch. Digital technologies may even be used to create a number of artistic effects, as seen in *Figure 2*. This image was created using a combination of print tools, digital photography and digital applications which alter digital images, creating a number of visual effects (in this case *vignetting*). Through viewing the ways other artists have experimented with these tools and techniques, readers may gather ideas for their own projects.

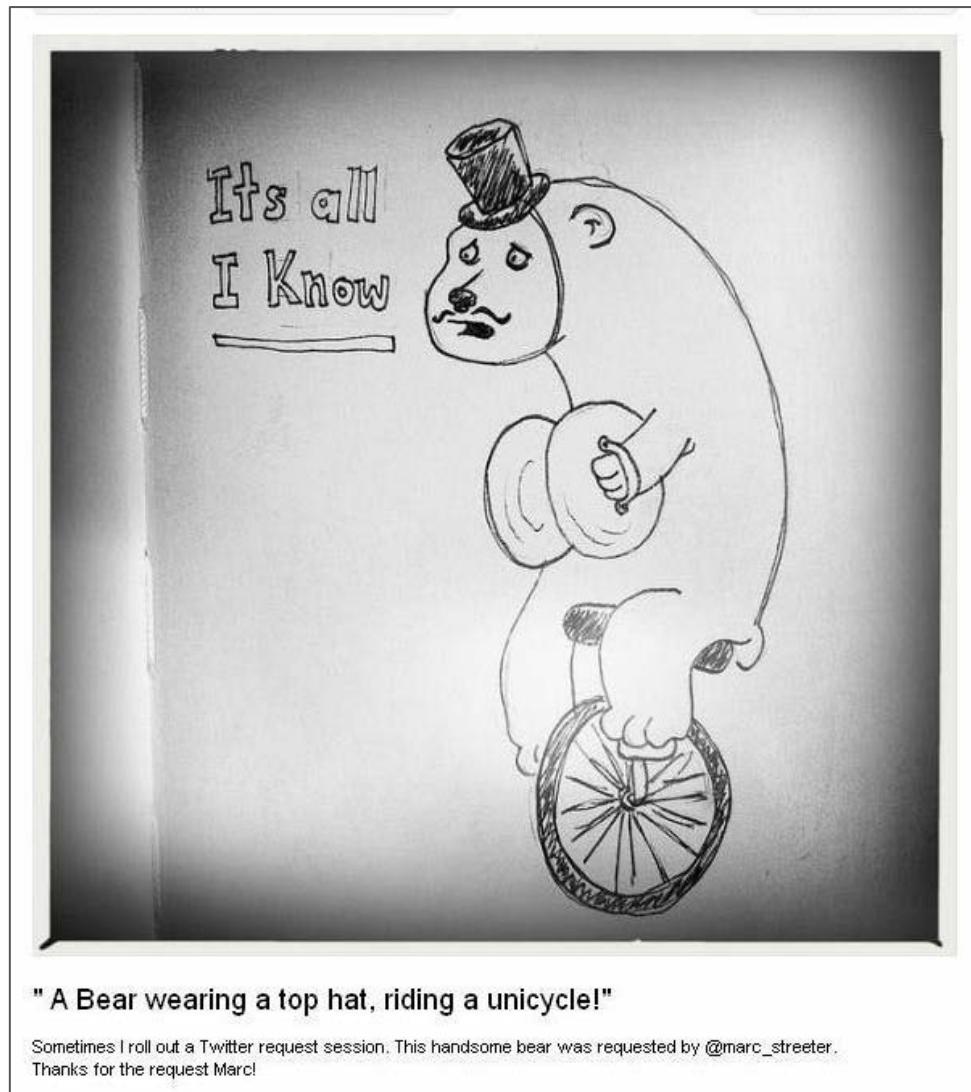


Figure 2: " A Bear wearing a top hat, riding a unicycle!" - An image linked through *ActionMan Adam's* Flickr page, 2012⁶.

5.2.2 DISSEMINATION

The World Wide Web can be used as both a form of content dissemination, and a link to distribution channels outside the Web domain. Products distributed online include webcomics; digital media such as online videos, texts and other forms of information; and even products and merchandise. Web-based forums may be used to 'push' content to other Web users, taking

⁶ <http://www.flickr.com/photos/thisisrabbit/6731464241/in/faves-amacomics/>

the form of subscriptions and RSS feeds, and also 'tell a friend' and similar services where content is pushed without the receiver's prior consent. Web-based texts have also lead to several forms of dissemination unique to the digital world.

There are two main ways that web-based forums may act as a form of distribution. Firstly, the forms of social communication provided on these sites may be used to share content, facilitating the sharing of materials both online and within 'real world' channels, including mail order and face-to-face events. Secondly, websites of all kinds may allow people distributing and receiving content meet at the same place. As people move through online spaces, particularly social media, they may access a variety of forms of content. By placing content on a forum where many people are likely to meet, creators can be sure that their ideas will be shared. A key example of this kind of organisation and distribution can be found on the *Funtime Comics*' Yahoo Groups site; accessed in 2002 and 2012⁷.

5.2.3 RECEPTION

While the World Wide Web is frequently seen as a tool to facilitate the production and dissemination of information, it is also a catalyst for information reception. None of the content present in web-based forums would have been developed if it were not for the presence of readers online. In fact, many websites examined in this project appear to be developed with an audience in mind, with the content and design anticipating their needs. For example, *Moas* provided links to information on New Zealand heritage, anticipating an audience who may not understand the references to New Zealand culture and history (see *Figure 3*). However, there are a number of tools that readers need before they are able to access the content online,

⁷ See <http://groups.yahoo.com/group/funtimecomics/> and <http://web.archive.org/web/20021003032225/http://groups.yahoo.com/group/funtimecomics/>

including knowledge and skills as to how digital tools may be used and information interpreted.



Figure 3: Links provided on *Moas* (2012⁸).

The numerous developments in digital technologies which have taken place over the last 10 years have illuminated the processes of reception which take place. The speed with which digital technologies have developed draws attention to the vast amount of knowledge and experience readers need to interact with texts of all sorts. In order to navigate or use a site, users need to have knowledge and experience of navigating web-based tools, including specific contexts, such as social media websites. The examples of areas where background knowledge is required are numerous, ranging from the shorthand used in twitter, to inside references to comic artists (as seen in *Figure 4*). A number of older sites examined in this project assisted readers with the transition to digital media; giving readers instructions on how digital forums (for example sales sites) may be used. A page linked by *ComicBook Factory* (2001⁹) instructed readers on how the site can be used to place an order, saying "Just enter the quantity of each item you wish to buy and click 'Check Out' at the bottom of the page." These are tasks that more recent

⁸ <http://moascomic.blogspot.co.nz/>

⁹ See <http://web.archive.org/web/20010405050431/http://www.cafepress.com/comicfactory>

commercial sites found in *ActionMan Adam*, *Cheery Bomb Comics* and *Comic Book Factory* presume readers to be familiar with.



Figure 4: Image posted on *Cheery Bomb Comics*' MySpace page, 2012¹⁰.

Who is this man and why was his image posted on Cherry Bomb Comics' MySpace page? Only those familiar with the genre will recognise an older image of New Zealand comic artist Dylan Horrocks.

Through the processes of reception of site content, readers may gather ideas, concepts, tools and techniques which may in turn influence other projects. As well as creative ideas, comments on sites such as *Moas* show that readers frequently used sites to gather information on technical processes which they could use in their own art (see *Figure 5*). This way the reception of online content becomes one of inspiration and influence which may lead to future productions.

¹⁰ <http://www.myspace.com/cherybombcomics>



Figure 5: "Say hello to my little friend..." – Retrieved from Moas' Facebook page, 2012¹¹.

