Resource Centre Sites:
The New Gatekeepers of the Web?

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The work presented in the thesis is, to the best of my knowledge and belief, original and my own work, except as acknowledged in the text, and has not been submitted, either in whole or in part, for a degree at this or any other university.

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Preface

This thesis introduces and analyses the emerging Website genre of Resource Centre Sites. RCSs are sites which combine news, rumours and background information as well as community discussion and commentary on their chosen topic, and frequently serve as a first point of entry for readers interested in learning more about the field. They also offer spaces for virtual communities of specialists or enthusiasts to emerge, who in the process and as a product of their interaction on these sites collate detailed resource collections and hyperlink directories for their fields of interest. Therefore, Resource Centre Sites significantly involve their users as content contributors and producers, turning them into what is here termed 'produsers' of the site.

Aiming to evaluate all the content relevant to their field that is becoming available online, and to coopt or at least link to this information from the news and resources collection that is a central part of the RCS, Resource Centre Site produsers engage in an adaptation of both traditional journalistic gatekeeping methodologies and librarianly resource collection approaches to the Web environment: in the absence of gates to keep online, they have become 'gatewatchers', observing the publication of news and information in other sources and publicising its existence through their own sites.

Their operation is studied here through a number of case studies of major existing Resource Centre Sites from various fields of interest. These sites are analysed both based on their available Web content, and using background information obtained in a series of email interviews with RCS creators. In combination, this offers insights into the operating philosophies of sites and site editors, and provides an opportunity to assess to what extent these ideas have been translated into everyday practice.

Chapter 1 provides an overview of past and current theoretical views of the Web in an effort to evaluate their suitability for the current study. Older approaches positing an abstract 'ideal' form of hypertext are rejected in favour of a direct engagement with the World Wide Web as the now dominant mode of hypertextuality. Chapter 2 outlines the principles of gatewatching in contrast to traditional methods of evaluating news and information as they exist in journalistic media and archival institutions, and investigates the effects such gatewatching practices may have on editors and users. Chapter 3 describes the overall characteristics of Resource Centre Sites as a genre of Web publications. It notes the special role site users play in the operation of such sites (in their new role as 'produsers'), and distinguishes the RCS genre from similar Website models such as portals and cybermediaries. Chapter 4 observes the everyday operation of such Websites in practice, using case studies of major existing Resource Centre Sites including Slashdot, MediaChannel and CountingDown, and interviews with their creators. (These interviews are included in full in the Appendix.) This analysis works with both a synchronic view to the variety of topics existing Resource Centre Sites are able to address, and a diachronic view to the evolution of proto-RCSs (such as enthusiast community or online advocacy sites) into fully-featured Resource Centre Sites. Finally, based on this analysis, Chapter 5 is then able to point out some of the implications and effects that increasing use of this media form may have on its users and the network of news and information publications on- and offline, and to indicate the potential for further developments of the site genre.

1 — Hypertext and the Web

The advent of hypertextual media of considerable and increasing scale since the 1980s has facilitated, and in some cases even introduced, a range of far-reaching changes – of modes of information publication, distribution, and retrieval, most centrally and obviously, but also beyond the publishing field itself in social, political, economic, educational, scientific, and philosophical domains. At the same time, there remains much misunderstanding about the nature and functioning of hypertext, and the wider implications of its use – a fact demonstrated perhaps most directly by the way in which hypertext and its most widespread implementation, the World Wide Web, are frequently regarded as synonymous. The Web, as a limited, though highly flexible and easily manageable version of hypertext (attributes which in part explain its rapid acceptance by the Internet community, and media users and producers in general), displays a number of important features of what has been postulated as 'ideal' hypertext, but its specific technological setup also introduces a variety of additional complications as well as opportunities which help to explain some of the particular types of impact the medium has had on its users – institutions and individuals, active content providers and passive content recipients alike. One such opportunity is the creation of Resource Centre Sites, a significant new genre of Websites which will be introduced in the following chapters.

To describe such implications of hypertextual media for their users does not mean simply falling into the trap of technological determinism, and neither do such implications somehow replace and eradicate the effects previous popular media have had on society – as Harasim writes,

> computer networking does not replace other forms of human communication; it increases our range of human connectedness and the number of ways in which we are able to make contact with others. Historically, changes in the means of communication – from speech to writing to the printing press – have transformed human

development and society. Technological change ... shapes the
limiting conditions of what is possible and what is barely imaginable.
New opportunities are opened, others are closed, augmenting and
changing our material world and our relation to and within it.
("Networlds" 16)

At the same time, though, such opportunities, while linked to technological change,
are also largely brought about by the sociopolitical and economic settings in which
they occur.

Whenever such opportunities have arisen, then, media producers have had to
find the most appropriate and effective ways of communicating with and providing
information for their audience through their media form – this has been the case
with the gradual emergence of the newspaper as we know it today, or the slow
refining of the TV news format, for example. In this process, concepts of what
constituted audience, and communication between media producers and media
audiences, were themselves significantly altered. In the latter half of the 1990s, as
the Web began to reach mass audiences, similar processes occurred for online
formats, leading for one form of Web-based news and information publications to
the emergence of Resource Centre Sites as a distinct genre of Websites. To analyse
such processes, however, it is first necessary to gain a perspective on how hypertext
functions.

Theoretical Approaches to Hypertext

Hypertext theory predates the Web by several decades, and is not even
necessarily limited to computer-mediated hypertext systems. It is often traced back
to Vannevar Bush's seminal article "As We May Think", published in 1945, and
reached its first heyday with the increased availability of basic hypertext systems
such as Apple's HyperCard, in the late 1980s and early 1990s. Central works such
as Barrett's edited collection *The Society of Text: Hypertext, Hypermedia, and the*

Social Construction of Information (1989), Bolter's *Writing Space: The Computer,*

Hypertext, and the History of Writing (1991), and Landow's *Hypertext: The*

Convergence of Critical Theory and Technology (1992) all predate the introduction

of the World Wide Web as today's premier hypertext system, while already in their

titles indicating the significance claimed for this new mode of writing.

Many of the claims hypertext theory makes for its object of interest are caught

up with, or complemented by, a rhetoric of technological advances towards digital

writing set to liberate readers as well as writers from the perceived limits imposed

by traditional writing and the printed book. The book is frequently set up as limiting

human creativity – Bazin refers to "the straitjacket of the book" (163) –, and placed

in binary opposition to the digital text (e.g. Snyder 17, 52-3; Bolter, *Writing Space*

207, 236-7; Landow, *Hypertext* 66). However, such juxtapositions of print versus

hypertext themselves paint a limited and somewhat misleading picture of what

similarities and differences exist between printed and hypertexts, and for the present

discussion – which is concerned not with hypertext as abstract concept, but with

textual practices on the World Wide Web – it is necessary to question such binary

oppositions.

Five familiar refrains echo through many of the earlier versions of hypertext

theory, and all five must in turn be tested for their veracity.

1. Focussing on the hyperlink as a chief distinctive feature from other
   textual forms, many hypertext theorists like to begin by claiming that
   interlinkage breaks up existing hierarchies of text in favour of a
   networked structure of information. (E.g. Landow, *Hypertext* 2-3;
   Snyder 52-3, 75-6.)

2. Because of hypertext's reliance on links for the connection and
   association of individual units of information, a second step in this
   view then is the rediscovery of intertextuality, which is seen as

primarily a feature of hypertexts, not text in general. (E.g. Mitra &
Cohen 182-5; Landow, *Hypertext* 53, 61; Nunberg, "Farewell" 106.)

3.   The argument then moves on to criticise print for its inherent linearity
which is associated with an adherence to a hierarchical organisation of
content even in spite of the demands of intertextuality. (E.g. Landow,
Hypertext 2-3, 43; Barrett, Introduction xiii-iv.)

4.   Where the medium's apparent new-found non-linear intertextual nature
manifests itself in the creation of multi-authored, reader-annotated
hypertexts, this is soon followed by statements on the death of the
author, or at least the perception of a significant weakening of authorial
powers. (E.g. Mitra & Cohen 187; Snyder 17, 79; Bolter, *Writing
Space* 199; Landow, *Hypertext* 23, 33.)

5.   Finally, such views culminate in the postulation of a set of criteria to
be fulfilled by 'ideal' hypertexts. (Esp. Barrett, Introduction xiii-iv.)

A Lack of Hierarchies

Landow writes that "we must abandon conceptual systems founded upon ideas
of centre, margin, hierarchy, and linearity and replace them with ones of
multilinearity, nodes, links, and networks. Almost all parties to this paradigm shift,
which marks a revolution in human thought, see electronic writing as a direct
response to the strengths and weaknesses of the printed book" (2-3). He and other
hypertext theorists (cf. Hesse 31; Snyder 52-3, 75-6) see the flat networked structure
of hypertext, without immediately visible hierarchies, as removing any fixed
hierarchies of content or content creators, any unified authorial voice, and any
prescribed interpretations of texts. Any addition to the hypertext (even if it consists
only of the user's private collection of visited links, on the very margins of the
hypertext proper), changes the possible meanings to be read from it, as it affects its
map of intertextual relations.

As a result, in this view the extent to which a hypertext provides for new contributions from its users (through the addition of new content by authors, of comment and annotations, or even simply private bookmarks of readers) is crucial in a hypertext implementation – systems which only allow input from accredited contributors into a fixed structure without opportunity for reader feedback (such as, in an extreme case, CD-ROMs) are thus clearly hierarchical, although they may well be using hypertext technology. Non-hierarchical hypertexts, on the other hand, would rely crucially on their reader to make sense of the information that is presented in the hypertext without a predefined signifying structure, and to add new information to it. In such systems, "each reader makes one or more … virtual texts an actual text when choosing which links to follow and which to ignore" (Snyder 17).

Snyder also claims that "once the linking which is integral to hypertext has been introduced into the electronic text, fixity is abandoned altogether" (53); however, this seems to underestimate the hierarchising nature of hyperlinkage itself – the very act of linking would seem to *introduce* some degree of fixity (as a potential linkage is now made actual). The addition of hyperlinks does not convert a hierarchically organised electronic text into a non-hierarchical network of texts; it merely creates a denser and more complex hierarchical structure. Rather, then, in their content and in the links they offer, hypertext pages suggest a certain hierarchical organisation according to a more or less explicit structural model.

This is not to say that hypertext is entirely hierarchical, however: in addition to the links given within a hypertextual unit itself there usually are also further branches outside that hierarchy which users can follow – such as, ultimately, the return to a previous page, to 'bookmarked' locations, or to places found through an index or search facilities. While hierarchies exist in hypertext, they are not binding to its user. This hardly constitutes a departure from the situation in other media, however – where ultimately readers or viewers are also always able to leave the particular text they are currently dealing with.

Landow believes that "hypertext ... provides an infinitely re-centrable system whose provisional point of focus depends on the reader, who becomes a truly active reader in yet another sense. One of the fundamental characteristics of hypertext is that it is composed of bodies of linked texts that have no primary axis of organisation" (*Hypertext* 11-2). Not only could it be questioned at what time an axis of organisation becomes a 'primary' one, but more importantly we must avoid the temptation to move from denying the presence of a primary axis of organisation to denying that any form of organised structure exists in hypertexts. If linked texts indeed form *bodies*, then clearly they are already forming distinct structures and hierarchies.

Such hierarchies are activated in the interaction with a hypertextual network of pages, for example: traversing the network imposes a structure at least temporarily. However, as an added complication such structures continue to rely mainly on predefined links within the text, which throws into question the very non-hierarchical nature of hypertext which Landow and others have claimed.

The presence of explicitly marked Web links to other points at least contains a strong suggestion for future movement across the network (as do other technical possibilities such as the Web's facility for browser redirection, or for the triggering of events automatically upon loading a page). Additionally, entirely free movement across a hypertext is already obstructed, in the case of the World Wide Web, by the difficulty for Web users to know where they can go from a given page without following predefined links or using preset bookmarks. Clearly, the Web is not the non-hierarchical networked paradise it is sometimes made out to be. Rather, links may be described as instruments of a rehierarchisation of the network: the provision of links at any one location in the network generally involves some degree of selection, and thus creates or adds to hierarchical structures.

Therefore, as Landow himself points out (in unresolved contradiction to his call to abandon concepts based on ideas of hierarchy altogether), "hypertext linking situates the present text at the centre of the textual universe, thus creating a new

kind of hierarchy, in which the power of the centre dominates that of the infinite periphery" (Landow, *Hypertext* 66). That process, however, is hardly unique to hypertext – any text which links to other texts within the 'textual universe' through intertextual links, hyper or otherwise (and because of the inevitable ubiquity of intertextuality thus *any text*), places itself at the centre of its universe, and at the pinnacle of its textual hierarchy. Landow adds the distinction that "in hypertext the centre is always a transient, de-centrable virtual centre – one created, in other words, only by one's act of reading that particular text" (Landow, *Hypertext* 66) – but this, too, seems no different from any other textual form.

Snyder contends that "hypertext is a plural text without a discursive centre, without margins, and produced by no single author. As an electronic text that is always changing and becoming, it is associative, cumulative, multi-linear and unstable" (60). On the surface, such descriptions are quite similar to how philosophers Gilles Deleuze and Félix Guattari describe their concept of the 'rhizome', which

> pertains to a map that must be produced, constructed, a map that is always detachable, connectable, reversible, modifiable, and has multiple entryways and exits and its own lines of flight. … In contrast to centred (even polycentric) systems with hierarchical modes of communication and preestablished paths, the rhizome is an acentred, nonhierarchical, nonsignifying system without a General and without an organising memory or central automaton, defined solely by a circulation of states. (21)

Such apparent similarities of description have led hypertext theorists to apply deleuzoguattarian thinking to hypertext – Bolter, for example, writes that "a text as a network has no univocal sense; it is a multiplicity without the imposition of a principle of domination" (*Writing Space* 25). Deleuze & Guattari's description of root-trees and rhizomes is thus translated into the observation that "in the electronic medium, hierarchical and associative thinking may coexist in the structure of the

text, since the computer can take care of the mechanics of maintaining and presenting both networks and trees" (Bolter, *Writing Space* 25). But this description does not sit well with rhizomatic theory itself, which – far from seeing hierarchical root-trees and associative rhizomes as different structural models that are able to coexist in a text – notes that "the important point is that the root-tree and canal-rhizome are not two opposed models" (Deleuze & Guattari 20).

If the "rhizome is not amenable to any idea of genetic axis or deep structure" (Deleuze & Guattari 12), then, any attempt to translate rhizomes into flat network structures and root-trees into hierarchical forms of organisation simply misreads this theoretical approach in a crucial point. This is not to say that hypertext can *not* be described as rhizomatic: any form of text can, and Bolter's above description of (hyper)text as network truly applies to *all* forms of text. For computer-mediated communication, for example, Miles notes that "email, mail lists, newsgroups and file transfer protocols are already rhizomatic, and these were in place well before the cornucopia of the Web" (75). While this is quite true, such observations may just as well be expanded to include all forms of text: all are rhizomatic, and for reasons which have nothing to do with computer mediation.

Where the application of deleuzoguattarian concepts by hypertext theory is intended to signal its difference from other (especially non-digital) forms of communication, then, it appears that this confuses rather than proves its point. At any rate, while describing hypertext in rhizomatic terms would certainly be a worthwhile and as yet not satisfactorily completed project, it is not the project of the present study. Our present investigation can be carried out without reference to root-trees and canal-rhizomes, and indeed without taking on board a great deal of 'abstract' hypertext theory which does not accurately describe what actually happens on the World Wide Web.

In summary, despite much work on the non-hierarchical aspects of hypertext (the ease of breaking out from the present text to connect to a different one, of treating hypertexts as flat networks of information), they do not seem to constitute a

departure from the situation in non-hypertext so much as a magnification of the effects of some of the intertextual connections that are present in any text. Nonetheless, the hypertext flavour of intertextuality is the second major difference from traditional texts which hypertext theory frequently claims for its object of study.

A New-Found Intertextuality

Indeed, Mitra and Cohen claim that "hypertextuality can be synonymous with intertextuality" (184) and state that "one ... characteristic that sets it apart from traditional text is the overt intertextuality of the WWW texts" (Mitra & Cohen 182). While all texts already contain implicit, and occasionally explicit, references to other texts, they believe that the networked nature of hypertext makes some of these links clearly explicit, and enables the reader to trace them immediately. It is this immediacy of connection (crucially dependent on the networking technology used) which in their view largely sets hypertext systems apart from textual collections such as traditional libraries, where connections must be established primarily by the user, with some im- or explicit assistance from the individual texts and a cataloguing system. At the same time, by this logic, the importance of the immediacy of intertextuality for hypertext also means that the success of any hypertext *as* hypertext depends crucially on its degree of useful interlinkage.

Mitra and Cohen contrast this with what they see as the situation in traditional text: "there is a presumption that the intertextuality of the texts needs to be 'teased' out of the text and that the intertextuality is not necessarily overt but is often embedded in the style and narrative of the texts. This presumption, however, disappears in the case of hypertext" (184), which is instead believed to make intertextuality visible. We must challenge the validity of that assumption, though. Intertextuality can be just as overt in other textual forms as it may be in hypertext, while hypertextual intertextuality goes well beyond what is made visible through

linking and similar mechanisms: while (as a basic example) bibliographies and citations may constitute the print equivalent of the kind of overt intertextuality that is contained in hyperlinks, the more covert forms of intertextuality which arise, for example, from basing one's text on bodies of prior thought in a particular field of interest are present in hypertexts just as much as in other kinds of text.

Quite obviously, the act of hypertextual linking is crucial to views which see a new quality of intertextuality emerge from hypertexts. Miles writes, for example, that "it may be more productive to consider the operation of the link ... as what separates the digital text from the book. ... The link may be nothing more than a making literal of the performative nature of all utterance ..., and more probably the illocutionary force of utterances; in saying, something is done. The manner in which multimedia make this literal, and its implications for writing and reading practice, are probably novel and substantial" (70). Even taking into account the cautious 'probably', however, this may already be an overstatement of hypertext's case. A focus on the hyperlink as a new, better, more immediate and more overt form of intertextuality which reduces our need to 'tease out' what intertextuality exists in other forms of text does not lead us to a better understanding of the intertextual embedding of a hypertext in its 'textual universe' – rather, it focusses on a special and relatively limited form of intertextual referencing (the hyperlink) over the total range of intertextual relations (which also includes citations, references, allusions, the borrowing, extension, or critique of previously expressed ideas, and much more).

Indeed, with this critical view of what Mitra and Cohen, Miles and others claim (cf. also Landow, *Hypertext* 61; Nunberg, "Farewell" 106) about the impact of hyperlinks on intertextuality, we might compare the operation of hypertext links to some extent with the effects of the transformation of a novel into a feature film: details and associations before left open to the interpretation of the individual reader are now guided into one direction of possibility. In a similar way, "the links in a hypertext are acts of interpretation that move the reader from one sign to another"

(Bolter, *Writing Space* 199). In both film and hypertext, the convenience of following the interpretation presented (rather than having to deal with the apparent chore of 'teasing out' intertextual linkages) might outweigh any opposition to this reading, and the persuasiveness of associations thus made explicit through these media might be seen to silence any alternative readings possible. Then, "hypertext can be considered as a 'belief network' to the extent that if two nodes are linked, then we 'believe' that their contents are related in some way" (Nielsen 140), and Beardon and Worden add that "in this sense the concept of hypertext obscures the real decisions that are taken and which are, by default, resolved in favour of those with the power and resources to act efficiently" (69) – those in charge of setting up hypertext pages and of choosing the links included. This point will become particularly important when we consider what level of power over the meaning-making process is exerted by the editors of Resource Centre Sites. However, we should also continue to question for all forms of text (from print to film to hypertext) whether such presented interpretations can ever actually restrict and close down possible readings.

Hyperlinks therefore do not just make the processes of intertexuality simpler and more obvious, as Mitra and Cohen would have it: rather, the simplifications they introduce may perhaps skew the operation of intertextual linkages and indeed obscure their effects. A hypertext document's links, perhaps even more so than the text itself, thus become a major locus of its argumentative and persuasive power and its ideological impact. At the same time, however, hypertext users cannot be forced to follow such associative and interpretive links; the effectiveness of the links depends crucially on the voluntary cooperation of readers, as links can only unfold any persuasive potential at all if they are being followed. Especially if there are easily accessible facilities for adding one's own, alternative associative links, a text's own links might effectively be engaged with and counterposed. As we will see, this is the case for example in Resource Centre Sites such as CountingDown and Slashdot.

Thus, as Bolter points out, for readers engaging with a hypertext from all perspectives "the invisible network of associations becomes visible and explicit to an extent never before possible. (The network can never be fully explicit, however, because the verbal ideas of the text will always reach out beyond any given electronic text to all other texts that the writer and reader know.)" (*Writing Space* 113). If Mitra & Cohen argue that we no longer need to 'tease out' *some* of a text's intertextual connections, any view that *all* intertextual connections are made visible through hyperlinkage is simply illusory. *Which* of a text's intertextual linkages are made visible and explicit now becomes crucial. This is a central question to be asked of the Resource Centre Site gatewatchers whose work we will examine in the following chapters.

In spite of their overly enthusiastic claims about the synonymity of inter- and hypertextuality, then, Mitra and Cohen provide important advice when they write that

> the analyst … has to be … interested in the extent of the intertextuality and the way in which the intertextual quality of the text serves as the source of its meaning. In some cases, a WWW text might be no more than a well-organised index of 'links' to other pages, but in the case of WWW texts, such an 'index' becomes meaningful vis-à-vis the particular links it offers and what it does not offer. (184-5)

Fighting Linearity

The presence of hyperlinks is also chiefly responsible for the third major claim to be made about hypertexts. Links accentuate the networked nature of hypertexts, and are seen to undermine the primacy of temporal over spatial organisation of information, which is believed to exist in various 'traditional' forms of text and to be partly responsible for what Landow repeatedly calls "conventional reading habits" (e.g. *Hypertext* 4; cf. Kolb 22; Snyder 60; Bazin 163). In contrast to textual

forms which, supposedly, favour progress along a clear line of reasoning towards a conclusion, with all steps in between contributing ultimately to an overarching aim, and movement along a path predetermined by the author, hypertext can easily be used to do away with such unidirectional, goal-oriented linearity. Especially the 'push'-model broadcast media such as radio and TV with their continuous streams of programming are seen as linear media *par excellence*, on the level of individual programmes, yet

> the online environment allows an individual to draw into the hypertext conversation disparate others because the physical forms of space are made more plastic. Yet even the 'forms' or categories of textual apprehension are made more malleable in the online environment because networked systems should, ideally, permit one operation (such as composing a text) to be instantly transformed into the exchange and annotation of that text by others; as space melts away, the collaborative operations of review and re-visioning are expanded. (Barrett, Introduction xvi)

However, it is not necessarily hypertext itself which is at the centre of any challenge to linearity – "non-linearity and random access are principles of organisation or reading performance commonly used by people in non-digital environments, with dictionaries and encyclopedias being perhaps the most common examples. ... This would suggest that the specificity of multimedia, and hypertext, is perhaps not so much a condition of their random access abilities, or even perhaps its consequent non-linearity, but a product of something else" (Miles 70). It appears, then, that a challenge to linearity arises not from the hypertext itself, but from the particular networked (and in this case, electronic) environment in which it can place authors, readers, and information – from the relatively flat structure which this network uses to hold information, and the freedom of network traversal which it affords the reader. Linearity does not simply disappear due to the existence of a

massively interlinked network of information; it loses its coercive force if there is no possibility to enforce it, and becomes optional multi-linearity.

But we can take this argument even further, and make it irrelevant for the present discussion: what possibility to 'enforce' linearity does there exist in print or other textual forms, after all? Who forces the reader of a printed book to read it in a linear fashion – and to what extent is the practice of reading ever strictly linear, word by word from cover to cover? Conversely, we can also question if whatever linearity still remains in the act of reading should actually be seen in negative terms at all – rather, it may be a necessary element in any meaning-making process. Not non-linearity, but networked multi-linearity appears desirable, then – but the potential for such multi-linearity may have been present in all texts all along. While we may not perceive them as such as immediately as we do the Internet, dictionaries and encyclopedias as well as, on a larger scale, collections and libraries can be regarded as printed information networks, but they constitute only the most visible examples in support of this view. Intertextuality means that *all* texts are multilinearly networked.

Digitisation can aid networking: potentially, "in a digital world all documents are equal. This means that from the computer's point of view it makes no difference if it's a picture, a sound, a movie, or just plain text; they are just bits. It is this lack of discrimination on the computer's behalf that allows different media elements to be combined on a single 'screen', and it is this quality that also allows the easy movement, for the reader and the computer, from one 'object' to another" (Miles 70). But we can program computers to mimic the specific textual qualities of other forms of text from e-books to digital movies with some degree of success, and we can replicate digital texts more or less well without computer mediation – this already points to the fact that there are no fundamental distinctions separating the operation of textuality in hypertext from that in other textual forms. Landow's 'conventional', linear reading habits paint an exaggerated picture of the linearity of print texts. This is particularly clear if we note the extent to which claims to the

inherent non-linearity of hypertext are based on perceptions of its heightened intertextuality through links: if (as we have done here) that foundation is undermined, the investigation of linearity or non-linearity similarly becomes a moot point.

The Death of the Author

As Landow's mention of the interspersal of "commentary … by another author or parallel or contrasting texts" (*Hypertext* 4) with the primary hypertext shows, he and others see intertextuality and multilinearity in hypertext as based to significant extent in the juxtaposition of texts by different authors through hyperlinks. In this view, this is linked to the fundamental technological setup of hypertext media such as the Web: unlike most traditional 'push' media with a clear distinction between producer and consumer – media where on the surface a reader's negotiated or oppositional reading of a text appears to have little effect on the text itself, which on the whole retains a fixed shape –, some theorists claim that in hypertext the degree of cooperation from the reader directly changes the text they see, often in fundamental ways.

A central link not followed may close off whole portions of the text, while a peripheral link visited may lead the reader to multitudes of other, only loosely associated documents, and may shift attention away from the original text. Bolter likens this practice of hypertextual reading to using an encyclopedia:

> readers themselves participate in the organisation of the encyclopedia. They are not limited to the references created by the editors, since at any point in any article they can initiate a search for a word or phrase that takes them to another article. They might also make their own explicit references (hypertextual links) for their own purposes ... . It is always a short step from electronic reading to electronic writing, from determining the texts to altering their structure.

(*Writing Space* 95)

However, this comparison with a standard genre of print, the encyclopedia, already throws into question the extent to which such observations are indeed unique to hypertextual media. Once again, perhaps, hypertext theory is thus dazzled by the ease with which *certain* links can be followed, and with which *certain* intertextual connections can be activated in this way, while failing to realise the significant limitations that are introduced by focussing *only* on this hyperlinked subset of all intertextual links.

Nonetheless, such observations of how hypertexts are read are frequently used to support discussions of the changing roles of readers and authors. So, Mitra and Cohen believe that the

> changing role of the reader calls into question the responsibilities of
> the author. The author is expected to give the reader the potential to
> transcend the role of passive reader to an active reauthor of the text
> as he or she follows and explores the links offered by the primary
> author. ... The reader now has the responsibility of collaborating with
> the author, or undermining the author, to reauthor the text to produce
> the customised meaning. (187)

While the methodology and extent of such intrusions may differ across various hypertext systems, in general this opportunity is seen as limiting authorial control over published texts – Bolter writes, for example, that "the text becomes a contested ground between author and reader" (*Writing Space* 199; cf. Snyder 17, 79). When anyone can add their own comments and ideas to a discourse, writers do not speak from an inherent position of authority, and in addition in most hypertext systems "there is not now and will not be an authoritative metalevel from which discussion and dialogue can be surveyed and legislated", as Kolb claims (18). However, the argument appears to contradict itself at this point: at the same time, can the reader gain the potential for reauthoring texts, while authors gain the power to enable readers to engage in such reauthoring in the first place? Far from a death of the

author in this new textual environment, as some hypertext theorists are claiming it, does this dependence of the reader on the author for a chance at reauthoring not serve to place authors in the very position 'from which discussion and dialogue can be surveyed and legislated'?

Perhaps the debate itself is pointless: the author of hypertext is no more and no less 'dead' than that of any other textual form. Conversely, recipients of all media texts are already always actively engaged to some extent, and in many cases their active involvement transcends a status as 'reader' or 'consumer' to the point where they become what in Web terminology we may simply call *user*. Hypertext theory is carried away by its own rhetoric once more if it claims that in comparison to 'traditional' text these users have gained "a new sense of dialogic identity, created by the sense of being perpetually in dialogue with other texts and other writers", as Snyder writes (79): readers are in this position in other textual forms, too, and hypertext's only additional contribution may be to help accentuate this sense, and accelerate the dialogic exchange between texts, and between their users. Certainly, it "consists of many virtual texts which may be the work of different writers" (Snyder 17), and which are activated in the act of reading – but this is no less the case in non-digital, non-hypertext forms of text.

As Bolter adds, "an electronic text permits the reader to share in the dynamic process of writing. The text is realised by the reader in the act of reading. ... The reader calls forth his or her own text out of the network, and each such text belongs to one reader and one particular act of reading" (*Writing Space* 5-6). Given the *caveats* we have found necessary to attach to similar such claims for the newfound advantages of hypertext over 'traditional' text, it may be prudent once more to ask if this celebration of the 'dynamic process of writing' in the hypertext medium – a process which is actually little different from other forms of text, save for the tools used – does not in fact obscure some disadvantages introduced by the focus *only* on what the tools for writing hypertext provide for.

'Ideal' Hypertext

The fifth and final move common to much early hypertext theory is the postulation of criteria for 'ideal' hypertext systems. By and large this encapsulates the various points made already: such hypertexts are seen as non-hierarchical, highly intertextual – that is, more so and more easily so than 'traditional' text –, non- or multilinear in their organisation of information, and opposed to what are seen as traditional author-reader dichotomies. Many, if not all, of these characteristics are founded on the operation of the hyperlink, as we have seen, and so in postulating 'ideal' hypertexts theorists tend to sketch ways to extend the range of potential hyperlinkage as far as possible.

Support for multi-authoriality in particular is seen as creating the opportunity for constant expansion of the hypertext, as well as for the interjection of new texts to create new links and debates between existing elements, and many 'ideal' hypertext suggestions therefore contain mechanisms which allow users to add their own content and comments, from personal or public annotations of existing texts to their own hypertextual documents. This links back all the way to Vannevar Bush's vision of the 'memex', for which "the process of tying two items together is the important thing", "the essential feature" (n. pag.), and which also includes a feature for inserting one's own observations into the network of what we may now call hypertexts. This is seen as an important departure from traditional media of publication, where the creation of permanent public commentary, while possible, might be rather more difficult to achieve (e.g. Barrett, Introduction xvi).

In this view the opportunity for the user to add their own public comments and annotations to a text would also be a further move towards multi-linearity, as it would branch monographic texts into multi-vocal palimpsests of texts, links, notes, and commentary; as Landow describes it, such a "hypertext blurs the boundaries between reader and writer" (*Hypertext* 5). This kind of 'muscular' hypertext, as

Barrett calls it, would possibly return to a more conversational mode, with layer upon layer of comments added to an original document. This

> most supple hypertext, therefore, would be one that does more than provide mere navigational guides through an already chartered database of text-objects with some minor reconfigurations of content possible. A true hypertext ... would not necessarily imply a conceptual level already ingrained by the programmer because this sort of structure preserves authorial imperatives and may permit only facile shifting of conceptual blocks ... . Instead, a muscular hypertext, an active system rather than a passive one, would support the social construction of meaning that characterises understanding and communication in the larger world beyond the computer screen. Real objects, intellectual and affective orderings of meaning in the individual and the group, supplant the miniaturism of mere object-oriented programming through a system that facilitates the creation, annotation, and exchange of new 'texts' within the community of users. (Barrett, Introduction xiii-iv)

Similarly, the addition and modification of hypertextual links by users, independent of associations predetermined by the author of a document, would be made possible by such ideal hypertexts, thus achieving another of the (as we have seen, not necessarily sound) goals which hypertext theory has set for itself:

> the transformed position of the reader or the user ... is possible only if the user has the true ability to move completely about the material in paths that have not been determined prior to the user's journey. ... The technology might, indeed, automatically create links between terms or phrases, creating the 'text of all texts.' For example, the selection of one term or phrase will call up for the user all other instances of that term or phrase. In a crude fashion, this is what Internet search engines presently accomplish. A more sophisticated approach might be a knowledge-based system that would intelligently 'learn' to create links to documents based on patterns of user actions. Thus, links could be based on the association of ideas rather than the identification of identical terms. (Jackson, n. pag.)

This is hardly an improvement over 'traditional' text, though – rather, from Barrett's and Jackson's own descriptions this seems like hypertext's attempt to overcome the limitations introduced in the first place in the digitisation of information and information systems, and to catch up with what is already possible in the world of non-digital texts.

And even if hypertext's ambitions are thus reduced from surpassing print to equalling its uses, general, network-wide mechanisms for such user annotation or automatic interlinkage may well remain unfeasible for a hypertext with the global scale of the World Wide Web. Only within individual, community-based pockets of the Web have Webchat, edited resource and links collections, and similar facilities already gone some way towards achieving this ideal. We will see some such sites in the case studies in Chapter 4 – but the aim of these case studies is not to uphold the probably unachievable 'ideal' which Barrett and others have created; a study based on such theory would inevitably have to conclude that existing Websites are far removed from these abstract postulations. Rather, the case studies analyse the actual implications of Resource Centre Sites in the context of the Web, not of an 'ideal' hypertext.

In all, in accounts of 'ideal' hypertexts linking and annotation are believed to "actualise intertextuality to the point of eradicating all the boundaries and divisions between texts" (as well as between authors and readers), as Nunberg writes ("Farewell" 106); on a larger scale, the limits to the hypertext as such also disappear: "the extent of hypertext is unknowable because it lacks clear boundaries and is often multi-authored" (Snyder 19). While hypertext's structures may make this observation even more inescapable than before, however, this is true of all forms of text, of course. Once again, therefore, positing annotation and linking facilities as a significant change from 'traditional' text overstates hypertext's case. To summarise, *all* texts already contain within themselves non-hierarchical *as well as* hierarchical potential, they are *already* inherently intertextual in nature, can

always be read in a non- or multilinear fashion, and *never* manage to create a strict division between authors and readers.

Hypertext may accentuate some of these features, and may accelerate the operation of some of the processes of intertextuality, for example, but it does so at a price: where certain interlinkages are strengthened through the operation of hyperlinks, this may serve to weaken and obscure other intertextual linkages and to place the creator of these links in a role of increased importance. *These* consequences, not the supposed improvements of 'ideal' hypertext over 'traditional' text, are what need to be investigated when we move to a study of the Resource Centre Site genre, as they might have a direct effect on the ways in which such sites are able to set communicative agendas, privilege or silence particular information, and give rise to specific structures of power amongst their editors and users.

