

New Answers for New Questions. How Electronic

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Nowadays some text is on paper and some text is on screens, but there is very little trouble involved in moving from one to another... It may be that the economics of publishing and distributing books and magazines may be in for upheaval, but in the English language at least it is already in absurd and terrible shape... sooner or later economic doctrine will reflect the realities of the costs of publication and distribution. I don't expect the Web to last very long indeed, at least not in its present form. It is a very young medium, and there are many obvious "improvements" that are possible. Parts of it are already dead.

(Bruce Sterling quoted in 'Dead Media Project: An Interview with Bruce Sterling', <http://www.ctheory.com/e75.html>)¹.

Introduction

One of the key social and philosophical issues confronting society in the beginning of the 21st century is the sharing of all kinds of information. How we react to this issue will change the very nature of the creation and distribution of literature, which is just one form of information, albeit information with very special properties. Textual media and our notion of it are changing. Old methods of sustainability and funding in publishing (literally sales of printed material) are no longer so assured. As literature adapts to the new medium, the nature of the material being published will be altered forever, as will the mechanisms and organisations that support publication. The purpose of this paper is to examine the likely nature of the impact of new media on literary publishing.

¹ Arpad Bak, 'Dead Media Project: An Interview with Bruce Sterling', *CTheory, Theory, Technology and Culture*, (22) No. 1-2, Event Scene 75 (<http://www.ctheory.com/e75.html>)

The electronic environment casts into doubt many of our assumptions about what constitutes a literate culture. In the electronic age it is no longer possible to assume that a single text can encapsulate the entire body of knowledge within a field; intertextuality and the growing realisation that no one individual can fully master any single scientific, technical or artistic discipline are becoming realities of our time. The expense of publishing is so marginal in the electronic environment that a number of key ramifications exist: such publishing does not need to serve a commercial purpose²; we can no longer rely on the authority of a canonical corpus of texts in the nascent network environment, raising questions about the integrity and quality of a document or source; finally, artists and individuals can operate outside of the limiting environment of commercial endeavour. This raises some important possibilities for [formerly printed] literature, primarily in terms of the form and scope of publication available.

Whilst the Internet³ has existed for over two decades, all these issues have remained, until recently, purely the domain of conjecture. That is because the technical platforms used for electronic publishing have lacked several important elements, preventing their uptake by a wider, non-technical public. Essentially, these are: ease of publication and editing, revision control, and a separation of presentation and document layout, as well as easy methods for achieving intertextuality (i.e. hypertext – which is one of the major advantages of e-texts over printed texts). Recently, however, this situation has begun to be rectified:

A decade ago, a small academic team at NCSA⁴, developed a small piece of computer software named Mosaic⁵ that changed the face of communication, and subsequently the

² Or even any practical purpose. Even at the time of writing, most of the material online is personal, not corporate in its origin. Source: Eric Raymond, *Five Myths of the Internet*, (<http://tuxedo.org/~esr/writings/fivemyths.html>).

³ Internet with a capital 'I' is a proper noun. When we are using "internet" we are referring to any interconnection of one or more local or wide area networks. The Internet refers to the global network of such internets.

⁴ National Centre for Supercomputing Applications (<http://www.ncsa.edu>).

rules for publishing have been re-worked several times. That piece of software was the web browser, and the researchers were in turn developing an application defined by Tim Berners-Lee⁶, a researcher at CERN⁷ who wanted a way for researchers to easily share their findings worldwide. This software platform was the first environment that actually made digital publishing easy enough for individuals working outside of information technology specialisations, or unable to draw upon the assistance of specialists.

But the Internet is not the erstwhile frontier it was five years ago. As the medium begins to mature, so have our expectations of it. We have only begun to scratch the surface of its potential as a publishing medium. At present, the World Wide Web does not provide any widely adopted method for versioning (the management of revisions in a document)⁸. Nor, is there any implicit difference between structural design and stylistic requirements⁹. It is still an imperfect medium. Any analysis of its impact must be tempered by realisation that we are still in the *early days* of an immature environment: but also by the knowledge that these early days will shape the medium that follows, and its future use. Digital publishing is already not limited to the web, but can be found in some form in almost every part of the digital environment, as with the file transfer sites of, for example, the so-called ‘underground art scene’¹⁰ that has existed online in various forms for approximately two decades; originally using private networks, and now, inevitably the Internet.

⁵ NCSA Mosaic can be downloaded from

<http://www.ncsa.uiuc.edu/SDG/Software/Mosaic/NCSAMosaicHome.html>.

⁶ Robert Cailliau, *A Little History of the World Wide Web*, (<http://www.w3.org/History.html>).

⁷ European Laboratory for Particle Physics in Geneva (<http://www.cern.ch/>).

⁸ Jim Whitehead, *The Future of Distributed Software Development on the Internet, From CVS to WebDAV to Delta-V* (<http://www.webtechniques.com/archives/1999/10/whitehead/>).

⁹ A designer today can note for example that this sentence is a *numbered list* and that part of the text is in *italics*: but if we had semantic and stylistic separation he could note that this is the *fourth footnote of the document*, with *emphasis* of certain descriptive items – which, on this page is rendered in *italics*. For a discussion of structure and presentation issues on the World Wide Web refer to: Norman Walsh, ‘An Introduction to Cascading Style Sheets’, *World Wide Web Journal* (O’Reilly/World Wide Web Consortium), Winter 1997, Vol.2 No. 1, p. 147-148.

¹⁰ I was unable to find a definition for Underground Art Scene, however the term is widely used to describe all kinds of artwork developed on computers over the last two decades. The scene is considerably matured with a variety of conventions and formats for the creation, packaging and distribution of underground art. Principal clearinghouses for underground art are *Hirez.org* (<http://www.hirez.org/>), *Artpacks.Acid.org* (<http://artpacks.acid.org/>), and *Acheron* (<http://www.acheron.org/>).