5.2.4 PRESERVATION

Along with the processes of production, dissemination and reception already outlined by previous researchers, I have chosen to include another stage in the communications cycle, preservation. After many centuries of experience with print objects, with their apparent claim to textual stability, the permanency of textual object appears to be assured. For this reason the process of preservation has been neglected by previous theorists when discussing the cycles of communication. However, while the preservation of print objects may appear straightforward (although there are a number of arguments against this claim), the transitional nature of the internet and computing technologies has meant the long-term use of digital objects is not guaranteed. As the *HCI-Book Strategic Research Cluster* (2007), observe, while books may exist in the same form for many centuries, e-texts require

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<http://www.facebook.com/photo.php?fbid=337565676286542&set=a.200889336620844.48634.195313920511719&type=1&theater>

access to outdated technologies and forms of software to remain functional. Without long-term accesses to digital objects, the ability of digital texts to influence new cycles may be reduced.

One of the ways digital objects may continue to be preserved is by being downloaded and transferred from the Web domain to the reader's personal hard-drive. Through downloading a digital object, readers gain more permanent access, as well as the ability to modify and distribute this content. After an object has been downloaded its visibility to the wider world is removed, so while this process may provide continued access for one user, the preservation needs of the rest of the World Wide Web are still not met.

With the ability to download and distribute objects users have not themselves created, users' attitudes to copyright and intellectual property have changed. A number of web-based communities (including social media) revolve around the sharing of content or ideas. Therefore the line between legitimate use and the breaking of copyright has become more and more unclear, as well as who actually owns the content; the contributing author or site host. Many contributors and site developers reviewed in this project appear to take for granted their right to share and distribute other people's content. The most common perception amongst online users seem to be that sharing other peoples' content is not morally wrong, and although it may be breaking copyright restrictions this behaviour is unlikely to be punished. However, in one of *ActionMan Adam's* blog pages (*Figure 6*) a link is provided to a movie trailer which was subsequently removed by the content owner, exercising their right to control the online distribution of content. This behaviour contrasts with sources who encourage readers to share their content as a tool for marketing and publicity, perhaps facilitating access by utilising a creative commons licence.

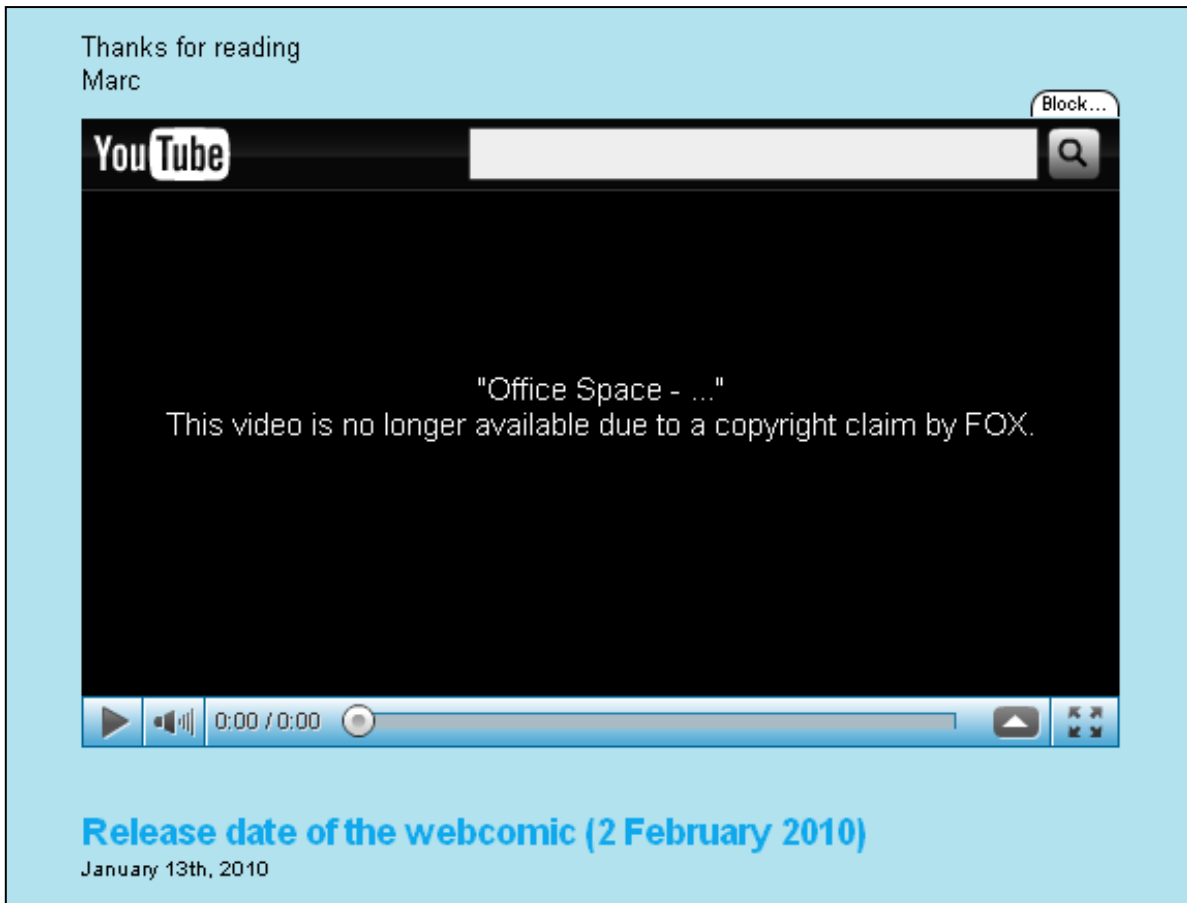


Figure 6: Excerpt from *Office Space* removed from ActionMan Adam's blog, 2010¹².

5.2.5 AMALGOMATION OF PROCESSES

While traditional publication techniques have separated each stage of the communications cycle, in an online environment the lines between these processes have blurred. By distributing content online, site creators are simultaneously completing the process of production (the creation of the website) and distribution (the delivering of the website to others), and by making comments on a website or sharing site content with others, readers may further blur the boundaries between reception and production. The production, distribution and reception stages may even repeat themselves,

¹² <http://web.archive.org/web/20100213075919/http://www.actionmanadam.com/>

with moderators sharing content and requesting feedback from readers before modifying the text. On the World Wide Web nothing is permanent!

5.3 TECHNOLOGY, ARCHITECTURE AND DESIGN

The technology, architecture and design of a website are the most 'physical' and recognisable aspects of the World Wide Web. These characteristics range from 'invisible' objects like software and html codes, to graphical features like colour and display. During the research into this topic I observed that as various developments took place in web-based tools, websites were designed and used in different ways. These observations mirror the findings of previous theorists, including Hillesund (2007), PwC (2010) and Rosenfeld and Morville (2002). I have provided a fuller examination of the contrasting features of print and digital texts, as outlined by previous writers, in Appendix D. With very few exceptions the findings of this project mirrored these conclusions.

5.4 READERSHIP AND ONLINE INTERACTION

Web-based technologies have had a large impact on the ways people interact with each other, allowing people to form communities and represent their identity in ways that could not have been anticipated. According to Hall (2011) and Hillesund (2007) the Web was originally designed as a platform for people to share ideas. Through this process of sharing and interaction people have developed online communities. Information sharing continues to be an important component of online communities, providing ways to broaden each others' knowledge base and share information which otherwise might not be visible. This is reflected in a comment made by *ActionMan Adam's* creator Marc Streeter, who, on sharing artwork created by comic artist Michael Turner, observed that "It is too cool to just keep hidden away" (see *Figure 7*).