Studying the Web

If hypertext is therefore different from other textual forms not in its fundamental nature, but in the explicitness and immediacy of some of its textual interplay, as a result of the electronically interlinked nature of hypertext, then this points to the fact that the shape of the network, the actual technical implementation of the hypertext system that is being used, will play a crucial role here. This already emerges from the turn to the effort of overcoming the technological limitations introduced in the digitisation of information, as we have observed it in statements by Barrett and Jackson above. We must therefore study the Web as it exists in practice rather than focus on hypertext theory as a more or less appropriate abstraction from that practice; through this study we will be able to describe the specific environment from which the genre of Resource Centre Sites has emerged.

The technological setup of a hypertext system can privilege a more active engagement with or response to existing hypertext documents – systems which allow for a direct annotation of texts, for example, would go further to remove a

distinction of authors from readers than systems in which commentary must be placed on separate pages which cannot be directly attached to the original text. Thus, beyond reader and writer "there is a third player in this game, the electronic space itself. The computer is always doubling the author for the reader, just as it doubles the reader for the author, interpreting and misinterpreting each to the other" (Bolter, *Writing Space* 199). In this process, while hypertext may undermine textual conventions from print and other media, changing the range of possible forms of engagement that is available to the user by adding the potential for new uses, strengthening some old structures and weakening others, at the same time it also gives rise to a potential for the formation of new conventions, many of which are inscribed into the technology used to create the hypertextual network.

With this in mind, it is easy to see the Web as not simply structureless network *or* structured hierarchy, but able to be both depending on the specific use made of it, in specific contexts. The Web text can be unstructured in its laterality and its almost random connections; however, at the same time Web technology with its preference for existing links over newly-forged ones makes it easier to follow pre-existing tracings at least for brief distances rather than to search for one's own untrodden paths across the network. Similarly, the predominance of search engines and Web indices demonstrates the presence of models for hierarchical organisation – one of the most prominent Web index sites, Yahoo!, possibly takes its name from the description as "Yet Another *Hierarchical* Officious Oracle" (Yahoo!, n. pag.; my emphasis) –, although Web users are not required to use such organising sites, of course. They will most likely find some degree of prepared organisation useful, however: the Resource Centre Site genre introduced in Chapter 3 depends on this, as we will see.

In technical terms, then, the Web is both an associative browseable hypertext system and a hierarchical searchable knowledge base; indeed, both concepts "are two ranges on the same spectrum. Both deal with structuring information, and both have ways of traversing the structure. Knowledge systems focus on structuring

small bits and automating the structure traversal. ... Hypermedia focusses on larger pieces, the structure typically is handcrafted, and the traversal typically is done manually by the user, browsing through the knowledge space. Each of these extreme views misses important characteristics of the other" (Tennant & Heilmeier 139).

In their engagement with the network users activate these structures, depending on their specific contexts of use. Therefore, Tennant & Heilmeier suggest that

> where possible, hypermedia systems should rely on automatic indexing, automatic linking, and inference. At the same time, it would be a great mistake to consider only small-grain knowledge systems and ignore the vast amounts of electronic material becoming available as unstructured text, graphics, video, and so on. The important consideration is not knowledge systems or hypermedia systems, but combining the benefits of these two approaches to structured information and knowledge (139-40)

– and indeed the Web can be seen as such a combination: it *is* the knowledge space mentioned above, and provides the field on which hypertextual and/or knowledge-systematic structures can be superimposed by the individual user with the help of intelligent automatic navigational aids, but without significantly and permanently affecting that knowledge space itself. The two sides can also be seen as manifestations of what Mackenzie describes as the 'real-time drive', a desire for real-time interactive engagement with found information which works relatively associatively, and the 'archive drive', which "supports a quasi-spatial experience of the virtual as terrain or a site in which space is organised by chains of images and signifiers through which subjects take up contingent and shifting positions of identification. The virtualisation of culture according to such organising chains is marked by a remarkable growth in indexes (many home pages, for instance, principally consist of a series of pointers to other places in the archive)" (62). We will investigate the significance of these drives for Web usage in more detail later.

To some extent, the different possible uses of the Web as knowledge or hypermedia system can also be seen in the different technologies used to enable them: while 'plain' HTML, true to its origins as a *hypertext* mark-up language, tends to be supportive more of hypertextual associations, additional tools such as CGI scripts, Javascript, or Java applets frequently are used to create knowledge system structures – while at the same time both sides are relying on each other to realise their full potential. There is also some danger in this distribution of tasks, however: should the uses of these tools, and the skills necessary for applying them, grow apart at some point, the Web might eventually fragment into a 'simple' and an 'advanced' side, a sprawling field of associatively linked Web pages and a structured array of highly specialised knowledge systems.

The two approaches also configure authorship in different ways. Hierarchical knowledge systems attempt to maintain a position of authority from which their texts can speak, since the perception of knowledge *as* knowledge (rather than 'mere information') by a reader depends in part on the recognition of the author as an authority in the field. On the other hand, associative hypermedia systems cannot (and do not usually attempt to) achieve this form of authority because their very aim is to leave knowledge formation up to the reader based on their more or less unstructured (but at any rate *not* pre-structured) traversal of the information space.

Once again, however, the two systems are merely two hypothetical extremes, and in reality systems are situated at some point on a continuum between them. Thus, various implementations of organised hypertext systems on the Web have introduced mechanisms which aim to police and enforce authorial rights and responsibilities, and especially also to maintain content quality and address 'content decency' and copyright infringements – in many cases, on the other hand, such system administrators and Webmasters are mainly introduced as a reaction to existing administrative or legal obligations, and their effectiveness in policing the hypertext structure decreases proportionally with an increase in the size of the network they are responsible for.

In the absence of any overall content organisation mechanisms, the Web on the whole should be classed here as closer to an associative hypermedia system, with several local knowledge systems existing within its overall structure (in part, Resource Centre Sites can be used as such local knowledge systems). *Overall*, efforts to retain 'authority' amongst the general hypertext user community therefore remain largely ineffective: usually (and certainly in the case of the World Wide Web), anyone interested to add their voice to the hypertext can do so in one way or another. This is done with varying degrees of invested effort and technical sophistication, however, and so *in particular fields of knowledge* positions of authority clearly do emerge. The author of hypertext is not dead after all, then – they live on where they can demonstrate their specific knowledge. Once again, it is questionable if this constitutes a significant departure from what we may observe in other forms of text, but it does have clear implications for the roles played by the editors and users of RCSs.

Just Another Medium after All

The Web is not the 'ideal' hypertext envisioned by Barrett and others, then, and as such does not constitute a radical change from the textuality of other forms of text. Whatever effects we might imagine the arrival of 'ideal' hypertext to have on print and other textual forms, it is unlikely that the Web as merely another writing technology would share them all. The very juxtaposition of print and hypertext may be nothing more than a straw figure set up by the more enthusiastic advocates of either form of text. Similarly, comparisons of the quality of content of new with that of established media are hardly sound: "of course the Web often looks crude. But when one recalls that it took hundred years after the appearance of the printed book to invent the title page, one realises it doesn't seem that bad" (Landow, "Twenty Minutes" 230).

A common corollary to the criticism of the quality of Web content is the postulation that the new medium be used exclusively for the advancement of human thought and culture towards an assumed objectively definable ideal goal. Talbott provides a particularly strong example of such reasoning: in electronic communication, he asks, "are *our* ideals being realised? It is hard to imagine any truly human aspiration whose fulfilment 'just happens.' Surely every ideal worthy of the name can be realised only through some sort of *conscious struggle and achievement*. Ideals arise in thought – our very highest, morally fervent thought – and thereby become goals towards which we can strive creatively. Only a machine realises its aims automatically, and therefore its aims are not ideals" (3). This would require a universal agreement on just who 'we' are, in the first place, as well as what our ideals are, and on what we see as worthy and morally sound – and in its homogenising approach seems fundamentally opposed to the pluralistic nature of modern society: Talbott's criticism thus seems to attack the messenger (electronic communication) for the postmodernist message. In its very structure, hypertext, too, is well suited to facilitate the expression and dialogue of multiple viewpoints regardless of social standing or other parameters linked to the societal positioning of the proponents, so that to appeal to a set of 'higher ideals' (even if they are 'ours') means nothing short of closing down that dialogue in favour of previously established moral norms.

At the same time, such a distinction of uses of electronic communication into 'good' and 'bad' applications, into uses realising 'our' ideals and those contravening them, also presupposes that both uses are mutually exclusive. Talbott describes what he sees as

> *the paradox of intelligence and pathology*. The Net: an instrument of rationalisation erected upon an inconceivably complex foundation of computerised logic – an inexhaustible fount of lucid 'emergent order.' Or, the Net: madhouse, bizarre Underground, scene of flame wars and psychopathological acting out, universal red-light district.

> ... The Net: a nearly infinite repository of human experience converted into *objective* data and information – a universal database supporting all future advances in knowledge and economic productivity. Or, the Net: perfected gossip mill; means for spreading rumours with lightning rapidity; ... ocean of dubious information.
>
> (348-9; emphasis in original)

This is a paradox only if one form of usage would somehow invalidate or rule out the other, if the playful or unproductive uses would waste space which would better have been allocated for serious applications aiming to 'advance' human existence. Apart from the fact that this distinction would once again require an objective definition of what counts as 'good' and 'bad' use, this description also overlooks the virtually limitless expandability of hypertextual space, in which the addition of any amount of 'dubious information' does not exhaust hypertext's capacity as a 'repository of human experience'. (Perhaps we do not even need to go this far to discount this criticism: paper-based print, after all, also supports anything from porn to 'high' literature, without *the medium itself* usually being attacked for it.) Similarly, any user of hypertext may use the medium for any variety of purposes, serious as well as playful – this is a clear demonstration of the fact that hypertext (or more precisely, that the specific implementation of hypertextual principles that is the Web) is a carrier medium (much like paper, air waves, or the telephone), whose inherent characteristics may structure possible uses, but do not completely predetermine them.

Collaborative Uses of the Web

The variety of uses which are possible for the Web is further widened by the Web user's ability to alter the Web (or at the very least their perception of it) and add to the network of interlinkages available to them. On the simplest level, a user's ability to store their own 'bookmarks' is already a first step in this direction. Additionally, as Jackson writes, "a second way it is possible to support free

movement is to design a system in which any user may modify any document or create any link between documents" (n. pag.), and the opportunity to create one's own publicly accessible documents or 'homepages' (many of which indeed take the form of simple 'links lists' in their early stages), or, once again, public commentary functions now becoming available in some Websites, might be seen as a very basic implementation of this goal on the Web.

In this, the prospect of the addition of comments to existing texts (and increasingly of commentary on these comments, and so on) need not necessarily be seen as a return, by degrees, to some form of temporal linearity – contrary to the situation in email and on newsgroups, in the absence of a strong temporal structuring force for hypertext documents it may quickly become difficult to discern the temporal linearity which could be used to order user commentary. As with marginal scribblings in a well-used library book, and similar to many other palimpsests, increasing distance to the time of writing may collapse the original layers of a text into one collaborative work: which contributions on whose homepage came earlier can hardly be traced. As we will see with the case study of the Slashdot site, too, such comments may end up being ranked not by the time of their creation, but by the 'usefulness score' users have bestowed on them subsequently. While this does not do away with linear hierarchy altogether, as some theorists may have hoped (and we have already questioned whether this is even possible or desirable in the first place), it offers a choice of alternative hierarchies. Thus, it must be noted that so far "it is not clear how 'immersion' in hypertext will affect the way that we mentally structure our world. Linear argumentation is more a consequence of alphabetic writing than of printed books and it remains to be seen if hypertext presentation will significantly erode this predominant convention for mentally ordering our world" (McKnight *et al.*, *Hypertext* 41).

Whether or not fully-fledged annotation and linkage facilities will ever be introduced in large-scale hypertextual networks such as the WWW, it is already obvious that its nonhierarchical network structure, and its ease of explicit

intertextual linkage along with the potential for non- or multilinearity of information structures that is common to all textual forms but perhaps technically particularly easy to achieve for electronic texts present significant threats to the idea of clearly delineated individual works. As Landow describes it, "at the same time that the individual hypertext lexia has looser, or less determining, bonds to other lexias from the *same work* (to use a terminology that now threatens to become obsolete), it also associates itself with text created by other authors" (*Hypertext* 53).

Hypertextual linkage clearly demonstrates all authors' and texts' contextual setting amidst a particular pre-existing and continuing discipline of thought. In this, hypertextual patterns of information presentation intensify the contact and communication between texts, they make more explicit and immediate some of the intertextual interweaving of texts, dissolving them "into a larger textual structure at a thousand points of contact" (Bolter, *Writing Space* 87) in a pattern of interaction not so dissimilar to email or newsgroup conversations where frequently responses are also not simply appended to a quoted message, but interspersed between individual quoted lines. The analogy is telling, as such dialogue between texts occurs in non-hypertextual settings, too, of course – but hypertext accelerates the exchange, and provides new opportunities for its conduct (while, as we have noted already, also privileging certain linkages over others, introducing a number of new complications in turn). Hypertextual responses may link to individual segments or 'lexias' of an existing hypertextual document, and then go on to offer very precisely targetted individual points of commentary.

There is "no reason not to include disparate materials in one electronic network. The writer or editor need not envision and address only one homogeneous readership" (Bolter, *Writing Space* 7), and additionally, in the act of reading hypertext users also assume some degree of co-authorship through their choice of links to follow (which in itself is not yet a significant change from reading print or other textual forms), as they might do further when they also add links and commentary to a text in more or less clearly visible ways. This emphasises Barrett's

point that hypertext is "a paradigm for the social construction of meaning or alternate 'texts.' The highly touted *non-linearity* of hypertext should be taken in its most complete sense: an a-cyclic, asynchronous sharing of language around central topics of concern – a communicative function for the creation of new texts, new scripts for the understanding of the individual and the group" (Introduction xiii-iv).

Ultimately, hypertext authors might do well to anticipate this creation of new texts from their work, and to provide direct opportunity for user involvement – this way, they would indeed become editors rather than writers of their hypertexts. Centrally, this also involves the acknowledgment of and provision for conflicting voices, which might be presented in direct contrast to the text: as, with any hypertext of sufficient size, dissenting voices will exist somewhere on the network in any way, as the interlinked nature of the network removes any objective sense of distance between such locations, and as furthermore the choice of path through the network and the acceptance or rejection of any expressed opinion is up to the user, authors can no longer hope to gain any argumentative capital by ignoring and excluding their opposition, but may receive some reader sympathy and respect for providing direct and unbiased references to alternative points of view.

Stripped to some degree of the persuasive power of author-ity, therefore, writers, while arguing for one side, might only be able to regain some personal authority by also taking on the role of moderator of the debate they have contributed to. Thus, "the programming structures underlying, indeed, giving rise to the hypertext merely support the larger *hyper-context* of social construction: a matrix of knowledgeable peers defining what they think through the medium of language" (Barrett, Introduction xvi). Once again, it is necessary here to rein in any overly exuberant rhetoric, however – while the 'matrix of peers' existed well before the emergence of hypertextual media, the main contribution of these media is to provide a technological basis for it and help accelerate the exchange of opinions between those of the contributors to this debate who are able to access the medium. Just what this technological basis is, how it operates, and what effects it has on the conduct of

debates certainly is a question of crucial importance, however. That question is precisely the reason why Resource Centre Sites as a genre of public information and discussion need to be studied, since the software packages used to create RCSs are a very distinctive constituent of that technological basis.

Talbott sees a negative side to this trend towards networking the debates: "what becomes of the activist's differential advantage – his [*sic*] special leverage – when the political process has fully adapted itself to networked communication and *all* campaigns are Net campaigns? Will the individual citizen then find it easier to affect the political process, or will the sheer, inundative bulk and sophistication of machine-assisted, well-financed activism put politics even more out of reach than the TV-driven juggernauts of our own day?" (49). Indeed it is true that a free, unbiased expression of all sides of a debate will also enable the expression of disruptive, negative, 'bad' ideas – however, it is immediately clear that what constitutes 'good' and 'bad' causes is affected by the dominant societal ideologies of the day, and that maintaining a 'differential advantage' for whatever activist causes we may support would ultimately mean limiting their opponents' freedom of expression. Again, to attack the hypertext medium for its making possible of that expression means shooting the messenger for delivering the message – not the medium, but the communities which use it decide which campaigns deserve success, and more so in the case of hypertext with its inherent non-hierarchical structure than in that of many previous media.

Virtual and Other Communities

Generally, global electronic media appear to help communities of users to emerge, thrive, and multiply. McLuhan & Powers envisaged that "culture becomes organised like an electric circuit: each point in the net is as central as the next" (92); and in a hypertextual environment where the physical scarcity of traditional carrier media no longer exists to enforce a strict rationing of transmission space,

communities can exist alongside and independent of one another. As Smith adds,
then, such networks "make possible a denser, more intense interaction between
members of communities who share common cultural characteristics … ; and this
fact enables us to understand why in recent years we have been witnessing the re-
emergence of submerged ethnic communities" ("Towards" 175) as well as the re-
emergence and creation of communities founded around other factors such as shared
tastes and other attributes of personal identity. Indeed, the widespread currency
gained by the very term 'virtual community' over the past decade demonstrates this
development.

Communities, then ('virtual' or otherwise), are groups of people identified
through their sharing of certain characteristics: tastes, attitudes, beliefs, and
ideologies which community members have chosen voluntarily (as in the case of fan
communities, for example), or ethnic, socioeconomic, geographic, and personal
attributes which they have chosen to accept as significant markers of their identity
(simple examples here include regional communities, unions, or self-help groups for
disease sufferers). Clearly, combinations of these also exist – for example in the
case of local branches of fan communities.

Although it is of course common for such communities to be described from the
outside, through the identification of more or less clearly visible characteristics (of
skin colour, language, place of residence, etc.) by the researcher, studies of
community interaction are more likely to succeed where they do not attempt to
impose the status of 'community' on a given group of people, but rather focus on
groups where members *identify themselves* as belonging to the community (or a
number of communities catering for different aspects of their lives). This approach
studies what with Benedict Anderson we might call 'imagined communities':
communities which members can join by virtue of living up to what they themselves
perceive to be the membership requirements. This is what John Hartley describes as
Do-It-Yourself citizenship: "the practice of putting together an identity from the
available choices, patterns and opportunities on offer in the semiosphere and the

mediasphere. … DIY citizenship is a choice people can make for themselves. Further, they can change a given identity, or move in and out of a repertoire of identities. … How do you learn this difficult trick of 'suiting yourself', as it were, while remaining locked in to various actual and virtual, social and semiotic communities?" (178). Hartley suggests that "television audienceship provides the training ground" (178), but as we will see such training now also increasingly occurs in DIY citizens' engagement with the Internet.

Within communities, then, certain rules and structures exist which govern community life. These are closely related to the community's shared defining characteristics – members of a given community, in other words, must share its accepted beliefs, express its communal values, or fulfil the personal criteria required for community membership in order to be able to count themselves as community members. Differences in the extent or the strength of their adherence to such rules also give rise to structures of power distribution amongst community members: those members seen to be most closely following the community rules also become most central to the community, commanding more respect and influence than less 'dedicated' members.

In the case of mediated communities as much as in face-to-face groups, active participation in the community also plays an important role: so, as Rheingold describes it for Usenet communities, "in many newsgroups, a crowd of regulars emerges … . Well-known cultures of very different kinds have grown up in different newsgroups. Over time, the ongoing conversations often create communities among the regulars" (n. pag.). Online, these regulars – or Netizens, as Michael and Rhonda Hauben have called them – are usually also those community members with the best access to up-to-date information, and often also provide their own informational and archival resource Websites.

Drive Time on the Web

As we approach a discussion of how the Web is indeed used in practice, Mackenzie's theory of 'real-time' and 'archive' drives, briefly introduced already, becomes particularly useful. If, as noted before, the temporal linearity of information structures in the hypertextual network is able to be replaced with other forms of linearity (or even non- and multi-linearity), then temporal structuring occurs mainly in the process of receiving and using information found on the Web, as part of what Mackenzie calls the 'real-time drive': "real-time links the perception of the image and sound to the trigger of individual action. Image, text and sound are no longer the one-way transmissions of a broadcast media machine. Real-time interactive processing opens the possibility of an interlacing between perception and action which appears to overcome the dislocating intervals between perception and action associated with earlier image media" (61).

It is necessary, therefore, that content providers in hypertext media directly engage users as active participants, and that (since the strict distinction between producer and consumer has now given way to a much weaker difference amongst users, measured by degrees of more or less active participation) content providers also engage and network with one another to a significant degree. "In fact", Jackson writes, "current advice widely given to people designing their own Web sites is that they continually change their information so that people will want to revisit, or that they form alliances with other site owners and agree to link to one another in 'web rings.' Other empire building techniques undoubtedly will continue to surface" (n. pag.).

Largely, this emphasis on a continual update of content is also due to the immediacy of networked information itself: the instant availability of any piece of information from any of the increasing multitude of sources creates immense competitive pressure on content providers to publish that information in the quickest, most usefully organised, and most aesthetically appealing way possible. This is another manifestation of Mackenzie's 'real-time drive', and creates a thrill of connectedness for the user (and a corresponding feeling of deep disappointment

when a site fails to deliver on its promises, or when frequent and regular updates unexpectedly cease): "what real-time provides is an experience of now. In relation to this experience of simultaneity, delay represents an unwarranted intrusion of merely technological limitations on the processes of culture" (60).

A significant additional effect of this drive is the potential to introduce fundamental changes to the modes of operation of existing information providers: as the real-time immediacy of information available on demand at any given point and on any given topic is a central advantage of networked hypertextual media over broadcast media (which can only anticipate recipients' demands, but offer no direct responses to them) and print (which fixes information in time, and for practical reasons cannot be updated with the frequency of electronic media), and as it is this feature which mainly creates a desire amongst users to return to hypertext documents frequently (which is, of course, highly important from a commercial content provider's perspective), content providers need to find ways to generate regularly publishable updates on their current work – depending on their field of operation, this may mean progress reports and previews of current projects, announcements of new initiatives, and possibly even collections of major rumours in their area, as well as (due to the networked and cooperative nature of the hypertext medium) feedback and responses to user comments and to statements in the hypertext sites of other competitors.

For many hypertext content providers, this is a major and not entirely welcome shift in operations, which requires a degree of operative transparency far greater than ever before; it underlines that creating a hypertextual presence means nothing less than *becoming a publisher*, no matter which field the content provider operates in by trade, and that publishing itself is now a bidirectional form of communication, rather than following the previous, largely unidirectional model of press releases and public announcements. As Ho describes it, for example, in 1996 the Web marketing approach taken was

by and large conventional: product news, catalogs and portfolios,
previews and samples, special offers and discounts, contests and
sweepstakes. There is one crucial difference though. Instead of an
'in-your-face' deluge of TV commercials and junk mail advertising,
the consumers have better control over what they are exposed to.
This 'Don't call us, we'll call you' mindset can change the rules of
the game in marketing substantially. (n. pag.)

This new and increased degree of public accountability and answerability is
likely to be unwanted for many institutions, but the networked and uncontrollable
structure of hypertext also leaves them little alternative choice other than to avoid
the medium altogether: any information made public at some point will be subject to
reconstruction, reappropriation, and reconfiguration, or generally to scrutiny and
commentary, by the other users of the network, and cannot be reclaimed and re-
controlled by its originator any more. Any such attempt to withdraw published
information would in fact be regarded as disruptive and destructive in a networked
context: this is the outcome of a second, 'archive' drive which complements the
'real-time drive', as Mackenzie describes it – "the ever growing totality of
inscriptions that weave the text of the Internet networks, with its mass storage and
data-warehousing systems, are the product of the archive drive. While real-time
produces the temporal 'here and now' of virtual culture, the archive drive produces
a locational 'there' composed of texts, images, indexes and records" (61).

This is another aspect of the computer-mediated, networked, flat-structured,
multi-linear, non-preprogrammed 'pull' medium of hypertext: as much as there is a
drive for all information to be kept up to date, there is also a strong demand for
older information to be kept available, to remain part of the network – at the same
time, and at any one time, therefore, the hypertextual network of information is both
syn- and diachronic in nature. (It is different in this from other electronic networks,
for example those used in terrestrial or cable broadcast, which serve the real-time
drive but must for archival purposes fall back on external devices such as VCRs.)
Thus, "the virtual culture of information is characterised as an interaction between

two different socio-technical drives and processes – the archive and real-time drives" (Mackenzie 59). For commercial operators and other content providers in the public eye, this is a further cause for concern and discomfort: not only does the real-time drive force them to publish news, updates, and activity reports almost constantly, the archive drive means that they will be held to their previous statements since these remain a matter of public record.

We might also expand Mackenzie's concepts by adding a third crucial drive evident in a large-scale hypertext system when it is interlinked with the overall communication facilities of many-to-many digital media (as is the case with the Web as part of the overall Internet): the *interactive drive* completes the picture by creating an immediate link between the (real-time and archive) *uses* of hypertext and the further public communication and interaction between hypertext *users* (both 'producers' and 'consumers', in commercial language) which is informed by the outcomes of their hypertext use. (The trading of links between hypertext sites should also be seen as one form of this interaction, incidentally.)

Commercial Approaches to the Medium

Due to such marked structural differences, therefore, hypertext, hypermedia, and "multimedia [are] a strange phenomenon for the world's media organisations to grapple with. On one hand it appears to be simply a new and potentially highly efficient means of repackaging and distributing existing media such as print, radio and television. On the other it can be viewed as a radically new media form with fundamentally different creative and narrative demands from those of previous ... media" (Griffith 49-50). Even a simple repackaging of existing content, which might pay only lip-service to the particular characteristics of the new medium, cannot ultimately escape their effects. It has already been noted that "although hypertext differs significantly from printed text in its 'arbitrary' structure, it shares many similarities for the reader. Hypertexts, despite their node and link structure,

are still composed of units of text and there is no reason to believe that, at the paragraph level at least, these are read any differently from units of conventional paper or other electronic text" (McKnight *et al.*, *Hypertext* 38).

But more so than in the traditional 'push' broadcast media like TV and radio, the self-determined traversal of the hypertextual information space becomes a central part of the act of reading, and indeed, the removal of a strong direction of information 'push' from author to reader – or, in commercial terms, from producer to consumer – puts the author in a position of also having to engage with increasing amounts of responses from their audience. Both have become (and are now frequently referred to as) *users*, with the full shift in communicative paradigms that this term entails.

Statements that "as a marketing and advertising medium, the Web has the potential to change radically the way firms do business with their customers by blending together publishing, real-time communication broadcast and narrowcast" (Hoffman *et al.* n. pag.) are thus 'right on the money', but not for the reasons suggested by Hoffman *et al*. Hypertextual media like the Web will not bring about radical changes simply because they mix modes of print and audiovisual publication for audiences of various sizes, but because they collapse publishers and audience, producers and consumers, into what is initially a highly heterogeneous and uneasy community of hypertext users, each with their own individual aims and interests, skills and contributions, but feeding off each other, cooperating, commenting or contesting, for better or for worse. As they move online, traditional content receivers – consumers – are increasingly restless and dissatisfied with material which precludes their active engagement, and an alteration to their specific needs, while traditional content producers are struggling to react to and anticipate such needs and demands, and thus to relinquish their privileged authorial position. Thus, Goldman-Segall asks, "*how do we take existing linear streams of any media, chunk them up into pieces, and then put them back together again? Well, first of all, we don't ever put them back as they were. We build our own versions of what came*

before. ... The making of 'texts' is a reconstruction of other texts that takes into account the effect of those texts upon our interpretive and creative process" (29) – and in a hypertextual context it would do well to also allow for further reconstruction, reappropriation, and reconfiguration immediately upon reception.

Thus, "the key difference with the integration of the Internet as a new media form into the mix of previous media is that it presents some central challenges to the organisation of cultural production" (Marshall *et al.* 64). Centrally, the Net (and thus, the Web) is open to anyone with the technological prerequisites, and thus importantly "it is not content that is driving the Web, it is the ease of publication (this is why there are so many complaints about the amount of 'noise' on the Web); this is probably analogous to the invention of affordable pen and paper, not the printing press" (Miles 73). Additionally, this comparative ease of entry into the network has also made it an increasingly global network that is widely used at least throughout the Western and industrialised world. Certain obvious limitations to its globality still exist, however; these are mainly due to local economic and infrastructural (and in a number of cases, such as China, political) problems, but even in the wake of severe new anti-terrorism legislations they are notably not linked to artificial access restrictions imposed by a *central* controlling agency. Where institutions or individuals exert power on the Internet, they usually do so in much more subtle, non-coercive and decentralised ways.

Indeed, there exists no central authoritative position; as Enzensberger showed already in 1974, it cannot exist: "it can be demonstrated that a linked series of communications or, to use the technical term, a switchable network, to the degree that it exceeds a certain critical size, can no longer be centrally controlled but only dealt with statistically. This basic 'leakiness' of stochastic systems admittedly allows the calculation of probabilities based on sampling and extrapolations; but blanket supervision would demand a monitor bigger than the system itself" (64). Beyond such 'stochastic' policing as provided by the various national and international laws and treaties governing communication, there are therefore no

strict universal laws of cyberspace; the network of machines which constitutes the Internet and supports the various media forms transmitted through it is collaboratively policed according to commonsensical parameters by its network of users, in ways appropriate to the region of the Net they find themselves in. In some areas, however, such 'appropriate' ways might also include measures which are generally regarded as unpleasant and aggressive, such as flame wars and technological attacks (for example, hacking). Nonetheless, for all their undemocratic and anarchic nature, such policing measures have so far managed to keep the Net operative. We will see some such policing mechanisms in action when we come to the Resource Centre Site case studies in Chapter 4.

The comparative ease of access and the increasing availability of cheap or even free resources on the Net, combined with the lack of central supervision and the decentred network structure's ability to divide into an unlimited number of sub-networks, also create a virtually unlimited amount of space for individual expression. By analogy, while studio facilities may vary, the same frequency carries all signals; this is therefore contrary to media which transmit through airwaves, where frequency bands must be permanently assigned to particular content providers as radio and television channels. As long as information is stored on a machine connected to the Net, therefore, it will be available to Internet users anywhere, at any time. In this Internet publication exceeds even print: it shares with print the increasing cheapness of storage (that is, of printing) facilities which is largely a product of the increased use of computers, but print has not solved the problem of cheap and instant global distribution. Bolter notes that this is not an altogether positive development: "the chaos of publication and communication in the late age of print will continue. The ideal of stability and cultural cohesion will largely disappear. Few will feel the need to assert such cohesion, since even the smallest group of writers and readers can function happily in its niche in the electronic network" (*Writing Space* 238).

In summary, as Levy points out, "certain questions that artists" (and, we might add, content producers generally)

> have been asking since the end of the nineteenth century are being asked once again, with even greater insistence, with the emergence of cyberspace. These conventions directly alter the 'framework': the work and its limits, its presentation, reception, reproduction, distribution, interpretation, and the diverse types of separation that they carry. The framework is so altered that it now appears as if no fence will ever contain this deterritorialisation *in extremis*: we must leap into a new space. It is the socio-technical environment of the proliferation and distribution of works that has engendered the mutation. Yet can we continue to speak of works in cyberspace?
>
> (366)

A comprehensive answer to that question would warrant a chapter of its own at the very least; what is more important for the present discussion are the problems of immediately visible limitations, of boundaries – fundamentally, the *lack* thereof – which Levy points out. As a consequence of the interactive drive, the push on the Web is for collaboration (in the joint creation of sites) and cooperation (between site creators, at the very least through extensive interlinkage, but preferably to much greater extent than that), and so isolated and monolithic 'works' in a traditional sense appear counterintuitive to Web users, and ultimately unsatisfactory. On the other hand, even if collaborative work on the Web does away with such boundaries between individual works or publications, we might still ask what influence the *remaining* divisions between content producers (be they ethnic, social, political, or economic) continue to have. In the case of Resource Centre Sites with their collaborative work towards maintaining and improving the quality of information on such sites, for example, just what is the make-up of the social groups of users working on the sites?

Who Publishes on the Web?

It is easy for Web users to create and make available publicly their own paths

through the information on offer, but a distinct limitation of the Web in comparison

to 'ideal' hypertext becomes apparent here:

> Web-based communication ... primarily is an extension of the
> presentational mode of communication, as in a public speech, a
> television broadcast, a newsletter or an advertisement. Web sites are
> designed primarily to be modified only by persons who 'own' them,
> or in ways sanctioned by their owners (e.g., site visitors may
> contribute to a comment list, add URLs, or participate in chat using
> owner-provided interfaces). These owners plan and deliver the
> communication. (Jackson n. pag.)

There is, in other words, no direct and universally available opportunity for

publicly visible commentary and annotation, unless specifically provided by a

Website's designers. In some ways, the Web is therefore biased towards the content

provider – "once we have it in our hands, the whole of a book is accessible to us

readers. However, in front of an electronic read-only hypertext document we are at

the mercy of the author since we will only be able to activate the links which the

author has provided" (McKnight *et al*., "Authoring" 119). Ironically, however, this

linking and the general accessibility of material in digital form also serves to *limit*

the power of other content providers, as we have seen: "the author is no longer

stabilised within a particular geographic space but is indeed a global and nomadic

author and may combine elements of original text with recycled material 'borrowed'

and digitally appropriated from other authors or simply co-opted by a hypertextual

link" (Mitra & Cohen 197).

While this may not be significantly different from other forms of text, it is

important to note that content providers therefore have only the power to control the

appearance of the individual units – Web pages – of hypertext which they produce;

they cannot influence the use made of these hypertext documents, or the wider context they are placed in by way of links (nor, indeed, further alterations and reappropriations of their material through the saving and manipulation of downloaded pages by individual users). Jackson usefully outlines the extent of content providers' remaining proprietorial powers:

> documents are owned, and whoever owns them may elect to remove them from the Web at any time, or change their location, or their name, creating 'dead links' in other documents that point to them. There is no central repository of material accessible by Web browsers, which means that authors have no way of knowing for certain the other documents to which they might link. There is no signed agreement that owners must make their information accessible to all for all time. It is possible to have a completely self-contained and closed set of documents that might never be accessed because no other documents link to them. Divisions on the Web are identified by the phrase 'Web site,' denoting territory or property. (n. pag.)

Such territorial claims are a shallow victory, however: as Mitra & Cohen note, in the case of print, "if texts disappear from the public domain because of a lack of public interest, that disappearance could be a telling commentary on the text. In the case of the WWW, the disappearance is not a function of the reader's interest in the text but of the author's intention to remove the text from the public domain. ... In the case of the traditional text, the author has little control over that" (191); on the Web, content providers can choose to withdraw texts from circulation – but even here there is no guarantee that texts once published on the Web have not already been saved and reused in unintended ways: copying, altering, and re-distributing other people's material is even easier in a digital medium than the photocopier had already made it for print.