The underground art scene is especially noteworthy, since the blend of specialist information technology and artistic skills found within the community has encouraged it to be an early adopter of the medium, and it has rapidly embraced its potential. Through the underground art scene, some possibilities of the medium are revealed. In *Abbreviated History of the Underground Computer Art Scene*, Andrew Bell describes something of the history of the rebellious movement:

Ever since the birth of the alphanumeric computer display there have been those computer users who have wished to express their individuality in a world based on standardization and conformity. From the early days of computers, certain self-proclaimed "artists" have taken it upon themselves to transcend the standard set of letters and numbers to make something original, something exciting and something interesting to look at. It is safe to say that the majority of people in the art and design community have never heard of ANSI¹¹ or RIP artwork. Even until recently the mention of computer-based "art" would invoke snide remarks and perhaps a joke about Disney's "Tron". What these people do not know is that for over a decade now a vast network of computer-based artists and art groups has been pushing the limits of available technology and producing fascinating artwork.

(Andrew Bell, *Abbreviated History of the Underground Computer Art Scene*, <http://www.hirez.org/articles/ar-history.shtml>)¹².

The Underground Art Scene is massive – perhaps a thousand artists are active in the scene today, and many thousands have played an active role in it during the last two decades. There is gigabyte upon gigabyte of archived material available online. The field has evolved with its participants, and has certainly been a key influence for artists

¹¹ Both ANSI and RIP refer to particular formats used in the Underground Art Scenes. Most formats adopted are based on raw terminal emulation and display formats. Bulletin Board Systems, which were accessed commonly through a terminal emulator, used these same formats to create more compelling and useful graphical interfaces, so there is something of an accident of history in terms of which formats have become popular within the movement. Today most art produced uses more friendly hi-resolution formats. See: RaD Man, Shivan Bastard, and Wildcat, *Artpacks Explained: An Introduction to the Graphical File Formats found within Artpacks*, (<http://www.hirez.org/articles/ar-history.shtml>).

¹² Andrew Bell, *Abbreviated History of the Underground Computer Art Scene*, (<http://www.hirez.org/articles/ar-history.shtml>).

migrating to this new medium. It is unsurprising that this movement that spawned widespread innovation and experimentation in visual art would do the same for literature, and the term lit is commonly used for the literature of the underground art scene. Authors working within the underground art scene use the established channels of the art scene to distribute their work – and awareness of it. Some authors will work within established art groups (for example, the group known as CIA Productions¹³ release both visual and textual material), others work individually or through groups that specialise in literature. As befits a sub-genre, sites that act as clearinghouses – for example *Textfiles*¹⁴ and *Lit.org*¹⁵ - boost access to the material and provide an essential service in the form of promotion and selection.

The work of organisations like CIA should be distinguished from fan fiction¹⁶, with which it is sometimes confused. CIA's literature department, *Scrollz*, bring a sense of maturity and consistency to their projects that any 'dead tree' publisher would love to emulate. CIA also use the Internet to close the loop between the readership and the author, printing communications from their readers, and soliciting applications to join the organisation directly. CIA assures quality in their releases through an editor, who also uses releases to communicate with his authors. In their most recent release (*Scrollz #11 - Theories*, <http://www.creators.org/>)¹⁷, the editor (who calls himself 'Blue Devil') describes what he calls a 'new challenge'¹⁸, set by CIA artist 'Ikarus', who writes:

Recently I've been working on a project, a book - bound, with the pages painted with acrylics. These pages also have a photograph laid on each spread. The photos are partially linked ... I branched off and did others things with it with natural media. ... Hirez and lit make a nice combination. I was wondering if *Scrollz* would be interested in providing a

¹³ Creators of Intense Artwork. Their homepage is <http://www.creators.org>.

¹⁴ 'The Current Text Scene', *Textfiles* (<http://scene.textfiles.com>).

¹⁵ *Lit.org*, (<http://www.lit.org/>).

¹⁶ A good starting point for fan fiction is *FanFiction.net* (<http://www.fanfiction.net/>).

¹⁷ *Scrollz #11 - Theories*, (<http://www.creators.org/scrollz/11/scrollz11.php>).

¹⁸ Blue Devil, *Scrollz #11 - Theories*, (http://www.creators.org/scrollz/11/chal_0200.php).

story, or a collection of response or something to combine with this art... a way of linking these images through literature - be it poetry, speech, fiction, whatever...

(Icarus quoted in *Scrollz #11 - Theories*, <http://www.creators.org/scrollz/11/scrollz11.php>)¹⁹.

What the artists and writers of the Underground Art Scene have intuitively grasped is that the online environment is different from any other medium. It is already blurring the boundaries between publishing and service provision, and creating confusion in efforts to distinguish one medium from another. In the digital environment, a novel can contain embedded art, or more challengingly, film and video clips – and a video might contain an embedded novel or short story²⁰. A particular impact of this aspect of the electronic environment is the much hyped ‘media convergence’, but the use of this term does not do justice to the wider ramifications of the Internet as a creative medium. The use of hypertext, or other kinds of links to embed content, means one person’s publication can become the content of another. Interactivity is always present, but not always useful: control of pace and exposition is no less essential in electronic literature of course.

The World Wide Web is a global and almost universal ‘virtual space’²¹, that promises publishers excellent analysis of what people read. With this ‘virtual space’ come new opportunities in publishing and selection. For example, a profitable information service might not prepare any of its own content, and instead, merely provide some kind of quality control and dynamism in what it links to²². The traditional distinction between authors, agents, publishers, retailers, distributors and readers has become muddled²³. This seems to represent a democratisation of publishing, with an apparent reduction in the barriers to

¹⁹ Icarus in Blue Devil, *Scrollz #11 - Theories*, (<http://www.creators.org/scrollz/11/scrollz11.php>).