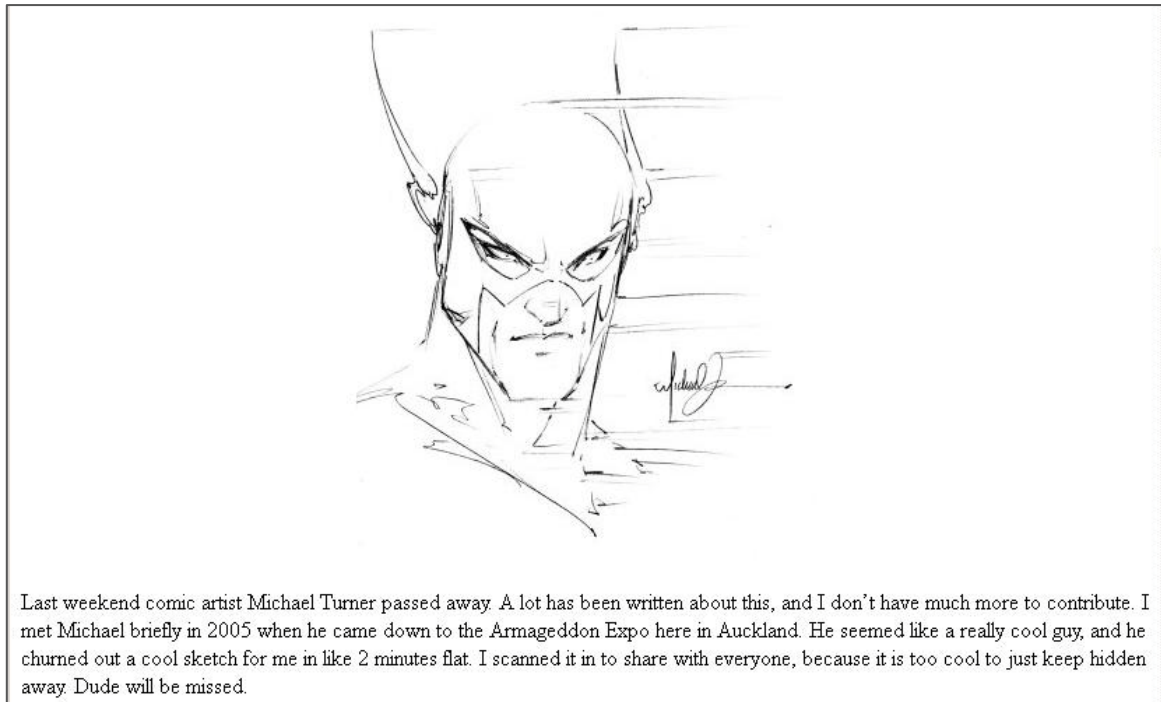


Figure 7: A shared image, taken from *ActionMan Adam*, 2008¹³.

In the following sections I will describe the impact recent developments in digital technologies had on online interaction and community formation.

5.4.1 CREATIVITY AND RETEXTUALISATION

One of the most significant effects of new technologies is the power they give readers to interpret and re-write the texts and websites produced by others. I have coined the term *retextualisation* to describe this process, which involves interpreting or reusing the work of others. There are many ways which through the process of use, readers may alter the original document. In social media sites, features like tags, 're-tweets' and likes can be used to represent others' work in a context all your own. Individuals' reading habits may even be viewed as a form of text, where favourites and similar lists become objects in their own right. Examples include *Figure 8*, where by viewing the images and contacts present in *ActionMan Adam's* Flickr profile, readers are able to

¹³ <http://web.archive.org/web/20080823112148/http://actionmanadam.com/>

view Marc Streeter's interests and communities; all by viewing content produced by others.



Figure 8: Profile page from ActionMan Adam's Flickr account, 2012¹⁴.

One of the primary forms of retextualisation found in the data collected for this project consisted of annotations and comments. Commenting facilities allow users to add too and interpret another person's text. Users can even upload images, videos, links and other media objects, adding these to the textual content. These processes frequently reinforce social relationships and lead to interaction, both 'within' the community of comic artists and between artists and readers or fans. Readers may even talk to each other, thus forming active communities of interest in parallel to the community of

¹⁴ <http://www.flickr.com/people/amacomics/>

practice. Topics such as *ActionMan Adam* embraced the collaborative opportunities this forum provides, encouraging readers to make creative and artistic contributions. We can see an example of this in *ActionMan Adams* deviantART page (Figure 9). In this image maverickcartier used the comment forum to make a creative contribution - a mini story which was appreciated by the host. While similar forms of fan-art have existed for many decades, newer web-based services give these texts greater power and visibility within the online community.



Figure 9: Comments place on the homepage of *ActionMan Adam's* deviantART page, 2012¹⁵.

The social interaction present on web-based forums also facilitates the creativity of comic creators. Online interactions provide artists with ideas which they then can adopt in their work. Artists may have an ulterior motive for doing this, for by responding to the feedback and building relationships

¹⁵ <http://amacomics.deviantart.com/>

with users, artists can ensure when the work is produced it will have an audience. Artists may also value the interaction on web-based forums as an antidote to the isolation of solo work (as described by Norcliffe & Rendace, 2003) and as a reinforcement for their artistic ideals. This was articulated by LOOP Volume 2 writer Noel Meek in an article on *ComicBook Factory* creator Karl Willis, published in 2000 (as cited in *ComicBook Factory*, 2001¹⁶.) As Meek described “The strange paradox to Willis' work is that he simply wants to be liked. He would like to be famous. Of course, it seems a strange way of going about it, creating art that has once been labelled misogynist and racist.” Evidence derived from *ComicBook Factory's* site, as well as topics like *Sheehan Bothers* who recognise Karl Willis's work, indicate that work that may be misogynistic and racist to some is deeply appreciated by others.

5.4.2 COMMUNITY DEVELOPMENT AND IDENTITY

One of the most significant findings developed in this project was the impact that web-based texts have on communities. As Brown and Duguid (2000) have described, documents help form communities. They facilitate the development of relationships and carry systems of power which impact on the way people relate to each other. Recent developments in web-based tools, particularly social media, have allowed new forms of relationships to emerge. Artists now can link themselves to communities of like minded individuals, both within New Zealand, and worldwide; at once forming connections and representing their identity.

Within the websites examined in this project there were a large number of social media sites. Almost every topic included at least one social media page, examples including deviantART, Facebook, Flickr, MySpace, Twitter and YouTube. While more general sites are used to introduce and promote

¹⁶ See <http://web.archive.org/web/20010415080422/http://www.comicbookfactory.net/loopinterview.htm>

the topic in question, social media pages encourage interaction with readers and other artists. Features like followers, members, contacts, friends and likers have all lead to writers to develop new connections with their readers. These connections are frequently cyclical, with sites linking to each other, thus forming a reciprocal relationship. Social media membership may be used by readers to indicate interests, and through them their personality. By linking to others with similar interests, readers' derive a sense of purpose and place; a shared community of interest. By examining all the links made to other sites with the sample of this project, it is possible to map a vast and diverse semantic network of relationships online; a group of people who connect with each other and facilitate each others' work. I believe that it is this community which draws writers and readers to connect in this environment

As well as the connections formed in social media sites, writers and readers may represent their identity in several other ways. Representations range from images; elements of design; links to other sites, both national and international; tags; activities; interactions; events; a place; comments; personalisation and other alterations of the text. Graphical and design features were frequently used to indicate aspects of identity that are not textually explicit. For example, in 2010 and 2012¹⁷ *Cherry Bomb Comics* incorporated a vibrant colour scheme of pink and purple into their site design, indicating an attitude of aggressive femininity. Links, both hypertextual and contextual may be used to describe connections and interests outside the medium of New Zealand comics. For example, there is a frequent connection between comic media and other visual arts, as can be seen in *ActionMan Adam* (2012¹⁸) where the creator and readers discuss the nature of the 'graf scene' in Christchurch. While links may be used to indicate

¹⁷ See <http://www.cherrybombcomics.co.nz/> and <http://web.archive.org/web/20100602172451/http://www.cherrybombcomics.co.nz/>

¹⁸ <http://www.blogger.com/comment.g?blogID=21941199&postID=2418037106494347405&isPopup=true>

a variety of international connections, a local identity may also be emphasised, including communities within New Zealand. After the dramatic changes in New Zealand environment resulting from the Christchurch earthquakes in 2012, *ActionMan Adam's* webcomic examined the impact of these earthquakes on residents of Christchurch (See *Figure 10*). This reflects the fact that content published on the Web has greater immediacy than traditional print texts, as recent events can be commented on within a far shorter passage of time. A similar commentary may take months, or even years to be produced in print.