In a similar way, the lack of direct annotation facilities does not undermine the greater tendency to cooperation with and answerability to other users that has already been shown to be a central feature of hypertext. While direct feedback over

the Web may be impossible unless specifically enabled, the close convergence of various forms of communication – email, newsgroup discussion, Internet Relay Chat (IRC), file transfer (ftp), and more recent forms such as Webchat and Internet telephony – means that Websites may still generate unprecedented amounts of direct feedback from users to content providers, as well as of public debate amongst users (which may include representatives of the content provider), as a direct result of the interactive drive.

Additionally, the ease of publication on the Web also introduces fairly unlimited opportunities for users to *become* content providers in their own right and (through self-published commentary) to enter into discourse with other content providers; through the use of links, such indirect annotations might still associate themselves closely with existing Websites even if those sites do not acknowledge them directly. "What hypertext is able to offer, on an everyday basis, is the possibility for people to be writers and readers of non-linear, interactive, digital texts. This is where the new media revolution will occur, in the same way that the history of the book only became fundamentally revolutionary when it was combined not just with universal reading, but with universal literacy. To be able to read *and* write, that is the trick" (Miles 76).

What emerges from this possibility to read *and* write (and, indeed, *publish*) Web content is a strong tendency to make more and more information available online, and thus to increase the usefulness of the medium as a source of information (no matter whether it is used mainly as a hypertext or knowledge system). McLaughlin describes the beginnings of a snowball effect – "the earlier 'land rush' ... to acquire an individual E-mail address has turned into a stampede to set up a storefront, or 'site,' on the Web" (55) – and it might be said generally that the more information comes online, the more there is an impetus for other potential content providers to follow suit; in a further extension of Mackenzie's terminology, we might call this the *publication drive*. This drive should not be seen simply as a fourth element comparable and complementary to the other three drives, however, but rather as the

one fundamental drive of communicative hypertext systems, of which the other three drives describe particular aspects: the real-time drive is the drive for publication of up-to-date, fresh content; the archive drive that for the re-publication and/or continued availability of older material; and the interactive drive is already inextricably linked to the publication drive since *public* computer-mediated interaction inevitably entails publication of the communicative content. As Landow points out, "considered as an information and publication medium, hypertext presents in starkest outline the contrast between availability and accessibility. ... Since hypertext promises to make materials living within a hypertext environment much easier to obtain, it simultaneously threatens to make any not present seem even more distinct and more invisible than absent documents are in the world of print" (*Hypertext* 188).

This works on a variety of scales: on the level of entire disciplines, Bolter expects that "if literature and humanistic scholarship are left in print" – and a brief glance at the range of online publications available certainly shows several disciplines in the Arts severely underrepresented – "while scientific and technical communications move to electronic form, the result would only be the further marginalisation of literature in our culture. For in that case the scientific and literary communities would not share an ideal of publication or a forum for dialogue" ("Ekphrasis" 253) – the literary community would be excluded from a participation in real-time, archive and interactive drives. At the same time, competitors *within* a given field will also feel a need to match one another's online presence, and at the level of Websites, furthermore, they will also find themselves required to compete not just through the existence, but also the extent, frequency, quality, and transparency of information on offer. Finally, a site's usefulness is also determined through the quality of its links, and competition will eventually ensue at this level, too – spurred on by the interactive drive. The more information becomes available, indeed, the greater also the possibility and necessity of interlinkage:

everything that the work of culture has produced until now, especially the documents of culture as such (literary and artistic texts) is to be placed within the linked file and directory structures of the electronic archive. In addition, the archive drive conceives of ever new projects on the basis of their archivability. These are not projects produced for use, consumption or circulation elsewhere and then preserved in the electronic archive, rather they are generated by the referencing and storage structures of the networks themselves. (Mackenzie 61)

This demonstrates once again the confluence of archive drive, interactive drive (which demands the interlinkage), and real-time drive (which demands it to be carried out promptly) in the publication drive. Resource Centre Sites are one such publication project arising from the wealth of information now available in the constantly updated, interlinked, global archive of information that is the Internet, as we shall soon see.

First, however, some further implications of the interactive side of the publication drive must be discussed. We might appropriate the McLuhanite catchphrase that "everyone's a publisher", potentially, on the Web, but this does not mean that distinctions between readers and authors disappear completely – generally, in fact, authors and their publications are more shielded from reader comments in the case of the Web than they are envisaged to be in more 'ideal' hypertext systems. Direct reader input must be specifically enabled by way of complex scripted extensions, or through reliance on other Internet media by providing links to email and newsgroups.

Indirectly, however, readers can publicly engage with authors' works to a substantial degree, by setting up their own Website and offering pages of commentary which link to or through links coopt other writings into the site, without the need for the original authors' permission. "One effect of this kind of linking is to create an intermediate realm between the writer and the reader, thus further blurring the distinction between these roles" (Landow, *Hypertext* 186), and it

serves to limit authorial control over published work. Web audiences, in fact, might even find such sites, which incorporate 'foreign' work from a variety of sources and offer additional commentary and further functionality, more useful than the original sites which such 'repackager' sites draw from – as we will see, Resource Centre Sites are significantly based on this principle.

This repackaging of existing information also helps to address one central problem inherent in the publication drive: that of having available sufficient material suitable for publication. Sites with only a limited amount of original material might prop up their contents by coopting outside sources (in much the same way that in other media forms newspapers and news broadcasters have come to rely on news agencies for material which their own staff cannot supply). For Web users, this overcomes a problem identified by Enzensberger in the mid-70s: "work on the media is possible for an individual only insofar as it remains socially and therefore esthetically irrelevant. ... It has long been clear from apparatus like miniature and 8-mm movie cameras, as well as the tape recorder, which are in actual fact already in the hands of the masses, that the individual, so long as he remains isolated, can become with their help at best an amateur but not a producer" (71).

The Web's solution to this is two-fold: on the one hand, amateur producers can overcome their isolation (and even their status as amateurs) by setting up links with other sites and repackaging their information in ways where these sites remain uninvolved and largely unable to intervene – that is, 'amateur' producers become listed in the same Web directories as these sites, link to these sites, or coopt their contents into their own pages. In this case, the sites from which additional material is being drawn remain passive. On the other hand, however, the Web also allows for overcoming individual isolation by helping to form more active collaboration: on the level of individual contributors, sites can be created by a range of (often geographically dispersed) people, all of whom contribute as best they can – significantly, CountingDown, one of the sites analysed in detail in a case study in Chapter 4, is run in collaboration by movie fans located in Melbourne, Toronto, and

Los Angeles, for example. On a larger scale, too, sites themselves may also cooperate – the cooption of one's material must not necessarily be seen as an unfriendly act of intrusion, after all, but could also lead to greater exposure of one's own site, and so 'ethical' repackaging (with a correct attribution of sources for the material, and including links to the contributing sites) might even be actively encouraged. This, too, is an operating principle of RCSs, as will be shown in Chapter 3. (Some of the sites studied in Chapter 4 even offer ready-made mechanisms for coopting their material, in fact – allowing their users and affiliate sites to use this material in clearly prescribed, ethically sound ways.)

What Happens to Published Material?

This also significantly blurs the boundaries of individual hypertexts. So, "electronic linking has the potential ... radically to redefine the nature of the text, and since this redefinition includes connection of the so-called main text to a host of ancillary ones (that then lose their ancillary-ness), issues of power immediately arise. Who controls access to such materials – the author, the publisher, or the reader?" (Landow, *Hypertext* 186). Legal as well as ethical theory might support the right of a text's author to control its publication format and appearance, and legal cases analogous to those of directors striving to prevent their works from alteration by TV networks wanting to insert commercials could be mounted to prevent outside links directly into the body of a hypertext – Monty Python director Terry Gilliam successfully sued the American ABC network when it cut Python shows in order to be able to run ads, for example (Berkman Center, n. pag.). However, in practice no generally applicable legal or technological means of preventing such intrusions from the outside have emerged. (The analogy with movies or commercial-free TV programmes cut up for TV rebroadcasting is flawed also because here the *transferral* of films from one media form to another opens up the possibility of alteration, while hypertexts are from the outset produced specifically *for* a medium

which includes and encourages the possibility of intrusion through links as a matter of course.)

Therefore, Jackson describes industry desires rather than reality when he writes in 1997 that it is "common that designers are expected to ask permission before linking their site to another. And in the emerging commercial world of the Internet, one designer might have to pay another in order for the second to establish a link to the first" (n. pag.) – to date, this has not occurred to any significant extent on the Web, and major commercial sites might only go to the trouble of legal action if they become aware of being linked to from particularly undesirable directions.

By and large, therefore, the observation holds that "in hypertext systems, links within and without a text – intratextual and intertextual connections between points of text (including images) – become equivalent, thus bringing texts closer together and blurring the boundaries among them" (Landow, *Hypertext* 61); they are blurring the boundaries, that is, between individual pages or 'hypertext lexias' as well as between sites generally. Indeed, through clever usage of basic hypertextual design tools, new sites may be created entirely out of material coopted from elsewhere:

> it is quite simple for the author to provide links to other WWW texts that provide the images and sounds, and to the reader, such borrowing might not be immediately evident because of the seamless connection between hypertext links. The role of the author is ... further altered because the author is not only the creator of new texts (and meanings) but also the facilitator of meanings by providing an index of specific WWW texts and images available in cyberspace.
>
> (Mitra & Cohen 189)

Interlinkage with other sites is thus not simply *as important as* a site's original content (the 'text', in a traditional sense, which it offers), but the links are important *as part of* its original content. For the study of Resource Centre Sites, questions of what meanings are facilitated by the creation of linked indices of outside content are of great importance, as we will see.

Using the Web

Due to the complex and not necessarily immediately obvious interweaving of internal and external hyperlinks that may be a feature of any given Website, navigating a hypertext, then,

> requires the user to perform several tasks simultaneously. First, the user must read and comprehend the text/graphics facing him or her on the current page. Second, the user must retain the gist of the pages preceding the current page; s/he must be able to understand the flow of the logic, ideas, and text from previous pages to the current page. Third, the user must decide where to go from the current page. Should s/he continue to the next page? Should s/he navigate to a related topic? All three of these tasks must be accomplished simultaneously.
>
> (Boiarsky 120-1)

This is complicated even further when we keep in mind that 'previous' and 'next' pages in hypertext are highly fluid concepts, depending entirely on the individual reader's (possibly quite erratic) movement across the hypertextual network. In aiding these tasks, Web authors must therefore provide the right (and the right amount of) links for the given topic, as we have seen, but they must also pay attention to choices of the content and extent of individual Web pages, particularly as the Web's special demands on its users' short-term memory have "implications for how information should be displayed. Long Web pages are particularly prone to problems with short-term memory: when information scrolls off the top or bottom of the computer screen, it tends to be forgotten. Readers can get easily confused when they need to re-read part of the page because it takes time to scroll to the information they want to re-read. ... If the information they want to re-read requires them to follow a hypertext link, this difficulty is even greater" (Boiarsky 114).

Partly due to linking, pages cannot always be expected to appear in the same context and order to all readers; "local units [of hypertext] cannot have closed form. I might come along and use your texts in other ways, linking them into other gestures, other forms and movements, without affecting your form directly. Your forms will be local but porous. There will be places of local decision but without fixed local boundaries. There is always more hyperspace, always another dimension that can intersect any local form", as Kolb points out (22-3). It is therefore difficult, if not impossible, to define or delimit Websites in any but the broadest of terms. Nunberg adds that "there is a difficulty even speaking of 'intertextuality' when the individuation of texts themselves becomes so problematic … . Ultimately, … what electronic media really give us … is something stranger than that: a domain where there can be intertextuality without transgression" ("Farewell" 106).

The Web, being hypertextual, is inherently intertextual, and was in fact created specifically to provide such intertextuality (if perhaps without explicitly stating that aim). Its provisions for directly addressing practically any piece of content available on the Net, through "Uniform Resource Locators (URLs), make it possible to create a kaleidoscope of reusable content on the Internet. Simply by pointing to a variety of URLs, one can create a virtual database that appears to be uniform but which may be made up, in reality, of many pre-existing pages on many Web-servers" (Cerf xi). Search engines remain the largest-scale, most elaborate implementation of this principle, but the cooption of outside content through links is a pervasive practice throughout the Web, and fundamental to its operation; in some cases, where this practice is aimed at balancing information provided by major institutions in a field it constitutes a demonstration of what de Certeau describes as *la perruque*, while generally we can describe this process as a global-scale form of *bricolage*.

Given the ease of appropriating 'foreign' content into one's own site, it is therefore difficult to speak with any great precision of 'a Website'; as Lennon notes, "there are two sides to a Web site – the logical structure and the physical structure. The logical structure includes the links between documents, navigational tools, and

so on. The physical side is concerned with such matters as the placements of HTML and other files (such as images and movies) within a directory structure on the server's file system, and the access permissions granted to users" (107). It is therefore eventually useful to speak of two related concepts, the physical site and the logical site. A *physical* site would simply include all the related content (pages, graphics and sound files, etc.) available on the same Web server, the same piece of hardware, while the *logical* site would include all the content appearing as conceptually, topically, or aesthetically unified to the user, no matter its location of storage; this latter definition follows along the lines of Lennon's own, by which "a Web site is a logical collection of Web pages, with a structure, linked together so as to provide ease of navigation and information retrieval" (106).

None of these definitions is satisfying *per se*, due to the flexible nature of Web interlinkage itself: for reasons as mundane as available storage space on any one server, a logical, stylistically consistent site may be located on a number of physical servers without this fact necessarily becoming obvious to the user, while a physical site might also hold a variety of (possibly closely related) logical sites created by the same design team. (Self-contained subsections of sites might also be regarded as sites in their own right by visitors unaware of or uninterested in the larger site.) Depending on the individual case, the actual *Website* itself, as users might intuitively perceive it, could be the combined total or the common subset of its participating logical and physical sites. As always on the Web, it should be noted, what is and what is not part of the same site is therefore a matter of individual users' perception.

All the more, such definitional confusion calls for a clarity of site design (with particular care to pointing out a site's boundaries, that is, the point at which the site creators' editorial control stops) so that users of a Website can, if not logically determine, then at least intuitively experience it as a consistent and clearly delimited site. Speaking generally, Agre argues that we should use a broad definition of the term 'design' in such matters: "by *designers* I mean to include everyone – authors,

composers, performers, public speakers, letter writers, editors, and others – who make decisions about the format and content of communications media, whether for others' purposes or their own. More indirectly, I also mean to include the people – librarians, publishers, book sellers, programmers, critics, anthologists, and others – who operate the distribution channels that connect the producers and the users of media products" (70). On the Web, many of these previously distinct functions have become combined anyway, but the point remains valid that all those involved in providing content to a Website need to contribute to its consistent appearance.

Centrally, users must be given a sense of orientation; they must feel in control and aware of their options for further exploration: "in a large hypertext the reader needs some navigational information about intersecting localities and (possibly competing) local gestures. This should be more than a list of the nodes available one step away. ... The navigational information might be given in graphic form" (Kolb 23), and indeed graphical aids of some kind are now a prominent feature of most professionally designed Websites.

Hypertext as Dialogue

Perhaps the most poignant demonstration of the effect which the combination of increasingly sophisticated forms of Web-based hypermedia and their use for the communication of ideas (as promoted by the interactive drive) has had is the demise of the Web's early 'rival' medium, CD-ROM: in Australia, since the 'Creative Nation' policy statement in 1995, "music CD-ROM production, and the CD-ROM sector in general, has failed to take off in the predicted manner. One crucial factor in this has been the rise of the Internet and Internet music services" (Czencz & Hayward 91). CD-ROMs *are* ubiquitous today, to be sure, but far less as interactive information and entertainment packages than as storage media and as means of delivering pared-down Web content to those without sufficiently cheap or fast Internet access. Their stand-alone nature, once seen as an advantage, now makes

them outdated: "it will be increasingly difficult for a twenty-first century form –
interactive multimedia – to be available within essentially nineteenth-century
corridors of information distribution and exchange – that is, stand-alone hard copy
product sold like books, records, CDs and video" (Cunningham & Finn 84).

Without strong links to a fixed physical carrier format of limited capacity and
use, the Web can also continue to evolve gradually in a way CD-ROMs cannot:
"while marketers have hailed the possible applications of CD-ROM multimedia,
games and the Internet have been organically developing their own aesthetic logics.
These are more likely to resemble future multimedia applications than today's CD-
ROMs" (Chesher 32) – and foremost amongst the possibilities unique to resources
on the Web is their ability to tap exactly into this web of further information.
Extensive linking to 'the outside world' becomes a crucial requirement of operation.

Hypertext on the Web, then, "becomes dialogue. It loses its mass, is privatised.
... It is a moving mosaic (text, image, sound), an unpredictable sequence of
bifurcations, a nonhierarchical, unpredetermined crossroads where each reader can
invent his [*sic*] own course along a network of communication nodes" (Debray
145). Even just 'browsing' the Web, therefore, is a collaborative engagement by the
reader, whose particular choices affect the resultant text. The rapid growth of the
Web is proof enough that readers – more properly, Web *users* – come to accept and
value this fact, as this fundamental feature of the medium empowers them; and *thus*,
first and foremost, there is a need for Web content producers to offer an extensive
range of links, in order not to disappoint their users by offering them an
impoverished range of options only. (Its lack of alternative pathways, and thus of
the opportunity for collaborative user engagement, is also a likely contributing
factor to the demise of CD-ROMs as interactive media: "such forms [of CD-ROM]
as exist often remain unoriginal extensions of spectator models such as video or
cinema" [Rieser 11].)

Thus, "we need to look at more than just what the technology does well; we
must also look at what the user does well. We must acknowledge that the user

brings a host of abilities and expectations to any new situation, including the use of new media technologies. These abilities and expectations can determine how an individual uses new media and can determine the impacts of those new media on the user" (Boiarsky 110). Users expect to be provided with useful links to further resources and direct access to these resources, and to be able to find further information easily and quickly through search engines and Resource Centre Sites. Thus, not only, as Landow writes, "from the point of view of the author of hypertext, for whom collaboration and sharing are the essence of 'writing,' restrictions on the availability of text, like prohibitions against copying or linking, appear absurd, indeed immoral, constraints. In fact, without far more access to (originally) printed text than is now [in 1992] possible, true networked hypertextuality cannot come into being" (*Hypertext* 198). This is true from the perspectives of both authors and users, and indeed since then the amount of material available on the World Wide Web has increased significantly, through the efforts of prominent initiatives like Project Gutenberg, but also with the help of a multitude of lesser-known institutions and individuals who have each brought their particular fields of interest online.

Restrictions to access therefore become problematic. Indeed, in Costigan's view, password-protected information is not even really part of the Net at all, in the same way that private driveways are not part of the public road network: "local computer systems often create a 'firewall,' a hardware and software division that keeps the Internet out and the internal information in. ... A firewall should not be thought of as a wall but as a different existence. Things that are on the Internet exist there; things with passwords or limited availability are parts of a different network, which may share some of the same hardware" (xxiii). Access restrictions stifle the interactive drive.

Cunningham & Finn write (in 1996) that "the major unresolved – perhaps unresolvable – problems with copyright control make much of the content on the Internet something between a peep show and ... the 'ultimate vanity press'. To

protect copyright (and, often, revenue stemming from it), much information accessible on the Internet is structured to tantalise or introduce rather than provide the whole, or it is largely ephemeral or trivial" (86), but this is decreasingly true: more and more, copyright is simply ignored and broken by users, or forfeited by its institutional holders (sometimes in response to prior breaches by users, practically as an act of surrender) – the ongoing debate around the online music delivery format MP3, where the industry assault on Napster has only served to create a plethora of alternative filesharing systems, is instructive in this regard. Hoffman *et al.* note that

> fee-based content sites are expected to proliferate as secure payment mechanisms are implemented. To date, however, the model has met with only limited success, perhaps because consumers may be unwilling to pay for content delivered in this manner. A recent trend is toward information-brokering, as with Newshare, and usage-based pricing, as with NewsPage, where visitors are able to access news summaries at no charge, but incur a small fee for the full text of a story. (n. pag.)

Only in those limited fields where money is not a major issue (for example, information of strictly corporate interest) should we expect a wide acceptance of such services, however. Certainly the prediction that "whilst the vast majority of information on the Net is still free, the number of user-pays sites will inevitably increase rapidly" (Cunningham & Finn 89) is yet to come true. At any rate, as a concept historically linked to physical goods, the current legal definition of copyright has become largely untenable on the Net (cf. Bruns, "Fiction of Copyright").

In addition to this pressure on traditional content providers to be less protective of their copyrights, they are also forced to be less secretive and publish more extensively – this applies especially in fields where usually there are long periods of publishing inactivity between releases, such as the music and computer software industries. The excellent suitability of the Net for fan networking serves to amplify

by magnitudes fan rumours and expectations, which clashes with industry sites' practice of documenting only musicians' or programming teams' official, final releases; fans (and the same is true for followers of other fields where new information is eagerly anticipated) now increasingly want to be kept up to date also with ongoing developments between releases, and preferably see glimpses of new work – hence, for example, the proliferation of 'public beta' versions of popular software. This development predates the Net, it should be pointed out (fanzines and other newsletters date back at least to the emergence of the photocopier), but as might be expected the Net has magnified the demand for information.

Such demands have been met in part by the primary content producers and the traditional secondary news services in a particular field of interest (entertainment gossip columns, computer magazines, etc.) themselves, but "through their Internet activities, popular media companies are acknowledging that they no longer represent the idea of the future. This loss of connection of technorhetoric to computer-mediated forms may not seem significant, but it is critical if one understands the entwined nature of popular media to the promotion of desire. Desire itself is a construction of the future as possibility" (Marshall *et al.* 64-5). Increasingly frequently, today, these desires are therefore catered for by specialist secondary content providers which step up into a mediating role between institutions and end users – the Resource Centre Sites described in Chapter 3. These content providers do not *publish* their own information as much as *publicise* edited digest versions of news and rumours from other sources, as we will see – an activity well-suited to make use of the multi-authored, collaborative shape of the Web. But how are these edited digests created; who selects what from the multitude of information available on- and offline?

2 — Gatewatching, Not Gatekeeping

As White points out, "it is possible to assume that the emerging media systems will result in a diminution of the kind of power which had been exercised by the controllers of scarce broadcasting channels in the past. It could be argued that this power will be diluted so that large and small organisations without any previous involvement in the media, together with the powerful and powerless, will find themselves on more equal terms when it comes to the distribution of information and entertainment on the abundant channels of the future" (5). (Indeed, five years after White's assumption we can at the very least observe that the powerful organisations online are not necessarily associated with the media giants which emerged in previous eras.) The abundance of channels comes at a price, however – there is an ever-growing wealth of information on the Web, without the opportunity for a gatekeeping regime along traditional models from print or broadcasting to be established. "Media like the Web tend to resist attempts to impose the sort of solutions that enable us to manage (even imperfectly) the steady increase in the number of print documents – the ramification of discourses and forms of publication, the imposition of systems of screening or refereeing, the restriction of the right to speak to 'qualified' participants" (Nunberg, "Farewell" 126). This in itself is not necessarily an altogether negative development, as such systems are often highly arbitrary in their value judgments, and may place insufficiently qualified people in gatekeeper positions; however, it is of little consolation to users swamped with information that the absence of any gatekeepers selecting material also means that fewer bad choices will be made.

Gatekeepers do often perform a useful function, and as Singer writes "the value of the gatekeeper is not diminished by the fact that readers now can get all the junk that used to wind up on the metal spike; on the contrary, it is bolstered by the reader's realisation of just how much junk is out there" ("Still Guarding" 80). As a result, "gate-keeping theory may provide a more valuable basis for study in this new

[Internet] media environment than it first appears. 'What happens when the gate keeper goes away?' is not the only question to be asked. It might not even be the best question. ... There is some evidence that journalists see that [gatekeeping] function as evolving and adapting rather than disappearing" (Singer, "Online Journalists" n. pag.). Levinson agrees that the end of gatekeeping as we know it need not yet have come: "one might think that authors heretofore kept behind the gate, or obliged to pay its toll in seeking approval of an army of keepers including agents, editors, book reviewers, and bookstore managers, would rise in joy at the Internet prospect. Instead many ... apparently have come to crave the ministrations of our gatekeepers, much as some prisoners love to love their jailors" (124-5).

Indeed, as Singer goes on to point out, in certain cases there is indeed strong demand for some form of Internet gatekeeping, that is, for "filtering software such as CyberSitter or NetNanny to carry out, in effect, editorial decisions about what is appropriate and what is not. It seems that people do still want someone or something to make – or help them make – judgments about content" ("Online Journalists" n. pag.). (In reality, this particular form of content judge performs a kind of 'inverse gatekeeping' or censorship, however, by selecting unsuitable material and *denying* access to it, rather than providing access *only* to the selected material.) Other services, such as search engines, portals, and Resource Centre Sites, attempt to establish themselves as the first points of call for information seekers. Thus, "this persistence of the assumption that gatekeeping is needed may be its most enduring legacy, and one that survives the advent of media like the Internet that make it unnecessary" (Levinson 125).

Such new 'gatekeepers' (if we stick with that term for now – we will see later that it is no longer fully accurate) might call themselves 'Net guides', or 'editors', or (in some cases, such as mailing-lists) 'moderators', but to some extent they perform traditional gatekeeper duties of selecting the material supposedly of greatest interest to their specific audience. Frequently, therefore, they are limiting themselves to a particular field of information, and provide structured overviews over major topics

and developments in a field, such as subject guides or subject directories. In some cases, the gatekeeping service is offered as part of a site which is itself run by a provider of primary content in the field.

Such 'gatekeeper' sites therefore anticipate, cater to, and combine in their operation both the 'real-time' and the 'archive drive' identified by Mackenzie: "within the domain of the virtual, real-time announces itself as the dispersion and deferral of the archive drive. Real-time can only present itself as the general form of on-screen presence by archiving images and representations in advance, and subjecting them to sequencing and referencing. ... Real-time works by putting in reserve, and anticipating presentation in a later present" (68). 'Gatekeeper' sites do this by anticipating users' demands for an accurate presentation of all the important current news and information in the field in an accessible and investigatable format. "Conversely, the archive drive announces itself as real-time in dispersal and deferral. Not only does the structure of the archive increasingly determine the coming into existence of its contents, these contents exist as real-time deferred" (Mackenzie 68). This the sites achieve by allowing users to review and understand their contents diachronically, making visible developments over time which would not be evident from the synchronic snapshots provided by the current developments alone. Thus, the contents "come into existence solely in view of a possible presentation on the screen, a presentation that will be governed by the horizon of real-time. To summarise, real-time is the archive drive becoming-time; the archive drive is real-time becoming-space" (Mackenzie 68).

To facilitate such processes, the sites frequently employ automated search and cataloguing technology in addition to human 'gatekeeping'; thus, "at the very moment indeed when the new technologies of memory can make us fear an alarming glut of traces – a true change of scale in the collective accumulation of archives, at once written, audio, visual, and audiovisual – these same technologies increasingly lighten its load, at almost the same pace, by facilitating individualised retrieval" (Debray 146). This continues to leave some important responsibilities

with the user of such services, who must know how to search for information, or at least know how to find the 'gatekeeper' most suited to their needs – a problem already present, if less prominently and obviously so, before the Web. Already in 1980, Smith suggested

> that the information revolution of the 1980s and 1990s offers us a step toward a new kind of Alexandria, i.e. towards an abundance of information, or universal availability, but one in which the constraints arise from the modes of storage and cataloguing, rather than from the more traditional constraints of censorship and governmental control. In other words, the librarian or the librarian's computerised successor becomes a more crucial guardian of knowledge than in the past, and the individual researcher/writer is more dependent upon the skill of searching for information than upon the skills of composition.
>
> (*Goodbye* xiii)

Librarians on the Web?

To speak of 'librarians' rather than 'gatekeepers' on the Web might in fact be more productive: where gatekeepers screen information and (as part of a publishing organisation) allow readers access only to that portion of all they survey which they deem of sufficient interest or quality, librarians (who are not publishers themselves) ideally point library users in the right direction (that is, the direction most suited to their needs), but cannot and do not attempt to limit users' access to all the other works contained in the overall library. The shift from 'reader' to user in this description is significant: while there remains what Levinson calls "our continuing need for centres", which to him "is likely the only reason that books will continue as an important medium in the twenty-first century and after" (102-3), that is, a reason for keeping gatekeepers, he also notes that "humans want to both lead, and be led ... . The rise of electronic media in general, and digital personal computers in particular, has accentuated and focussed" the desire "to make our own decisions,

rather than be spoon-fed by central authority" (Levinson 91), and librarians suit this notion: they assist, but do not lead.

Librarians, too, frequently specialise in a certain field, possibly out of prior personal interest; often they themselves are amongst the chief information seekers in the field. Internet 'librarians' (if we use this term to replace the previously used 'gatekeeper') are usually similarly personally involved, 'of the people', and partisan; they support the case of those seeking information rather than that of the information providers or controllers.

This 'librarian' position contrasts markedly with that of the traditional ideal of the 'objective', 'impartial', and 'disinterested' gatekeeper-journalist. As McQuail describes it, in journalism "the normal standard of impartiality calls for balance in the choice and use of sources, so as to reflect different points of view, and also neutrality in the presentation of news – separating facts from opinion, avoiding value judgments or emotive language or pictures" (255). But this ideal norm in itself has (with few exceptions) usually remained exactly this – an ideal – even in more traditional forms of journalism, due to the pressures of commercial media forms and of practical, everyday journalistic experience; especially recent media have offered only vague attempts to uphold some form of journalistic integrity, independence, and responsibility. As Smith writes, "in the twentieth century we have constructed a series of electronic media that are similar in some ways to the early printing presses. They are devices whose sovereignty rests in society as a whole, and in no society has it been possible – though many have tried – to re-create the traditional norms of press freedom in the context of electronic media. ... Producer sovereignty has been sacrificed to consumer sovereignty" (*Goodbye* 312).

In electronic media which offer only a limited choice of transmission channels, this has been a cause for much concern, but on the Web with its lack of restrictions on the number of simultaneously operating publications and, subsequently, its multitude of media outlets and information providers of varying scales, and its multitude of alternative competing information-evaluating 'librarians', it need not

be seen as inherently negative; rather, here, finally, a broad and very diverse range of specific target audiences can be catered for simultaneously, at any one time. McQuail terms this multiplicity of channels 'external diversity', and (following Westerståhl) notes that "under conditions of 'external diversity'" the call for impartiality in news reporting "does not apply (although that of factualness does), since the assumption is that there will be alternative media to tell the story from another point of view. For instance, a strongly partisan newspaper in a partisan system is not expected to present the reader with all *points of view*, although the reader still expects reliable information" (147).

The Web's easy availability of transmission channels makes it possible for multiple 'librarian' sites (which will be formally described as Resource Centre Sites later) to exist in any one field: "the same technology that makes everyone a publisher also can make everyone an editor online" (Levinson 130) in whichever field one believes to be an expert. While they may understand themselves as competing for the same audience, there are no obvious restrictions on the number of possible channels as they exist in those electronic media tied to a scarce physical resource; new 'librarian' sites can always be set up without the need for some form of approval or accreditation. Thus, Costigan claims, the Net's "limits will not be reached. ... The Internet does not have an edge to push past, no wall or ocean to contain it. Its size and shape change constantly, and additions and subtractions do not inherently make something new or different" (xxiii).

For the Web's information 'librarians', who are (in the face of 'external diversity') thus relieved of a need to be non-partisan and impartial, this means that their service "requires some rational understanding of who are using the materials, what they are doing with them, and how they fit into an overall way of life. … It is not just possible but crucial for designers to learn what is known about the uses of media" (Agre 70). Due to the extensive interlinkage of sites and the general instant and constant availability of different 'channels' and forms of content on the Web, the user base of such sites fluctuates strongly (much more so than in physical, often

subscription-based media forms such as print journalism or even radio and TV), based largely on current performance – in seeking information, users' demand for up-to-date, quality information will be equal in force to (if not greater than) their 'brand loyalty' to a particular 'librarian' site. Over time, however, it is likely that individual users will recognise a set of sites which they will deem 'most trustworthy' or 'most useful', and frequent regularly.

Due to the continuing growth of the Web, then, such 'librarian' advisory sites for information seekers are an increasingly important development on the Web. They are related to, but significantly different from, other information-finding tools in existence, such as search engines: "search engines consist of two main components: a gatherer which automatically searches the Web for new and updated information ..., and an inference engine that interprets users' requests. ... The gatherer creates an index of the document space and the inference engine translates the user's queries, finds suitable matches, and displays the resultant list" (Lennon 101). Generally, therefore, search engines rely mainly on their automated core, with human input only on the breadth of their gathering and the resultant overall categorisation of the gatherer's results; given the immense amounts of data which major search engines have indexed, no more directly human-controlled operation would be feasible. Search engines can be compared fairly directly with an elaborate form of library catalogues, therefore.

Such search engines are useful for finding very specific information, but cannot (and do not aim to, although some search engine providers like Yahoo! have now also added many ancillary services to their sites) provide ongoing reports about new developments in a field, or evaluate the accuracy, quality, or usefulness of the content they find. While their existence demonstrates that (as noted in the previous chapter) the Web can be seen and used both as browseable hypermedia system *and* as searchable knowledge base, search engines must necessarily ignore some fundamental aspects of the hypertext medium, as Snyder points out: "unlike databases, hypertexts are meant to be read, not searched; readers follow meaningful

links or paths through the document instead of issuing queries. Unlike knowledge

bases, hypertexts contain information meant to be understood by human readers, not

machines. Effective hypertext writing depends therefore on the tension between

regimentation and richness, between predictability and excitement" (35). (It is not

surprising, then, that of the two most prominent early Web search engines, Yahoo!

and AltaVista, the one organised with more human input and more hierarchically –

Yahoo! – today is the more popular one: while often cataloguing the Web more

extensively, AltaVista presents the results of its gathering with far less structure.)

Search engines, therefore, should be used mainly to find very specific

information, or (through the hierarchically organised Web portals they frequently

provide in addition to their direct search facilities) to find important and useful entry

points into a subject – for example, specialised 'librarian' sites. "In the

interconnected world of the WWW, a starting point serves only as a gateway and

could end up being the most inconsequential part of the analysis. Because the

WWW produces interconnected texts that have a constant decentring tendency, to

concentrate on a starting point is to deny the WWW its greatest strength" (Mitra &

Cohen 193); search engines and portals are such starting points, or perhaps channels

of entry through which users pass quickly rather than actual *points* at which they

pause.