²⁰ G.P Landow, *Reconfiguring the Author, Hypertext. The Convergence of Contemporary Critical Theory and Technology*, (Baltimore: The John Hopkins University Press), 72.

²¹ Finn Bostad, *What happens to writing when texts in “a world on paper” are replaced by messages in “virtual space?”* (<http://www.hf.unit.no/anv/wwwpages/Finn/Finn1.html#RTFToC3>)

²² For example, The Argus Clearinghouse (<http://www.clearinghouse.net/>). See: James Rettig, *Putting the Squeeze on the Information Firehose: The Need for 'Neteditors and 'Netreviewers*, (<http://www.swem.wm.edu/firehose.html>).

entry inherent in the creation and distribution of both literature and art. Electronic publishing promises to liberate authors from the constraints presented by the commercialisation of the distribution of literature. Like previous crucial events in the history of literature – the printing press, or the Renaissance – the mass explosion of the Internet in recent years seems likely to indelibly stamp its mark on literature. This impact will be reflected in stylistic changes in terms of the literature itself, and economic changes in the process of artistic production.

The reality of media convergence is an ever more seamless interpolation of different mediums. The combination of literature with art, the placement of each in film, the encapsulation and interlinking of all mediums through hypertext, is likely to become normality. This is clear: the digital environment encourages the convergence of previously separated media. Texts in the electronic age will not always have a beginning, middle, or even an end. Hypertext links make intertextuality become more than a notion, but a founding reality. Today, copyright law (in all jurisdictions that enact such legislation)²⁴ places no limitation on the right to link to other material, and so makes such intertextuality between texts a possibility. The implications of this fact for artistic production are extremely significant. A crisis in intellectual property beckons.

In tandem with the rush of established publishers and booksellers onto the Internet, ongoing projects to place out of copyrighted material online (Project Gutenberg²⁵ and the Internet Public Library²⁶ being the most notable examples) show clearly the dichotomy between authors and individuals working in this new medium and the established method

²³ This disorderly free-for-all will vanish in time, however it is essential to recognise its impact to envisage is what form the environment, and services that follow will take.

²⁴ Administered mostly through organisations such as the World Trade Organisation (WTO), and the World Intellectual Property Organisation (WIPO). The riots in Seattle in 1999 were at least partially related to current proposals to extend intellectual property law to protect only established players and nations in content publication, limiting the freedom of individuals and developing nations to compete in the production of cultural artefacts. The Digital Millennium Copyright Act will be the first major law that attempts to broadly extend the scope of copyright law online.

²⁵ Project Gutenberg is located at <http://www.gutenberg.net/>.

²⁶ The Internet Public Library (IPL) is located at <http://www.ipl.org/>.

of publication and distribution that preceded it. With global availability and competition, and marginal costs of distribution, market forces seem to suggest that the value of new intellectual property will become negligible. Publishers and authors who seek to profit from their artistic labour will need to find ways to add value to their work. Value will be found in structure, annotation, validation, and trust. A volunteer effort such as Project Gutenberg might never provide this value, suggesting that roles and niches that exist for traditional publishers in the new medium.²⁷

Changing Media

Who wages war against whom? Is it between two classes or more? Is it a war of all against all? ... What is the essence and mode of the transformation of power relations? All these questions need to be explored...

Michel, Foucault, *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*, (New York: Pantheon Books, 1980)²⁸, p 130.

We are entering a network era. What does it mean?

This medium seems to realise the fears and misgivings that theorists have often proposed for technology. The complexity and anarchy of the electronic environment threatens to obfuscate the message through an obsession with its form. There is a responsibility to ensure this does not happen²⁹. In the freedom of publication that the Internet offers, it seems all too easy for the very act of publication and artistic creation to lose some of the reification it has traditionally entailed³⁰.

²⁷ Arden is an example of a publisher who takes this kind of value added service seriously. The subscription service, Arden Online, provides interactive searchable access to their critical Shakespeare editions. See <http://www.ardenshakespeare.com/ardenonline/>.

²⁸ Michel, Foucault, *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*, (New York: Pantheon Books, 1980)²⁸, p 130.

²⁹ Heidegger always feared that this would be the inevitable result of technology for example. See: Michael Bischoff, *The End of Philosophy and the Rise of Films*, (<http://www.freenet.msp.mn.us/people/bischoff/thesis.html>).

³⁰ This reification of print is actually a barrier to the growth of electronic medium, and continues to help printed volumes retain value and usefulness

The network is the ultimate in deconstructive space. At its core are dogmatic rules – protocols, standards, computer operating systems and programming languages - but these have served only to ensure that decentralisation and Darwinian autonomy are essential features of its nature. This web is a complex and interconnected series of nodes, where crucial nodes³¹ arrive at the forefront of popular consciousness. These crucial nodes, ‘nexuses’, are the markers and crossroads on the information trail; their primary significance is derived from their role in pointing to other related documents and bringing them their readership³². The commercial web makes up a number of these nexuses, but commerce is not a prerequisite of such a place: the popularising of a work is a primarily a human process, dependent on the efforts of both its creator and its audience. We cannot rely on luck for this process to be performed effectively, but instead need to develop methods to encourage the selection and promotion of literature. Some measure of the significance of a work can be garnered through its popularity, and the nature of such popularity but in the case of most material online, there is no practical method of accurately assessing the size of a work’s audience³³. It becomes necessary to turn to other often used methods of the print medium to assess how much usefulness and quality we can find in a work of literature. An often-useful indicator of a text’s value is becoming the extent to which it is referenced by other known documents³⁴. This method of assessing the quality of a document is not entirely useful on its own, since other factors - the diversity and popularity of the genre, the range and quality of equivalent material available, as well

³¹ Henceforth *nexus*.