Figure 10: "It'll Never Be the Same Again" - A comic strip commemorating the impact of the Christchurch earthquakes ActionMan Adam, 2012¹⁹.

¹⁹ <http://www.actionmanadam.com/2011/06/itll-never-be-the-same-again/> - also see <http://www.actionmanadam.com/category/comic/chapter-6/> for further discussion of the impact of this earthquake.

5.5 FUTURE DEVELOPMENTS

With the challenges brought about from the movement of print technologies to digital forms there exist a number of tensions which impact on the way digital content is produced and viewed. The first is the transition from solo to collaborative authorship. Although writers like Brown and Duguid (2000) and Darnton (2009) may question this, books and print objects are traditionally considered to be created by one, or perhaps a small group or authors. As creators of this content, these authors hold special rights over the published work, rights that copyright and other legal restrictions reinforce. However, in the last 10 or so years digital technologies has greatly expanded the opportunities for collaborative production. In online forums, groups of 10s or even 100s of people may form to create a digital text. The increasing use of comments and retextualisation further reduce the power given to individual authors. Other examples include the lists present on twitter and similar social media pages, where a collage of comments and posts of several authors are shared in one location (as can be seen in *Figure 11*).

Cartoonists
A public list by ComicBook Factory

17 MEMBERS | 0 SUBSCRIBERS

[Subscribe](#)

Tweets

[List members](#)

[List subscribers](#)

Recently added members · [View all](#)

- Johnny Ryan** @MrJohnnyRyan
[Follow](#)
- Pendleton Ward** @buenothebear
[Follow](#)
- Ryan Scott** @EarlofShresbury
[Follow](#)
- Adrian Kinnaird** @adriankinnaird
[Following](#)

More lists by [@ComicBkFactory](#) · [View all](#)

- [Publishers](#)
- [Comic Shops](#)

Tweets

L S Marquez @IAmTheImpostor 35m
Must've spent nearly 14 hours just trying to get all the documents together. Still have to go to Ottawa to get a sticker in my passport.

L S Marquez @IAmTheImpostor 39m
While I'm printing my VISA requirements, my trusty all-in-one runs out of ink, then the laser printer decides it doesn't like US paper sizes

L S Marquez @IAmTheImpostor 41m
Kafkaesque. You won't know the meaning of the word until you find yourself in possession of a Philippine passport.

Matt Emery @guzumo 1h
[@MrJohnnyRyan](#) cheapskate
[In reply to Johnny Ryan](#)

Matt Emery @guzumo 1h
I knew holding that grudge for 22 years would pay off eventually

Johnny Ryan @MrJohnnyRyan 2h
I would have paid \$35 to watch Andre The Giant take a shit.

Johnny Ryan @MrJohnnyRyan 5h
Born to Smurf pic.twitter.com/N2AUFp1e
[View photo](#)

Johnny Ryan @MrJohnnyRyan 5h
Still Smurfing pic.twitter.com/6YBky8aS
[View photo](#)

Figure 11: An example of a list developed by *ComicBook Factory* in Twitter (2012²⁰).

These features call into question the decades old assumption that a text is created by one author, and has only one meaning. If list such as *Figure 11* can be pulled together by one reader, then it is possible that reader have more influence over textual production than hereto thought.

Another tension which exists within production online is the border between private and public spheres. As Bryman (2008) observed, the huge volume of content available on the internet may give readers a sense of privacy when communicating online. However, the reality is that most online content is

²⁰ <https://twitter.com/#!/ComicBkFactory/cartoonists>

publically accessible. Unless site developers have made a concentrated effort to modify the privacy settings and/or block crawlers from search engines like Google, then content posted in an online forum may be visible to anyone. As time goes on and more of people's interactions take place online, a greater proportion of our private lives may be visible to others.

The border between public and private spheres is visible on a number of sites explored in this project. Early sites, such as *Comic Book Factory*, seem to have been developed believing that only a small community of fellow comic artists will view the content. This is demonstrated through the fact that *Comic Book Factory's* 2001²¹ homepage includes a number of links to alternative or illicit sites on the Web; including online gambling sites and pages containing pornographic images. New Zealand comics have long carried an alternative stance, with considerable overlap with punk-music and other 'anti-establishment' communities, and links to this kind of content are acceptable within this context. However, this site was actually accessible to people of all political sensibilities, who may see this content in a very different light!

Later sites have demonstrated that moderators are aware any content posted online may be publically accessible, and in their Yahoo Groups page from 2012²² members of the *Funtime Comics* community specifically recommended not providing addresses or physical contacts, in order to protect their privacy from online 'stalkers'. However, there have been a number of minor incidents in the comics community over the last few years where creators have voiced opinions in what they thought were private

²¹ See <http://web.archive.org/web/20010401144730/http://www.comicbookfactory.net/>

²² This observation is based on information retrieved from a private forum.

contexts, which have then been widely distributed on the internet and caused negative publicity²³.

5.5.1 IMPLICATIONS OF REMEDIATION

Throughout the data collection in this project I found a number of examples which support the theory of remediation developed by Bolter and Grusin (1999). Examples include the image represented in *Figure 5*, which bears a remarkable resemblance to the appearance of the recto and verso pages of a print book. I also found evidence of what I would describe as reverse remediation or *re-remediation*, where older technologies borrow features of the new. For example general media sites (what could be described as Web 1.0) borrow features of social media and Web 2.0, including regular posts and updates displayed in reverse chronological order, in order to adapt their more traditional design to the needs and interests of a newer audience (as seen in *Figure 12*). The propensity of newer technologies to adapt or absorb the old has already been observed by Bolter and Grusin (1999); however the possibility for the reverse to take place has not been extensively discussed.

Zine Fest in London @ Women's Library	06/18/2011 - 22:13
Bits & Pieces...	03/08/2011 - 13:10
London & Auckland zine & book launches	01/20/2011 - 11:44
Revolutionary Women: A Book of Stencils. BOOK LAUNCH!!	11/03/2010 - 06:18
Read You What I Wrote: a zine reading event at the London Zine Symposium 2010	05/20/2010 - 15:37
Cherry Bomb Comics at the Brighton Zine fest this weekend!	02/19/2010 - 11:50
Wellington Zinefest 21 Nov and Ladyfest 4-6 Dec	11/10/2009 - 09:56

²³ Details have not been included because this information was accessed through private forums.

Figure 12: Re-remediation as seen in *Cherry Bomb Comics* Homepage, 2012²⁴.

While these changes may only have taken place in a period little over ten years, they illustrate the processes involved in the development of new media forms. While new technologies may provide opportunities for people to communicate in new ways, the familiarity that people have with older textual forms mean they may adapt the new to emulate the familiar features of the old; features that their social lives are organised around. Re-remediation allows patrons of older technologies to resist the development of the new and defend the continued importance of traditional forms of text.

Based on the finding of this project, I disagree with the popular perception (supported by researchers such as PwC, 2010) that the future will bring about dramatic advances in digital technology. I argue that it should not be taken for granted that newer forms of technologies will succeed the old and 50 or 100 years in the future our communication will be solely digital. The evidence suggests it is more likely there will be a continued amalgamation of various print and digital media forms, so that the opportunities brought by new technologies are embraced, while the social, academic and legal structures formed over the last 500 years will still exist.

5.6 DIRECTIONS FOR FUTURE RESEARCH

Several of the concepts touched on in this project may benefit from being examined in future research projects. Firstly, while I have described a number of tools and techniques which may be used to communicate online, I also gained evidence of misuse and irony in features like images, design and metadata. These features have been used to challenge and re-interpret

²⁴ <http://www.cherrybombcomics.co.nz/>

traditional communication methods. Future researchers may find it interesting to examine not just the conventions of website design and use, but how these may be subverted or misused, along with the implications of this process for digital communication. There are also opportunities for research into the topic of digital technologies and their impact on creativity and artistic expression, a subject I could not do full justice to. However, potentially the most fascinating research area to come out of this project is the possibility for bibliometric examination of the networks of links which exist in social spaces online. A possible research project could map a semantic Web of social connections which mirrors the work done by the World Wide Web Consortium (W3C) (2012) on the information Web. The findings of this project would provide valuable infiltration on the way networks of social connections form online.