Gatewatchers on the Web

By contrast, their first *points* or significant locations of contact for their areas of

interest still lie ahead of them: as users proceed into more specialised fields, the

Websites they encounter will increasingly be 'librarian' sites (along the lines of

what will be described later as RCSs), rather than search engines or plain resource

directories – in these smaller spaces, central sites will take on the character of

central community information and connection hubs rather than mere starting

points, and will be topically unified enough to resist the Web's tendency for decentring.

That such supposedly 'librarian' sites are themselves part of the 'library', and can be found in its catalogues (the search engines), indicates that the librarian metaphor, too, breaks down at this point: in contrast to real-life librarians, the online 'librarians' are themselves necessarily also publishers, as everyone providing information on the Web is perforce a publisher. The sites under analysis here, therefore, are neither in the traditional sense gatekeepers (since in contrast to their print and broadcast counterparts they do not have exclusive control over the 'gate' through which information passes to the reader/user) nor librarians (since they are not merely keeping track of what is published in their field of expertise and advising users about it, without themselves being part of an operation publishing selected content), but rather combine aspects of both models into a new form of content tracker and advisor which might usefully be termed *gatewatcher*: they observe what material is available and interesting, and themselves provide condensed content guides and selected material. As Levinson describes it, compared to traditional editors "the online editor thus becomes an endorser rather than a door dragon, as the … process of filtration is severed from the classic editorial mandate" (130).

For such gatewatcher sites, specialising in a particular field, the resources available on- and off-site will be unified enough to be navigatable by users: "navigation is best for information spaces that are small enough to be covered exhaustively and familiar enough to the users to let them find their way around. Many information spaces in real life are unfortunately large and unfamiliar and require the use of *queries* to find information" (Nielsen 137-8). Usually, such queries will often point to documents which are then read outside their intended context; another advantage of gatewatcher sites over search engines, then, is that of framing the resources they point to in a common context provided by the overall site.

In this sense, then, Talbott is only half right in stating that "if the Net's information riches are less daunting than those of the library, perhaps it is because we don't really have to *deal* with them; we need only yield ourselves to the information-processing software" (198): that information-processing software will mainly point us towards the central sites established by the gatewatchers working in the field, and thus the Net appears less daunting than the library because despite its larger size it has a much greater number of highly accessible and frequently highly specialised 'librarians' (to use that term for one last time) working in it – *that* is the reason we do not have to deal with the 'library' of the Web in its entirety.

Despite the networked, open-access nature of hypertext, too, and despite the clearly transitory nature of entry points, there still remains a need and a desire amongst its users to start at the beginning in their search for information (and without additional human intervention, most search engines are unable to provide that service, since they are unable to distinguish beginning, middle, and ending of an argument presented over several Web pages). Gatewatchers, through the Resource Centre Sites they create, provide this beginning, or more precisely a variety of pointers to a range of alternative beginnings slated to different user needs, and serve as a central, 'safe' location to return to after exploring the surrounding hypertextual network in various different directions. This demonstrates that "digital networks, such as the Internet, are so flexible that it is practically impossible to imagine the range of architectural choices that lie ahead. Indeed, the Internet is capable of simultaneously supporting a considerable range of facilities, each of which would count in normal times as a separate medium" (Agre 94-5). Resource Centre Sites connect and tie together these different 'media'.

No Endings, Only Beginnings

As Mitra & Cohen add, "in the case of the WWW hypertext, it is impossible to determine what can be the authentic beginning of the text. Although every site on

the WWW presents a top and bottom of a page, that is only a microscopic part of the WWW discourse. When considered as a part of the larger WWW text, any page provides only a point of entry into the mammoth labyrinth of texts where the beginning and end become particularly difficult to identify" (185-6); thus, one user's ending may be another's beginning, depending in part on their specific interests or their level of familiarity with a topic. For those presenting information on the Web, there is thus a need to be aware of this fact, and anticipate readers using their pages in an unexpected, non-linear sequence; "hypertext reconfigures the text in another important way by redefining 'beginnings and endings' ... in non-linear terms as multiple rather than singular events. ... Even an atomised text can make a beginning when the link site, or point of departure, assumes the role of the beginning of a chain or path. ... In the case of hypertext, the beginning can never be more than the point at which one begins reading" (Snyder 56-7). Sites can and often do offer particularly useful points of starting, however.

On a larger scale, this also has fundamental consequences for text on the Web as such, as we have already seen to some extent in the preceding chapter; as Bolter writes,

> electronic text falls naturally into discrete units – paragraphs or sections that stand in multiple relation to one another. An electronic text is a network rather than the straight line suggested by the pages of a printed book, and the network should be available for reading in a variety of orders. Texts written explicitly for this new medium will probably favour short, concentrated expression, because each unit may be approached from a different perspective with each reading. Electronic writing will probably be aphoristic rather than periodic.
>
> (*Writing Space* ix)

This segmented nature might also be seen as a negative consequence of hypertext, of course.

The popular 'Web rings' are one clear example of non-linearly structured hypertexts on the Web: circular collections of topical sites interconnected through common navigational controls which guide the user to the next member site of the ring. Thus, users can join the ring by accessing any of the member sites, explore that site at will, then move on forward or backward along the ring to the next site they find interesting; of course they may also at any time leave the ring by following other, tangential links on a member site or using their own bookmarks or search links. Such rings can be seen as an example of the 'circle' structure of organisation that Bolter envisages: "the computer permits many structures to coexist in the same electronic text: tree structures, circles, and lines can cross and recross without obstructing one another. The encyclopedic impulse to organise can run riot in this new technology of writing" (*Writing Space* 95). Significantly, a number of such Web rings are administrated or supported by Resource Centre Sites, and offered as another way of exploring their field of specialisation.

Links

Thus, "it is already becoming clear that the computer provides a new writing surface that needs connections different from those of the printed page. In fact, the page itself is not a meaningful unit of electronic writing. The electronic book must instead have a shape appropriate to the computer's capacity to structure and present text. Writers are in the process of discovering that shape, and the process may take decades, as it did with Gutenberg's invention" (Bolter, *Writing Space* 3). What has already emerged as a significant shaper of electronic texts is the hyperlink itself. Hyperlinks allow individual Web pages to appear as roots, that is, as points of entry into a network of texts, although they might have been envisaged originally as sub-nodes and branches of the hypertext, and also allow the user to penetrate deeply into the body of hypertext works, at their own will and to their own ends without a need to even take notice of the surrounding layers of material.

At the same time, while any Web user may of course add their own, more or less private and more or less permanent links to the hypertext simply by jumping to a new location, through their browser bookmarks, or by creating a Website of their own, publicly available links are mostly put in place by the authors of Websites – "links are not generated automatically in Web architecture. There are no natural or automatic links between information. (Even search engines use algorithms that must be designed and programmed.)" (Jackson n. pag.). In this view, links occupy an unusual neutral ground between the strategic (officially sanctioned) and tactical (user-determined, uncontrolled) uses of the Web we might identify by applying de Certeau's theoretical framework – or, perhaps, they *are* the ground on which both such uses are played out on the Web, simultaneously and without affecting one another in any direct way.

From the designer's or author's point of view, however, a link certainly "reflects a communicative choice made by the designer. A link, therefore, is strategic. The possible variations for structure are shaped by communicative ends, rather than technological means. The use of the link in the creation of Web structure enables the designer to control the potential ways a user can move through information" (Jackson n. pag.), and thus links are Web authors' ways of imposing some structure on the *ad hoc* collection of individual pages and sites, of offering some prebuilt connections which users may traverse.

How designers might do this remains very much at their discretion, however, with various strategies available that have more or less direct equivalents in other forms of publication, as Jackson also notes: "Web designers might choose to use a very limited number of links, or to use them in a traditional indexing fashion, or to use them to encourage linear progression through the material, or to use them conscientiously to approximate an associative experience for the user. Differences in structure reflect differences in communicative agendas" (n. pag.). The ability of the Web author to set (or at least suggest) such agendas must be noted here, then, for all the overall emphasis on the user-driven nature of information retrieval on the

Web in general. "It remains that the links between documents may not generate new or unexpected structures. Nor does movement between links generate new links or new configurations of links. Web structure, on a technological rather than social level, is not emergent" (Jackson n. pag.); it is purely on a social level, then, that new structures – new uses of hypertext – do arise, and it is Web designers who develop these new structures by conceiving new ways of presenting and linking their content. Thus, "structure might ... be understood as emergent *if the designer is defined as the node of analysis*, not the Web page or Web site" (Jackson n. pag.).

Site linkage, both internally (amongst the individual pages which comprise the site) and externally (to other sites and pages on the Web) is far from trivial, therefore. This begins simply with the degree of connectedness that is feasible for a site, as has been noted before:

> from the hypertext viewpoint knowledge is infinite: we can never know the whole extent of it but only have a perspective on it. To implement pure hypertext is impossible because we would have to do two things: decide what is the unit we make into a node, and represent the infinity of links that connect this node to all other nodes. This is impossible: life is in real-time and we are forced to be selective, we decide that this much constitutes one node and only these links are worth representing. In this sense the concept of hypertext obscures the real decisions that are taken and which are, by default, resolved in favour of those with the power and resources to act effectively. (Beardon & Worden 69)

In devising links, the designer is caught between various divergent demands: while we might wish for the greatest possible selection of additional information to be available on demand through links (otherwise a text will appeal isolated and monolithic, unaware of the wider discursive context within which it is situated), we would also like to see the most relevant further resources in a prominent position, with lesser contributions sidelined or even excluded (so that the text does not overwhelm us with ancillary information, thus becoming unusable by making its

reader feel 'lost in cyberspace'). Thus, "hypertext developers face a dilemma: as users we require rhetorical conventions that limit the complexity of hypertext documents, but such conventions may curtail many of the features that make hypertext so interesting" (Snyder 116).

Additionally, designers can only link to what they are aware of as being available on the Web, of course (and will need to check for its continued availability regularly), and run the risk of linking to sites which may outweigh their own in relevance, for some users – effectively guiding their users to the competition's offerings. Attempting to balance these criteria of Web design can be a daunting task, no doubt, and so it is no surprise that in Resource Centre Sites a specialised genre of sites has emerged to perform it.

To make matters worse, each of the criteria is also very much dependent on the views of the individual user or site designer, as questions of the respective relevance of sites will differ markedly between individuals, in part depending on their level of prior knowledge. One solution to this problem would be to offer various alternative site structures with differing levels and patterns of connectedness, targetted at different sections of the user base; this may be done by various sites independently of each other, or by one site offering a number of different perspectives on its contents. Such possible multiplicity of approaches also multiplies the Web designers' problems of keeping up to date, however: "changes [to Web pages] can have a 'ripple' effect in cyberspace because if a single file changes, hundreds of other files linked to it would also change because those links now point to a new and different text" (Mitra & Cohen 191).

Traversing the Web

Eventually, "market power in online services will accrue to organisations which can develop the most attractive and functional transactional spaces. As has been discovered with the Internet, while communication standards are open and non-

proprietary, the range of potential on-line service [i.e., content] providers is large"
(White 8) – and those providers emerging as successful need not be those that are
already major players in other media, as we will see in the case of the Resource
Centre Site genre. Attractiveness *and* functionality are key terms, therefore, and
Nielsen extends the list by noting that "usability is traditionally associated with five
usability parameters": sites must be "easy to learn", "efficient to use", "easy to
remember", allow "few errors", and need to be "pleasant to use" (143) – but again,
the question is what this means for any individual user.

"When we speak of documents being so small that a reader cannot 'get lost' in
them or so large that navigation aids are required to use them effectively, the
implication is that information occupies 'space' through which readers 'travel' or
'move'" (McKnight *et al*., *Hypertext* 67). As noted before, there must therefore be
great emphasis on the clarity of design of sites, with clear delineations of the
various sections within a site, and of the site as such within the overall hypertextual
environment of the Web. This is anything but a trivial matter:

> as readers, we need to know when we cross a boundary. Boundaries
> allow us to pause and take stock as we gather attention and
> anticipation. ... But what is a boundary in hypertext? Movement from
> one locality to another. Such a boundary would divide interconnected
> groups, but it could itself be an item discussed and argued over. Even
> if boundaries intersect and compete, even if they are controversial,
> we need to sense where they are purported to be or where they are
> fought over or infolded. (Kolb 23-4)

Sites must offer the user a sense of location, to avoid feeling lost – at the same time,
however, they must not force users to subordinate themselves to a particular pattern
of cyberspatial organisation: "there are ways of orienting the reader in an electronic
document, but in any true hypertext the ending must remain tentative. An electronic
text never needs to end" (Bolter, *Writing Space* 87).

Inevitably, in any sufficiently elaborate system, "hypertext users are likely to get lost ... . If a hypertext document or database is particularly complex, the user might not even remember his or her 'path' through the document" (Boiarsky 121). The computer usually does, though: as a last resource, there always remain the Web browser's 'back' and 'home' buttons as a reassuring Ariadne's thread when users do get lost in the labyrinth – as Nielsen describes it, "probably the most important navigation facility is the backtrack, which takes the user back to the previous node. ... The great advantage of backtrack is that it serves as a lifeline for the user who can do anything in the hypertext and still be certain to get back to familiar territory" (128-9).

Ideally, however, users should never be left with backtracking as their *only* means of further navigation; they should at any point be aware of where they are and where they might go from here. This also involves an awareness of what else there is available on- and off-site – that is, of the degree of comprehensiveness of the site they are currently visiting, and the possible alternatives available. Thus, "the coming ease-of-use problem is one of developing *transparent complexity* – of revealing the limits and the extent of vast coverage to users, and showing how the many known techniques for putting it all together can be used most effectively – of complexity that reveals itself as powerful simplicity" (Tennant & Heilmeier 122).

Interactivity

McLaughlin notes that a central factor in "the rapid proliferation of multimedia content on the Internet" was "the adoption by users of multipurpose graphic interfaces that not only permit the retrieval and viewing of text documents and images and the playing of movies and sound clips, but, more importantly, allow the user to interact with information servers to provide feedback, place orders or subscriptions, search databases, cast ballots, complete surveys, and contribute resources" (54) – in short, to cater for the interactive drive; and indeed, the

interactive nature of the Web is one of its most rapidly developing aspects. Rafaeli defines that "by interactivity we mean the extent to which communication reflects back on itself, feeds on and responds to the past. ... Good choices and crafty implementation of interactivity are often the difference between successful and failing Web sites" (Newhagen & Rafaeli 6). With obvious enthusiasm (and perhaps somewhat overstating her point), Harasim adds that

> the social and intellectual isolation that characterised human history has been reduced only with the advent of new communication technologies, from literacy and the printing press to the telegraph, newspapers, the telephone, and now increasingly, computer networking. ... Unlike broadcast media such as television, radio, or newspapers – which are noninteractive, one-way media involving passive receipt of information – in the networld people can act directly to question, probe, or elaborate on any piece of information that is posted. ("Networlds" 25)

The degree to which Web users take up such offers varies greatly, however, and it is therefore necessary to outline various types of interactive behaviour observable online.

Uses of the Web by those who have access to it range from mere passive reception of preformatted content in 'Web channels' – which are not entirely unlike traditional television – through a succession of intermediary stages to active provision of content alone or in collaboration with other users and in interaction with a Web audience. There is, then, a continuum of uses with passive reception and active engagement at its opposite ends; this continuum of uses applies both horizontally and vertically, as well as both synchronically and diachronically – in other words, any given group of Web users may be differentiated (horizontally) along the continuum according to their predominant forms of Web usage, while for any individual user the degree of their interactive engagement may vary (vertically) depending on the particular site they are visiting, as well as on a range of other,

personal factors. Such differences of degree exist synchronically (all other factors being equal, various users may interact with the same Website to different extent at the same time, and any one individual user may use different sites more or less actively at the same time) as well as diachronically (users may gradually move towards the 'active' end of the scale as they become more familiar with a site and its contents, or with the Web as such, or conversely become more passive as their early enthusiasm wears off and they find trustworthy content to consume passively).

Along the scale, we might identify several intermediary stages – it should be noted, however, that these are not distinct states users move through or cluster at, but merely represent markers along a continuous band. A purely passive reception of preprogrammed 'Web channel' content has already been noted as the 'passive' extreme – more precisely, however, it should be said that such channels, which often use on-demand broadcast technology such as RealAudio and RealVideo, Windows Media, or advanced Javascript and Java extensions, are not necessarily in themselves part of the Web, although they are accessible through it: they are multimedia presentations embedded into their creators' Websites, as well as now usually pre-installed as content options in newly-purchased PCs. The channels become 'Web channels' only through this embedding as content delivery options in provider sites.

Access to these channels through the Web, therefore, requires some interactive response, however limited, to the site by the user, and so we must say that the continuum of Web uses technically starts not with *complete* passivity, but with *severely limited* active use – purely passive reception of the channels remains just off the scale. Even users who never stray beyond the channel options which come pre-installed with their Netscape or Internet Explorer browsers, for example, must *click* on these options to use them, after all. This underlines the inherently and unavoidably interactive nature of the Web, as a 'pull' medium. For the present purpose, however, we might say that the usage of Web channels is *practically*

devoid of interactivity – after all, media forms are not usually seen as interactive simply because they have an 'on/off' switch.

More directly interactive uses of the Web begin with *browsing*, which constitutes a relatively uninterested 'looking through' the Web not unlike channel-surfing in the television medium. Users browsing the Web drift across its content along available links without predefined aims; thus, they use the Web in a highly disorganised manner – nonetheless, although this use might accentuate the non-hierarchical aspects of hypertext, even browsing imposes some small degree of temporary structure on the network, as particular connections are actualised for a brief moment.

When browsing becomes more aimful, we can refer to it as Web *navigation*, with all the connotations of directed, purposeful movement and organised exploration that this term implies. Navigation requires more knowledge of possible tracings and structures which may be activated from their dormant state within the network, and itself imposes more structure on the network – and more permanently so as users navigating the Web with a particular purpose are also likely to take note of what they arrive at by adding 'bookmarks' to their browser database.

Finding a Voice

The activities described so far are largely concerned with finding content which is then received passively – read, watched, or listened to (although navigating might also incorporate the use of search engines to find relevant sites, and the collection of useful bookmarks could already be seen as a – strictly private – form of Web content creation.) Further steps along the usage continuum expand the interactive nature of Web users' engagement – with the Web as such, but also importantly with the specific sites they visit. Sites can always be read – browsed or navigated – relatively passively, but in many cases they also offer the opportunity for more active uses – through automated searches for and access to particular content, as in

the search engines already mentioned, through similar facilities of smaller, more specifically focussed scope, or through on-site communication facilities such as guestbook or Webchat pages or options which allow direct user feedback to a site's creators. A further step from here would then be the use of these facilities or other means of (online) communication to contribute to a site's content *outside* the areas designated for visitors: for example by pointing out errors or omissions and offering corrections and additions, or more fully as a contributing writer or editor collaborating with the site's primary creators.

A logical further increase of active Web participation would then be the provision of a user's own content through their own site (or a site which is shared between a number of users), and the connection of that site, through links, to other sites on the Web. At its simplest, such active participation often merely takes the form of publishing one's private collection of bookmarks pointing to favourite Websites, as a more or less extensively ordered and commented 'list of links'. Initially, such links, simply pointing to supposedly interesting sites, will necessarily remain unidirectional and unreciprocated, and thus 'passive' in a sense, but as users create, around their links lists, more elaborate sites which are of use to Web users other than themselves, and as they publish their own content beyond mere links to other sites, they will also work to have their pages linked *to* from other sites (such as topically relevant other providers, and search engines), thus creating more 'active' two-way connections through links. Such connections to other site creators could also be expanded to a more or less organised cooperation between sites, or even to direct collaboration on shared projects. In this way, a sense of community amongst site providers arises – which is also likely to involve the more active of these sites' users –, and it is out of such communities, in turn, that many existing Resource Centre Sites have emerged, as the central nodes of the network of connections thus established amongst the communities.

Mixing Up the Metaphors

> A ubiquitous metaphor in electronic text is that of the traditional
> writing space: a desktop and related images of files and documents.
> Miniature desktops, little file icons, partially overlaid open files, pop-
> up notebooks, clipboards, rubbish bins for discards: it is as if the user
> had never left the familiar territory of paper. ... But if hypertext
> becomes the medium of the future, … the process of devising new
> metaphors will accelerate. (Snyder 6)

The metaphors employed here – especially 'browsing', 'navigating', and the now
less frequently used 'surfing' – already demonstrate such changes. As Nielsen
points out, Web usage "is often referred to as browsing or navigating, rather than
just 'reading,' to emphasise that users must actively determine the order in which
they read the nodes" (2). (This is not to say that this process does not occur in
reading print, too – but reading hypertext puts a new focus on this active
determining.) The distinctions between the individual metaphors are also worth
noting, and reflect the differences in the degree of their active nature, as described
above: 'browsing', much as it is used in other domains of everyday experience, such
as shopping, is merely a haphazard looking-through, without clear aims, but on the
other hand "when subjects are required to access a particular piece of information in
hypertext, the screens of data are analogous to rooms and landmarks" (Edwards &
Hardman 92), and the act of moving between them is likened to 'navigation' – with
the implications of a traversal of "large, open and sometimes poorly charted spaces"
(Snyder 69) in a skilful, purposeful way, and of a total immersion in those spaces
that is markedly different from the superficiality of 'browsing'. Even 'surfing' can
be understood this way, and combines aspects of both metaphors: we might see it as
a skilful use of 'waves of information' to one's own benefit which is performed in a
tactical manner, but without much impact on the vast 'ocean of knowledge' out
there, and without a true practical purpose. Especially the navigation metaphor is
also reflected in the names of well-known Web softwares: we use Netscape

Navigator, Internet *Explorer*, or (on the Amiga platform) *Voyager* – even though the common generic name for these programmes is still 'Web browser'.

The distinction employed here is a significant shift from earlier views on the differences between 'browsing' and 'navigating', and demonstrates the developing nature of the Web: in 1993, McAleese still asserted that "there are two states: browsing is where an idea is followed using the linking mechanism of the hypertext elements ... ; navigation involves the use of a graphic aid such as a browser or map to show an overview representation of the nodes and links" ("Navigation" 6) – today, where virtually all Web browsers are graphical in nature, that distinction has become outdated.

It is obvious, then, that interactivity is not simply a feature inherent in the Web medium: while browsing and navigation can already be seen as basic interaction with the Web by an active user, only the additional functionality offered by individual sites in different ways and to varying degree allows for a fuller participation of users, and their cooperation and collaboration with site creators. Thus, as Wearne notes,

> the notion of 'interactivity' has become an elusive object of scrutiny. Indeed, interactivity is no longer attractive in itself. Rather it is the *design* of that interactive work which is crucial, how its pathings relate to the content and aesthetics, and more importantly, how the choices made by the viewer feed back to them through the text. I would like to propose here a craft of 'structural aesthetics', a craft which has arisen due to the alternative narrative structures possible which result from new media technology. (19)

Products of that craft, such as on-site search engines, guestbooks and Webchat facilities, or features such as the personalisation of a site to the individual visitor (through use of 'cookie' files as markers of identification for returning users), are all designed to show a site's connection and involvement with its users and to create a feeling of belonging for them, which for a group of users might also turn into a

feeling of community. Quentin Jones terms sites which provide the base for such feelings 'virtual settlements', so that "a virtual community is a set of social relationships forged via a virtual settlement" (n. pag.) – however, the reverse chain of events also applies, and *pre-existing* online communities (arising, for example, out of newsgroups or the Internet Relay Chat) might also establish their 'virtual settlement' on the Web *afterwards*. In either way, interactivity as facilitated through various Net technologies is thus obviously an important asset for the continued existence of such communities. Users settle where their interactive drive is catered for.

The degree to which sites are able to offer such facilities also contributes to the emergence of certain class distinctions between Websites, which arise (in basic terms) between simpler and more elaborate sites. We will consider such differences more fully in the following chapter, but it is already evident from the discussion so far that sites will largely be able to be distinguished by the amount of effort that has gone into their creation –Wearne's craft of 'structural aesthetics' in itself is not the deciding factor here, but rather it is the sophistication and continued exercise of that craft by individual practitioners. This is not strictly limited to the work put into the original content of a given site itself, however: one important part of that craft also is the continuing maintenance of a site's links and other connections to further relevant sites, which demonstrate the site's embeddedness in its peer community, and thus (by the logic of the networked, hypertextual medium) its usefulness to the visitor. For the example of the electronic art site, but with relevance beyond that domain, McLaughlin defines such network embedding as

> the extent to which a site is central to, or visible in, the matrix of on-
> line relationships among galleries, their viewers, and their
> contributors. Network embedding may be reflected in indexes of
> pointing (being on the receiving end of a hypertextual pointer from
> another gallery) and of pointing-to (supplying hypertextual links to
> other sites); in the presence of mediated extensions of the site's
> outreach, such as affiliated ... sites, mailing lists and newsletters, or

> searchable databases and archives; and in university or studio/design firm/arts collective affiliations. (65)

Once again, sites and their creators must do more than just passively link to other content on the Web.

Due to the importance of such active, bi-directional linking between sites, site publishers therefore depend crucially on the acceptance of their peers – publishers might always link *to* other sites, but only if peers see the new site as a worthwhile addition to the network of available information will they also reciprocate that favour by providing a link *back*. As this is a wholly voluntary process, site providers cannot demand that others link to their site, but must wait to be accepted into the community rather than force themselves into it – this may be a slow and frustrating process, but it is clearly necessary; it mirrors the process of gaining acceptance from one's visitors, as creators similarly cannot force Web users to visit their sites.

In the absence of other means of gaining acceptance, content quality remains a central element of persuasion for both users and peers, and thus sites will ideally be publishing *with* their users, not just *for* them; that is, they will provide spaces for user interaction – as McLaughlin explains for art sites, this begins with "openness to visitors and to potential exhibiting artists: the extent to which information about the gallery, its exhibitors, its art objects, and the mechanics of retrieval and viewing are available freely and in a manner friendly to visitors with varying degrees of on-line literacy" (65). Goldman-Segall expands on that idea when she speaks of creating

> shared cultural spaces for ourselves and our audiences. As [in accessing hypermedia] we assemble, filter through our mental map, and put chunks of data together with our own interpretation and story to tell, new creations evolve. However, if we define collaboration in its broadest sense, we realise that we collaborate with the others' works, and our readers collaborate with our works. Thus, the products of our reconstructions can be the result of a collaboration

with fellow researchers, with the original 'authors' of other works,
and with our audience. (30)

Designing Interactivity

The more a site provides spaces for this process – which, as we have seen, is
fundamental to using hypertext in general –, the more it will be seen as useful by its
visitors. Thus, for Wearne "design craft resides in the conceptual process of
planning associations between elements and built-in textual feedback" (19). Beyond
the 'mere' aesthetic and structural setup of a Website, therefore, "the design concept
is further realised in the presence of interactive features, which organise the
activities of the gallery through forms that allow visitors to send comments to the
gallery owner or to the artists, search archives or data bases, or order objects on
display at the site" (McLaughlin 66), and *mutatis mutandis* the same applies for
other fields of interest addressed by the Web. For Emmott, this represents an
important step beyond previous design concerns, and one not entirely unexpected in
a predominantly user-driven medium such as the Web: "design will have to focus on
users in ways it has never done before – it will have to be really *user-centred*.
Designers will have to develop applications and devices that have truly intuitive
interfaces" (Introduction 8).

This intuitive interactivity that is offered by many sites on the World Wide Web
is another contributing factor to the breaking-down of author/reader distinctions that
we have seen already, along with the increased ease of publication that the Web
offers. Through interactivity, "the spectator can step out of his or her seat, so to
speak, and onto the stage. The possibility to penetrate the acting space offers new
dimensions to the nature of the experience. ... Space of work, space of penetration,
and space of community" (Friedlander 164). The accessibility of such spaces, the
possibility of interacting with a site and with other users through a site – in short,
perhaps the feeling of community that arises – all add to the users' desire to return
to a site frequently, too: in order to maintain their relationships within the

community, take part in the community's interaction with the outside world, and catch up on the latest developments and news. Active community members can use such community spaces to move gradually from participant to publisher in their own right, and draw on the community as a readily accessible audience for their own work – whose attractiveness will itself again be governed by such factors: "the work needs to be able to summon engagement, providing the user with a reason to interact. This reason comes with the creation of *desire*" (Wearne 21).

Part of the attraction of finding the concerted efforts of online communities, and of attaching oneself to those communities as a new user, stems from the instant accessibility of communal spaces which the Web as a medium affords its users, often in great contrast to offline communities.

> The internet is perceived as something that is free in some way. There is an expectation in internet use that one is cheating, or, in a more mild sense, getting something for nothing. The connection to the graphic images of sophisticated Websites, the capacity to download photographs from a variety of locations or the ability to see segments of *Seinfeld* or *The Simpsons* without charge are some of the giddy pleasures of the internet. Embedded in these practices – indeed embedded in the very meaning of the internet – is the sense of cheating. (Marshall 55)

This undoubtedly thrilling 'sense of cheating' and the feeling of individual empowerment that comes with it makes it easy to overcome the inhibitions that may otherwise be linked to joining a new community; eventually, however, the user's awareness that they are receiving valuable information and support 'for nothing' can also increase their desire to give something back to the community or to individuals from whose work they have been profiting – there might thus be a gentle form of implicit peer pressure to add one's own particular talents to the community's resources. This, too, can drive users to take a more active role on the Net, then. Such participatory impetus could possibly be lost with a greater proliferation of pay-

per-access sites that would reduce the feeling of 'cheating', but in light of the fact that such sites have as yet failed to make an impact outside very limited and specialised fields this possibility continues to appear remote – by far most of the popular information on the Net remains freely accessible.

In spite of the need for site owners to make their sites *feel* interactive to users, not all sites which appear to offer such facilities truly go beyond appearances to providing fully-featured tools for interaction and communication between users and with the sites' creators. It is possible to give users the feeling of interaction without their interacting with other people on the Net, much in the same way that video games have long offered players a feeling of control over features of the game although the game itself remained entirely unaffected. Translating this approach to Web content, we can therefore find sites which offer visitors some degree of user-driven 'interactivity' which nonetheless serves only to provide access to preprogrammed, fairly non-interactive content delivered to users as Internet narrowcasts.

For this type of on-demand 'push' delivery of content, existing "media corporations are ideally situated to move beyond the Internet's promotional limits: they possess the content that will be part of the 'push' technology where greater amounts of moving image content will appear instantaneously once a user alights on a particular site. At this stage, these large media entities are giants in waiting, promotionally present but encumbered by the awkward fit of their past into the imagined technofuture" (Marshall *et al*. 75). Such 'push' delivery will remain unable to take over the Web in its entirety, however, as the medium's user-driven, 'pull' setup would be hard to curtail – the global media conglomerates are 'giants in waiting' only for this particular market of on-demand narrowcasting over the Net, which may use the Web as its access front-end, but relies on ancillary technologies for its actual content delivery; for such providers, their access Websites are little more than TV remote controls.

Talbott states that the hypertext "navigator is invited toward that same, distracted, associational manner he [*sic*] may already have learnt in front of the television screen. (The hypertext 'button' [i.e., link] is close cousin to the remote control button, and the joltingly syncopated rhythms of channel surfing prove equally apt for Netsurfing.)" (197) – in light of the preceding discussion, however, it is obvious that this analogy with television works only for the specific area of on-demand narrowcasting, not for the Web as such. (Most fundamentally, in television viewing using the remote control *interrupts* the flow of information, while in the case of the Web following links usually is a necessary *prerequisite for receiving more* information.) While Web navigation is certainly often associational – and a reason for Talbott's criticism of that fact cannot be identified easily –, it is not necessarily any more 'distracted' than in the case of many other media forms; in fact, the constant need to continue clicking on hyperlinks to move on through the Web could be seen as a feature to keep the user's attention *focussed* – on their navigational aims, though not necessarily on the site they are viewing – at least to some degree (and a feature notably absent from 'push' media). Talbott's lack of consideration of this important feature of the Web becomes further evident from the claim that "hypertext, in the absence of a determined discipline, can discourage any sustained attention to another's train of thought, substituting a collage of impressions for concentration, and a flaccid openness for the muscular reception of new and difficult material" (197-8): precisely *because* the Web is a user-driven 'pull' medium, though, 'determined discipline', which we might translate more generally as 'an interest in finding more information', appears more likely to exist amongst Web users than it does amongst the users of many other media forms – put simply, Web users (other than first-time users browsing the Web for the novelty of the experience, perhaps) do not navigate the Web just because it's there. They might in some cases investigate topics that could be adjudged unsavoury, immoral, or illegal by the particular moral or legal standards we may like to employ as

observers, but these users will still explore the Web with a distinct sense of purpose and with the 'sustained attention' Talbott demands.

Friedlander's experience with a stand-alone information kiosk supports this point:

> I watched visitors explore an interactive program in a museum, one that contained a vast amount of material – pictures, film, historical explanations, models, simulations. I was impressed by the range of subject matter and by the ambitiousness and polish of the presentation. ... But to my surprise, as I watched visitors going down one pathway after another, I noticed a certain dispirited glaze spread over their faces. They seemed to lose interest quite quickly and, in fact, soon stopped their explorations. (163)

It appears quite obvious that users must have a prior interest, however vague or precise, in a topic in order to seek out more information on the Web – they must already have a reason to look, or be given such a reason for further exploration in the course of their inquiries. Friedlander's case underlines this need: "visitors were simply overwhelmed with the sheer mass of information and were reluctant to continue accumulating facts without a guiding purpose, without some sense of how or why they could use all this material" (163). Ultimately, this sense of purpose can only come from the individual users themselves, however, as the uses that information found on the Web will be put to cannot be fully anticipated – Websites can guide users in their evaluation of the available material, though, and this is where central, popular gatewatcher sites such as Web portals and Resource Centre Sites play an important role.

If in light of the importance of well-designed interactive and participatory features for the popular success of such Websites it seems unlikely that many sites should be able to find the expertise and resources to develop these features, then it should be noted that the wheel need not necessarily be re-invented multiple times: as we will see in Chapter 4, the leading practitioners of Wearne's 'craft of structural

aesthetics' are freely providing the tools for setting up efficient Resource Centre Sites to the general public.

The Fate of Intermediaries

From a commercial perspective, Sarkar *et al*. ask whether on the Net, with its opportunity for direct access to producers, marketing intermediaries are,

> as current notions espouse, a threatened breed? Or is it likely that the mediating function will be present in the electronic marketplace, with traditional intermediaries benefiting from network-based transactions to solidify their role in exchange, and with new types of network-based entities which function as 'Cybermediaries?' ... Analysis of the nature of consumer needs, particularly in a computer-mediated environment, suggests that there will be a role for both traditional and new types of intermediaries that broker the relationship between producers and consumers. (n. pag.)