³² These nexuses should not be confused with routers. I am talking about the intellectual pathways by which information travels around the network to a human, not the routers that physically direct data around the network, which are more analogous to post office depots. I don’t want to over emphasize the importance of eyeballs to the value of a document, but it is important to realise that an unseen, unlinked document does not exist in any real sense.

³³ This data is available to service providers and publishers of course, but they don’t have to make such information public. The innocent days of visitor counters on every web page seem to be gone for good.

³⁴ This principle is a core feature of the “Google” search engine, used to enhance the relativity of query responses. See: Larry Page, *Page Rank: Bringing Order to the Web* (<http://www-pcd.stanford.edu/~page/papers/pagerank/ppframe.htm>).

as the difficulty of creating the material will also be factors contributing to these citations³⁵.

The digital medium seemingly puts no demand on form, content or, even on style. Most information on the Internet is personal information, often not polished or intended for publication, but subsequently having such a role thrust upon it³⁶. People use the networks to exchange views, knowledge and information, including, but not limited to, their creative efforts. They do this via email, mailing lists, Usenet, and now the World Wide Web. These are not commercial exchanges, but popular, and multiple, often conflicting voices. This uncensored and uncontrolled voice of the people neatly sidesteps the conventions of television, newspapers, publishers and journals, allowing people to literally make up their own minds. There is no implicit demand for a document to be expansive and conclusive in itself: no suggestion that it should contain within its pages all the knowledge of a field. The medium inherently challenges such assumption. There is no requirement for a text to meet the demands of length: no need to shorten an item for entry in a literary journal, or to lengthen a work for publication as a book. The cost of publishing any item is remarkably similar, and the material demands to which the publishing industry is accustomed have become anachronisms in this new medium.

Prior to the advent of mass popular online publication, the distribution of literature remained onerous and expensive, out of the reach of many. In contrast, the electronic environment allows the distribution of flawless (but intangible) digital copies of literature almost next to nothing³⁷. The constraints of cost associated with printing limited

³⁵ For example, the level of interest, and perhaps linking, in poetry (a small market) and fiction, which is a larger market broken into many sub-genres will differ.

³⁶ For example, deja.com is a commercial service that permanently archives almost all discussions on the Usenet in a searchable format; these discussions are also dynamically recompiled into a web magazine accessible from the front-page of their service.

³⁷ It is necessary to be very careful in this statement since in much of the world the costs of electronic publishing remain too great for most, with inexpensive access to the Internet still available mostly only in the United States and Europe, and access in developing countries remaining 'embryonic'. Source: Organisation for Economic Cooperation and Development, Committee for Information, Computers and Communications

publication to certain forms that filled differing niches of use: journals, novels, novellas, and anthologies. None of these have a place in the electronic environment, except by virtue of their historical fact³⁸.

This environment is clearly literate. It has been observed that as society advances we create new forms of literacy, and the literacy of the Internet is not the same kind of literacy we use when we talk about books.³⁹ The essential conflicts of the Internet era differ from those of print. They are not about structure, the shape of knowledge, or a canonical set of philosophies and thought. With many competing voices, and countless, disparate and low cost professional and personal conduits for information, different conclusions become inevitable. The realisation that there are multiple truths becomes essential. In an article for *The Guardian* newspaper, Philip Greenspun proposes that:

Oral cultures do not believe a field may be wrapped up neatly into 400 pages. Knowledge is open-ended. People may hold differing opinions without one person being wrong. This is not necessarily one truth; there may be many. Though he didn't grow up in an oral culture, Shakespeare knew this. Watch *Troilus and Cressida* and its five perspectives on the nature of a woman's love. Try to figure out which perspective Shakespeare thinks correct.

Feminists, chauvinists, the pious and atheists can all quote from the same Shakespeare play in support of their beliefs.

- Philip Greenspun, 'Second sight', *The Guardian Newspaper, Online supplement*

(Thursday December 9th, 1999), p. 6.⁴⁰

Policy, 'Global Information Infrastructure – Global Information Society (GII-GIS) Policy Requirements', p 24 – Developing Economies, (http://www.oecd.org/dsti/sti/it/infosoc/prod/e_97-139.pdf).

³⁸ The anthology as a guarantee of relevance and quality does have some analogies in the online environment, by giving an assurance of quality to intertextual collections.

³⁹ Bradley Kirkland observes: 'as our society advances, we create new forms of literacy. And if you are not first literate in words, then you'll never become computer-literate. If you're not computer-literate, then you cannot be Internet-literate. And so on. As always, if you can read and write, then the world is at your fingertips. More literally now than ever.' *Bradley Kirkland, LitLinker Forum with Bradley Kirkland*, (<http://www.pbs.org/literacy/forum/linkerviewsbradpg2.html>).

⁴⁰ Philip Greenspun, 'Second sight', *The Guardian Newspaper, Online supplement* (Thursday December 9th, 1999), p. 6.

The author of the column is an academic at the Massachusetts Institute of Technology, a professional web developer, and a photographer. His work is at once amateur and professional. The most significant parts of his work, a web applications platform, a book on web publishing, a massive archive of his own and other's photography, are available freely on the Internet. His book, *Philip and Alex's Guide to Web Publishing*⁴¹ is also available from a conventional print publisher. This individual has made the significant portion of his intellectual property and creative work available freely using the Internet, and has also persuaded a print publisher to sell the text he gives away.

The ease of distribution that the Internet provides is a double-edged sword for the artist. Intellectual property rights, face not only economic but practical threats. The ability to enforce what seems to have become their theoretical existence in the electronic medium is limited. Ease of copying and subsequent re-distribution is great, and mechanisms for copy protection remain limited. Efforts exist at creating schemes of copy protection, and, as I write, legal disputes between the DVD (Digital Versatile Disc) Forum and the Linux Video and DVD developers (LiViD), will establish whether circumventing copy protection methods in the name of fair use, will become itself illegal⁴². Intellectual property is a thorny and complex issue, where the reality of situation will likely differ from legislative position and the desires of intellectual property owners⁴³. Some progressive creators and publishers are attempting to find new ways of working: it would seem that Philip Greenspun gives his work away freely not through enlightened altruism, but also because he must.