One thing is clear, as digital technologies continue to change; researchers must examine these changes and their impact on the way people communicate. Just as social media has had a great impact on traditional web-based media, technologies which are currently developing, such as mobile devices and QR codes²⁵ embedded in everyday objects may impact on the World Wide Web in the future; or they may not, only future research will tell.

6. CONCLUSION

The findings developed in this project have revealed a number of significant points about the way people use web-based tools to communicate and the impact recent developments in digital technology have had on the history of communication. Recent developments in digital technologies have made previously invisible tensions visible. These include the connections between

²⁵ QR codes are a form of barcode which may be scanned on mobile devices, encouraging navigation to online stores and various websites. Further information on this technology can be found in sites like <http://www.denso-wave.com/qrcode/index-e.html> and <http://www.qrcodes.co.nz/>.

reading and rewriting a text, the ways people may re-use each other's work and the impact interaction has on textual creation. I believe these tensions have always existed; as soon as the earliest humans were able to look at an image or read a text they have made interpretations about what it communicates. Writers such as Darnton (2009) have observed throughout most of western history supposedly authoritative documents like newspaper reports frequently re-used other sources. The only thing digital technologies have done is make this process explicit.

The process which has led to the visibility of these processes is the great speed with which digital texts are communicated. Throughout most of print history it may have taken decades for the author to receive feedback on their work. According to Escarpit (1966), in 1321 Dante's *Divine Comedy* took four centuries to spread throughout Europe, *Don Quixote* (published early 1600s) took 20 years and Goethe's *Werther* (published 1774) took five. Even as recent as the 18th Century, it would have been many years before a commentary on these works could begin. However, in the digital world an artist may post new work and receive feedback in minutes. This is why the internet is such a communicative medium, it provides readers with immediacy to which previous tools have never come close (Bolter & Grusin, 1999).

According to Darnton (2009) it is common for contemporary commentators to criticise the nature of web-based communication and the information it brings. The findings of this research project may appear to support this theory, as they demonstrate the great power readers have to adapt and alter web-based texts. However, rather than being seen as a weakness in the fabric of authorial control, the power the internet gives readers should be seen as strength. It allows connections to be formed between reader and writer that are stronger than ever. Once we learn to embrace the opportunities offered by the World Wide Web, its potential uses for writers, readers, artists, teachers,

librarians and other information professions will be vast. People will be able to connect to the texts they are reading in new ways, ask questions that they never could before and interact with their world in a way that has previously only been available to the few. The key is neither to adopt a progressivist, nor retrogressive attitude to the medium. Instead of focusing on the ways publishing could or should function, we should embrace it, experience it and learn to appreciate our digital world for what it is; a tool which allows us to build connections with others.

REFERENCES

- Adams, T., & Barker, N. (1993). A new model for the study of the book. In N. Barker (Ed.), *A potencie of life: Books in society* (pp. 5-43). London, UK: British Library.
- Arthur, P. (2008). Digital fabric, narrative threads: Patchwork designs on history. *Interdisciplinary Humanities*, 25(2), 106-120. Retrieved from Academic Search Premier database.
- Batley, S. (2007). The I in information architecture: The challenge of content management. *Aslib Proceedings*, 59(2), 139-151.
- Bolter, J.D., & Grusin, R. (1999). *Remediation: Understanding new media*. Cambridge, MA: MIT Press.
- Bowman, J. (2008). Communities of practice: Web 2.0 principles for service in art libraries. *Art Documentation*, 27(1), 4-12.
- Brown, J.A. (1997). Comic book fandom and cultural capital. *Journal of Popular Culture*, 30(4), 13-31. Retrieved from ProQuest Research Library.
- Brown, J.S., & Duguid, P. (2000). Reading the background. In *The social life of information* (pp.173-205). Boston, MA: Harvard Business School Press.
- Bryman, A. (2008). *Social research methods* (3rd ed.). NY: Oxford University Press
- Carrington, V. (2009). From blog to Bebo and beyond: Text, risk, participation. *Journal of Research in Reading*, 32(1), 6-21. doi:10.1111/j.1467-9817.2008.01378.x
- Chen, Y. (2003). Application and development of electronic books in an e-Gutenberg age. *Online Information Review*, 27(1), 8-16. doi:10.1108/14684520310462527
- Darnton, R. (1993). What is the history of books? In K. E. Carpenter (Ed.), *Books and society in history* (pp. 3-26). NY: R.R. Bowker.
- Darnton, R. (2009). *The case for books: Past, present, and future*. NY: PublicAffairs.
- Escarpit, R. (1966). Historical survey. In *The book revolution: Books and the world today* (pp.17-30). London, UK: Harrap.
- Esposito, J.J. (2003). The processed book. *First Monday*, 8(3), n.p. Retrieved

July 13, 2011, from
<http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/1038/959>

- Fenty, S., Houp, T., & Taylor, L. (2004). Webcomics: The influence and continuation of the comix revolution. *ImageText: Interdisciplinary Comics Studies*, 1(2), n.p. Retrieved December 11, 2011, from http://www.english.ufl.edu/imagetext/archives/v1_2/group/
- Fingerroth, D. (2008). *The rough guide to graphic novels*. London, UK: Rough Guides
- Ford, S. (2008). Soap operas and the history of fan discussion. *Transformative Works and Cultures*, 1, n.p. doi:10.3983/twc.2008.0042
- Galey, A., Cuningham, R., Nelson, B., Siemens, R., & Werstine, P. (2009). Beyond remediation: The role of textual studies in implementing new knowledge environments. *INKE 2009: Research Foundations for Understanding Book and Reading in the Digital Age. Implementing New Knowledge Environments*, 1(1), 8pp. Retrieved November 18, 2011, from <http://journals.uvic.ca/index.php/INKE/article/view/167>
- Gibbons, P. (2003). The far side of the search for identity: Reconsidering New Zealand history. *New Zealand Journal of History*, 37(1), 38-47.
- Haigh, T. (2006). Remembering the office of the future: The origins of word processing and office automation. *IEEE Annals of the History of Computing*, 28(4), 6-31. doi:10.1109/MAHC.2006.70
- Hall, J.L. (2011). Online retrieval history; how it all began: Some personal recollections. *Journal of Documentation*, 67(1), 182-193. doi:10.1108/002204111111105506
- The Harvey Awards* (n.d.). Retrieved May 9, 2012, from <http://www.harveyawards.org/>
- HCI-Book Strategic Research Cluster*. (2007). Retrieved November 21, 2011, from <http://www.hci-book.org/cluster/>
- Hillesund, T. (2007). Reading Books in the digital age subsequent to Amazon, Google and the long tail. *First Monday*, 12(9), n.p. Retrieved July 22, 2011, from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2012/1887>
- Hillesund, T. (2010). Digital reading spaces: How expert readers handle books,