More generally, too, users will still find it useful to have access to intermediary services combining information from and about various content providers in a given field rather than having to access all these providers individually. Such sites need not be limited to any one purpose – "we can create meeting places that allow long-distance learning, that allow groups of people to collaborate on creating a world together, or a performance, or a multimedia document. If we imagine such a world connected to a network filled with data, we have perhaps a model for the schools of the next century" (Friedlander 169), but just as much we can see these places as its shopping malls, libraries, entertainment complexes, research facilities, or as having many other uses, depending on their individual topical focus.

Nielsen draws a different analogy by describing such sites as "hypertext 'journals' consisting of 'official' nodes and links that have been recommended by some trusted set of editors. This approach is of course exactly the way paper

publishing has always been structured" (189) – but the Web makes access to such 'journals' much easier (for both their 'readers' and 'writers'), and allows for a greater variety amongst them (by reducing the cost of publication), so that many more very specific, niche interests can be catered for. As Levinson writes, "magazines, journals, and books will and should continue to be published, on and offline, as expressions of the publisher's taste and editorial acumen ... . But the capacity of anyone with a Web page to therein publish his or her own story, essay, book means that texts made available with a publisher's imprimatur will no longer lock such non-endorsed texts out of the public arena. The Web allows gatekeeping both on it and in society as a whole without filtration. Instead, gatekeeping becomes endorsement without punishment" (129) – gatewatching.

Nielsen also emphasises the increasing need for such services: "even without malicious tampering with the hypertext, just the fact that so many people add to it will cause it to overflow with junk information. Of course the problem is that something I consider to be junk may be considered to be art or a profound commentary by you, so it might not be possible to delete just the 'junk'" (189). As we will see, gatewatchers and RCSs in particular sift through the 'junk' with an eye for material suited to a specific set of interests, to find the pieces of relevant information hidden amongst it. Thus, they can help focus user interest on and direct Web traffic to particular Websites (which will also make them commercially attractive), and they help users get the most out of their exploration of the Web. Levinson would see this as an improvement over traditional models: through gatekeeping, he writes,

> what, on balance, is actually gained? Does the ineffective keeping of
> trash and error from the public ... does its filtration out of our
> communication systems offset in benefit the damage done when the
> same filtration deprives us of the Beatles, a Karl Popper, an unsung
> Milton, a gem of purest ray serene? I would argue that the risk of
> losing any of these ... far outweighs the unappraised 'glut of

possibilities' which Michael Heim ..., early in the online age, saw as
one of its main potential drawbacks. (127)

In many ways, such gatewatcher sites follow on from the long-established
practice of individual Websites to offer all their most important sections as
immediately accessible from their main page, and expand that practice beyond any
one site: they provide, or at least aim to provide, direct links to *all* the important
information on *all* the sites they monitor, in an easily accessible format. As
McAleese remarks, "hypertext is explosive in its ability to make textual links.
Further, hypertext systems, because of their ease of construction, are very rich in
text, graphics and visual illustrations. Explosiveness or divergence is common in
hypertext. ... It should be obvious that the most efficient or effective way to
facilitate a useful system (no matter what its components are) is to improve its
precision not its power" ("Overview" 3) – and so, portals, RCSs and similar
intermediary sites aim to direct users to the information they seek with precision and
without detours, in a way that search engines and related services cannot.

McKnight *et al*. provide a useful summary of the problem such sites aim to
address:

the creation of very large hypertext systems may be of limited value
unless they are structured in such a way as to be coherent to the
reader. ... Browsing [a paper document] is the process by which
scanned material is evaluated for relevance according to a set of
needs or interests (which may be capable of only vague definition by
the reader), with irrelevant material being quickly rejected. ...
However, it is not clear that this type of information-seeking can be
supported by hypertext systems that entail relatively flat semantic
networks. (*Hypertext* 99-100)

By providing central information resources, intermediary Web gatewatcher sites
reduce the 'flatness' of the network, instead offering a view (indeed, multiple

alternate views) of it as divided into distinct topical segments which may be traversed with less fear of getting lost.

Hypertext's preference for a division of information into separate units (which stems chiefly from hypertext documents' segmented, non-monolithical nature) plays into their hands here; topical specialisation wins out over all-inclusive approaches, as an example from one one particular publishing activity shows: "can we really hope for the disappearance of unsolicited, one-size-fits-all advertisements? If the current growth of trading on the Web is anything to go by, the answer may possibly be 'Yes.' As consumers, we can search for what we want when we want it – although ... we usually find advertisements embedded in it" (Lennon 164). Those, however, are now targetted very specifically at the particular constituency of individual Websites. Again, too, such specialisation emphasises the need for all content providers involved to strive for good embedding in their particular community in order to gain its support and tap into the communal knowledge and resource base.

The Need for Editorial Presence

It is not enough, therefore, for such intermediary sites to present their recommendations of further resources to users simply in a plain, largely archival format – this would be seen as uninspired and uninspiring by users, and akin to the 'text dump' pages found on the early Web. Rather, in view of the points made so far in this chapter, providers of 'intermediary' sites must also offer 'added value' within their pages – especially interactive features which support the customisation of the site to the interests of the particular user as well as offer an opportunity for online communities to gather together. Ideally, these sites should enact all three components of the publication drive, by providing up-to-date information (real-time) that remains permanently available (archive) and provides for searching and

bi-directional engagement by and with users (interactive). McLaughlin describes the emergence of such distinctions for the case of the art Website:

> there is considerable variation among on-line image sites with respect to exhibition practice. Broadly speaking, however, one can distinguish between galleries and exhibits, on the one hand, and mere archives, on the other. The former have about them a sense of curatorial presence, selectivity, and mission: The works on display have been assembled within a context, which may be the technology used to create them, or the national origin of the artists. There is at least an implicit notion of the audience to whom the display is addressed ... . Mere archives, on the other hand, most of them uncatalogued collections of unattributed images, are characterised by little or no sense of mission. (47-8)

That 'sense of mission', evidence of editorial involvement and direction, is therefore an important feature of services such as Resource Centre Sites, as we will see in the following chapter. Such editorial guidance might also go some way to address another problem inherent in the Web. As Gay notes, "visual interfaces and navigational tools that allow quick browsing of information layout and database components are more effective at locating information … than traditional index or text-based search tools. However, it should be noted that users are less secure in their findings. Users feel that they have not conducted complete searches when they use visual tools and interfaces" (185). If the editors providing those tools and interfaces – the Resource Centre Sites and similar informational gatewatcher guides, that is – can also instil some confidence in their users that they have indeed got all the most relevant information at their disposal when using these sites, such insecurities might be alleviated, if not necessarily eliminated altogether.

That "the eventual benefit of information abundance is not simply that there will be more information available in a library or in electronic form but that the information and knowledge that is available will be applied to problem-solving as readily as adding a column of numbers or moving a paragraph of text is done today

[in 1991]", as Tennant & Heilmeier hope (117), might remain an unrealisable ideal, however. Too many factors, it seems, conspire against Web users to keep them from achieving a totally satisfactory sense of closure in their Web searches: hypertext documents are frequently "fragmenting a piece into sections that can be accessed in a non-linear fashion. ... However, the flip side of experimentation beyond such pathing has been warning cries of vertigo and disorientation as users get lost in the maze of links with no navigational guide" (Wearne 19); it is hard to tell whether all important links have been explored.

Indeed, the ease of publication on the Web means that "hypertext also changes our conception of an ending. Different readers can choose not only to end the text at different points but also to add to and extend it. In hypertext there is no final version, and therefore no last word: a new idea or reinterpretation is always possible. ... By privileging intertextuality, hypertext provides a large number of points to which other texts can attach themselves" (Snyder 57). This constant influx of more and newer information might also help to explain the phenomenon of Net addiction: "few surfers disguise the rush they get from their Net fixes, and the terms of a new, psychedelic vision are now common currency within the Net culture as a whole" (Talbott 196-7); that rush is linked largely to the thrill of immediate connectedness both to the latest news as it emerges and to the vast archives of existing knowledge. Like junkies, some Web users might always be on the lookout for the next fix of information to better the previous one – and here, the 'drugs' are free and in constant supply (Bruns, "What's the Story" b. 12).

Additionally, "with the growth of knowledge comes decreasing certainty. The confidence that went with objectivity must give way to the insecurity that comes from knowing that all is relative" (Smith, *Goodbye* 206) – a problem that is far from being limited only to the Web, but one which we have by now seen the Web bring out in particularly sharp contrast several times, by making the *amount* of information that is available so clearly felt. Also, no two Web users browse alike, and the body of information thus gained will therefore differ from user to user: "the

techniques used in reading the Web ... do not produce 'hard facts' in a regular manner. Quite to the contrary. Skimming, filtering, pecking, imposing, transgressing, and fragmenting activities are not likely to produce the sort of stable, shareable descriptions of the reading experience that has characterised disciplinary research into printed texts" (Sosnoski 136).

We might ask once more at this point whether reading experience in print has indeed been as 'stable' and 'shareable' as Sosnoski claims, or whether the Web has not simply brought into clearer focus a problem inherent in all meaning-making activity. Whatever the answer to that question, however, such problems certainly *do* exist on the Web, and it is clear that any sites addressing them at least to some extent, for some Web users, by pointing them in *a* (though not *the*) right direction and returning to them some sense of location and environment, perform a useful task; we will see in the next chapters *how* they perform it.

In order to balance the preceding negative descriptions of the Web, it should also be noted here that many of the problems with this medium that have been reported in the literature can be regarded as novice problems. Talbott's criticism demonstrates this point: "computers and the Net have become the most highly perfected means yet for the scattering of the self beyond recall. This is already hinted by the common experience of Net converts – those many newcomers just now discovering the Internet, who find themselves enthralled by the Walmartlike aisles of cyberspace, stocked with a glorious surfeit of information" (10), but once those newcomers have gained some orientation in these 'aisles', the analogy is likely to continue: why should they not then habitually proceed straight to the aisles which hold their favourite goods, in the future, instead of remaining scattered selves? (Much as the citizens of former Eastern bloc countries have come to terms with the abundance of Western goods now surrounding them, and are even frequently quite critical of what is now offered to them.)

At any rate, McKnight *et al.* remark that navigation "is not a problem unique to hypertext and many people make a decent living acting as guides in the maze of

paper documentation" (*Hypertext* 140). So, there is no evidence to support the claim that the Web affects its users' sense of self 'beyond recall' – necessarily, "novices do not know in which order they need to read the material or how much they should read. They don't know what they don't know. Therefore learners might be sidetracked into some obscure corner of the information space instead of covering the important basic information" (Nielsen 190), but as anyone who has seen new undergraduate students in a large university library would know, this is a problem with all complex, unfamiliar information spaces, and does not inherently prevent inexperienced entrants from gradually *gaining* that experience and find markers of orientation.

As Lennon notes, then,

> to survive in the information age, students will need to be proficient in navigating various information pathways, and they must be provided with the necessary skills. Once they have these skills they will be able to take control of their learning to a much greater degree than ever before. ... However, a note of caution is needed here. Experience has shown that students need encouragement and even gentle discipline to form the new study habits required for mastering the new learning environment. (174)

This is the true challenge of the Web, and not only for students (in a narrow sense), but for anyone who might be using it to gather new information.

The Web as Computer Game

As if in answer to Talbott's concerns, Landow asserts that "as long as thematic or other culturally coherent means of ordering are available to the reader, the fragmentation of the hypertext document does not imply the kind of entropy that such fragmentation would have in the world of print. Capacities such as full-text searching, automatic linking, and conceptual filtering potentially have the power to

retain the benefits of hypertextuality while insulating the reader from the ill effects"
associated with a lack of linearity (*Hypertext* 57), and RCSs and similar gatewatcher
services are set to add their valuable contribution to that protection.

Indeed younger generations might even find it relatively easy to come to terms
with vast information spaces with fairly little guiding information, as their
experience with computer games may already have given them the necessary search
and navigation skills. Talbott therefore misses the point when he writes that

> the potential advantages of hypertext are, in actual practice, a
> powerful invitation to scattering. It requires a tremendous inner
> discipline to sink oneself deeply into the thoughts represented by any
> given text, rather than to set off in grand, superficial pursuit of all the
> imagined delights behind the 'doors' showing up as hypertext links
> on the screen. Clearly, a generation raised on *Adventure* and video
> games – where every door conceals a treasure or a monster worth
> pursuing in frenetic style – has its own way of appreciating the
> hypertext interface. And society's experience with television – where
> the 'links' are buttons on a remote control device – doesn't suggest
> positive things about our ability to use hypertext rather than be used
> by it. (13-4)

In fact, the dedication and concentration young players put into solving a succession
of ever more elaborate puzzles in adventure games can (if we ignore Talbott's
implicit distinction into worthwhile and worthless intellectual pursuits as the
individual value judgment it is) easily be seen as the ideal training for that
'tremendous inner discipline' necessary to investigate any given question, using the
Web or other information sources. Talbott is *right*, therefore, in saying that for the
Web "there's an element of the video game here as well – the adventurous quest to
rack up points for booty captured", but the appalled tone of his conclusion that "the
doctrines of endless Enlightenment and Progress become the compelling subtext of
a universal video game few can resist playing" (196) seems quite unjustified.

The ability to figure out unknown problems, the desire to understand and gain control of a situation, which they can learn from computer games, is therefore likely to serve new Web users well, and help them adjust more quickly to the new medium. So trained, they might better understand the complexity and interconnectedness of what they learn: "the non-linear structure of hypertext as being split into multitudes of small distinct nodes could have the long term effect of giving people a fragmented world view. ... On the other hand it could just as well be true that the cross-linking inherent in hypertext encourages people to see the connections among different aspects of the world so that they will get *less* fragmented knowledge" (Nielsen 190). Web designers, too, might learn from such experiences, as Boiarsky points out: "understanding how people use a technology, and how that technology affects them, requires knowledge of how people use and interpret information *in general*. We need to know *how* end-users think in order to create useful and aesthetically pleasing technologies" (110).

Similarities of the approach to the Web with that to computer games might also help to undermine some of the more heavily encrusted structures of information dissemination that are still dominant: "we are promised, on the information 'library' side, less of the dogmatic and more of the ludic, less of the canonical and more of the festive. Fewer arguments from authority, through more juxtaposition *of* authorities" (Debray 146) – this is also supported by the fact that there usually exists no one central authority, no one central site, in any field of information covered by the Web, but that there rather is a multiplicity of sources and viewpoints with varying claims to 'authority' and 'objectivity'; rather than rely on authorities to determine what is accepted knowledge, Web users must, and do, distil their own knowledge from the information they find in their searches.

Data, Information, and Knowledge

Thus, as Bazin puts it, the Web offers "a system for the coemergence of bodies of knowledge … – a system in which instruction, self-apprenticing, intellectual creation, and diffusion all closely cooperate" (163). In the process, distinctions between 'knowledge' and 'information', and beyond this, between 'information' and 'data', also emerge – by the terminology employed throughout the present discussion, *information* is data (in the widest possible sense) prepared for presentation on and access over the Web (prepared by humans or machines), and *knowledge*, then, is what individual readers form out of the information they receive, and likely to be different for each individual.

"Hypertext provides the individualistic learner with the perfect means for exploration and enrichment of particular areas of study. By permitting one to move from relatively familiar areas to less familiar ones, a hypertext corpus encourages the autodidact, the continuing education student, and the student with little access to instructors" (Landow, *Hypertext* 129-30). There is no doubt that canonised knowledge does exist amongst online communities as much as it does offline (see Bruns, "Every Home" 71f), but in neither case does the community support for its canonical status mean that such knowledge is truly shared amongst all community members – the information/knowledge distinction helps emphasise that fact, and thus helps to avoid false notions of a universally accepted objective viewpoint.

For the process of knowledge-formation out of available information, the form in which the initial data (no matter if they are scientific formulae or fine art) are presented *as* information is of immediate paramount importance. "The technology that delivers immense bundles of data does not simultaneously deliver a reason for accumulating so much information, nor a way for the user to order and make sense of it. That is the designer's task. The pressing challenge of multimedia design is to transform information into usable and useful knowledge" (Friedlander 163), or perhaps at least aid that transformation as it is performed by the individual user. This is even more true for hypermedia design, which adds to the task of presenting

the data and information available on-site the further dimension of embedding this corpus into the wider Web through hyperlinks.

Thus, as Friedlander continues, "the designer is a kind of theatrical director who must shape a unified, focussed, and meaningful experience, moment by moment, out of the richness and potential of the medium. The designer must develop her or his system with the users foremost in mind, making sure that at every point there is a clear, simple and focussed experience that hooks them into the welter of information presented in a multimedia system" (164). At the same time, however, the designer must also be aware of the individual nature of each user's experience of a site, and refrain from forcing one preferred interpretation of the information provided, one *knowledge*, onto the users.

Ideally (and, considering the multiauthored and cooperative nature of the Web, most likely), the designer is also a Web user, and thus aware of users' needs – designers must realise that "hypertext changes authorship to such an extent that positions, arguments and sustained expositions are rendered highly unstable, relying as they do on narrative modes of storytelling and exposition" (Cunningham & Finn 89). This instability can only be remedied by individual users, as they come to their own, more or less stable conclusions based on the information they have retrieved, creating their own narrative of knowledge-formation.

Talbott criticises this focus on information by saying that "apparently, *information as such* – anything storable in a computer – is now felt to possess an objective value sufficient to underwrite the Net Age. ... The objective aura is achieved by eliminating from view everything related to the *content* of information. This raises the question whether the coming age might actually be the Age of No Content, or the Age of Meaninglessness" (198). This distinction of 'information' and 'content', the latter of which, he appears to claim, can be judged in some way according to how 'meaningful' it is, is misleading, however: *no* content, no piece of information, is inherently meaningful to everybody; any pretensions of 'objective value' linked to a particular informational content have long been discovered to be

ideologically driven, and the meaning of information is only activated (and gains 'value' in Talbott's sense of the word) in the process of perception by individual receivers situated in specific social contexts, as they form knowledge out of it. If this is the case, however, then certainly we might at least place *general* value on having the greatest possible amount of information available publicly, *pace* Talbott.

Fundamentally, what Talbott is lamenting is the fact that "knowledge is no longer conceived and construed in the language of forms at all ('bodies of knowledge,' or a 'corpus,' bounded and stored), but rather as modes of thought, apprehension, and expression, as techniques and practices" (Hesse 31); this, however, is only the final acceptance of long-established fact (even though the very use of the word 'fact' might seem paradoxical here). Knowledge is fluid, changeable, ephemeral, contradictory, and contested rather than static, fixed, constant, objective, and universal, and an individual's knowledge is dependent on the extent of information available to them, and the discursive, intellectual, and social contexts in which they operate. It is these contexts – discursive regimes, disciplines of thought – which enable commonly shared, accepted knowledges to emerge. Thus, in all the focus is not on a *body* of knowledge, but on the *flow* of information. Perhaps "all that we glorify today as 'information' is but an ashen residue of the luminous meaning that once held both man [*sic*] and world in its embrace" (Talbott 343), but there is little alternative to this new 'glorification' of information – the extinction of the one 'luminous meaning' embracing us is an unavoidable product of enlightenment and individual self-determination. Thus, "in the future, it seems, there will be no fixed canons of texts and no fixed epistemological boundaries between disciplines, only paths of inquiry, modes of integration, and moments of encounter" (Hesse 31).

Again, such postmodern attitudes towards information and knowledge are also reflected in the structure of postmodern media. "More effectively than the codex or the printed book, the computer reflects the mind as a web of verbal and visual elements in a conceptual space" (Bolter, *Writing Space* 207). In some ways, though

far from perfectly, the computer network works as an extension of the mind's, as many observers have noted – it is partly for that reason, too, that to the individual user the usefulness of ideas, not their origin, now matters more. "The idea of a relatively stable canon made sense in a culture dominated by printed books. ... But the notion of a standard has now collapsed, and the collapse is mirrored in the shift from the printed to the electronic writing space, in which a stable canon of works and authors is meaningless" (Bolter, *Writing Space* 237).

The Fluidity of Information

As Smith describes it, "knowledge has been 'owned' by the institutions and individuals who have created it, but in the electronic phase of knowledge storage and retrieval, information goes back to society or mankind [*sic*] in general. Power over knowledge remains with the institutions that control the systems by which it is transmitted and obtained, but information can move endlessly from place to place, from storage to storage, without being 'copied' or 'learned'" (*Goodbye* 313). Information, therefore, can and will be used – that is, transformed into knowledge – by individual users in ways which are influenced by their social and discursive contexts.

Additionally, "what the digitalisation of text seems to have opened up is the possibility for writing to operate in a temporal mode" where the ease of electronic publication makes possible continual changes and updates, and "in which writing loses its particular relation to time, in which the space created by the structure of deferral gives way to pure textual simultaneity, to what we might want to call scripted speech" (Hesse 32). In this form of publishing, the real-time drive is no longer subordinated to the archive drive by the physical means of publication: "electronic text is continuously various. Because no one state or version is ever final, an electronic text is relatively dynamic in permitting correction, updating and

modification. Even at the level of simple word processing it is not constrained by the fixity that characterises print" (Snyder 52-3).

It is immediately obvious that this can also pose problems for content providers as well as users on the Web, as it makes it both labour- and cost-intensive to continually maintain a once published text, and confronts the users with the added responsibility of having to check whether any information they may find online is still current and accurate. This has been (and will continue to be) one of the questions most seriously throwing into doubt the reliability of the Web as an information medium – even if (less obviously than in this case) similar problems exist in many other media. The highly changeable nature of the visual presentation of any given piece of information on screen has also contributed to these problems: "screens ... have different formal conventions. Unlike pages, they are not numbered, their margins are fluid, and they have cursors, windows, and menu lines" (Snyder 8) – even simply citing information found on the Web, only rarely a problem in print, is far from trivial in the case of the electronic medium. Largely, this is because "although the grammar of the computer screen shares some conventions with the printed page, the two are quite different. Pages are static units in a spacial text. Screens, by contrast, do not display [static] units of text. ... The screen is ... a temporal rather than a structural unit" (Snyder 8).

As Bolter summarises, therefore, "the electronic space is unique in that its textual structures are kinetic: the structure can alter or regroup its elements behind the screen as we look on" (*Writing Space* 198). Snyder supports this by referring to electronic texts as 'softcopy', in contrast to printed 'hardcopy'. For its creator, "softcopy offers a process-oriented rather than product-oriented mode of writing. Composed in softcopy, writing is … a fluid and malleable stream of electronic information. Softcopy documents are written to be displayed rather than printed, and designed for provisional recording in electronic storage, pending the rereading or rewriting of them" (13).

To significant degree, electronic texts are therefore seen as ephemeral in nature, but this ephemerality might be a general sign of the (postmodern) times, as Bolter notes: "today we cannot hope for permanence and for general agreement on the order of things – in encyclopedias any more than in politics or the arts. What we have instead is a view of knowledge as collections of (verbal and visual) ideas that can arrange themselves into a kaleidoscope of hierarchical and associative patterns – each pattern meeting the needs of one class of readers on one occasion" (*Writing Space* 97).

The Frustrating Web

For many (and Talbott's views as cited above are just an extreme example of far wider-ranging worries), this is a cause for sincere concern about the limited usefulness of the Web for society as such –

> contexts presented online are often too limited for what we really want: an environment that delivers objects of desire – to know more, see more, learn more, express more. We fear being caught in Medusa's gaze, of being transfixed before the end is reached; yet we want the head of Medusa safely on our shield to freeze the bitstream, the fleeting imagery, the unstoppable textualisations. We want, not the dead object, but the living body in its connections to its world, connections that sustain it, give it meaning. (Barrett, "Hiding" xiv-v)

We want, put simply, to form knowledge from the available information in order to *understand* it, but are confronted and frustrated by the fact that our knowledge can only ever be formed on the basis of a non-exhaustive, not entirely trustworthy sample of all the information available on the Web, and that our understanding must therefore necessarily remain limited. The tendency for merely individual, isolated wish-fulfilment, or for only superficial investigation of the available information,

which might be a reaction to this disillusionment, is problematic if the medium is also meant to be beneficial to larger communities, or 'society as such'.

Bazin fears that "the digital empire puts too much emphasis on relation and circulation per se, rather than on the acquisition of content. Instead of the substantivist metaphysics of the hidden meaning which a 'vertical' reading would attempt to reveal, it prefers the rhetoric of exchange and conversation. It counters the aesthetics of depth with a pragmatics of interface" (163-4), and Talbott assists this critique by claiming that

> the Great Information Hunt, for all the impressive rationalism of its software tools, stands for the scattered, distracted mind, impelled by automatic reactivity. It stands for a half-awake, association-based consciousness flitting from one Net link to another and dissipating mental energies in a formless, curiosity-driven excursion. Most of all, it stands for the dissolution of the sovereign self. The effort to recollect the self from the Net's perfectly well-behaved environs results only in a further dispersal of the self – a loss of coherence.
>
> (208)

There appears no good reason that this should *necessarily* be so, however. While this 'scattering of the mind' may be a real possibility for some, users might just as well choose to use the Web in 'deep', 'productive', and 'meaningful' ways – whatever those may be. There seems no reason to consider the *medium* as anything but neutral in this – as neither encouraging nor discouraging such 'positive' or 'negative' uses. By contrast, the *users* of "hypertext will have to adapt to a new set of rules imposed by being able to browse. Freedom to browse may have a concomitant responsibility – the responsibility to ruminate and have strategies" (McAleese, "Navigation" 5), in other words, to spend their time wisely and ensure they achieve their objectives.

Many and especially new users have not yet realised such responsibilities, however, and it is those we may presume Talbott and others have in mind in their

criticism of the apparent effects of Web use – as yet, there is much evidence that such newcomers practice too little investigation of the scope and accuracy of the date sources from which the information they encounter online has been drawn, and hardly worry about potential biases and hidden agendas in the material from which they form their knowledge. As Talbott puts it, "one gets the feeling that a lot of it has to do with a futuristic, almost religious vision of what the Net is becoming – and all these interim discoveries are more valued for the process they indicate than for themselves. Signs for the faithful. Epiphanies" (196). Barrett agrees that "the virtual environment is a place of longing. Cyberspace is an odyssey without telos, and therefore without meaning" – in an ultimate, timeless sense. But although we might not – cannot – find any 'absolute truth', nonetheless "cyberspace is also the theatre of operations for the reconstruction of the lost body of knowledge, or, perhaps more correctly, not the reconstruction, but the always primary construction of a body of knowing" (Barrett, "Hiding" xvi). And in this lies its value.

Thus, the pursuit of the unobtainable by Web users may diminish as with growing familiarity the novelty of the medium gives way to a degree of healthy user cynicism in the way this has occurred for print media, radio, and TV, for example, and as thus Web *browsers* turn into *navigators* and investigate their own fields of interests more thoroughly, determining for themselves which of the available online information sources they deem most trustworthy, reliable enough to use them as they form new knowledge for themselves; at the same time, however, ethics as proposed (and, occasionally, practised) in other media – demanding that content providers declare their biases and point out the limits of their knowledgeability – also apply to the Web and should be adopted to protect users. As we will see in the next chapter, Resource Centre Sites can play a valuable role in helping users to decide which sources to rely on, and often themselves adhere to an ethical form of conduct in their own operations.

More Work for the User

Centrally, however, the onus is on the user, who "is acquiring some of the expertise of the reporter (and editor), which will be necessary in an age in which the reader makes more of the choices as to what knowledge he [*sic*] wishes to receive" (Smith, *Goodbye* 206), and furthermore this 'reader' does not remain limited merely to a passive reading role. "A new bridge is constructed across content and tools wherein the audience interacts and contributes to the learning and building of the story. ... The multimedia artifact may become an ever-expanding composition authored by multiple viewers. The product may illustrate a range of interpretations" (Goldman-Segall 31).

Put negatively, "the Net's distributed information does not enable me to 'pull myself together [to distil meaning from information],' for it provides no principle of coherence. All the intricate, informational linkages of cyberspace notwithstanding, an inescapable arbitrariness rules" (Talbott 209) – but it is not the task of the Web in the first place to 'enable' its users to make sense of its contents: they must enable themselves. No 'official', sanctioned institution exists to make meaning, create knowledge for them, and they should "read Web documents … not as information but as intelligence, which requires an explicit warrant of one form or another" (Nunberg, "Farewell" 127-8) – however, in other media, too (especially perhaps in the case of the newspaper industry which in many countries is now driven almost solely by commercial interests), such attention to the credibility and reliability of sources is well necessary, and acceptance of information as established knowledge can be downright foolish.

As we have seen, however, and as the next chapter will demonstrate in detail, in the absence of 'official' and universally trusted sources on the Web there do exist any number of self-appointed 'information librarians' and 'gatewatchers' which users may choose to trust – "in the forest of information and opinion, filled with murmuring voices, we will rely on filters: editors and points of view and digests that

we feel we can trust. These will be the equivalent of refereed journals or expert editors. Such guides will multiply and compete with each other; soon metadigests and metajournals will appear" (Kolb 19) – and by now, they have. In spite of hypertext's flexible, changeable nature, "structures and overviews will not disappear; they will multiply and turn on one another" (Kolb 19). Users may choose from such multiple offerings the one(s) they deem most trustworthy.

Levinson is confident that this will improve, not diminish, users' understanding of the world:

> we can expect the massive dissemination of information by and large to create myths that are closer not further from reality. ... Further, the Web sharpens this process for us as individuals by allowing each of us to pursue more information about the myth in our own way, at times of our choosing. Again, there are no guarantees that information we may find on a Web page is truthful – any more than there are guarantees that the information presented to us by the gatekept media of newspapers and television is true. But ... unless every single Web page on a given subject is tainted with the same misinformation, we are likely sooner or later in our extensive browsings on the Web to come across information that exposes the deceptive myth. (163)

By allowing and ensuring through its fundamental structures the continued availability of such a plurality of choices, the Web might also serve to significantly undermine existing media-institutional hegemonies – opposition to established information sources "is more likely to succeed in conditions of hypertextuality than in the print culture, if only because hypertext makes it easier to expose the contradictions and power moves in such texts, and the multiply constructed positions from which they might be read" (Snyder 77). By extension, the Resource Centre Sites offered by independent gatewatcher organisations or individuals might seem just as, or more, useful to their Web audience as the sites of the media giants

or of long-established offline institutions, providing enough effort has gone into the creation of such RCSs.

Thus, as noted before, hypertext can be described as "a plural text without a discursive centre, without margins, and produced by no single author. As an electronic text that is always changing and becoming, it is associative, cumulative, multi-linear and unstable" (Snyder 60), but it is exactly that openness and instability which has created the opportunity for new structures to emerge. It both allows new RCSs to make their mark and gain an audience, and provides a reason for their existence in the first place, as they are needed to help their users find the information of greatest interest to them in the ever-growing collection of information available online. As Levinson notes, therefore, "we should ... expect the media to be fundamentally altered in their gatekeeping by the vast publication possibilities of the Web – for these possibilities break the technological and economic bottlenecks of print on paper (and broadcasting on the airwaves), and thus knock the props out from under the media's rationale for gatekeeping" (128) – gatewatching, not gatekeeping, is now the more useful activity.

3 — The Genre of Resource Centre Sites

Levinson believes that "the question for gatekeeping in the digital age will be: with the Web removing the technological and economic reasons for the pre-sorting of information, will the public still look to gatekeepers to provide an imprimatur of what is best to read, see, and hear, or will audiences seek out and ratify a more direct relationship with creators?" (12). From the preceding chapters it should already be clear that the answer proposed here is that in the form of Resource Centre Sites a middle ground, between the filtration and censorship of traditional models of gatekeeping and the mainly self-directed, random access of user-driven information-seeking, has begun to emerge and will gain enough significance to reach a status of importance similar to that of the traditional gatekept forms of older media. Levinson foreshadows this in his already noted reference to "our continuing need for centres" (102).

To begin a definition of these sites it is perhaps necessary first to identify what exactly they are central *to*, since the term 'centre' appears both in Levinson's statement and in the name proposed for this new genre of Websites. There are in fact two major justifications for their claim to 'centrality', one of which is linked to their obvious desire to bring together all the important information, news, and rumours of the field they specialise in, thus establishing themselves as the *central node* in the hyperlinked network of information sources in the field, or more directly – were we to plot all the interconnections of sites on the topic through links as a kind of pseudo-geographic road map – as the centre of this web of links.

The second aspect to their centrality is related to this, but somewhat more abstract: RCSs are also situated at the centre of the community of participants in the field, and in the middle of a continuum stretching between different types of Web users (with that term used here to include everyone from content producers to content consumers). As has been noted before, the divisions between producers and consumers online are increasingly blurred in practice, which has caused Alvin

Toffler to coin his famous term 'prosumer' – to avoid the overly commercial tone of this neologism, however, perhaps it would be better to speak of 'produsers'. In spite of the fact that virtually any engagement with the Web is indeed an act of 'produsing' (where use of content inevitably also leads to further *production* of it, even if only in private or as an unintended byproduct, and where content can only become content if its producers also *use* the Web), this must not be used to justify glossing over important distinctions between the aims, principles, and socioeconomic origins of individual 'produsers'.

The Continuum of Produsers

Broadly, by noting such factors we might identify a continuum of produsers that stretches from institutional to community content providers and users. 'Institutional' here includes any official organisation with clear structures, from public institutions such as governments and universities to corporations and lobby groups, while 'community' refers to social gatherings of people who share similar views, interests, or aims, such as subcultures or socioeconomic groups – including groups of one. It should be noted that this continuum cannot simply be equated with a spectrum ranging from 'public' to 'private', however: many of the organisations on the institutional end, although publicly owned or controlled, conduct their business very much in private, whereas many of the community groupings, often made up of private citizens, exist through the public interaction of their members (on this see Bruns, "Every Home"). More productively, the continuum proposed here can be linked to organisational structures: one defining characteristic of institutions is their explicit hierarchical setup which obscures the existence of more informal networks, while communities operate far more by impermanent connections across their network of members, even though the relative status of members within their community might also give rise to hierarchies. (Most so-called 'community

organisations' – from sporting clubs to NGOs – should be regarded as *institutions* in the present discussion, therefore.)

Online, the continuum of produsers thus described translates into a continuum of content sites prodused by them – and for the moment, 'sites' is here also taken to include non-Web content such as newsgroups or mailing-lists; it is then notable that the organisational structure of the produsers also determines fairly directly that of their content sites. Institutional content (found mainly in Websites) usually takes an explicitly hierarchically organised form, and is often *produced* in a traditional sense. On the other hand, most community content (communication arising out of the *use* of sites such as newsgroups and mailing-lists and their archives, as well as sometimes private Websites) often exhibits hierarchical tendencies only at a more remote, subtler level, for example where the influence of moderators or in-groups of regular participants contributes to a social structuring of participants into more central and more marginal members (see Bruns, "Every Home Is Wired" for an analysis of such tendencies). In other words, on the institutional end there is an overwhelming supply of producers, with few users (we could say that institutions *prod*use), while amongst the large group of community users a content-producing elite may emerge (on average, communities prod*use*).