⁴¹ Philip Greenspun, *Philip and Alex's Guide to Web Publishing*, (San Francisco: Morgan-Kaufman Publishers / <http://photo.net/wtr/thebook/>).

⁴² No one is foolish enough to believe that plain text can be effectively copy protected (some text distribution formats – for example Adobe's Portable Document Format (PDF) do offer limited copy and printing protection). This case, as many such cases, does not revolve around literature, but films. In 1999, developers working on Linux DVD support cracked CSS, the copy protection system for the DVD video format. Curiously, most artists should welcome their actions, for which there is strong moral, and legal justification, especially since the DVD encryption represents a barrier of entry to artists wanting to distribute their work in this way, forcing them to deal with a small cartel of wealthy corporations. The case is too complex a diversion to discuss in depth in this paper.

⁴³ Paulina Borsook, *Steal This Article*, (<http://www.upside.com/taxis/mvm/story?id=34712c125c>).

Artists, governments and private individuals need to reconsider what kind of legislative environment is both socially desirable and practical. The goal of copyright law is surely to encourage the creation of new cultural material, and to encourage its availability to culture. Exactly where do theft and plagiarism end, and collage and montage begin? Intellectual property law seems in many ways limited and inappropriate in this medium that is so inter-textual that it is direct references⁴⁴ that actually hold it together, and a draconian regime will restrict fair use and many kinds of artistic activity. Old certainties in this medium now appear less clear, whilst the synergy between art and business seems ever stronger:

Please consider the ungenerous and uncreative logic we are overlaying our culture with. Artists will always be interested in sampling from existing cultural icons and artifacts precisely because of how they express and symbolize something potently recognizable about the culture from which both they and this new work spring. The owners of such artifacts and icons are seldom happy to see their properties in unauthorized contexts, which may be antithetical to the way they are spinning them. Their knee-jerk use of copyright restrictions to crush this kind of work now amounts to corporate censorship of unwanted independent work.

- Negativland, *Changing Copyright*,

(http://www.negativland.com/changing_copyright.html)⁴⁵.

In reality, it is not possible to censor all (mis) uses of intellectual property. Due to widespread piracy and illegal redistribution, most authors must accept a practical lack of intellectual property protection. This problem is not confined to new media, since the availability of inexpensive scanners will pose a far more realistic threat to publishers than photocopiers ever represented. The real threat to the author relying on intellectual property as a means of funding artistic development seems to be not piracy, but individuals who are

⁴⁴ Direct references expressed most commonly through hypertext links.

⁴⁵ Negativland, *Changing Copyright*, (http://www.negativland.com/changing_copyright.html)

prepared to take advantage of the Internet to freely distribute their literature⁴⁶. Authors and publishers working today should expect to be required to give away their literature in order to be competitive in the market place, and therefore, relevant.

Many individuals criticise the notion that they will have to give away their work. How will creative people become rich and famous if they cannot do so by selling the fruit of their labours, they ask? Economic reality has already made such complaints redundant. The mega-corporations who own a majority of our cultures artistic products represent only a small part of literary activity, but before the popularising of the Internet represented the only conduits for its distribution. For every artist who has sold out to commercialism, ten thousand may never have that opportunity. The Internet, by reducing all barriers, also removes the commercial basis for a majority of artistic production. In her paper for the Electronic Frontier Foundation⁴⁷ Esther Dyson writes:

We argue that the newly revealed physics of information transfer on the net will change the economics and perhaps ultimately the laws governing the creation and dissemination of intellectual property...call it content to avoid the presumption of ownership.

What happens to intellectual property on the net? Perhaps the question is best answered with another: What new kinds of content-based value can be created on the net? We believe the answers include services (the transformation of bits rather than bits themselves), the selection of content, the presence of other people, and assurance of authenticity - reliable information about sources of bits and their future flows. In short, intellectual processes and services appreciate; intellectual assets depreciate.

While content won't be entirely free, the economic dynamics will tend to operate as if it were. Content (including software) will serve as advertising for services such as support, aggregation, filtering, assembly and integration of content modules, or training - or it will be a by-product of paid-for relationships.

⁴⁶ As is the norm within the Underground Art Scene, discussed earlier.

⁴⁷ Or EFF. See: <http://www.eff.org>.

- Esther Dyson, *Intellectual Property on the Net*,

(http://www.eff.org/pub/Intellectual_property/ip_on_the_net.html)⁴⁸.

Authors cannot expect to become rich from their labours, as Paulina Borsook notes, a preoccupation with this desire, reflects that ‘we have become a society more consumed with exploiting than with creating. There is more charge; more incentive and more societal anxiety about profiting from creation than there is in fostering the conditions that lead to creation’⁴⁹. And free dissemination of artistic works does this. Authors can hope to become successful, if their work can reach an interested audience. And success will breed commissions.

Clearly, some kind of quality control, or filtering, is needed, to prevent this information utopia becoming a dystopia, but quality control, like the distribution itself, is not necessarily related to the flow of capital. This is fascinating, since it seems to go against a natural assumption that large capital investment will represent some guarantee of quality. The last few years have seen intense commercial effort in this seemingly unpopulated frontier, with an Internet rush analogous to the gold rush⁵⁰. As before most will not profit. Despite the enormous influx of capital, the personal voice has not been drowned out, but still reigns supreme.