- the Web and electronic paper. *First Monday*, 15(4), n.p. Retrieved November 17, 2011, from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/2762/2504>
- Horrocks, D., Bollinger, T., & Renouf, T. (1998). *Nga pakiwaituhi o Aotearoa: New Zealand comics*. Auckland, New Zealand: Hicksville Press.
- Internet Archive. (2011). *Internet Archive: Wayback Machine*. Retrieved August 22, 2011, from <http://www.archive.org/web/web.php>
- Kane, G.C., Fichman, R.G., Gallagher, J., & Glaser, J. (2009). Community relations 2.0. *Harvard Business Review*, 87(11), 45-50. Retrieved from Business Source Complete database.
- Kinnaird, A., Healey, K., Horrocks, D., Slane, C., & Sang, A. (2011, May 15). *Graphic novels, comics and cartoons*. Presentation at the Auckland Writers and Readers Festival, Auckland, New Zealand.
- Larsson, D.F. (2007). Comic? Book? or, Of Maus and Manga: Visualizing reading, reading the visual in graphic novels. *International Journal of the Book*, 4(1), 43-50. Retrieved from Humanities International Complete database.
- Lewis, L.A., Koston, Z., Quartley, M., & Adsit, J. (2010). Virtual communities of practice: Bridging research and practice using Web 2.0. *Journal of Educational Technology Systems*, 39(2), 155-161. doi:10.2190/ET.39.2.e
- Longworth, K. (2007). Between then and now: Modern book history. *Literature Compass*, 4(5), 1428-1443. doi:10.1111/j.1741-4113.2007.00474.x
- Mainardi, P. (2011). From popular prints to comics. *Nineteenth-Century Art Worldwide*, 10(1), n.p. Retrieved December 11, 2011, from <http://19thc-artworldwide.org/index.php/spring11/from-popular-prints-to-comics>
- Mangen, A. (2008). Hypertext fiction reading: Haptics and immersion. *Journal of Research in Reading*, 31(4), 404-419. doi:10.1111/j.1467-9817.2008.00380.x
- Manguel, A. (1996). The shape of the book. In *A history of reading* (pp.125-147, 334-335). NY: Vilung.
- McGann, J. (2001). Visible and invisible books in n-dimensional space. In *Radiant textuality: Literature after the World Wide Web* (pp.167-191). NY: Palgrave Macmillan.

- McLean, T.J. (2009). Adding new zip to strips. *Animation Magazine*, 23(6), 36-37.
- Norcliffe, G., & Rendace, O. (2003). New geographies of comic book production in North America: The new artisan, distancing, and the periodic social economy. *Economic Geography*, 79(3), 241-263. Retrieved from JSTOR database.
- O'Reilly, T. (2005). *What is Web 2.0? Design patterns and business models for the next generation of software*. Retrieved May 5, 2011, from <http://oreilly.com/web2/archive/what-is-web-20.html>
- Pack, T. (2009). Site preserves artefacts of our digital culture. *Information Today*, 26(4), p.38-39. Retrieved from Academic OneFile database.
- Pearson, R. (2010). Fandom in the digital era. *Popular Communication*, 8(1), 84-95. doi:10.1080/15405700903502346
- PricewaterhouseCoopers. (2010) *Turning the page: The future of eBooks*. Retrieved September 7, 2011, from http://www.pwc.com/en_GX/gx/entertainment-media/pdf/eBooks-Trends-Developments.pdf
- Rosenfeld, L., & Morville, P. (2002). *Information architecture for the World Wide Web*. Sebastapool, CA: O'Reilly.
- Stone, P. (2001). Content analysis. In *Encyclopedia of Sociology*, 1, 417-422. Retrieved from Gale Virtual Reference Library.
- Sutherland, J. (1988). Publishing history: A hole at the centre of literary sociology. *Critical Inquiry*, 14(3), 574-589.
- Twyman, M. (1994). The emergence of the graphic book. In R. Myers & M. Harris (Eds.), *A millennium of the book: Production, design and illustration in manuscript and print, 900-1900* (pp. 135-180). DE: Oak Knoll Press.
- Walker, G., Mayer, T., Ling, A., Christer, N., & Washam, A. (2011, May 14). *Publishing panel*. Presentation at the Auckland Writers and Readers Festival, Auckland, New Zealand.
- Weller, T. (2008). Key schools of thought in information history. In *Information history: An introduction: Exploring an emergent field* (pp.55-85). Oxford, UK: Chandos.
- World Wide Web Consortium. (2012). *Semantic web*. Retrieved May 18, 2012,

from <http://www.w3.org/standards/semanticweb/>

REFERENCES: IMAGES AND EXAMPLES.

- AMAComics. (2008, August 23). *ActionMan Adam*. Retrieved March 14, 2012, from <http://web.archive.org/web/20080823112148/http://actionmanadam.com/>
- Blogger. (n.d.). *ActionMan Adam: Post a comment*. Retrieved March 14, 2012, from <http://www.blogger.com/comment.g?blogID=21941199&postID=2418037106494347405&isPopup=true>
- CafePress.com. (2001, April 5). *The ComicBook Factory: Business not charity*. Retrieved March 26, 2012, from <http://web.archive.org/web/20010405050431/http://www.cafepress.com/comicfactory>
- Cherry Bomb Comics*. (2010, June 2). Retrieved February 9, 2012, from <http://web.archive.org/web/20100602172451/http://www.cherrybombcomics.co.nz/>
- Cherry Bomb Comics*. (n.d.). Retrieved February 9, 2012, from <http://www.cherrybombcomics.co.nz/>
- ComicBook Factory. (2012). *Cartoonists: A public list by ComicBook Factory*. Retrieved April 4, 2012, from <https://twitter.com/#!/ComicBkFactory/cartoonists>
- Davidson , J. (2012, February 11). *Moas*. Retrieved February 17, 2012, from <http://moascomic.blogspot.co.nz/>
- deviantART. (2012). *AMAComics*. Retrieved March 26, 2012, from <http://amacomics.deviantart.com/>
- Horrocks, D., Bollinger, T., & Renouf, T. (1998). *Nga pakiwaituhi o Aotearoa: New Zealand comics*. Auckland, New Zealand: Hicksville Press.
- Moas. (2012, February 21). Say hello to my little friend! Here is the giant centipede coloured. I call him Big Red. [Web log post]. Retrieved February 27, 2012, from <http://www.facebook.com/photo.php?fbid=337565676286542&set=a.2008893336620844.48634.195313920511719&type=1&theater>
- MySpace, LLC. (n.d.). *Cherry Bomb Comics*. Retrieved February 29, 2012, from <http://www.myspace.com/cherrybombcomics>

- Streeter, M. (2010, February 10). *ActionMan Adam: Webcomic*. Retrieved March 14, 2012, from <http://web.archive.org/web/20100213075919/http://www.actionmanadam.com/>
- Streeter, M. (2011, June 29). *ActionMan Adam: It'll never be the same again*. [Web log post]. Retrieved March 29, 2012, from <http://www.actionmanadam.com/2011/06/itll-never-be-the-same-again/>
- Streeter, M. (2012, February 22). *ActionMan Adam: Archive for 'Chapter 6'*. Retrieved March 26, 2012, from <http://www.actionmanadam.com/category/comic/chapter-6/>
- Thisisrabbit. (2012, January 10). "A bear wearing a top hat, riding a unicycle!" [Web log post]. Retrieved March 28, 2012, from <http://www.flickr.com/photos/thisisrabbit/6731464241/in/faves-amacomics/>
- Willis, K. (2001, March 3). *The ComicBook Factory: Article – LOOP*. Retrieved March 29, 2012, from <http://web.archive.org/web/20010415080422/http://www.comicbookfactory.net/loopinterview.htm>
- Willis, K. (2001, April 1). *The ComicBook Factory*. Retrieved February 17, 2012, from <http://web.archive.org/web/20010401144730/http://www.comicbookfactory.net/>
- Yahoo! Inc. (2002, October 3). *Funtime Comics*. Retrieved March 29, 2012, from <http://web.archive.org/web/20021003032225/http://groups.yahoo.com/group/funtimecomics/>
- Yahoo! Inc. (2012a). *AMAComics' photostream*. Retrieved March 28, 2012, from <http://www.flickr.com/people/amacomics/>
- Yahoo! Inc. (2012b). *Funtime Comics*. Retrieved March 29, 2012, from <http://groups.yahoo.com/group/funtimecomics/>