Resource Centre Sites sit in the middle of this continuum, as hybrid combinations between the two approaches where network and hierarchical structures are in balance – and it is this hybridity that makes them so useful to produsers from either side of the spectrum: in their organisation (both of their operational structure and of the content they offer) they combine producing and using approaches in equal shares, in a way that seems for both institutional and community produsers to resemble their own organisational preferences, enabling the RCSs to gain their trust and cooperation. We will see in the remainder of this chapter how this plays out in practice.

Hoffman *et al.* offer "an initial attempt to organize the commercial activity on the Web thus far according to its business function. We identify two major

categories of sites: 'Destination Sites,' and 'Web Traffic Control Sites'" (n. pag.).

With the preceding discussion, this distinction can be expanded to apply beyond the

limited area of 'commercial activity' for all aspects of Web use: 'Destination Sites'

can be found towards both the institutional and community ends of the spectrum

(and mailing-lists and newsgroups are destination sites, too, for users seeking

interaction and community membership), while – along with other sites, such as

search engines and portals – Resource Centre Sites are 'Web Traffic Control Sites'

par excellence.

From Institutional to Community Uses

Expanding further from Hoffman *et al*., this continuum from institutional

destination sites to Resource Centre Sites to community destination sites can then be

further refined. (This discussion must necessarily paint the variations in Web

content in relatively broad strokes, but we may nonetheless gain some valuable

insights from it.) On the institutional extreme, we can locate self-contained, non-

interactive, proprietary sites as they may be used for traditional-style advertising,

for example – with all content highly policed, and a total absence of links to other

sites (mainly for fear of linking to sites considered unsuitable for commercial or

political reasons). As we move gradually away from this end, sites open up more,

taking advantage of the possibilities of linking afforded by hypertext technology –

for example to provide pointers to affiliated sites within the same or in associated

institutions (government Websites as well as Internet malls might serve as examples

here).

An increase in interactive features also begins at this point, to enable searches –

initially only of the institutional site (and its affiliates) itself, but later on also of the

Web as such (surrounded by notices displaying the requisite warnings and

disclaimers) –, and to enable progressively more sophisticated and less policed

facilities for user feedback to the content providers and communication amongst the

users themselves. At this stage of the continuum, we are passing through site genres such as the cybermediaries already identified by Sarkar *et al*. and finally arrive at the genre of portal sites; for example, the Microsoft Network (MSN), Netscape Netcenter, or Telstra.com sites, which are, as the high-profile commercial nature of their backing organisations already indicates, still very much hierarchical organisations, but in their content mix hierarchical and flat structural approaches, as for example they offer both unpoliced, open chat facilities *and* highly structured and policed content. Search engines also appear in this stretch of the spectrum, not least because they now increasingly blend with Web portals; in all, this points to a notable increase in the breadth of topical coverage in comparison with the far more specific sites found further out on the institutional end.

Next we arrive at Resource Centre Sites proper, roughly at the centre of the continuum. Here hierarchical and flat approaches to organisational and content structures truly mix, as we will see later; for the time being, it may suffice to say that heavy-handed policing has now given way to a more inclusive approach that judges material almost solely by its relevance, not by its commercial or political expediency; in a related move, the organisational structure has also changed from a closed-off, hierarchical setup to one where roles and responsibilities still exist for those operating the site, but are augmented by unplanned voluntary support from the community (which is actively encouraged).

Beyond this, on the community side, distinctions (which, when taken to suggest strict divisions between site genres, are problematic anyway) become harder to draw. From the RCS genre we move gradually towards individual homepages; correspondingly, the breadth of topical coverage (through links or original content) and the desire to be, if not objective, then at least unbiased, can be seen to decline again. Further on, we may find either largely unstructured lists of favourite links, or 'vanity' homepages which detail personal interests or achievements without much attempt to embed these pages in a wider network of information (the creators of

these two types of homepage thus seem unable to combine extensive linking with original content, and must choose to settle for one of these options).

If once again we take 'site' to also mean content sites outside the Web itself, then on this community end of the continuum we also find discussion fora such as newsgroups and mailing-lists. Thus, we might say that the community end of the continuum is frayed into three distinct strands, which emphasise three different aspects of community: the self-portrayal of community members *as* community members (through 'vanity' homepages which fixate that identity in the eyes of the member themselves and visitors, but in doing so cannot also provide for the active proliferation of community identity); the tracing of the community network as it is *perceived by* a community member at any moment (through simple links lists which make visible the member's connections to the community, again helping to display an identity to the member themselves, and others); and the perpetuation of community membership *amongst* its members (through active participation, which reinforces shared beliefs and ideas, but because of the relative ephemerality of the communication forms used cannot fixate them). At this extreme point of the continuum, in other words, otherwise contained conflicts between the archive, real-time, and interactive drives break out and push users into divergent directions.

Along this continuum, we may also plot a number of other important parameters. For one, the communicatory settings cover a wide range of models: from a one-to-many setup similar to that used in broadcasting, as it occurs (not surprisingly) on the far institutional end with its traditional advertising-derived approaches, past the some-to-many of Resource Centre Sites ('some' since content producers here include the site's creators as well as participating community members, who together *produse* the RCS) to the many-to-many of discussion fora (which may also be a few-to-few), or, for the other strands of the continuum, the 'vanity' homepages and links lists, to a one-to-few. As Hoffman *et al.* write, such "applications on the Internet (e.g., personal homepages) represent 'narrowcasting' to the extreme, with content created by consumers and for consumers" (n. pag.).

Related to this are the degrees of proprietary content, of editorial freedom, and of the amount of interlinkage with other sites, with these factors also all being interrelated (where highly controlled proprietary content is important, editorial freedom and outside linking are least likely, and vice versa). Here, we find that the emphasis on owning one's content is most pronounced on either end of the scale – for policy reasons in the case of institutions, and for practical reasons for community content providers: since the self-display of individual contributors is always already mediated (online for example through their use of media such as newsgroups or mailing-lists), the very aim of a 'vanity' homepage or a personalised collection of links is to present oneself and one's connection with the community on one's own terms as much as possible, by attempting to maintain some degree of control over the process of mediation. Similarly, discussion fora (the other possible end point for the community side) can also be said to place great importance on content ownership; this applies for individual participants (who, in the absence of any other cues, *are* their utterances) as well as the fora as such, even though this may seem paradoxical at first: through socialisation and peer pressure amongst members, there is great force to accept and perpetuate the 'official', 'common knowledge' within the group, all the more so because disowning other communities' views is also a well-known means of defining one's subcultural identity. Towards the centre of the spectrum, by contrast, much more of a *laissez-faire* attitude prevails, and interests are focussed on the ability to draw from all sources deemed useful, within as well as without one's own institution or community – this, then, also explains the corresponding increase in site interlinkage as we approach the centre from either direction.

Defining Resource Centre Sites

As Sarkar *et al.* note, the Internet "enables new types of economies of scale, scope, and knowledge by intermediaries, leading to the rapid evolution of many new

forms of cybermediaries who are interposing themselves between producers and consumers" (n. pag.). It is time, then, to define the central operating principles of one such form or genre of intermediaries between institutions and communities (to expand from the narrow, limited focus on 'producers' and 'consumers') – Resource Centre Sites.

What should be most obvious by now is that RCSs are – or more precisely, present – the outcome of gatewatching: RCS creators evaluate what information is or becomes available through other resources in their chosen field of specialisation (often employing criteria similar to those used by their gatekeeper or librarian counterparts elsewhere), and present this information through their Resource Centre Site in ways that are geared to be useful to novices seeking entry into the field, experts updating their knowledge, and/or regular visitors checking for recent news, developments, debates, and rumours. In this process, therefore, gatewatchers must sometimes show a certain degree of disregard for confidentiality or copyrights to present 'scoops' or cover the field completely, while at the same time they also need to protect their relationship with useful sources amongst institutions or communities in the field (this is once again similar perhaps to investigative journalists).

The hypertextual nature of the Web makes dealing with this dilemma easier than it is for their colleagues in other media, however: rather than lifting wholesale interesting material they have found on other sites, they can simply link to it. Resource Centre Sites therefore consist most of all of an extensive and highly structured array of very precisely directed links to information on other Websites, organised according to topics, ranked by relevance, usefulness, and degree of sophistication, and especially pointing out recent additions. This requires careful judgment on part of the gatewatchers: they must include enough to inform, but not enough to overwhelm their users, and must thus learn to accurately assess the importance and relevance of information.

Further, these links are presented not simply as listings (as in a search engine), but framed by additional commentary, which helps to direct users with particular

interests or varying degrees of prior knowledge, and can warn them of information of dubious accuracy. This is one way of achieving an annotation of the Web, as postulated for 'ideal' hypertexts but not provided for *directly* by World Wide Web technology. A first step in this annotation is often simply the acknowledgment of an information source, and so links pointing to items deep within another site are frequently accompanied by links to the site's main point of entry, for example. This is one feature of what may be identified as an overall 'code of ethical conduct' (unstated though it may be) generally observed by gatewatchers. (Some of the terms of this code emerge from the interviews with gatewatchers cited in the following chapter.) Such ready acknowledgment of other operators in the field – rather foreign to other media forms – may also lead to some form of direct cooperation between these and the gatewatchers, who may thus become privy to advance and inside information on a regular basis (in turn also conjuring a danger of information dependence, however).

In addition to, and to balance out, inside information from institutional sources, gatewatchers also accept commentary, information, news and rumours from their community-based users. Again, sources are openly acknowledged here, which at once gains the community's respect, motivates further users to contribute, and helps to legitimise their views and concerns by making them more 'official' through publication. This may also improve institution-community relations, and thus places RCSs in a truly intermediary role. In all, it may be useful again to draw attention to a distinction used in Chapter 1: RCSs are not in the main *publishers* of original information – they *publicise* what is already available in various scattered locations elsewhere. They are thus secondary information disseminators, but because of their offer of conveniently centralised information resources often constitute the primary source for information seekers. (They *do* publish some original content, of course, in the form of their annotations and other editorial commentary.)

Annotation also takes the form of other editorial input or commentary, especially of course if gatewatchers are indeed allowed special insights into institutions which

would not be available to the wider community, and comment on what they have seen; by sharing these insights with other users, they then become reporters as well as editors, in traditional journalistic terms. Even in the absence of such privileges, however, their continued in-depth engagement with a field makes them particularly knowledgeable commentators, in any way, and so editorial feature articles are another common element for RCSs. In part, such commentary might also ensure what Tennant & Heilmeier term the "transparent complexity" (122) of Websites: the complex nature of an RCS is made transparent for the user if its gatewatchers provide an overview of their operation and structuring methodology, thus revealing some of the gaps and limits of their coverage, as well as spelling out potential sympathies or biases.

Such openness and transparency is a further aspect of attraction for community-based users, who may be disenchanted with the highly policed, sanitised content of more institutional information sources. The broad and continuous coverage of more than just 'official' news thus appeals to their real-time drive, and can probably be mildly addictive; to cater for such users (and bind them to a site even more closely), many Resource Centre Sites thus offer facilities for email notification of users if 'new' news is published on the site, or even provide additional email news services directly. On the other hand, the archive drive is also already catered for, of course, since RCSs are in their very nature also archives of news, rumours, and other information. Similarly, they also address the interactive drive: not only by interacting *with* users through search functions and aforementioned options which offer users email notifications and allow them to submit their own news, rumours, or commentary, but also often by enabling users to interact *amongst themselves* – this is done either directly by operating Webchat or mailing-list facilities, or at least by pointing to suitable Usenet newsgroups. (Through monitoring such user-to-user interaction, gatewatchers may also draw links to additional information suitable to be added to the Resource Centre Site, and follow users' current concerns.)

Possible Sources of Resource Centre Sites

From this discussion it is already evident that RCSs depend crucially on being available to everyone without restrictions, as all users (from the institutional to the community end of the scale) are both potential *users* (in the narrow sense) as well as potential *producers* of RCS content – in other words, *produsers*. This broad-based, open-access approach also has implications for the milieux out of which Resource Centre Sites are most likely to emerge: located as they are at the nexus between community and institutions, they could be set up by institutions sacrificing some of their organisational control to embrace the community, or by community members organising themselves in quasi-institutional ways, but as it appears easier to impose structure on the network than to discard it again, most RCSs so far appear to have their origins in the community.

Lennon writes that "the information in any network is only as useful as the system that serves it" (10), but "unfortunately, even the best search engines cannot determine the quality of the retrieved content, so we watch with interest the development of electronic publishing houses" (53); if we regard Resource Centre Sites as just these electronic publishing houses, then they are more akin to specialist publications, fanzines and enthusiast newsletters than major publishers and newspapers. Nonetheless, the online arms of existing newspapers may also be reasonably well-placed to become RCSs: "the high traffic generators that are content providers are often preexisting publishers. Publishers become intermediaries when they offer links to producers through advertising or product listings related to their content" (Sarkar *et al*. n. pag.) – but to become fully-blown intermediaries in a Resource Centre Site sense they will need to move far beyond this, giving up more editorial control and involving their reader community more actively. As Riley *et al.* remark, "the notion that 'growing communities' is a common business strategy for print newspapers leads us to ask, what variation on the theme might be operationalised in an online newspaper organisation?" (n. pag.).

Rather than expect RCSs to emerge in great numbers from institutional sources, we can see them grow out of community endeavours, such as small-scale private and community homepages which gradually become elaborate and organised enough to be regarded as Resource Centre Sites; thus,

> the key to what is going on in this information revolution is held by the *users* of information superhighways. This is a revolution that will be driven by users (consumers) rather than by media corporations. It will be users – individuals, groups, and organisations – as the critical drivers for the development of multimedia and interactive applications who will determine the value and the impact of information superhighways. It will be this impact that will ultimately shape, in a profound way, the political, social, and economic force of the increasingly digital world in which we will live. (Emmott 3)

Indeed, aspects of organisational control, ethics, and ownership can already be seen as potential problems for maturing Resource Centre Sites, as will be shown later. Early in their life, in any way, soon-to-be-RCSs often emerge under the leadership of already established central figures in a community – often termed Netizens – who may be able to exploit a pre-existing network of contacts and their own well-developed knowledge of the field to gather the informational supplies necessary to set up and maintain the site. There is also an obvious reliance on community involvement at this stage (even more so than later on in the operation of the RCS proper, when gatewatchers may also hope for better direct and indirect institutional support), and so McMillan terms these proto-RCSs "Community Content sites", which

> can exist with minimal funding from community-minded organisations and with the donated time, efforts, and expertise of volunteers. The content of such sites is an ever-changing montage of ideas, information, and intelligence created and shared by the participants. These sites are more likely than others to incorporate elements of interactivity and content creators are likely to place

relatively little value on the concept of intellectual property. In this environment, a many-to-many model of communication may be most likely to exist. Some community-oriented sites may attract large numbers of participants from all over the globe. Others may be very small and focussed, like many of the disease-related support groups.

(n. pag.)

As these sites develop, they slowly move away from an *ad hoc* style of discussing and presenting issues important to these grups, towards somewhat more structured forms both of communication and of informational organisation. During this move, the site's operational policies are developed virtually on the fly, which can be a pitfall; compared with sites approaching from the institutional end, however, which must work hard to *shed* rigid operating policy restrictions imposed by their institutional controllers, such a lack of top-level control and established structures is also likely to be experienced as liberating and empowering for site creators, and indeed explains much of the continuing enthusiasm amongst Web content producers outside the institutional realm.

Setting Up the Structures

Central to the creation of a Resource Centre Site is the design of the structuration and presentation principles for information contained within it; as Agre writes, "a worthy goal for design for new media ... is to support the collective cognitive processes of particular communities. The principal *object* of design ... is the genre ... – that is, an expectable form that materials in a given medium might take" (79). As the case studies found in the next chapter will demonstrate, RCSs are such a design genre for the presentation and publication of materials on the Web: these sites and others like them, taken from a wide variety of fields, operate according to the same general principles in spite of their disparate content. As one, they:

- provide up-to-date news, rumours, information and commentary from a variety of sources, catering for the real-time drive; the gatewatchers behind these sites thus function like human "'knowbots,' the little personalisable pieces of software that will go rooting around like truffle-hunting pigs in the incomprehensible, and exponentially expanding, vastness of the online universe to find content that matches users' identified interests" (Singer, "Online Journalists" n. pag.), and they make public their findings, combining aspects of gatekeeper, librarian, editor and reporter in their work;

- offer structured overviews of resources (on- as well as offline) for further and background information and interaction, thus serving the archive drive;

- in response to the interactive drive, invite and provoke direct and indirect institutional input and information as well as initiate and facilitate community feedback and participation, thus negotiating between both sides in a semi-official, intermediary position; this joins institutions and communities in a shared 'virtual community': "a necessary condition for virtual communities is the existence of a virtual-place" (Q. Jones n. pag.), and RCSs provide this 'virtual-place'.

In describing the status of Resource Centre Sites in their chosen field, then, their intermediary role is further accentuated. Most immediately obvious, they are semi-professional organisations – semi-institutionalised as well as semi-private. In this, as gatewatchers they are to some extent akin to watchdog organisations, but without overt political aims of their own – compared to what lobbyist, enthusiast, or fan organisations may exist in a given field, their position is to be more critical towards both institutional and community sides, balancing their appreciation for either side's views.

This balance is also evident in their own organisation, which, while relying on strong community involvement for the operation of the site (ranging from fundamentals like a steady stream of visitors to the ongoing provision of feedback, opinions, and information, to be published as site content), also depends on support (overt as well as covert) from the institutions in the field, for example by providing inside and advance information. Importantly, this also extends into financial aspects: institutional supporters may cover some of the running costs of the RCS directly or by sponsoring the necessary equipment, while community-based users may also provide voluntary financial support by donating money, equipment, or work. Strong community support – manifesting itself as steady usage of the site – can also bring about indirect financial benefits from third parties, of course, which may see popular sites as lucrative advertising vehicles: "sponsored content sites sell advertising space to reduce or eliminate the necessity of charging fees to visitors ... . Thus, as with magazines in the terrestrial world, advertising appears from a variety of sources and underwrites the editorial content" (Hoffman *et al*. n. pag.). (Another, more questionable practice is the gathering of consumer demographics for commercial purposes, for which RCSs as highly topically focussed sites would also be a viable vehicle.) Finally, some Resource Centre Sites might also be able to generate profits from marketing their own merchandise to the community – from coffee mugs, t-shirts and mouse pads to archival CD-ROM versions of their content, for example – or selling their knowledge of the community, or their knowledge of the community's accumulated knowledge, to institutional interests (which might, however, be a dangerous move as it could undermine the gatewatcher's status as an impartial intermediary and alienate a community which feels used by the RCS creators).

Resource Centre Sites tread a fine line between the competing – and often contrary – interests of communities and institutions, then, which may manifest itself in a variety of ethical and legal dilemmata: community members may argue that the information and opinions collected in an RCS are not the site owners' to exploit, or

that at least the community as a whole should profit from such exploitation; institutions might attempt to use their arrangements with gatewatchers to police rumours or leaked information after publication, by threatening libel or defamation proceedings or simply a withdrawal of support. Members of both sides might also try to claim copyright on information disseminated through the site; this is an obvious problem with leaked institutional content, but is also often overlooked as RCSs grow out of private or community Websites but retain a core of privately-produced and -owned content at their centre.

Especially where such conflicts over the conduct of site owners arise, they also throw into some doubt the overall authority of Resource Centre Sites. While there is generally a significant (and healthy) amount of scepticism about the accuracy of information available online, the convenience and ease of use of well-run RCSs makes it easy for their users to give up their sceptical distance and accept what they find on their favourite site as 'the important information' and '*all* the important information', much as this happens with media institutions elsewhere (newspapers, television programmes) when they accumulate an apparently unblemished track record. Online as well as elsewhere, this is a major cause for concern: in other media, too, quality checks fail all too often, but online few such controls are even in existence in the first place; at the same time, however, the online audience – especially where as in the case of Resource Centre Sites they also participate to some extent in the operation of a site – may possibly be regarded as more generally vigilant than audiences in other media.

Operating Strategies of Resource Centre Sites

RCSs are confronted with a potentially highly engaged and sceptical audience, as it is likely to exist on the community side in many fields of interest – an audience which might be even more vigilant than that of overtly commercial news organisations since it may have witnessed the emergence of a Resource Centre Site

out of its own midst, and would expect community ideals to be upheld in the further operation of a site. Especially for this reason, strategies used by RCSs to attract and bind their audiences (and potential problems arising from them) are of central importance.

Most immediately, as the term 'Resource *Centre* Site' already implies, these sites will attempt to establish themselves as the most central and most popular sites in their field. This is begun through the breadth of coverage and timeliness of news updates which they achieve, both of which cater for the users' real-time drive: as noted, Mackenzie writes that "what real-time promises is an experience of now. In relation to this experience of simultaneity, delay represents an unwarranted intrusion of merely technological limitations on the processes of culture" (60) – especially where there is competition between a number of competing RCSs, the site with the fastest updates will therefore have an obvious advantage, but as secondary sources of information RCSs are also in an indirect competition with primary information publishers: if Resource Centre Sites take too long to notify their audiences of what news has been published on the Website of a major institution in the field, for example, users will go back to checking the institutional sites directly (this is a new development, compared to older media forms where primary news and information, such as press releases, were hard to come by for individual media users).

In short, Resource Centre Sites attempt to be seen as the first and only point of entry into a field that users will ever need: while users will move from an RCS's pages to view the information available on other sites to which the RCS links, those pages are framed by the RCS (that is, made part of the RCS's structure of content organisation), not by the Website they 'really' belong to. The distinction between 'physical' and 'logical' sites introduced in Chapter 1 may be useful here: linked information from other sites remains part of the physical site of another institution, but is coopted into the logical site that the RCS audience experience (it also remains part of the logical site seen by the other institution's audience, of course). Another

way to describe what gatewatchers do would be to say that they attempt to construct a logical site spanning all that they consider important to know about a particular field of interest, by bringing together material from many different physical sites. By analogy, this is akin to creating a topical encyclopedia by collating and annotating pages ripped from other books on the topic (but in a far less crude way, without damaging the other books, and with constant updates). The result of this work is also appealing to the archive drive, since the logical site thus established remains a useful tool to structure information and point out links and associations – to repeat Mackenzie's description, "the archive drive produces a locational 'there' composed of texts, images, indexes and records. ... It supports a quasi-spatial experience of the virtual as terrain or a site in which space is organised by chains of images and signifiers through which subjects take up contingent and shifting positions of identification" (61-2).

Where they are successful in their endeavours, then (attracting a sizeable and engaged audience), Resource Centre Sites may also command tremendous influence on their audience: if users do come to accept that what is available from an RCS is indeed all they need to know, and arranged in just the way in which they need to know it (suggesting an objective ranking of importance, and clear causal connections between individual pieces of information, for example), then this must inevitably influence their process of knowledge- as well as opinion-formation, affecting both their long-term world-view and their short-term political views (with 'political' used here in its widest possible meaning). Much like their gatekeeper, librarian, and editor colleagues elsewhere, gatewatchers can thus become powerful opinion leaders and trend-setters.

Perhaps in contrast to these other opinion leaders, however, gatewatchers appear less removed from their audience, by virtue of their appeal to the interactive drive (which maintains the audience's ability to be *produsers* rather than mere consumers). This is not unlike a type of site identified by Hoffman *et al*.: "the Incentive Site represents a unique form of advertising that attracts a potential

customer to a site. The objective is to pull the user to the commercial site behind it, thus helping marketers generate traffic to their Web sites ... . The content may be transitory in nature and may appear to serve as a 'public service announcement' or offer incentives" (n. pag.). The incentive offered by RCSs, then, is interaction itself – the ability for users to contribute their own content to the site, taking part in public debate and opinion-formation both by suggesting links to information which may be added to the RCS and by offering their own feedback and commentary. This can be seen as something of a hypercharged form of 'letters to the editor', but beyond mere letters users can now to significant extent *become* editors – gatewatchers – themselves, by taking part in the running of a site. (What forms this participation can take will become more visible in the case studies in the next chapter.) This must necessarily create a feeling of identification with, and belonging to, a site; it may also be a particularly useful way of binding users to a site on a computer-mediated communication medium: here users only become visible if they participate (that is, publish their own contributions), so that in order to remain visibly existing in the eyes of others they must *continue* to participate on a regular basis.

Commercial Practices

Commercially, Resource Centre Sites may also be lucrative developments; Hoffman *et al*. seem to agree with this point: "commercial development of the Web must follow the demand ('demand pull'), instead of being driven by 'gold fever.' Firms will reap the benefits of innovation in interactivity by being closer to the customer than ever before" (n. pag.). Such closeness to the user community (to avoid the limiting term 'customer') is likely to be a result of long-time community involvement, however – it cannot be bought or otherwise established over night by gatewatchers newly arrived in a field, due in good part also to the 'pull' nature of the Web as such. Certainly, sites able to bind a dedicated, well-defined 'target audience', as Resource Centre Sites are able to, are in a position to profit from that

ability even if their audience is relatively small because of its high specialisation: "audience size may not be critical. Creators ... who can attract small but specialised audiences may be able to sell those audiences to advertisers at a premium and enjoy profitability" (McMillan n. pag.).

The aim to attract advertisers in order to finance running an RCS thus also complicates gatewatchers' relations to other Resource Centre Sites operating in the same field: while they are in competition for a share of the audience and of the available advertising revenue, at the same time the very nature of gatewatching demands an open acknowledgment of other useful sites in the field. After all, "in a networked age of rapid, efficient two-way communication, work is still dependent on information *processing*, but there is a new emphasis on information *sharing*. The goal is efficiency in meeting predetermined ends by creating satisfactory outcomes between distributed people or agencies" (W. Johnson 169); as means of reaching this goal, if RCSs were to deliberately hide the existence of one such agency (another RCS) from their users, they would also undermine their own usefulness. Nonetheless, their own commercial and editorial interests also demand the promotion of their own site as a distinct entity superior to other offerings – which creates a conflict of interests that is difficult to resolve satisfactorily.

The result of this dilemma, then, may be a temptation to adjust content and structure of a Resource Centre Site in favour of the gatewatcher's own contributions – which, in turn, could also be a first step towards skewing the information available to benefit advertisers and other financial supporters of the site (a practice much lamented in other commercial mass media organisations, such as newspapers and broadcasters). Since RCSs depend on being seen as critical, independent gatewatching organisations, however, this would once again threaten to undermine their standing with the audience – instead of being a directory service for unbiased information, they would begin to resemble online malls promoting a non-representative selection of products, services, and institutions: "a key difference between a mall and a directory is the source of their income. A mall derives its

income from its 'renters;' a directory does not have renters and so will typically have some type of advertising for sale" (Sarkar *et al*. n. pag.). 'Renting' of a kind would also occur if gatewatchers were to charge institutions for listing their information in an RCS database. (Despite the commercial focus of the preceding discussion, much of what has been said also applies to non-commercial fields – if, say, a partly government-funded RCS on youth issues were to exclude material critical of government youth policies, it would diminish its own ability to be seen as an impartial source of information.)

The Importance of Balance

To perform their task and remain well-respected, therefore, Resource Centre Sites must be highly inclusive (though nonetheless critically evaluative and selective) towards information and opinion made available from both the institutional and the community end of the continuum. A key term here is *balance*: RCSs attempt to serve two masters, and must find a delicate but stable balance between their often competing and contrary demands. From both groupings at the same time, they face questions about their editorial freedom from, or loyalty to, both sides, and they depend on the good will and cooperation of either side in equal measure: the community provides the lion's share of the RCS audience, and must not come to see the gatewatchers as spokespeople in the pockets of the institutions, while the institutions' willingness to offer support through financial help and the provision of 'hot' news would be threatened if they regard the gatekeepers simply as idealistic community activists beyond the influence of civilised discussion.

At the same time, and to further complicate this quest for balance, it must also be acknowledged that full impartiality and objectivity is very much an unattainable ideal – it is difficult to imagine how gatewatchers or any other presenters of information could possibly hope to escape their own personal or shared cultural attitudes entirely. As McQuail writes, "the ruling norms of Western media call for a

certain practice of neutral, informative reporting of events … . However, objectivity is a relatively complex notion when one goes beyond the idea that news should reliably (therefore honestly) report on what is really going on in the world" (253). He points out that there are at least three notions on what events should be reported by journalism: "one source of criteria is what *theory* says news ought to be like. Another is what professional *journalists* decide is most relevant, and a third is what an *audience* actually finds interesting and useful. These three perspectives are unlikely to coincide on the same criteria or on the assessment of content" (254). In practice, the views of those presenting the information (such as professional journalists or gatewatchers) will provide the criteria applied here, and will become inscribed into the reporting process, undermining any theoretical ideal of full impartiality – where reporters' news criteria diverge too far from those of the audience, however, they are likely gradually to lose that audience.

At their most fundamental level, RCSs are tools for imposing structure on information, and whatever structure they choose to impose must always already carry within it implicit or explicit cognitive assumptions – only an entirely unstructured system would be free of such assumptions, but as we have seen the World Wide Web in itself cannot be made to shed all structrure, and like any other tool of structuration RCSs only serve to reduce its disorganised aspects even further. At best, therefore, gatewatchers running Resource Centre Sites may own up to their attitudes and assumptions, to the extent that they are aware of them, by openly acknowledging their biases, sympathies, enmities, and affiliations, and thus gain the respect of their users for such openness; where they do directly present an agenda of sorts, for example in commentaries and other editorial interventions, they must take care not to force that agenda on their users without choice, but to balance it with alternative viewpoints. This should be quite easily possible in a hypertext medium which offers the possibility to simply link to pages offering dissenting views. Thus, a gatewatcher also becomes a kind of participating moderator in the debates which they present through their site. Overall, they must aim to be honest and accountable.

The more they do give themselves the appearance of honesty and accountability, however, the more they might also use this to mask covert agendas they still perpetuate, for example through subtle editorial choices. In a less sinister way, too, even the most balanced and enlightened site may unconsciously still be biased in ways which remain unnoticed because they are in line with the most deeply ingrained cultural 'truths' linked to its gatewatchers' social origins: to give but one basic example, Resource Centre Sites operating in English to maximise their audience continue the Anglocentrism of the Web as well as the dominance of Anglo-Saxon, or generally Western, value systems –

> the Web has developed largely as an English-language medium, based in Western culture. The implications of this, while not immediately obvious, are important. Much of the world is marginalised by the use of English-only documents, especially the developing world which could stand to benefit the most from the Web's transparency of location. It requires much effort to provide multiple translations of each document, and can also require a clumsy introductory page where the user is asked to choose a language. Much worse, many written languages (Chinese, Japanese, Hindi) are difficult to represent within the limitations of the ISO-Latin1 character set defined in the HTML specification. (Lennon 104)

Nonetheless, the RCS genre's attempts to achieve the greatest possible operational transparency and to at least engage with the difficulties of unbiased coverage can be seen as a step forward, both from the jealously guarded 'closed shop' approach of institutional information providers – who still "want to protect the content of their own sites" (McMillan n. pag.), ignoring that this is counterproductive in a Web context – and from traditional media outlets' misleading claims to 'objective' reporting, which have been shown to be dishonest on a great number of occasions. At the same time, however, there remains a need for gatewatchers, too, both to protect their own trade secrets, their informers, and their editorial control over their sites against overzealous community members

demanding even more openness, and to continue to assert their editorial independence against attempts from both community and institutions to push through their own agendas.

Differences from Similar Site Genres

In addition to the preceding positivist discussion of how Resource Centre Sites operate, it is also useful to determine how they are *different* from other, more or less closely related site genres. To begin with, we might see them as hybrids between the 'Web Traffic Control Sites' identified by Hoffman *et al*. – to whose "three major categories of Web Traffic Control: Malls, Incentive Sites, and Search Agents" (n. pag.) we might offer RCSs as a fourth – and the content destination sites examined by McMillan: the major aim of Resource Centre Sites is to direct Web traffic, certainly, but in doing so they themselves are also a valuable content destination, particularly if we consider RCSs together with the material they point towards as one immense, field-spanning, unified *logical* site. In terms of McMillan's categories, furthermore, RCSs sit somewhere between 'Sponsored Content' and 'Community Content': the former are funded through "advertising and/or sponsorship fees [to] support [the] creation of content", with a purpose to "provide information and/or entertainment that attracts targeted and/or mass audiences", and employ a communication model of "one-to-many from sender to receiver" (n. pag.), while 'Community Content' sites are "volunteer efforts, non-profit groups, and other community-minded organisations" with a purpose of "dialogue, networking, community building" that "also provide information and increase awareness" using a "many-to-many [model] with no clear distinction between sender and receiver" (n. pag.). The gatewatchers running the sites *are* distinct senders to some extent (but do frequently involve other community members as well, in a 'some-through-few-to-many' model); information provision, dialogue, networking, *and* community

involvement *are* their key aims alongside one another; and advertising and sponsorship often *do* play at least some role in RCSs.

In fact, using these and additional parameters of analysing Websites perhaps it would be possible to imagine a multi-dimensional space of possibilities for Website types, in which particular site genres are clustered around their characteristic parameter combinations. By gradually altering one particular parameter in this system as a thought experiment, it is then possible to move from one genre into another, charting changes along the way. A systematic exploration of this idea cannot be attempted here, for reasons of space, but we might nonetheless compare Resource Centre Sites with various other known site types by starting from these sites' location in the space of possibilities and changing their parameters to approach the RCS genre.

Cybermediaries

One starting point, then, are the cybermediaries described by Sarkar *et al*. They write that "cybermediaries are simply intermediaries which take advantage of the [Net] to create these economies of scale and scope"; they are, in short, "New Network-Based Intermediaries" (n. pag.). From here, Resource Centre Sites can be approached by reducing the overt commercialism of cybermediaries; RCSs are a kind of 'information intermediaries' which do not directly make money out of providing this information. Still, the description that cybermediaries "are able to obtain products directly from manufacturers, who may hesitate to go directly to consumers for fear of alienating retailers upon which they depend" (Sarkar *et al*. n. pag.) can easily be adapted to RCSs: these are able to obtain information directly from institutional sources, who may hesitate to go directly to the community for fear of being swamped by the community's demand for further communication. We might also draw from Hoffman *et al*.'s "concept of integrated marketing", which "holds appeal and promise for business efforts on the World Wide Web, because the

Web offers enormous potential for developing customer relationships and customising the offering to individual customers" (n. pag.) – what RCSs engage in is a kind of 'integrated information provision'. Indeed, Hoffman *et al*. "argued that the marketing objective is to integrate" destination sites and Web traffic control sites "into a coordinated plan designed to achieve the important marketing objectives of generating initial visits and securing repeat visits" (n. pag.), which – with less commercial aims – is precisely what Resource Centre Sites achieve.