This environment, with highly collaborative, inter-referential authors working in a dynamic field, essentially devoid of enforced intellectual property protection allows many parallels with the environment in which Shakespeare, Ben Jonson, John Webster and their contemporaries operated during the Renaissance. Patronage, which represented a unique

⁴⁸ Esther Dyson, *Intellectual Property on the Net*

(http://www.eff.org/pub/Intellectual_property/ip_on_the_net.html).

⁴⁹ Paulina Borsook, *Steal This Article*, (<http://www.upside.com/taxis/mvm/story?id=34712c125c>).

⁵⁰ Dr. John McQuillan, ‘The Internet Gold Rush’, in *Business Communications Review*, Vol. 28 No. 9, (<http://www.bcr.com/bcsmag/09/98p10.htm>); Kevin Feguson, *Business Plans Trampled in Internet Gold Rush*, (<http://www.forbes.com/tool/smallbus/00/jan/0105/feat.htm>).

funding model, both in Britain, and elsewhere in Europe⁵¹ may suggest how the financing of artistic production may take place in the digital environment. I expect that where authors have acquired a reputation through the widespread dissemination of their work, it will become increasingly likely that wealthy corporate and private sponsors will fund further work from that individual, in an effort to be share the appreciation directed at this work, and the positive reputation associated with it. This method of funding is analogous to advertising, since a successful author has control of a very important and scarce resource (the attention of their readership) that makes such sponsorship a compelling prospect. Such a model is one that actually seems to empower career authors, since they can utilise their existing success to negotiate with sponsors directly, and simultaneously preserve the emancipated and free nature of online distribution⁵². This model has been put to effective use by online pioneers, such as Etoy Corporation, an artistic group who have funded their activity by issuing shares in their venture⁵³.

Nodes and the Exchange of Information

This discussion is closely related to our changing notion of publishing. I have described how the electronic environment reduces the cost - and essentially the barriers to entry - related to artistic activity. I have also discussed the notion of nexuses, the nodes that become important in the flow of information. My goal here is further explore such an idea in an effort to understand what unique characteristics bring a text to prominence (making it a nexus), and how the importance of a text is closely related to such issues as censorship, and trust.

⁵¹ Christopher Hibbert, *The Rise and Fall of the House of Medici*, (Newton Abbott: Readers Union Editions, 1975).

⁵² For example, Steven King recently released his novella *Riding the Bullet* (<http://ww3.simonsays.com/king/>) as an e-book at a very low price – free on the day of release and for \$2.50 subsequently. Will successful authors in the future give away their e-books having found other sources of funding?

I have proposed that some kind of quality control is necessary within this medium. It seems that for the medium to be useful, mechanisms must be found to boost the exposure of "good" content, and separate it from the remainder.

Some recognition of what is meant by "good" is required. Clearly, quality is a very subjective term, and not absolute in the slightest. Effective quality control and filtering in the electronic environment requires recognition of this fact, and we can learn about this by looking to print publishing to understand what methods and services can be put into place to provide such services.

In contrast to the electronic medium, print publishing is a very mature medium with five hundred years of development in the English language⁵⁴. Many of the agents and methods used in print publishing to verify the quality of a text, will surely find their way in one shape or form, into the electronic medium, as it too matures. There is no reason to believe this process will not happen extremely quickly, since the rapid expiration, publication and automation of the electronic environment, enabling rapid publication but also engendering rapid obsolescence, means that new services and methodologies are likely to be adopted more quickly. Conversely, it should be observed that print publication developed many of these methods for economic reasons: many of the quality control methods being perhaps a response to an economic necessity which for reasons already discussed does not exist in digital media. These methods are not exclusive; the sensibilities and appreciation of readers have themselves become the most important method of validation of printed material (through market forces), but we rely strongly on third parties to select exactly what we will read⁵⁵.

⁵³ Etoy Corporation: <http://www.etoys.com/>.

⁵⁴ A fact that has surely not gone unnoticed. The major academic project to bring copyright expired and public domain works online is named Project Gutenberg (<http://www.gutenberg.net>) in recognition of this fact.

⁵⁵ In fact, a very popular emerging category of software exists for peer-to-peer user citation and annotation that allows users to attach their own comments and opinion to documents on the World Wide Web. A good

The primary method of quality control in print is surely found in references and citations. The reader can infer something of the reliability of a text through the esteem in which he holds these references, and by actually locating and examining the references himself. Citations help place a work within a canon of other literature, and go some way towards indicating the value that other authors ascribe to a text. Conclusions as to the value of a novel, or fiction, can be made from citations in criticism. Citations in electronic media usually utilise hypertext, allowing an unparalleled ease of access to referenced material. Journals and the peer review process provide another crucial validation method for texts. Publication in a journal normally requires peer review, and journals, in turn provide essential criticism for primary texts. Critical review in magazines, and newspapers⁵⁶ provides another distinctive source of criticism and validation for published material. All of these methods are limited in some way, and none can be considered authoritative. For example, the value of the citations themselves is questionable, although on the Internet most citations will take the form of links, providing some possibility for investigating their value. Peer review is by its nature subject to the opinion of the critic and so tends not to be robust.

The publishing process itself provides a number of important checks that helps control the quality of texts in print. The decision to publish is essentially a marketing decision, limited by the cost of publication, and encouraged by the expectation of returns: that is, market forces influence the selection of which work is published. The decisions applicable to whether to re-print, or allow a work to go out of print are also similar. This leads to a kind of natural selection in publishing, where economic factors play an important role in the decision as to whether to publish. This final set of factors does not exist at all in the electronic environment, and may soon cease to happen in print either, if publishers and retailers exercise new technology to enable books to be printed on demand.

example of such an application is *Third Voice* (<http://www.thirdvoice.com/>), but these platforms have their own problems in terms of how to ensure the relevance and quality of the annotations themselves.