BIBLIOGRAPHY: ADDITIONAL CONSULTED WORKS

- Berger, A.A. (2009). Semiotic analysis. In A. Hansen (Ed.), *Mass communication research methods* (pp.150-178). London, UK: SAGE.
- Creswell, J.W. (2009). The use of theory. In *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed., pp. 49-71). Thousand Oaks, CA: Sage.
- Gardiner, J. (2000). Recuperating the author: Consuming fictions of the 1990s. *Papers of the Bibliographical Society of America*, 94(2), 255-274.
- Jordan, J.O., & Patten, R.L. (1995). Introduction: Publishing history as hypertext. In J.O. Jordan & R. L. Patten (Eds.), *Literature in the marketplace: Nineteenth-Century British publishing and reading practices* (pp. 1-18). Cambridge, UK: Cambridge University Press.
- Murray, S. (2004). *Mixed media: Feminist presses and publishing politics*. London, UK: Pluto Press.
- Neems, J. (2011, May 7). Comic capers. *Waikato Times*, B1. Retrieved from Australia/New Zealand Reference Centre.
- Radway, J. A. (1984). The institutional matrix: Publishing romantic fiction. In *Reading the romance: Women, patriarchy, and popular literature* (pp. 19-45, 243-248). Chapel Hill, NC: University of North Carolina Press.
- Ross, C., Terras, M., Warwick, C., & Welsh, A. (2011). Enabled backchannel: Conference Twitter use by digital humanists. *Journal of Documentation*, 67(2), 214-237. doi:10.1108/00220411111109449
- Schodt, F.L. (1998). Land of the running serial. *Civilization*, 5(3), 69.
- Tanselle, G.T. (1995). Printing history and other history. *Studies in Bibliography*, 48, 269-289.
- Tinker, E. (2007). Manuscript in print: The materiality of alternative comics. *Literature Compass*, 4(4), 1169–1182. doi:10.1111/j.1741-4113.2007.00478.x
- Wenger, E. (2006). *Communities of practice: A brief introduction*. Retrieved December 29, 2011, from <http://www.ewenger.com/theory/>
- Winship, M. (1995). The art preservative. In C. Bigelow, P. H. Duensing & L. Gentry (Eds.), *Fine print on type* (pp. 14-23). San Francisco, CA: Bedford Arts.

APPENDIX A: SAMPLE

In this appendix I have provided a summary of individual websites used in data collection. These sites have been organised by the stage of data collection where it was analysed (pilot or second) topic each and the category I felt each site most related to (options include Artists/Comics, Webcomics/Animations, Social Media, General/Reference, Publishers/Collectives and Stores). During the second stage of data collection I organised the sites by topic, however during the pilot stage I examined them as one group, which has effected the way that this data has been displayed. After each web address I have indicated the archived dates of versions I accessed through Wayback Machine. If the site was not archived (as was the case with a number of blogs and social media pages) I have indicated this after the current date. As can be seen from the dates accessed, I gathered more data from the older sites where I was able to view changes over a number of different points in time, however I also included newer sites in the sample, in order to increase the variation of data collected, including newer site designs with the old.

PILOT DATA COLLECTION

Artists/Comics

- <http://moascomic.blogspot.com/> - 2012 (Not Archived)
- <http://www.sheehanbros.com> – 2002, 2003, 2005, 2008, 2010, 2012

Social Media

- <http://www.myspace.com/cherrybombcomics> - 2012 (Not Archived)
- <http://twitter.com/#!/adriankinnaird> - 2012 (Not Archived)
- <http://www.facebook.com/pages/Moas/195313920511719> - 2012 (Not Archived)

General/Reference

- <http://fromearthsend.blogspot.com/> - 2012 (Not Archived)

Stores

- <http://www.cherrybombcomics.co.nz/> - 2004, 2008, 2010, 2012

Sampled Topics: *Cherry Bomb Comics, From Earth's End, Moas and Sheehan Brothers*

SECOND DATA COLLECTION

ActionMan Adam

Artists/Comics

- <http://www.amacomics.blogspot.co.nz/> - 2012 (Not Archived)

Webcomics/Animation

- <http://www.actionmanadam.com/> / <http://actionmanadam.com/> - 2008, 2010, 2012

Social Media

- <http://amacomics.deviantart.com/> - 2012 (Not Archived)
- <http://www.flickr.com/photos/amacomics> - 2012 (Not Archived)
- https://twitter.com/#!/marc_streeter - 2012 (Not Archived)
- <http://www.facebook.com/ActionManAdam> - 2012 (Not Archived)
- <http://www.myspace.com/downtownprophets> - 2012 (Not Archived)

ComicBook Factory

Artists/Comics

- <http://www.comicbookfactory.net> - 2001, 2006, 2007, 2012
- <http://comicbookfactory.blogspot.co.nz/> - 2007, 2008, 2012

Webcomics/Animation

- <http://connieradar.blogspot.co.nz/> - 2012 (Not Archived)
- <http://www.fotangus.com/> - 2012 (Not Archived)
- <http://www.mylittlefunny.com/> - 2012 (Not Archived)

Social Media

- <http://www.myspace.com/jessicaandthejawbreakers> - 2012 (Not Archived)
- <http://www.facebook.com/mondamedia> - 2012 (Not Archived)
- <http://www.facebook.com/pages/The-ComicBook-Factory/> - 2012 (Not Archived)
- <http://www.facebook.com/pages/FOT/> - 2012 (Not Archived)
- <http://www.facebook.com/mondamedia> - 2012 (Not Archived)
- <https://twitter.com/#!/ComicBkFactory> - 2012 (Not Archived)
- <http://www.youtube.com/user/ComicBookFactory> - 2012 (Not Archived)

Funtime Comics

Social Media

- <http://funtimecomics.livejournal.com/> - 2012 (Not Archived)
- <http://www.myspace.com/funtimecomics/> - 2012 (Not Archived)
- <http://funtimecomics.deviantart.com/> - 2007, 2012

Publishers/Collectives

- <http://funtime.comics.org.nz/> - 2002, 2007, 2012
- <http://groups.yahoo.com/group/funtimecomics/> - 2002, 2005, 2012

APPENDIX B: EXAMPLE MEMO

The following is an example of a memo used to describe one of the themes developed for this topic. This is just one of a number of themes I coded in the final state of data collection. The following list provides a summary of the codes I used to indicate to topics being referenced:

- **AMA** – ActionMan Adam
- **CBC** – Cherry Bomb Comics
- **CBF** – ComicBook Factory
- **FEE** – From Earth's End
- **FTC** – Funtime Comics
- **M** – Moas
- **SH** – Sheehan Brothers
- **X** – Any result from the pilot data collection²⁶

The indicators of each topic were placed in a table, indicating the point in time which this theme was examined.

RECEPTION

This section describes the impact websites have on comics reception, in particular how an audience may be implied in the text, along with the knowledge and skills needed to access and interpret content produced online.

Research questions: Q1

READERSHIP

Summary:

- The age group, demographics and interests of users the site is aimed at.

Description and Examples:

²⁶ Because of the different processes used recording the results of the pilot and second data collection, the references from the initial sites have been included in the 'Pilot' column. Dates for these items are indicated by **X**.

- Content is always posted for a reason – therefore the readership is implied in the site's content and design.
- The audience the print comic is aimed at may not be the same as the audience for the website. Moas describes itself as an all ages comic - but the promotional site appears to have been aimed only at adults, and would be of little interest to children

References:

Pilot	2001	2002	2003	2004	2005	2006	2007	2008	2010	2012
M									AMA	X

BACKGROUND KNOWLEDGE

Summary:

- In order to be able to navigate or use a site, users need to have knowledge and experience of navigating in web-based environments, including specific contexts (such as social media websites).

Description and Examples:

- Examples include the shorthand used in twitter to indicate features like tags, re-posts and responses.
- Uses may be expected to experiment with navigation and 'play' with various parts of the site, before they find the results they want.
- This knowledge spreads to jargon and inside references used by the web-based comics community – an example of this is a post of an old image of Dylan Horrocks in CBC – only a reader familiar with the image of this artist would realise its significance.
- For early sales sites exact instructions for online transaction are given – in later sites it is presumed that features like shopping cart and checkout would be familiar to the user.

References:

Pilot	2001	2002	2003	2004	2005	2006	2007	2008	2010	2012
CBC, FEE	CBF							X	X	X

APPENDIX C: LINK ANALYSIS

The following is an example of the process which took place during the analysis of links retrieved from the sampled sites. The data collected was divided into the following fields; original site topic, date, linked site, web address, categories and notes. Full information was not available for every linked site; however every effort was made to provide all information relevant to each link.