Central to the differences between cybermediaries and RCSs is the move away from the proactive stimulation of consumer needs, and their subsequent satisfaction by commercial means, towards a responsive filling of information wants experienced by the user – as McMillan points out, "content can ... exist in two types of 'public markets.' The first is online commerce ... . In this case, the content of the Web site is secondary to the primary purpose of selling. The second form of the public market is a marketplace of ideas. Governments may provide information for citizens; or individuals or groups may provide information for others who share similar interests" (n. pag.). Obviously, Resource Centre Sites operate on this second 'market' first and foremost, with only an occasional presence in the first (to support themselves). Cybermediaries, on the other hand, are interested mainly in sales, not the exchange of ideas, to the point of ignoring the opportunities for user feedback afforded by the Web. Hoffman *et al*.'s remark that "the Web frees customers from their traditionally passive role as receivers of marketing communications, gives them much greater control over the information search and acquisition process, and allows them to become active participants in the marketing process" (n. pag.) is instructive in this regard as it presents a view of consumer interaction as limited to product search and acquisition, excluding the possibility for customer feedback after the purchase and during or after the use of a product – however, to their credit they do note elsewhere that "the interactive nature of the Web is especially conducive to relationship building and offers marketers new opportunities to create stronger brand identities which have the potential to translate to brand loyalty" (n. pag.),

which does appear to point to an ongoing engagement between producer and consumer beyond the main marketing phase.

In distinction from cybermediaries, who depend on an ongoing direct relationship with their suppliers, RCSs also show less bias towards particular institutional sources. Cybermediaries are of course already more flexible than direct suppliers –

> consumers may choose to continue to use traditional and/or online intermediaries precisely because the intermediary represents multiple producers. When no single producer could be expected to meet the full range of customer needs (e.g., no airline flies to all places at times convenient to all customers), then an intermediary service will be more desirable. In addition, customers may trust the advice of an intermediary who represents multiple producers, since they would not have the same biases as the producer vis-a-vis their own product (although this can be manipulated by the relative profit margins associated with various producers' products). (Sarkar *et al*. n. pag.)

RCSs take this advantage further since more so than commercial cybermediaries they do not depend on direct affiliations with suppliers of information; much more so than commercial products, information from a wide variety of sources can be presented in overview.

Portals, Directories, and Search Engines

Resource Centre Sites may also be fruitfully compared with Web portals, directory services, and search engines. "The purpose of Search Agent sites is to identify other Web sites through keyword search of a database that extends throughout the Web" (Hoffman *et al*. n. pag.); "directory service intermediaries help consumers find producers by categorising Web sites and providing structured menus to facilitate navigation" (Sarkar *et al*. n. pag.); while like Resource Centre Sites

Web portals combine both directory and search services with (here often quite elaborate, and/or commercial in nature) original content – however, "typically, search sites ... are rarely topic specific" (Sarkar *et al.* n. pag.), and this applies also for directory services and portals. Where they do limit themselves to particular topical fields, then, they begin to approach the RCS genre; this makes sense also from an operational point of view: while search engines and, to some extent, directory services can be run automatically once the initial search and sorting mechanisms are programmed, increasing topical specialisation requires more and more human supervision and direction of the categorisation process, which eventually introduces the role of the gatewatcher proper (whose growing editorial presence also parallels a similar editorial role in the creation of portals).

Non-topic-specific portals, search or directory sites, aiming to cover the entire Web, are necessarily also very large and often well-financed (though not necessarily financially *sound*) operations – another difference from RCSs. This might manifest itself also in a difference in production values, which portals in particular often use to create content that retains neo-nostalgic links to other, older media (with whose organisations they might cooperate, as in the case of the joint AOL-Time Warner or Microsoft Network (MSN)-Nine Network ventures).

> The wedding of previous media forms to the Internet produces a peculiar hybrid. Web designers dominate the commercial media sites and integrate variations of Internet/media pioneers such as *Hotwired*. ... There is an aesthetic and graphic link to what constitutes netspeak and what embodies the latest technologies of imaging. Moving animated images have migrated around the commercial media Websites from their original prevalence on banner advertising. Menus now shimmer and move slightly. Content links blink as if one is channel-surfing through a selection of programs.
>
> (Marshall *et al.* 75)

Despite the ready availability of sophisticated production tools even for home users, for a lack of workforce the smaller-scale RCSs may not be able to match the

expensive and elaborate production values of the bigger players (which can also feature extensive multimedia and other additions), but it is not necessary to see this as an immediate disadvantage: the Web is not primarily driven by the bedazzlement afforded by special effects (which appear to be beneficial for attracting an audience mainly in one-to-many media such as film and television); additionally, the limitations in the technical setup of many Web users may also serve to limit the effectiveness of such extensions, so that they may not be a major selling-point for the sites which do employ them. Rather, users appear to be attracted by Websites' ease of use and their convenience in finding information, with both factors often even negatively affected by all-too-flashy effects.

Additionally, small players online also have an advantage over big operations simply because in its very nature the Web privileges specialty information over general content: specific searches yield vastly more useful results in search engines and directories than general inquiries, and the fact that most portals are yet to prove they were worth their establishing costs also points to the fact that user take-up of such services has not been as fast as expected. We can find good reasons for this by looking at the Web in both its hierarchical and its unstructured aspects: the amount of unstructured, associative networking possible between available pieces of information becomes exponentially overwhelming the less one limits one's perspective by looking at a clearly defined topic only, so that in their attempt to impose structure general, all-inclusive sites can provide only vague tracings of associative connection across the map of information, while more limited specialist sites can provide available lines of enquiry in far more exhaustive detail; while in a hierarchical system of information categorisation the general, upper-level taxonomies of major directory services provide the tip of the pyramid only, with truly detailed distinctions only occurring further towards the highly specific areas in its branches.

Speaking commercially once again, thus, "the Web offers opportunity for competition on the 'specialty' axis instead of the price axis. From a marketing

perspective, it is rarely desirable to compete solely on the basis of price" (Hoffman *et al*. n. pag.); more generally, we might say that it is more desirable to compete on the basis of the specificity and quality of one's information than on that of its all-encompassing nature, since the latter is far more costly to achieve. As Hoffman *et al*. also note, "it is increasingly difficult to find anything on the Web, especially if one is not looking for it! Therefore, identifying pivotal cross-linking opportunities will be critical" (n. pag.) – RCSs provide such opportunities.

Commercial Enterprises in General

Resource Centre Sites also benefit from closer ties to their 'target' communities, and this is another important parameter with which we can distinguish them from cybermediaries as well as from portals, directories, and search engines. Due to the fact that often they or at least their gatewatcher operators have direct origins in the community itself, they are also to some extent still regarded by the community as 'one of us', which along with the opportunity for direct engagement in providing information for the site fosters audience loyalty. "Forums, Fan Clubs, and User Groups ... are ... not necessarily direct intermediaries, but can play a large role in facilitating customer-producer feedback and supporting market research. The best examples of these groups are product-related discussion groups and lists", Sarkar *et al*. wrote in 1995 (n. pag.); by now the "Community Content" Websites (in McMillan's terminology) and subsequently the RCSs proper which they have spawned do play a large role also beyond the commercial marketing arena on which Sarkar *et al*. focussed.

Today, financial abilities and technical expertise of media institutions as determinants of online publishing success have been surpassed by the cultural, informational, and knowledge capital accumulated within specific interest communities, giving rise to what Kumon & Aizu term 'intelprises':

intelprises are neither enterprises nor states; they are a new type of network organisation, one that uses persuasion and inducement rather than the methods of threat and coercion typified by sovereign states or exchange and exploitation typified by enterprises. Just as industrial firms accumulate wealth first by producing specific commodities and then selling them in the marketplace to make profits, the intelprises, as players in the wisdom game, will accumulate wisdom first by creating specific information and knowledge, or sharables, such as new theories, ideologies, policies, works of art, or alternative lifestyles, and then by disseminating them in the global network, thereby gaining and increasing their supporting cast of believers.

(320)

Without distorting their meaning, we can substitute 'institutions' for 'enterprises' and 'communities' for 'states' (communities, too, police their members by 'threat and coercion', there called 'peer pressure' and 'socialisation') – this makes it obvious that these 'intelprises' are indeed precisely what have here been called Resource Centre Sites, situated exactly in the centre of a continuum between enterprises and states, or institutions and communities. As we have also seen, however, these new entities may fruitfully cooperate with those around them, provided they do so in a well-balanced manner. As Kumon & Aizu put it,

it is shortsighted, of course, to expect that the enterprises and competition of the wealth game will vanish in the hypernetwork society. Rather, just as cooperative operations exist between states and enterprises, various forms of cooperation between enterprises and intelprises may be developed. ... Enterprises in the early hypernetwork society may support intelprises financially so that intelprises can concentrate in creation and dissemination of sharables without worrying about their financial stability. Intelprises, in turn, may support research and development activities as well as the marketing efforts of enterprises. (320-1)

Marshall *et al.* identify possible approaches to such cooperations: "there is a double strategy emerging as media companies establish their Internet presence: on one level, they are protecting their position as entertainment and information sources through the new technology; on another level, they are producing promotional material which points to their already existing forms of production and distribution" (65). From the point of view of the Resource Centre Sites, on the other hand, this could also be regarded as a sign that the developing seeds of their support for a greater freedom of information (on which they crucially depend for their operation) are beginning to crack the increasingly brittle mantle of traditional media enterprises (as well as of other institutions protective of their informational property); the trend towards a better sharing of information for the mutual benefit of and an increased cooperation between content providers and content users (whose roles continue to blend) has continued to strengthen (helped along by a number of high-profile examples such as the computer operating system Linux and Netscape's open-source Web browser Mozilla). This can also be seen as a result of increasing digitisation: electronic information is dynamic, not static, forcing emphasis to shift from the possession to the *use* of information.

Resource Centre Sites as 'Virtual Settlements'

Since the truism holds that individual users use information individually (that is, in ways different from one another), this is also another argument for increasing specialisation and customisation of information – not only in a commercial context, "the medium offers unprecedented opportunities to tailor communications precisely to individual customers, allowing individual consumers to request as much information as desired. Further, it allows the marketer to obtain relevant information from customers for the purpose of serving them more effectively in the future" (Hoffman *et al.* n. pag.); Resource Centre Sites are ideally placed to perform all of these tasks: use information, use it in highly topically focussed ways, and feed back

RCS user responses to institutions and communities alike to serve both more effectively. This can both help institutions understand themselves and the communities they address, and "support the collective cognitive processes of particular communities" (Agre 79).

In turn, by providing a central resource site of which both ends of the spectrum are both users and (to some extent) producers, the RCS further breaks down the traditional producer/consumer dichotomy – "the contradiction between producers and consumers is not inherent in the electronic media; on the contrary, it has to be artificially reinforced by economic and administrative measures", as Enzensberger notes (70), and Resource Centre Sites have ceased to reinforce it by offering a space for produsers. McMillan speculates that "as security of Internet transactions improves, there may be a rise in the number of Public Information sites that are funded by direct consumer payment in the form of pay-per-use and/or subscription fees and thus come to be characterised as private, rather than public, information" (n. pag.) – this could mark a renewed attempt to reinforce the traditional role distinctions, but so far it has not occurred on any significant scale.

If we regard the entire continuum of players in a specific topical field, from the community through Resource Centre Sites and their gatewatchers to the institutions, as the field's 'virtual interest community' (ignoring for now the question of whether also to include here any casual Website visitors who are not community members proper), then we should expect to find RCSs as the focal points of that virtual community. Following Quentin Jones's suggestion that "a distinction will need to be made between the cyber-place within which a virtual community operates ... and the virtual communities themselves" (n. pag.), RCSs then equate quite directly with what he calls a 'virtual settlement':

> for a cyber-place with associated group-CMC to be labelled as a virtual settlement it is necessary for it to meet a minimum set of conditions. These are: (1) a minimum level of interactivity; (2) a variety of communicators; (3) a minimum level of sustained

membership; and (4) a virtual common-public-space where a significant portion of interactive group-CMCs occur. The notion of interactivity [is] central to virtual settlements.

Virtual settlements can be defined as a cyber-place that is symbolically delineated by topic of interest and within which a significant proportion of interrelated interactive group-CMC occurs. It also follows that the existence of a virtual settlement demonstrates the existence of an associated virtual community. (n. pag.)

Furthermore, such a 'virtual settlement' also provides a possible structure for its associated virtual interest community. However, this persuasive and graphic metaphor is also fraught with the danger of suggesting overly stable, even rigid, 'settled' structures: since many RCSs for the same field of interest can exist alongside one another, many alternative 'virtual settlement' structures can also coexist for the same virtual interest community – they are to a certain extent impermanent tracings on the network map, not the permanent connections of hierarchical structures.

Comparisons with Other Media Forms

In addition to the comparison with other 'virtual' structures emerging online – with other genres of sites, and their modes of operation –, it is also worthwhile to investigate to what extent Resource Centre Sites resemble, or differ from, information sources and resources in 'traditional' (mainly, broadcast and print) media. Perhaps the most-noted potential for difference, in many aspects, probably lies in the economies (in financial as well as informational meanings of that term) of scale which are enabled by the global network: "within the hypertextual libraries that are now being assembled, individual intellectual communities can retreat into their subnetworks and operate with as much or as little connection to each other as they desire. These communities may be large or small" (Bolter, *Writing Space* 235), and the importance of this statement lies in the fact that online, such intellectual

communities' sizes are now indeed determined almost solely by their intellectual appeal, not by their ability to lobby pre-existing media organisations for coverage or other kinds of support.

In part because of the newness of the medium – the absence of long-established structures –, but most of all because of the open, global, networked nature of the Net, online communities usually exist as independent, self-determining and self-organising groups answerable only to themselves. Frequently arising out of these communities, RCSs inherit this independent, community-controlled nature at least initially – although this may change over time as the gatewatchers running a site make their own editorial attitudes felt more strongly. Relying on continued community support for their operation, however, they must still continue at least to *appear* to pay attention to community beliefs and demands. The dependency on community participation in RCSs is one factor ensuring the conformity of their content with established community norms and ideals, therefore.

Reach

Membership in online communities is therefore not limited to closed, well-defined groups (and this applies at any level from 'mere member' to 'online publisher'). This is also due to the fact that the very term 'membership' is somewhat misleading: there are generally no requirements to sign up, pay membership fees, or in any other way assert one's intention to join a community – users simply participate. In fact, as we have seen, the very attempt to charge users for accessing a Website, for example, is usually a deterrent to participation. In the case of Resource Centre Sites, this points to a notable distinction from what may be considered their closest print counterparts: unlike specialised journals, interest group newsletters, or fanzines, RCSs are available to everybody, for free, which in comparison does of course greatly improve their theoretical (they *could* be found by anybody using the

Web) as well as practical audience reach (subscription fees do act as a deterrent offline, too).

This, then, also constitutes a further boost to their participant base, in contrast to print publications (especially in combination with the Net with its emphasis on *use* over mere consumption): new users might come to a site at any time, and make typical 'newbie' contributions to it, especially by posing questions aimed at increasing their understanding of the fundamentals of the particular field the site caters for; to address this, RCSs usually also contain a selection of 'beginners' resources', including most centrally a FAQ (frequently asked questions) list with in-depth answers. Such sections are less likely to be found in comparable print publications (especially where publication costs serve to limit their page count); online, on the other hand, 'newbie sections' are easy to maintain once they have been established: once published, the archival nature of the Web ensures they remain available, and since introductory resources are rarely the subject of hot debate and rapid change, the updating of their content is unlikely to require much effort for the gatewatcher.

In all, this increased openness to novices makes the field more accessible and keeps its community from becoming or remaining an élitist in-group – which can have a dramatic impact on traditionally relatively closed groups, such as academic disciplines or fan cultures. At the same time, the catering for diverging viewpoints through different sections of one RCS or through a number of alternative sites can also calm conflicts amongst factions within a community or more widely between fields of interests as such: newcomers whose basic questions might be a nuisance to experts if these questions filled up the pages of their favourite newsletter can now find these questions answered in a special 'newbie' section of the RCS (or even in a separate site dedicated to them entirely), without interfering with more advanced discussion, for example.

Specialisation

Fred Johnson throws a somewhat critical light on this compartmentalisation of users and uses, however: "the new media and telecommunications are infrastructure that allow the global economy to develop interconnected spaces in distant cities so that the corporate centres in one city exist intimately side by side, and much closer than their respective suburban peripheries and sprawls. Cyberspace allows planning elites to code the urban grid and design around whole neighbourhoods blinking them into invisibility and out of the flow" (90); the very sites which allow novices greater entry to the information available in a field also help to shield experts from these newcomers, in other words, leading to ever more tightly defined pockets of interest whose inhabitants fail to communicate with others in the wider field.

For those who believe in the existence of a common, shared society of all citizens, this could be seen as furthering the fragmentation of that society into small, disconnected groupings without a sense for the big picture; "in terms of news beats, the move toward rejection of the tangible (city hall, the courthouse, the schools) in favour of the thematic (politics, law, education) accelerates" (Singer, "Online Journalists" n. pag.). Since, unlike traditional print or broadcast news publications which aim to present *all* the news of importance, RCSs finely divide these news beats into individual publications, – one Resource Centre Site for politics, one for law, one for education, or even several such sites each for particular aspects of these fields – they could be seen as prime contributors to such fragmentation.

However, this view misses the crucial point that media users do not usually rely on one source of information only, and that people tend to have a large number of personal and professional interests, the curiosity about which they satisfy in various alternative ways throughout the course of any given day (by reading the morning newspaper for political news and views, listening to the radio for the latest musical releases, watching TV for events in entertainment, reading professional publications to update their job-related knowledge, etc.). Resource Centre Sites may supplement, or in some cases replace, these sources, but do not fundamentally alter this multiplicity of interests (which should possibly be regarded as a deeply human trait)

nor of information sources used to address them. RCSs do have an advantage over traditional mainstream print and broadcast media, however, in the fact that, with their focus on particular fields of interest, they are able to provide information seekers with more specialised and detailed information on demand, satisfying their interests more directly than these media do: "the interactive nature of the Web and the hypertext environment allow for deep, nonlinear searches initiated and controlled by customers. Hence marketing communications on the Web are more consumer-driven than those provided by traditional media. In addition, recreational uses of the medium, manifested in the form of nondirected search behavior, can be an important benefit to consumers intrinsically motivated to use the medium" (Hoffman *et al.* n. pag.) – also outside the narrow field of 'consumption'.

It is also sensible to note that the influence of the Net on societal developments should not be exaggerated – in its nature it may reflect rather than cause developments such as the progressive fragmentation of society, if in fact they do exist. (More fundamentally, we might also question whether society ever was a unified homogeneous whole.) As Bolter notes, "the computer is the ideal technology for the networking of America, in which hierarchical structures … break down into their component parts and begin to oscillate in a continuously shifting Web of relations" (*Writing Space* 236), and thus in accordance with McLuhanite views the medium of the World Wide Web may indeed be the message pointing to the structures of the society it has emerged from. The key to this discussion is to follow neither technological determinism nor social constructivism, but to see technological and social developments as interrelated and co-dependent. That is, Web technology does not simply alter societal structures as the sole determinant of any new structures that may emerge in an increasingly networked society, and neither is it simply a technological reflection of current or emerging structures in society. Rather, the connection is bidirectional, with technology affecting the development of such structures, and social and societal trends influencing those in modern communication technologies. The Internet did not fragment a previously

unified society, and neither was it created as a fragmented medium by a fragmented society – rather, its ability to serve individual subcultures individually matches existing needs within society, and this is one key to its success.

Largely, then, where RCSs are catering for narrowly defined fields of interest, we must once again rely on the user to make the necessary connections between the information found in individual Resource Centre Sites, and thus form knowledge from it – and we can be reasonably confident that users will do so, since for centuries now users of libraries have similarly been able to connect the contents of the books found therein. (They might possibly also be aided in this by the existence of something of a hierarchy of RCSs in a field: there could very well be a general RCS to cover the field, and a set of progressively more specialised sites focussing on sub-fields, sub-sub-fields, etc. – say, physics, fundamental physics, quantum theory, and so on, with the upper-level sites pointing to a collection of the lower-level ones operating in the field.)

Instead of being agents of an increasing fragmentation of knowledge, then, Resource Centre Sites can help to further interdisciplinarianism, as they leave it up to their users to process and apply the information they find, while (through their links) offering a number of immediate leads towards that end; in a way, these sites interface the internal network of the user's cognitive associations with the external network of hypertextual interlinkage. Any information found online this way is thus always already embedded in wider contexts of virtually unlimited extent, with potential effect ranging far beyond its initial field of context, intellectual as well as temporal or geographic: "deadlines are erased – or, perhaps more accurately, become continuous. Geographical territory becomes globally expandable" (Singer, "Online Journalists" n. pag.). This also constitutes a difference from traditional mainstream media of limited societal and geographical reach or temporal persistence.

Journalistic Aims, Methods, and Ethics

The fact that Web users must seek out information actively has important
repercussions:

> the aim of the newspaper, in the last century in particular, has been to
> create the impression – perhaps the illusion – that all information is
> the true business of all its readers. ... It is now becoming much easier
> to supply them with a stream of the facts they elect to receive, rather
> than those that somebody else elects to give them, and this switch in
> the balance of sovereignty over the content of available information
> media has profound implications for the future of citizenship and for
> the evolution of the sphere of privacy, of identity. (Smith, *Goodbye*
> 311)

At the same time, if the illusion of comprehensiveness and objectivity on part of a
news organisation is no longer of particular importance or attraction for readers
(users), then this raises several key questions for journalists:

> Interactive media potentially personalise [the] market, with
> individual audience members able to do everything from e-mailing
> reporters about particular stories to "voting" on the types of stories
> they want to see. How are journalists responding to these new
> pressures? Do audience members now have a greatly expanded
> ability to determine what news is? If so, how is that ability changing
> the nature of news and the relatively broad, community-based context
> in which it has traditionally been defined? (Singer, "Online
> Journalists" n. pag.)

To begin with, as has already been noted, amongst gatewatchers there is less of a
claim to 'objective', 'unbiased' reporting. While of course readers will still not
tolerate being lied to (should they become aware of it), they will accept the fact that
personal views will colour the selection criteria of any form of editor, from
gatekeepers through librarians to gatewatchers – and in the absence of the rhetorical
baggage of tradition, as journalists or librarians may encounter it, gatewatchers can
openly acknowledge their own beliefs and biases (to the extent that *they* are aware

of them). Due to the greater participation of the community, they also occupy a less elevated position above their 'audience' – thus, they determine what news is in collaboration with RCS (prod)users, with the gatewatchers' views only one (perhaps particularly well-supported) view. Therefore, in gatewatching notions of what is news are now perhaps even more community-based than before – but they are based on the expression of community members' views through their co-produsing of Resource Centre Sites, rather than on journalists' educated guesses at what the community may regard as newsworthy.

Community involvement, thus, also changes the nature of news and news reporting: whereas traditional news sources present events as collated and filtered – processed – by journalists through reporting as news *stories* (in other words, a blending of news and journalistic commentary, however much couched in objective language), Resource Centre Sites are able to some extent to divide news and commentary into separate entities: *news*, in an RCS, may simply be the links to newly available information elsewhere, while *commentary* would be the editors' comments on why they consider these links to be noteworthy, why they were placed in a certain section of the site, and what their own views about this information are. (An RCS for computer gaming, for example, might both link to a company's news release on a new game, and evaluate its contents. This is unlikely to happen in a computer games magazine, for example, where news releases would rarely be published in their original form.) Users, then, are able to see the primary source directly, form their own views from it, contrast these with the gatewatchers' reading, and even submit their own commentary – in other words, they can combine news and commentary as they see fit, that is, think for themselves and then share these thoughts with the community.

Thus, as Smith writes,

> the new journalist will be either a technician of entertainment-news
> or a specialist with a loyalty to his subject resembling that of an
> academic rather than a spot-news reporter. A great division seems
> inevitable between these two groups: the one catering to a kind of
> information helotry, for whom the right to know has been subtly
> transmuted into the right to be entertained; the other catering to an
> enlarged class of well-informed people who have themselves
> acquired the ability to evaluate and handle sources and compare
> different versions of the same event (*Goodbye* 206)

– and it should be clear by now that gatewatchers fit the second, 'specialist'
description. Instead of the impartial observers they have traditionally been
positioned as, "people inside the newsroom are modifying their definition of the
gate keeper to incorporate notions of both quality control and sense-making. In
particular, they see their role as credible interpreters of an unprecedented volume of
available information as fundamental to their value – even their survival – in a new
media environment" (Singer, "Online Journalists" n. pag.). The interpretations they
provide do not any more carry with them the same force of persuasion as they did in
other media, however, due to the increased availability of alternative interpretations
from the audience and from other gatewatchers.

The other alternative proposed by Smith – the 'technician of entertainment-
news' – seems unlikely to occur in RCSs. Especially in the broadcast media, unable
to match the specificity and detail of information on the Web, it appears
increasingly familiar, however, and so Smith's distinction may be linked to that
between 'push' and 'pull' media, and their respectively relatively more passive or
active audiences: it seems logical that mass, broadcast media with limited
interactive features would eventually produce a form of 'entertainment journalism'
– in other terms, infotainment – suited to them, while a user-driven, interactive

medium capable of catering to highly specialised groups would need similarly specialised news providers who work with, not for, their constituents.

If we accept this to be the case (this is not an act of technological determinism, since the nature of these media is in turn also partly determined by the uses their audiences expect to be able to make of them), then we should also anticipate attempts to create commercially run gatewatching services (in the same way that, say, band fanzines might eventually turn into mainstream music magazines, or through the establishment of new services from scratch). Traditional media firms involved in such attempts may very well only pay lip-service to the community-based, open nature of gatewatching, as Riley *et al.* warn: "we ... need to be concerned that 'control' that users experience in creating their own version of an electronic paper (the 'Daily Me') or from the interactive nature of navigating within the online site is understood as mostly illusory [by the newspaper corporations]. That users' privacy is under siege as well due to the use of cookies (tracking a visitor's site activity by installing a small writable text file onto the user's hard drive) merely adds insult to injury" (n. pag.).

This, then, raises serious questions about journalistic ethics in this new media form – but even without resorting to big business conspiracy theories, there are important concerns about the effects Resource Centre Sites may have on their audiences, in analogy to similar questions asked of newspapers, radio, and television since they first emerged, and more recently also of other Internet communication forms:

> clearly, the analysis of the message/text/discourse content has been more popular with exchanges observed in newsgroups. However, popular recognition of the 'mass media' appeal of the WWW turns attention to the WWW text. This interest leads researchers to examine questions about the content of the WWW. In fact, debates around the censoring of the WWW text begin with the presumption that textual content can have specific effects on its audiences.

However, how the effect might manifest and how the text can be
analysed has not been explored in great detail.

(Mitra & Cohen 180-1)

'Producer'-'Consumer' Relations

The study of commercial exploitation of Web users by corporations is similarly
in its infancy: "the technology offers the firm the opportunity to gather market
intelligence and monitor consumer choices through customers' revealed preferences
in navigational and purchasing behaviour in the Web" (Hoffman *et al*. n. pag.).
Some initial steps toward an engagement with these questions will be made in
Chapter 5.

What we might already note in the context of this comparison with traditional
media forms, however, is that gatewatchers have comparatively little ability to
dominate their field, the way newspaper publishers and terrestrial broadcasters have
done it in many countries: due to the cheapness of publishing online, and the lack of
bandwidth limitations as they exist in media tied to a scarce physical resource (that
is, the unlimited space available to 'set up shop'), any number of RCSs can exist in
any given field, working with the same informational 'raw materials' – the
resources related to the field that are available online, which (being digital) are not
depleted through usage, and (being on the Web) are available for free. While Web
publishing is not entirely free of costs, therefore, economic factors are of less
importance here than in other fields of publishing, especially since the concurrent
reliance on community involvement can also help to keep costs down. RCSs are
therefore a form of publishing that is also easily available to non-commercial
operators.

In fact, attempts to commercialise gatewatching will come up against practices
likely to be considered rather alien by traditional media operations – chiefly, the
practice of openly acknowledging and cooperating with competitors in the field.
This is unlikely to occur in print publishing or broadcasting, but as we have seen it

is virtually inevitable for a Resource Centre Site truly aiming to cover all of its chosen field. Despite Fred Johnson's remark, cited earlier, that "cyberspace allows planning elites to code the urban grid and design around whole neighbourhoods blinking them into invisibility and out of the flow" (90), to make other resources invisible is precisely what RCSs cannot allow themselves to do if they aim to be successful (*even if* these resources are competitors); in any way, in the networked world of the Web such exclusions would only be annoying obstacles for users, serving as detours but incapable of silencing alternative offerings altogether.

Additionally, the universalist claim of a traditional statement like 'all the news that's fit to print' cannot be translated to a Web environment: Resource Centre Sites do not (and cannot) offer 'all the links that're fit to list', but simply 'everything *we think* will be useful to you' – but alternative structurings are always possible: "there will be places of local decision but without fixed local boundaries. There is always more hyperspace, always another dimension that can intersect any local form" (Kolb 23).

This observation applies not only for the linking itself, but also for the commentary provided by the gatewatchers: the motto here is not 'this is how it is', but 'this is how *we feel* it is (but feel free to add your own thoughts)'. Furthermore, since this plurality of information and opinion is now widely accepted as a fundamental characteristic of the Net, it is impossible to attempt to roll it back in favour of a more hegemonic, prescriptive approach of telling users where to navigate to and what to think. Public backlashes against various attempts to censor and filter information on the Web have already show this impossibility – more fundamentally, it must be questioned if in the first place this would even be possible technically. But even on a far less dramatic level, just to ignore the plurality of opinions amongst the user community is now usually seen by these users as dishonest – on the other hand, to openly acknowledge and engage with a variety of alternative views, as Resource Centre Sites generally do, can be highly advantageous for those sites, as users credit them for their honesty.

To engage with diverging community views and to provide a platform for them has often been regarded as too much effort by traditional media firms with their background of tight control of what is and is not published, and to give up such extensive control has proved difficult for them. Corporations from outside the media sector often show even less regard for audience involvement in their online endeavours, frequently sticking to the largely non-interactive, one-to-many "Internet Presence sites: flat ad, image, and information" that Hoffman *et al.* identify (n. pag.) – which mainly transfer offline advertising and consumer information and entertainment materials to the online medium, but fail to link it into the overall hypertextual network. New operations better attuned to the requirements of the Web are much better placed to cater for their target community's interactive drive.

Additionally, and partly out of their prior experiences with the offline institutions in the field, the community also appears more likely to interact intensively with the sites offered by gatewatchers in their position as intermediaries than with the Websites established by the institutions, behind whose Web fronts commercial or ideological motives are often suspected. This in turn also makes it difficult for institutions to tap into the community as a source for news and communication directly, as community cooperation will be reluctant and guarded at best, and it stresses the institutions' need for gatewatchers as a reliable barometer of community views and feelings – while simultaneously the reporting of these news and feelings also bolsters the authority and respect gatewatchers and their Resource Centre Sites enjoy amongst that community.

As Cunningham & Finn note, "actual publishing on the Internet poses a range of related and additional issues. There is great pressure to use it more and more as a primary research tool because of its relative instantaneity, cheapness of information recovery and seeming vastness, which pose questions of authentication and quality control" (89). To begin with, in some contrast to other media, there is no way to infer anything about the quality and extent of a publication's coverage by the way it appears to us, since production values do not directly translate to quality in a

medium where high-powered production tools are relatively cheap, and since the extent of a Website could only be judged if somehow we could step up to a higher vantage point to see the entire network laid out below us; as McKnight *et al*. write, this *is* possible in print:

> when we pick up a book, we immediately have access to a whole host of information about the likely contents, its size, subject matter and so forth. Even just looking at the book cover tells us a lot about the likely style of coverage and so forth. When we open the book, we have expectations about what we will find inside the front cover such as details of where and when it was published, perhaps a dedication, and then a contents page. ... The same is probably true for most text types, i.e., there are organisational principles governing the lay-out and structure of their contents. (*Hypertext* 70)

This, however, does not generally apply for the hypertext medium where organisational principles can be defined *ad hoc* by the individual site creator and where general organisational conventions are only now beginning to be adopted (as they are with the gradual emergence of the RCS genre).

By extension, quality ratings of content are even less reliable on the Web than elsewhere – without an absolute overview over *all* that can be found on a particular topic, we can never be sure that we have not missed a crucial site. To determine the quality and authority of Resource Centre Sites (which in themselves constitute the collected judgments of gatewatchers and their community on the usefulness of yet *other* sites in the field) must therefore remain a matter of relative value judgments, and is likely to be different for each community member – as a result, the authority of Resource Centre Sites is undergoing constant change: "what makes cyberspace so interesting as a public sphere is how none of the visual landmarks can be trusted. Also, the old economy of readers and writers, speakers and listeners is turned sideways; with the simultaneity and multidirectionality of online communication,

authority is won and lost with such frequency that is becomes nearly irrelevant"
(Bailey 30).

Acquiring a Central Role in the Field

In comparison with their gatekeeping colleagues, then, gatewatchers enjoy a
different kind of authority in the eyes of their audience – one that does not stem
primarily from an appearance of objectivity and from the exhaustiveness of their
coverage, but more from their own respectful engagement with the community, as
perceived by individual members of that community. Perhaps even more so than the
appearance of objectivity in other media, this feeling of mutual respect is centrally a
matter of establishing a proven track record – or in the language of marketing, a
known 'brand name'. For newly-created RCSs, this must necessarily be a long-term
goal, and thus reinforces their need to work towards embedding themselves within
their target community.

Of central importance in this are the site's interactive features – encouraging an
increasing part of the community's interactions with itself to take part on and
through the Resource Centre Site itself is a major step towards the site becoming a
'natural' part of the community, as it creates a feeling of belonging for the
community members making regular use of such facilities. At the same time, where
community interaction comes to depend more on the interactive features offered by
RCSs in the field (Webchat facilities, for example) than on the more 'neutral'
ground of mailing-lists and newsgroups, this could also cause the community to
fragment into several sub-groups based around the various Resource Centre Sites its
members use; this, in turn, might also help specific sub-communities (who might
have chosen 'their' RCS over a similar site because of its slightly different topical
focus) to gather more closely, though.

Additionally, for all the loyalty they might develop there is no mechanism by
which the users are permanently wedded to 'their' RCS, and the user-driven nature

of the Web makes it seem likely that community members will still occasionally visit alternative sites in their searches for information (especially since the main aim of RCSs is to direct users *to* such sources). This continual scrutiny and comparison of various Resource Centre Sites' performance levels in providing news and information while keeping a critical distance from the sources of that information is likely both to keep Resource Centre Sites relatively honest and accountable in their operations by constantly exerting a mild competitive pressure, and to keep audience loyalties in a state of flux between individual RCSs.