People are only really starting to implement methods and systems online to provide the same kind of high quality content filtering, sorting and validation that we now have in print⁵⁷. Part of the problem is the exponential growth of the Internet, which is reportedly growing more quickly than any existing search engine, is physically capable of indexing. This physically demands that we use multiple sources in our research, and do not rely on a single canon of interlinked texts. Plurality is, it seems, intrinsically a part of the Internet's nature. Early search services relied only on text queries⁵⁸; later services attempted some kind of subject based classification⁵⁹, or attempt at relevancy⁶⁰. However these one-size-fits-all services have not provided the kind of capable and specialist knowledge, comment, analysis and insight that we need to provide a critical infrastructure for literature. Such services are indeed starting to become established, but they are nascent, lacking either a sound technical platform⁶¹, or where such technical infrastructure is available⁶², it has yet to be adopted within the literature community. Nevertheless, a number of services seem to promise better things: Trace⁶³ provides an excellent index of literary journals, so also does the Writers Resource Center⁶⁴. A huge part of this problem may lie in the entrenched position of print journals, which as a rule have continued to avoid the online environment since it threatens their notions of propriety, and the value that they have established for themselves. Some literary journals *have* successfully moved online, and it seems realistic

⁵⁶ For example *The Times Literary Supplement*.

⁵⁷ James Rettig, *Putting the Squeeze on the Information Firehose: The Need for 'Neteditors and Netreviewers*, (<http://www.swem.wm.edu/firehose.html>).

⁵⁸ Search engines are usually based on Boolean logic, which allows a number of search terms to be combined using logical operators. See: Laura Cohen, *Boolean Searching on the Internet*, (<http://www.albany.edu/library/internet/boolean.html>).

⁵⁹ An example of this kind of directory service is Yahoo! (<http://www.yahoo.com/>).

⁶⁰ Google (<http://www.google.com>) is an example of this kind of service.

⁶¹ Voice of the Shuttle (<http://vos.ucsb.edu/>) is an excellent directory for the humanities, but its usefulness may eventually be limited by the apparent lack of technical infrastructure, or efficient mechanism for visitor input and customisation.

⁶² Actually much of the software required for these kinds of services is freely available on the Internet. It is outside the scope of this article to recommend particular platforms or software packages for maintaining such validation services. An excellent discourse on the subject is: John Udell, *Practical Internet Groupware*, (Sebastopol: O'Reilly, 1999). *Riot* (<http://riot.seire.org/>) is worth mention because it is a product of the Underground Art Scene discussed elsewhere in this paper.

⁶³ Trace. (<http://trace.ntu.ac.uk/traced/litzine.htm>)

⁶⁴ Writer's Resource Center, Literary and EZines List. (<http://www.poewar.com/links/ezines.htm>).

to assume that the situation will improve in the future. However there is a pressing need for the academic and artistic community to bring its expertise to the development of the medium. There is currently very little unified effort⁶⁵ toward the adoption of machine-compatible techniques for evaluating and reviewing literature, where semantic mark-up⁶⁶ would enable such information to be quickly and easily shared between review services and critical services. It is clearly important that scholarly and artistic individuals and organisations interested in literature, are adequately represented in trans-discipline category and meta-data initiatives such as The Dublin Core Initiative⁶⁷ which in the longer term are likely to serve a similar role to that played by the Dewey-Decimal system for print publications. Academics and the journals that they operate house specialist expertise that is required to raise the quality of material, discussion and resources in the electronic environment - but in too many cases this environment has been ignored. This could be harmful to both scholarly and private use of literature as systems for collaboration and validation are agreed upon and implemented without significant input from the very organisations and individuals that will in due course be most interested in their use. There is an urgent need to bring together this new medium and the standard-maintaining mechanisms developed by academic communities for pre-existing publishing media. I began by discussing the so-called 'underground art scene'. For them, such mechanisms of filtering and validation are, in many ways, already reality.

⁶⁵ The TEI Guidelines (<http://etext.lib.virginia.edu/TEI.html>) provide a good starting point, although what is really needed is more collaboration on the development of useful DTDs (i.e. grammars) for encoding documents. Other possible DTDs exist for articles (<http://www.xmlxperts.com/xmlarticledtd.htm>) and books (<http://www.xmlxperts.com/xmlbookdtd.htm>). XHTML (<http://www.w3.org/TR/xhtml1/>) provides a possible route to migrate existing World Wide Web content to a more useful format.

⁶⁶ The HTML Writers Guild describes semantic mark-up as: 'Semantic mark-up gives information about the text it is marking up. E.g. In the element <hamlet> To be or not to be...</hamlet> the tag hamlet tells us that the words are being spoken by Hamlet'. bckman@ix.netcom.com, *XML FAQ*, <http://www.hwg.org/resources/faqs/xmlFAQ.html>.

⁶⁷ The Dublin Core Initiative (<http://purl.oclc.org/docs/core/projects/>) is a subject independent effort to create category definitions in the form of metadata for information. It is described in a formal Internet Standard, *RFC (Request for Comment) 2731* (<http://www.ietf.org/rfc/rfc2731.txt>).

Conclusion

It is clear that the major impact that electronic publishing is having on literature derives from its immediacy, its flexibility and its interoperability. The activities of the underground art scene with their emphasis on anonymity, and implicit and advanced understanding of practical methods of exploiting intellectual property in the digital medium means that the relations between privacy, speech, academic freedom and accountability must be an intrinsic part of any system of quality assessment and validation online. Indeed, experience shows that where a publication or public (broadcast) communication environment does not make such features an intrinsic aspect of the communication, the noise will invariably rapidly begin to outweigh the useful content⁶⁸.

The issues surrounding copyright, academic freedom, the right to privacy, and freedom of speech are provocative, and practical conclusions seem to challenge accepted normalities. These issues can only be effectively addressed in the context of a thorough understanding of the digital environment itself.