SAMPLE LINK ANALYSIS

Original Site	Date	Linked Site	Web Address	Categories	Notes
ActionMan Adam	2008	Podgy Panda Dot Com	www.podgypanda.com	Arts	
		ActionMan Adam Blog	www.amacomics.blogspot.com	New Zealand Comics	
		Downtown Prophets	http://liveweb.archive.org/http://www.myspace.com/downtownprophets	New Zealand Music	
		Cave Drawings	http://web.archive.org/web/20110208121830/http://scheurbertart.blogspot.com/	Arts	
		1000 Arrows	http://liveweb.archive.org/http://www.1000arrows.blogspot.com/	Comics Arts	
		WordPress Blog	http://web.archive.org/web/20080820131348/http://www.wordpress.org/development/	Host	
		WordPress Codex	http://web.archive.org/web/20080823125746/http://codex.wordpress.org/Main_Page	Host	
		ProcessRecess	http://web.archive.org/web/20080914034603/http://www.processrecess.com/	Arts	
		40ozcomics.com	http://web.archive.org/web/20080509161636/http://www.40ozcomics.com/	Arts Comics	
		WordPress Plugin Directory	http://web.archive.org/web/20080820131316/http://www.wordpress.org/extend/plugins/	Host	
		Podgy Pander Blog	http://liveweb.archive.org/http://podgypanda.blogspot.com/	Arts	
		Ryan Ottley	http://web.archive.org/web/20081026105238/http://ryanottley.com/		
		Obey Giant	http://web.archive.org/web/20080913110321/http://obeygiant.com/	Store Arts	

APPENDIX D: CHARACTERISTICS OF PRINT AND DIGITAL TEXTS

Computers and the print codex are forms of media with contrasting characteristics and different uses. In *Table 2*, I have represented the key features of both print and digital texts, focusing mainly on websites. The characteristics of the codex have been described by various writers, including Brown and Duguid (2000), Chen (2003), *HCI-Book Strategic Research Cluster* (2007), Hillesund (2007), Manguel (1996), McGann (2001) and Rosenfeld and Morville (2002). The characteristics of digital texts were described by Bolter and Grusin (1999), Carrington (2009), Chen (2003), Esposito, (2003), *HCI-Book Strategic Research Cluster* (2007), Hillesund (2007), Manguel (1996), McGann (2001), O'Reilly (2005), PwC (2010) and Rosenfeld and Morville (2002).

Using this table I aim to demonstrate the similarities and differences between these two technologies. These features may have a significant impact on their use and potential development in the future.

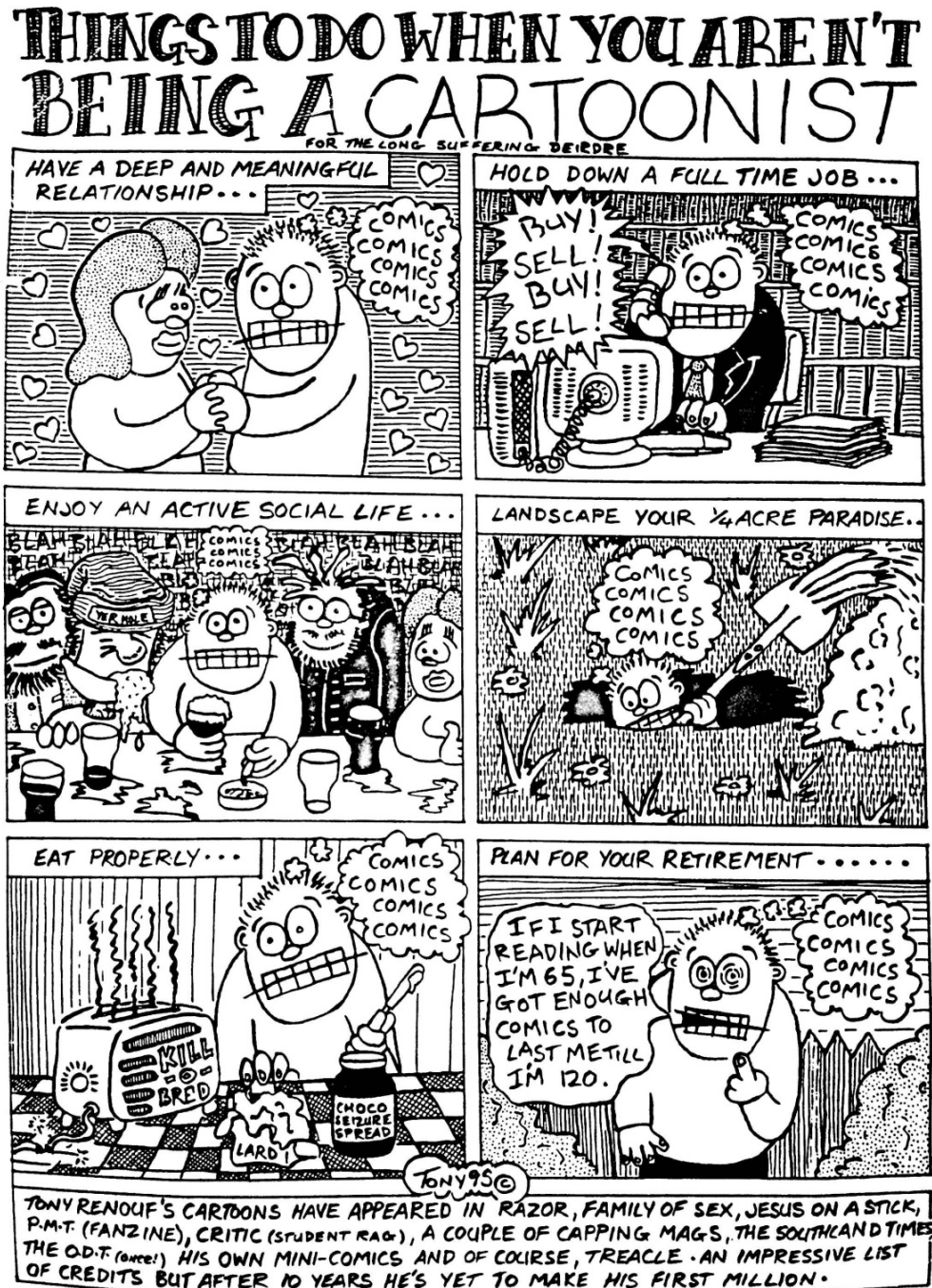
	Print Texts	Digital Texts
Features	<ul style="list-style-type: none"> • Cover, title page, colophon • Chapters, sections, pages, page numbers • Headers, footers • Glossaries, table of contents, index • Typefaces, ink, paper-marks • Text, illustrations and graphics 	<ul style="list-style-type: none"> • Main page, navigation bar • Internal links, hyper-textual navigation • Dictionaries and glossaries • Embedded objects • External links, semantic network • Multimedia • Updates and changes over time • Metadata, usage data
Use	<ul style="list-style-type: none"> • Annotations' and marginalia • Portable • Storage over time • Can consult by section • Easy to leaf through • Multiple reading sessions 	<ul style="list-style-type: none"> • Navigated by scrolling • Layering of images and windows. • Personally adjustable • Annotations • Copy, paste and re-use • Search • Portability and share-ability • Globally accessible and searchable • Multiple platforms
Physicality	<ul style="list-style-type: none"> • Information provided in sequential order • Both sides of page are used • Tangible and finite, with a clear beginning and ending • Readers maintain a sense of the whole • Structure is same as visual representation • Integrated into the physical world 	<ul style="list-style-type: none"> • Can be stored in large numbers in a small space • Navigated indirectly through mouse and keyboard • Read using additional hardware and software • Separation of storage and structure from visual representation • Existence as data
Impact	<ul style="list-style-type: none"> • Deep historical and cultural roots 	<ul style="list-style-type: none"> • Implications of technology still being explored

Table 2. Similarities and differences of print and digital texts.

Briar Milligan

INFO580 research report

10,053 words, excluding contents, references, bibliography and appendices.



Property of Tony Renouf