The electronic environment will force us to reassess our notion of intellectual property, and publishers, academics and critics will have to reassess their roles if they want to continue to provide value in the electronic environment. If the Internet and Electronic Publishing are to fulfil their promise of an interoperable, searchable canvas –the world’s biggest library, in which all creators can play their deserved part, such review should be the product of an open-minded and informed public debate; one that interested contributing members of literary communities should not only witness but also be at the centre of. Intellectual property protection comes from several different but closely related pieces of legislation - copyright, patents, trademarks and design marks. Current efforts⁶⁹ to

⁶⁸ USENET and its junk mailings (Spam) being the best example of just how bad such problems can be. For discussion of Spam in Usenet see: Tim Skirvin, *FAQ: Current Usenet Spam thresholds and guidelines* (<http://www.faqs.org/faqs/usenet/spam-faq/>).

⁶⁹ For example, the World Trade Organisation will play a key role in shaping such legislation. See: *WTO, Intellectual Property*, (<http://www.wto.org/wto/intellect/intellect.htm>). Also, the *World Intellectual Property*

synchronise intellectual property legislation worldwide provide an opportunity for a thorough investigation of intellectual property law. Only in time can we conclude whether legislation continues to serve the purpose for which it was originally crafted, or whether it will choke the artistic renaissance that we can hope lies ahead.

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(http://www.oecd.org/dsti/sti/it/infosoc/prod/e_97-139.pdf).

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Appendix: Additional Resources

'Underground Art Scene'

Acheron.org, (<http://www.acheron.org/>). A clearinghouse for news and releases in the 'art scene'.

ACiD Productions, (<http://www.acid.org/main.htm>). One of the most influential groups within the 'art scene'.

Creators of Intense Artwork. (<http://www.creators.org>).

Current Text Scene, The, (<http://scene.textfiles.com/>). Archive of the latest known 'text files'.

Defacto 2 Dot Net, (<http://www.defacto2.net/>). Key clearinghouse for the Internet's 'underground'.

Etoy Corporation, (<http://www.etoys.com/>).

HiRez.org, (<http://www.hirez.org/>). A review and criticism site for the underground art scene focused on Hi Resolution images.

Lit.org, (<http://www.lit.org/>). Reviews and news and archiving for literature within the 'art scene'.

Riot, (<http://riot.seire.org/>). Platform for managing web services for groups and individuals that release art and literature on the Web.

'Intellectual Property'

Confu: The Conference on Fair Use, (<http://www.utsystem.edu/ogc/intellectualproperty/confu.htm>). Convening with the goal of developing guidelines in fair use in five areas: Distance Learning, Multimedia, Electronic Reserves, Interlibrary Loan, and Image Collections.

Electronic Frontier Foundation, (<http://www.eff.org>). The mission of EFF is to protect ‘rights to digital free expression from political, legal and technical threats... empower people to maintain their privacy and control their digital identity... ensure that systems are designed to respect people's rights, such as free speech, privacy and fair use’.

Patents.com (<http://www.patents.com/>). Intellectual Property Law resource maintained by Oppedahl & Larson LLP.

Research Agenda for Networked Cultural Heritage, (<http://www.ahip.getty.edu/ahip/home.html>). From the Getty Art Information Programme. Wide range of contributors.

World Intellectual Property Organization Treaties, (<http://www.wipo.org/eng/main.htm>).

World Trade Organisation (WTO), Intellectual Property Page, (<http://www.wto.org/wto/intellect/intellect.htm>).

‘Open Content’

Copyright’s Commons, (<http://cyber.law.harvard.edu/cc/>). A coalition devoted to promoting a vibrant public domain, supported and maintained by the Berkman Center for Internet and Society, at Harvard.

Free Film Project, (<http://www.geocities.com/ResearchTriangle/Facility/6309/>). A focus point for examining the idea of developing movies and animations entirely within a GPL-type (open or copy left) license.

Internet Public Library (IPL), (<http://www.ipl.org/>).

Open Content, (<http://www.opencontent.org/>). Open Content exists to ‘facilitate the prolific creation of freely available, high-quality, well-maintained Content.’ Provide generic licenses for ‘open’ redistribution of content and publications.

Project Gutenberg, (<http://www.gutenberg.net/>). Project to make e-texts of public domain literature freely available.

Internet Standardisation Process

Adobe PDF, (<http://www.adobe.com/products/acrobat/adobe.pdf.html>). The specifications for the most commonly used format for electronic text, PDF or Portable Document Format.

Dublin Core Initiative, (<http://purl.oclc.org/docs/core/projects/>). A subject independent effort to create category definitions in the form of metadata for information.

European Commission's Open Information Interchange Service, (<http://www2.echo.lu/oii/en/oii-home.html>). 'Guides to the application and implementation of OII standards and specifications in specific areas'.

RFC Editor, (<http://www.rfc-editor.org/>). Information about general Internet standards, published as RFCs (Requests for Comments) and the submission process.

Web Standards Project, (<http://www.webstandards.org/>). Organisation to lobby for harmonisation of open software standards on the Web.

World Wide Web Consortium, The, (W3C), (<http://www.w3.org/>). The principal standards body for the World Wide Web.

Filtering, Selection, Accumulation

Arden Online (<http://www.ardenshakespeare.com/ardenonline/>). Annotated and searchable Shakespeare available from subscription based service.

Yahoo! (<http://www.yahoo.com/>). Directory based portal/search tool.

Google, (<http://www.google.com>). Citation based search engine.

Trace, (<http://trace.ntu.ac.uk/traced/litzine.htm>)

Voice of the Shuttle, (<http://vos.ucsb.edu/>). Specialist directory for humanities research.

Writer's Resource Center, Literary and EZines List. (<http://www.poewar.com/links/ezines.htm>).