As Stone notes, this ongoing impermanence of loyalties and associations in computer-mediated communication seems likely to have a lasting effect on the understanding individuals, groups, and communities have of themselves:

> the identities that emerge from these interactions – fragmented, complex, diffracted through the lenses of technology, culture, and new technocultural formations – seem to me to be, for better or for worse, more visible as the critters we ourselves are in the process of becoming, here at the close of the mechanical age. I see these identities engaged in a wonderful and awesome struggle, straining to make meaning and to make sense out of the very idea of culture as we know it, swimming for their lives in the powerful currents of high technology, power structures, and market forces beyond their imagination. (36)

Resource Centre Sites are a prime space for the playing out of this sense-making, then, and their structures are ideally suited to this 'post-mechanical', information age. Previously, with limited resources for information dissemination, there was a need for the reporting and expression of news and values to be tightly policed. As Singer writes, "the original need for gate-keeping journalists ... came about because of the limited space (or time, for broadcasters) available in traditional media. Online media such as the Internet have unlimited space. Are there other limits, such as the user's time and patience, or the media organisation's resources,

that create comparable constraints? If so, how can they best be handled?" ("Online

Journalists" n. pag.). As non-exclusive, collaborative vehicles for the proliferation

and storage of news, information, commentary, and discussion, involving

institutions as well as communities in the field, and mediated by gatewatchers,

Resource Centre Sites provide an answer to this question.

4 — Case Studies

A great number of Websites within the Resource Centre Site genre can now be found on the Web, and more sites continue to appear – from 'big issue' sites, covering a wide range of approaches to their chosen field and aiming to be comprehensive gateways to all relevant information and knowledge about their topic, to highly specialised resource centres on issues that are of concern only to a small, exclusive community of enthusiasts or specialists. Furthermore, we are also beginning to see the emergence of standardised models for the setup of RCSs – from proposals for organisational concepts to ready-made software solutions – models which may (at least for this site genre) be a first step towards the common organisational principles McKnight *et al*. are still missing in hypertexts. Three sets of case studies of existing Resource Centre Sites will be discussed in this chapter to demonstrate the practical implications of the theoretical outline of the practice of gatewatching and the genre of Resource Centre Sites as they have been presented in the previous chapters.

These studies were conducted during the first half of 2001, and began with a thorough reading of the available content of all sites with a view especially to the organisation of the information they present into various sections containing news, commentary, and background resources. Another key interest of this research was also the extent to which the sites allowed for and encouraged user participation, and the extent to which participating users could thus become produsers of the sites. In other words, during this part of the research the sites were approached from the point of view of a potential site user and/or produser. To avoid the negative side-effects often associated with a researcher's status as a 'newbie' (that is, their relative inexperience with a new form of computer-mediated communication), as they have plagued very early studies of email, newsgroup, and Web-based communication, sites had already been used extensively throughout the preceding months and years in order to gain some familiarity with their contents.

Where possible, such content studies were then backed up by email interviews with key members of the sites' staff (four of them founders or co-founders of their sites) which were conducted in May and June 2001 (see Bibliography and Appendix for details on sites and respondents). Site staff were all emailed an identical questionnaire covering topics such as the site history, its present state, its day-to-day operations, its relations with community and industry sectors, and its use of the Web as a communications medium. Site staff were also given the opportunity to add their own free-form comments. Those staff who responded all provided lengthy and informative insights into their aims and procedures in operating their respective sites.

The methodology employed for the case studies is therefore not unlike that used for studies such as *Fame Games* (Turner *et al.*) or *Tune In, Log On* (Baym). For both these studies as well as for research on Resource Centre Sites, first-hand interviews were indispensable, as there exists virtually no other source of information about the people and philosophies involved in the production of celebrity, the participation in daytime soap opera newsgroups, or the gatewatching process. (Some of the answers to frequently asked questions on RCSs also provide valuable first-hand insights, though.) Key practitioners in these fields can only tell one side of the story, however: the study of the texts they produce or facilitate has therefore also been a key aspect of such research projects, as it provides a direct counterpoint to these 'accounts from the engine room' by indicating what results the practitioners' work produces in the end, and to what extents they are eventually able to realise their stated aims. So, for example, Turner *et al.* used "a contextualised reading of media texts" (27) to balance their account of "*what the industry itself thinks of as its professional practice*" (26; emphasis in original), while in her study of the rec.arts.tv.soaps newsgroup Baym "collected posts to the group systematically" (25) in addition to conducting several surveys to gather responses from r.a.t.s participants. From the combination and juxtaposition of the gatewatchers' philosophical and practical ambitions with the evidence presented on-

site, useful conclusions on the viability of gatewatching methodologies and the Resource Centre Site model for their Websites can be drawn.

Direct interviews with users (both community- and industry-based) of Resource Centre Sites would have constituted a third valuable element of this study, but would have been far beyond its scope. Even for a study of one individual site such as Slashdot with its 400,000 users the choice of suitable and representative participants to be interviewed might have proven to be an insurmountable obstacle; given the present concern with eight Resource Centre Sites it would be entirely impossible without a significantly larger research team. At any rate the focus of the present study is on outlining the methodologies involved in gatewatching efforts, and on describing the structures of Resource Centre Sites as venues for gatewatching – more detailed research on the interaction of users (as produsers) with RCSs and similar sites is yet to be conducted.

One – The Supersites: MediaChannel and HIV InSite

The first case study will show two Resource Centre Sites in their fullest form of development, at a point where we may already begin to question whether these sites are not starting to move beyond the RCS model. Nonetheless, in their analysis we will see many of the basic operating and publishing principles of Resource Centre Sites; additionally, they will also help to problematise the positioning of Resource Centre Sites at the centre of a continuum between institutional and community interests. Finally, we will consider the term 'supersite' as an alternative way of referring to such RCSs.

MediaChannel (MC) and HIV InSite are amongst the largest, most elaborate RCSs operating in their fields (respectively, of news media commentary and criticism, and of support for HIV/AIDS researchers and sufferers) – both in terms of their success and reputation with users and the quality and quantity of material offered on-site. Both refer to themselves as 'gateways': HIV InSite's "Disclaimer" page describes the site as "a gateway to in-depth information about particular aspects of HIV/AIDS", but as with MediaChannel this should not be understood to mean that the sites do not contain any original content and merely point towards Websites located elsewhere: while this *is* an important part of their (and any RCS's) operation, they also offer a great number of edited resources on-site. MC's Senior Editor, Aliza Dichter, confirms this balance between local and remote content: "we are helping users connect to the most important and valuable media-issues content we find on the Web", but especially "for major stories, particularly complex developments, we create special in depth reports aggregating material from our network" (all Dichter statements from email interview). MediaChannel's central motto, therefore, is "we watch the media" – for their impact, to provide additional information and alternative perspectives, and to inspire debate and action on media issues. This is seen as "a 'service', a resource".

Local and Remote Content

The balance between original and external content is somewhat different for the two sites, however. For MediaChannel, clearly, "highlighting and linking to affiliate content is the core of the MC model. The goal is to help drive users around the network" – while for HIV InSite the most central and important information is almost invariably located on its own servers. This can probably be explained as a result of the different topics covered by the two services: the sensitive nature of medical information and advice might mean that HIV InSite's editors value the verification and editing of information for accuracy and clarity over speedy

reporting, while the higher emphasis on timeliness and scope of coverage over accuracy (though not necessarily at its expense) in news reporting would be likely to motivate MC's staff to rely on their affiliates' work rather than slow down the process through further editing stages.

In Dichter's words, then, "MediaChannel's coverage in many ways represents the collective scope of the affiliate media outlets – the greater-than-the-sum-of-the-parts value of the vast range of concerns and issues covered by the participants in the MC network", aggregated in one site with links back to the original sources. This closely matches the description of the basic gatewatching process as it has been described in Chapter 2, and MC's "Frequently Asked Questions" list underlines this point: MediaChannel's "editorial staff selects relevant material to highlight on MediaChannel; links from these summaries provide direct access to the complete, original articles", so that MC and its base of affiliated sites constitute "the deepest, highest quality database of media-related news and information on-line" ("FAQ")– we see, once again, the combination of gatekeeping (the staff selection of relevant news) and librarian (the maintenance of a database of news and news sources) mechanisms into gatewatching.

Similarly, the MC FAQ also describes the plurality of voices that has been shown to be typical for gatewatcher sites: in the absence of a narrow overarching political agenda, "MediaChannel is home for a wide variety of international perspectives. There is no unanimity of opinion among the Affiliated Sites, though many tend to agree on two broad positions: support for freedom of expression and the belief that media consumers are better served by a diverse array of media outlets than by a few" ("FAQ"). The same is also true for HIV InSite, which by its own declaration "strives to provide a fair and balanced representation of viewpoints on many controversial aspects of AIDS. Views, policies, and recommendations contained within HIV InSite materials are not necessarily shared by all HIV InSite staff, editors, or sponsoring or contributing organizations" ("Editorial Policy") – so, in the list of links with information on the assisted suicide of terminal AIDS patients

we find both pro- and anti-euthanasia groups, for example. As with MC, however, there are also some fundamental shared views amongst HIV InSite and the sites it links to – most centrally, the view that people living with AIDS are to be supported by the general community, not ostracised.

Sponsors and Editorial Independence

The commitment to provide balanced, fair views becomes particularly important when considering the sources of content and funding for both services. HIV InSite's list of supporters, in particular, provides a veritable 'who's who' of pharmaceutical firms, listing transnationals such as DuPont, Merck, GlaxoSmithKline, and Roche amongst its sponsors; amongst its other sources – "corporations, foundations, governments, and individuals" ("Sponsors and Funders") – are also U.S. government bodies such as the Center for Disease Control and the U.S. Agency for International Development (USAID). Perhaps to pre-empt any suggestions that the site content could be compromised by accepting support from such major bodies, the site is therefore at pains to declare that "partners … are not responsible for editorial decisions" ("Partners") and that "in all cases, final selection of all information and analysis on the site is by HIV InSite, in consultation with UCSF faculty and staff" ("Sponsors and Funders"). Indeed, the site's content appears to support this claim – at the height of the major drug producers' attempts to keep cheap imitation medication for people living with HIV out of South Africa, for example, HIV InSite featured a number of articles and news reports that were highly critical of some of its major sponsors' policies. Such editorial independence may also be ensured by the fact that the site remains located at an academic institution, the University of California in San Francisco (UCSF).

MediaChannel is similarly a non-profit agency, but without affiliations to academic or government organisations. It is part of the OneWorld global network of NGOs and non-profit sites dealing with human rights, civil society, and sustainable

development issues, and supported by The Global Center, "a New York-based
foundation that supports independent media", with additional grants provided by
"the Rockefeller Foundation, the Open Society Institute, the Reebok Human Rights
Foundation, the Arca Foundation and the Puffin Foundation, as well as grants from
individual donors" ("FAQ"). While (in the absence of direct support from major
government or media industry bodies) there appears to be no overt pressure to toe a
'party line' of some sort, then, this independence also comes at the price of an
ongoing struggle for funding, as Dichter writes: "media education of this sort,
communication rights, media improvement are not generally recognized 'funding
areas' – unlike, say, animal rights or environment, media issues are not among the
priorities of much US nonprofit funding". Perhaps the greatest potential outside
influence on MC's content could therefore be exerted by OneWorld itself –
MediaChannel has adopted "OneWorld's 'supersite' networking and aggregation
model to media issues" (Dichter) – which this case study shows to be closely related
to that of the Resource Centre Site –, and as part of the arrangement between the
sites there is an agreement "which allows the OneWorld editorial team to extract
material from … partner sites and highlight them in a central area, where they are
re-grouped according to category. For example, the OneWorld News Service
consists of articles and press releases from all of OneWorld's partners" ("About
OneWorld"). This could lead to pressure from OneWorld for MC content that is
particularly useful for its own purposes – so far, however, there appears little
evidence of such pressure.

In addition to their major funding sources, both sites also accept individual
donations and grants: in this, HIV InSite describes itself as a "non-profit agency",
while MediaChannel accepts contributions through the donation site *Helping.org*,
which lists it as a "charity".

Site Content

Their ability to draw ongoing funding from a variety of sources also points to the fact that both sites have been considerably successful in their respective fields. While no user access statistics were available for either site, the quantity and quality of available information shows both sites to be major efforts of production. Running since March 1997, HIV InSite has won more than 20 awards (including the prestigious *Scientific American* Sci/Tech Web Award in 2001), and is currently produced by about 15 staff; MediaChannel, which has run since October 1999 (and was officially launched in February 2000) now has five full- and seven part-time staff, and has featured around 1300 news items from affiliates since its inception (up to the time of writing in mid-2001) – currently, the site consists of around 420 pages (Dichter). As MC particularly depends on its affiliated sites for news and other content, it is also significant to note that the number of affiliates since 1999 has grown from less than one hundred to over 720 "media-issues groups and media outlets" (Dichter). The MC site features a standing invitation for new affiliates and individual contributors: "become our eyes and ears in your town and tell us what's wrong – and right – about your media" ("Ten Ways"), so that "MediaChannel will link to your site, spotlight your content and drive traffic to your pages. Your organization will be featured in our directory, a guide to the largest online network of media-issues groups" ("Become"). Such direct requests for new content are generally absent from HIV InSite, most likely again due to the nature of its topic, which requires an extensive verification of contributor credentials – however, it does have feedback facilities which can be used to submit news or point to useful Websites.

The previous chapter has outlined three major areas of content within Resource Centre Sites: news and commentary, resources, and community interaction. Naturally, these fields overlap to some extent: 'old' news might become background resources, and particularly insightful excerpts from the community fora might be re-

published on the site as commentary, for example. Nonetheless, it is possible to group (loosely) the content of MediaChannel and HIV InSite into these three areas. What becomes immediately obvious here is that MC's content is biased more towards the 'news and commentary' side, HIV InSite's more towards resources; this is hardly surprising given their fields of interest: MediaChannel is concerned with the news media, after all, and HIV InSite with providing informational resources to practitioners, patients and their partners.

News and Commentary

Still, HIV InSite also features some significant news. This includes the 'HIV InSite Daily NewsWatch', a lengthy list of daily news about HIV/AIDS from major Websites and newspapers, newsletters and other information services, as well as the 'Other News Services', a massive list of specialist news services, mainstream media with HIV/AIDS-related sections, regional news services, and other online services. In addition, many of the site's subsections feature 'New & Noteworthy' sections at the start, with up-to-date lists of the latest additions to these subsections. This situating of news *within* topical sections demonstrates clearly the primacy of knowledge presentation over timeliness within HIV InSite.

There is relatively little commentary or editorialising on the site, with only two sections – 'Author! Author!' and 'Spotlight' – offering editorials, invited commentaries, expert discussions, and interviews with book authors. Such editorial restraint could be seen as an attempt to ensure the perception of maximum impartiality on behalf of the site's editors (perhaps partly to pacify sponsors), or as another consequence of the sensitive nature of the site's topic – importantly, however, it must also be noted that central sections of HIV InSite (especially many of the 'resources' subsections) are written directly by the site's staff, ensuring a strong presence of editorial content. (Such sections are written in a scientific-

academic mode of writing, though, which tends to silence a distinctive authorial voice.)

MediaChannel also has a 'Daily Media News' section, "which consists of original briefs sourced to alternative and mainstream news outlets as well as press releases from groups worldwide, is concerned with new and breaking developments and current media news" (Dichter), and includes links to MC affiliates' daily news, hot stories, and topical sections. Undoubtedly, this is the central section of the site, with previous days' news also available here. Notably, it is featured on MediaChannel's main page, pointing out this site's valuing of news over resources in comparison with HIV InSite. The news section is supplemented by news and commentary sections such as 'Whistleblowers' (exposés from within the mainstream media), 'Interviews' (with media-makers and media-watchers) and a 'Book Corner', which covers the latest relevant releases in brief reviews and also offers some chapter excerpts, reviews archives, and links to an online bookstore.

Such news and commentary sections can also partly be seen as an element of the resources area as they become older, and the 'Media Reader', an "international, biweekly, multimedia magazine" with text and audiovisual news features linked in from affiliate sites, further blends these areas: as Dichter writes, "while the weekly edition and biweekly magazine are timely, they are not driven exclusively by current events and can address ongoing issues, innovative projects, commentaries and other content that is not 'hard news'". Further commentary is contained in the 'News Dissector', an editorial column written by MC's Executive Editor Danny Schechter, 'Op-Ed' with commentaries from contributors (it also includes further links to commentaries on affiliate sites), and the 'Media Art' section – which has commentary and criticism as well as actual artworks.

Resources

Clearly, both HIV InSite and MediaChannel rely heavily on external and affiliate services for the news they report, concentrating mainly on collecting and presenting these items. As Dichter points out, there are also financial reasons for this: "we … run original and exclusive news reports on occasion, but do not have the budget to fund this – predominantly we feature news reports from our affiliates. We have a few collections of 'hot story' sections where we aggregate headlines on a particular story on an ongoing basis, but do not really have the staff to maintain this effectively". The work of MC staff is therefore focussed on the aggregation of material for the news and resources sections, and on providing commentary.

Amongst MC's resources sections, then, are the 'Issue Guides', covering "key themes and lightning-rod issues" with the customary links to affiliates for more information, and 'In Depth' with analysis and background stories from affiliates. Both of these are issue-based (covering for example the media in Russia, or the U.S. elections); in addition there also is a list of broader topics (containing entries such as 'business', 'law', and 'technology') which can be used to find all relevant news articles and commentaries featured in MC.

Further resources provide more basic information. The 'Journalists' Toolkit' contains "essential resources for the working journalist", from job training through to research and writing guides; the 'Media Access Toolkit' advises interest groups on how to have their story featured – favourably – in the mass media. Additionally, there is a 'Global News Index', a "directory of links to other specialized media news sites" (Dichter), and a recent sub-site added to the MediaChannel: the 'Policy Center' is intended to be "a gateway to information, ideas, discussions and groups" involved in media policy and law – it could be seen as a smaller, topically more restricted Resource Centre Site within MC itself. (A further addition to the site is currently in preview: the 'MediaChannel Classroom' is a "media literacy centre"

aiming to aid teachers in teaching media literacy and media issues in class by providing resources such as a 'Teachers' Guide' and a 'Teachers' Toolkit'.)

Finally, the MediaChannel resources also include the 'Media Marketplace', which allows its users to offer and search for media jobs, research materials, media content and footage, as well as equipment, and the 'Bulletin Boards', where events, action alerts, TV/radio broadcasts, educational opportunities, awards and funding sources can be advertised. In addition to allowing for community interaction, these can also be seen to support a very basic facility for the posting of user-submitted news, so that they blend all three areas of RCS operation: news, resources, and community interaction.

As noted, the resources area makes up a large part of HIV InSite's content. Its centrepiece, in fact, the 'Knowledge Base', is described as a "comprehensive, online textbook of HIV disease", and contains an edited collection of articles about virtually all aspects of HIV/AIDS (with further article references often containing additional article abstracts). Additional sections, which include relevant parts of the 'Knowledge Base' itself, are aimed at specific subsets of HIV InSite's audience: 'Medical' contains a vast resource of information for medical practitioners, even including an online training section; 'Prevention' is aimed primarily at practitioners, but to some extent also at people living with HIV/AIDS and their friends; while 'Basics' contains easily accessible introductory pieces for a general audience which often feature links to additional information on- or off-site.

A general audience with varying degrees of prior knowledge is also addressed in the 'Policy Analysis' section, which offers information on HIV/AIDS prevention and treatment policies and legislation around the world, divided into 'General', 'US', 'Regional & Country', and 'UNAIDS' subsections – this section consists largely of links to activist, NGO, and non-profit organisations with some introductory texts; the regional subsection also offers specific local information such as infection statistics. Part of the links from this and other sections can also be found in the overall 'Links' section, which contains a massive list of hyperlinks to

outside resources. Finally, HIV InSite also contains an audio section with a large number of conferences and presentations (at the time of writing, the most recent audio presentation in this section dated back to August 2000, with no indication why updates had stopped).

Interaction

Finally to the third area that Resource Centre Sites engage in: interaction with and between users. At the most basic, HIV InSite offers its users the opportunity to subscribe to "HIV ForeSite", an "email-based newsletter" about "news information available on HIV InSite and elsewhere concerning HIV/AIDS"; the site also invites feedback through email and user surveys. Most importantly, however, it contains a section named 'Ask InSite', where user questions about HIV/AIDS and life with the disease are answered by experts. Questions featured here range from basic information about the probable origins of the HI virus and advice on stress and anxiety management for HIV carriers to fairly specific answers on the safety of particular sexual and other practices. While no news updates to this section have been posted since mid-2000, it remains useful also as a resource of HIV/AIDS information. (The lack of updates here might simply be an indication that answers to many variations of the most immediately burning questions for people living with HIV/AIDS have already been posted: when all frequently asked questions have been asked, the frequency of other questions declines quickly.)

It is perhaps somewhat surprising that HIV InSite does not contain any discussion fora for direct interaction amongst its users, in addition to 'Ask InSite's facilities for interaction between site users and creators. Some possible explanations for this fact might be linked to the potential for abuse that such fora can also open: since HIV/AIDS is still misconceived as a 'gay plague' by some groups, discussion fora for people living with the disease and their supporters might easily be disrupted by homophobic participants; they might also attract tangential discussions about the

role of governments and pharmaceutical firms in political decisions, and overall criticisms of economic globalisation. Additionally, and perhaps most seriously, there is also a significant danger that false medical advice disseminated through such discussion groups (by malicious participants posing as medical experts) might mislead or harm patients. On the other hand, there are also plenty of HIV/AIDS-related newsgroups, mailing-lists and other discussion fora elsewhere (on sites that HIV InSite links to, for example), so that there is no reason for this particular site to duplicate these efforts.

The same also applies for MediaChannel – there is a plethora of long-established discussion groups, from media and cultural studies mailing-lists to activist networks and fan groups for particular personalities, programmes, and channels. MC's own online fora are therefore relatively underdeveloped, and generally focus on specific issues; the site has also "featured moderated discussions ('roundtables') on specific media issues and published the results. We have had online forums since the launch of the site but are … looking forward to increasing development of our community features such as discussion groups" (Dichter). To this end, Dichter adds, MediaChannel is "about to launch new discussion forum software". In addition, the site is also occasionally engaging with its audience off-line: "from hosting events to creating print publications and audio and video programs" (Dichter).

Editorial Principles

The structures of both sites, then, adhere closely to the model for Resource Centre Sites as it was outlined in the previous chapter – despite the fact that they are perhaps somewhat limited in terms of user interaction and communication. In their editorial operation and its underlying policy and philosophy, too, they follow the gatewatching ethics: so, the MediaChannel FAQ describes the organisation as "a publisher of original news and opinion, and … an aggregator of content from hundreds of affiliated sites" – making it "a platform for provocative voices often

unavailable through the mainstream media". In other words, as the gatewatching model postulates, MC staff aggregate material from their affiliate network and link back to further information on external sites, combining processes from journalism and librarianship: staff "strive for high journalistic standards of accuracy, balance and transparency" (Dichter), while in itself "affiliation does not mean the support of a single belief, but rather the mutual recognition of the value of a diversity of media sources and criticism. Our only criterion is that sites … engage media issues in a critical and insightful way" ("FAQ"), which in its drive for openness and breadth of coverage is a very librarianly aim. Unsurprisingly, MC "staff members are also media junkies and constantly gathering items from their media diets, emailing lists, etc.", as Dichter writes: "we are constantly reading mailing lists, newsletters, and other Web sites and also receiving a ton of mail from users".

Since the most of MediaChannel's content is provided by its affiliate network, however, there is also some degree of pressure to feature affiliate sites most prominently: in response to a question about potential MC bias towards its affiliates' offerings over those of non-affiliated news sources, Dichter agrees that MC "have expended most energy creating resources to promote and connect the 'products and services' of our affiliates" and to "help users access the vast range of valuable materials, services, and content from our affiliate network" – which does introduce a danger of 'blind spots' in MediaChannel's coverage of issues not sufficiently dealt with by any of its affiliates. Dichter also stresses that "we try to collect the most valuable resources from wherever", however, and in practice the large number of affiliate sites might also be seen to ensure a great breadth of views on a wide range of media-related issues. At any rate, MediaChannel's standing with its users relies on these factors, and the site cannot afford to be seen as heavily biased on certain issues – beyond the bias for media freedom and an open exchange of views that is shared by MC staff, affiliates and users and enshrined in its mission to be "an open forum for debate, discussion and interaction with ideas and information and initiatives about media issues" (Dichter).

HIV InSite's mission statement echoes the sentiments expressed by Dichter almost down to the wording; its policy, too, "is to link to the best of the Web, and thousands of links to external Web sites are incorporated into the site's original content" – indeed, the site stresses that this intent is "unlike" that of "many commercially-oriented sites" ("About"), even in spite of HIV InSite's own direct financial ties with many of the world's leading transnational pharmaceutical concerns: "funders are not involved in editorial decisions", and "in all cases, final selection of all information and analysis on the site is by HIV InSite, in consultation with UCSF faculty and staff" ("Sponsors and Funders").

In this case as in MediaChannel's, we see a combination of gatekeeping and librarian approaches into gatewatching: a combination of the already 'fair and balanced' journalistic reporting on HIV/AIDS news and views, with "materials posted to the site … reviewed for credibility, reliability, and accuracy" ("Editorial Policy"), and the librarianly compilation of this content and extensive background information into sections such as the 'HIV InSite Knowledge Base'. Once again, undue bias towards the products and services offered by contributors and sponsors of the site would likely backfire with users, who could perceive such bias as a threat to the site's accurate and comprehensive coverage – however, there are also more fundamental naturalised biases that are taken to be shared by site staff, contributors and users (such as the view of HIV/AIDS as a curable disease deserving society's attention and compassion).

Relations with Community and Institutions

Beyond such topic-specific assumptions, both sites also share a view of their visitors as a community of active, intelligent users rather than as a passive audience: both acknowledge users' rights to full access to information – HIV InSite's "policy [is] to allow free, anonymous access to all of the site's content", and the tone of its content is open, accessible, and to the point, while MediaChannel

seek to provide content that is provocative, insightful, relevant and accessible to a broad international audience, and also accurate, explicit in attribution, clear about commentary and criticism, and not hateful, racist, vindictive etc. We hold similar standards for our affiliates… . When we highlight material from our affiliates we attempt to be clear in attribution of perspectives and sourcing. While editorial policy and affiliation policy is at the discretion of our staff we encourage feedback and the posting of that feedback publicly on MC. (Dichter)

While it is difficult to gauge to what extent such user feedback and contributions filter back into the content of both sites (feedback might affect the content indirectly, where it leads to the alteration or expansion of items of original content or contributions sourced from affiliates, but is not published in itself), where user commentary *does* appear both sites seem to extend their policies of open user access also to active participation: as Dichter writes, "we do not edit the content [of the discussion fora] at all", and for HIV InSite a similar approach seems to be borne out by the fact that user-submitted contributions are not toned down for reasons of 'communications decency' – in 'Ask HIV InSite', for example, terms such as 'blow job', 'pre-cum', or 'fuck' appear frequently.

Indeed, in Dichter's view the line between MC's creators and its users is virtually irrelevant, because of their shared aims and interests, and users' active participation in shaping the content of MediaChannel: staff consider themselves "part of" the community, as she writes, and "if we consider that the community is the users of MC and people concerned with media issues that *is* our staff and interns … and yes, nearly all of our original content has come from submissions from our community" (with that community thus also including MC's affiliated sites and their staff, of course). This can also lead to some degree of pressure, then: "some people of course wish we paid more attention to this issue or that or played a more advocacy or campaigning role", and "we continue to seek input and feedback regarding usability and make improvements when we can" (Dichter). Dichter also

notes some very positive responses, however: "in addition to endorsement by experts and veteran journalists (including the legendary Walter Cronkite) and tons of fan mail, MediaChannel has been honored with invitations to participate in and cosponsor major international media events, and … has been recognized by various Web sites". By contrast, there have been no overly negative responses from media institutions – possibly due to the site's policy of strict journalistic ethics and respect for "the concerns of the source" of a story (Dichter), which comes with MC's aims to be seen as something of a 'model citizen' of the journalistic world.

In the absence of any direct statement from HIV InSite about the input received from institutions or community with regard to the direction of its coverage and content, it is impossible to say how such input might have affected its editorial processes; however, the site's repeated statements that "the editorial process is independent" ("Editorial Policy"), its placement at an academic institution, and its overall espousal of a medical-scientific approach towards providing and presenting its information all point to a view of HIV InSite as located at arms' length both from the pharmaceutical and medical industry and from the community of HIV/AIDS carers, patients, and affected partners, in contrast with MediaChannel's view of itself as 'part of the community'.

At the same time, in both cases that 'community' can also be broken up into a variety of separate interest groups with differing, and sometimes contrasting, aims; HIV InSite and MediaChannel can then be seen as being located at the nexus of the various interrelationships between these groups. This is not necessarily a common feature of all Resource Centre Sites, as we will see in the second case study where the range of institutional and community groups is much more limited – rather, it should be taken as a consequence of these Websites' 'supersite' status that results from their concern with multifaceted, 'big issue' topics.

As Dichter describes it for MediaChannel,

> MC is many things: We seek to help bring media issues into broader circulation in the public discourse. We work to help enable and support and enhance the work of journalists, media-issues groups, researchers and activists and independent media – particularly grassroots, community and public-interest media – worldwide. We strive to create a forum for discussion, debate, activism and public participation around media issues. We seek to explore and provide information and communication on the role of media (large and small) culturally, politically and socially

– in short, "MediaChannel brings … diverse groups together to focus on how media impacts [sic] all of our lives" ("FAQ"). Some of these groups are named on the MC site: "more than a site for specialists" ("FAQ"), MC caters for "journalists and media professionals, organizations and activists, scholars and citizens" ("Mission Statement") as well as "a broad, general audience" ("FAQ"). Clearly, membership in these groups can be shared: media professionals (especially in smaller-scale outlets) might also be activists, journalists might also be scholars, and cases of media whistleblowing remind us that even media workers in the major market powers frequently remain concerned and responsible citizens – and so, as Dichter points out,

> for MC our "community" and "industry" overlap inextricably. We cover both the media industries – including commercial, noncommercial, independent, alternative, community and public media – *and* we cover groups and efforts concerned with media & democracy (perhaps a nascent, global 'media and democracy movement') – we both cover and seek to serve journalists and media makers as well as critics and activists and those who consider themselves audiences or consumers of media.

Media makers are generally also media consumers, while especially online media make the move from consumer to contributor (or even publisher) increasingly easy, as we have already seen in previous chapters.

Multiple Institution-Community Continua

If "MediaChannel exists to provide information and diverse perspectives and inspire debate, collaboration, action and citizen engagement" ("Mission Statement"), then, such interaction takes place among a number of axes:

- First, between the capital-M 'Media' – the "nine transnational conglomerates [which] dominate the global media" ("Mission Statement") – and 'us' citizens (Dichter reports that her very aim in joining MC was to "help citizens become more critical 'consumers' of information"). This is the traditional 'bloc' view of the Media, by which "the media are among the most influential forces in contemporary life, and the number of citizens concerned about the media is already high and continues to grow" ("FAQ"); MediaChannel thus sits between media producers and media consumers.
- Second, between the 'Media' – the transnationals – and the 'media' – the smaller, grassroots (and frequently Web-based) media outlets which are often community- or issue-based, and who make up the majority of MediaChannel's affiliates: "because many of our affiliates are able to do high-quality investigative news, even if the mainstream media neglect the story we are able to feature it because of our attention to these sources" (Dichter). Here, MediaChannel sits between the major and the minor media producers.
- By extension, between the media (with or without a capital 'M') and activist or lobby groups who require media access to publicise their

views – groups at whom MediaChannel's 'Media Access Toolkit' is aimed. In this case, MediaChannel sits between news reporters and news makers.

- At this point, MediaChannel's role also shifts from that of a reporter of general media issues (that is, issues to do with the media themselves) to one of reporting on issues in the media (in other words, actual media content), and so another form of interaction played out on the site is also between the (non-media) institutions covered in the media reports and those affected by their actions (possibly 'us' citizens again). This makes MediaChannel sit between the makers and the subjects of institutional policies.

Finally, MC is also the venue for two further types of professional interaction:

- between the media industry and its members, and professionals (journalists and other media workers) in the media, and
- between the media industry, and media scholars and other academics and commentators dealing with media issues.

A similar list of axes along which its involved interest groups interact can also be created for HIV InSite: here, we find it engaged in the interaction

- between medical practitioners and patients, as it aims to empower people living with HIV/AIDS by improving their knowledge about their condition and its implications,
- between the pharmaceutical industry and medical practitioners, whom it keeps informed about latest scientific developments and treatment options (to the point of offering online training),

- between the industry and patients, who gain knowledge about available medication, but are also better enabled to withstand commercial exploitation of their condition,

- between scientists and the general populace, who are informed about the state of and advances in the struggle against HIV/AIDS, and

- between (local as well as international) government and non-government policy-makers and citizens, who can track the efforts made to contain the virus and prevent further infection.

In spite of their location at the nexus of potentially divergent interests, however, both sides play a constructive, communicative role rather than providing an ideological battleground – this is in keeping with the overall ethos of involved, but balanced gatewatching as it has been outlined in the Chapter 2. Thus, HIV InSite serves to connect and unify its differing audiences: overtly through sections such as 'Ask InSite', which puts patients and relatives in touch with experts (ranging from medical practitioners and scientists to a sex worker relating her experiences in dealing with AIDS fears and scares), but also more indirectly through the open accessibility and clear language of its 'Knowledge Base' and other sections. By extension, it also unites its content creators and contributors into one group that includes medical staff and scientists as well as journalists and HIV/AIDS patients.

MediaChannel has similar aims: "cooperation, collaboration, connection, networking, that is what it's all about for us" (Dichter). For the user side, this is evident from the extent to which the site addresses and connects various groups in the same way: ultimately, every user is thought to be a media consumer and citizen with the desire to play a more active role in the community. On the side of the media industry, cooperation is similarly the guiding principle, to the point where MC's staff see no competition with similar media outlets, but only potential future collaboration, as Dichter stresses emphatically: "competing is not a relevant term for us. Flagging new, exclusive content on our affiliate sites (and any site that

featured media issues content would likely become an affiliate rather than 'competitor') is *what we do*!!" In other words, she writes, "when there are other sites working on similar issues our interest is to identify our natural connections, our individual strengths and build collaborative connections to find how we can best work together or at least help cross-promote each other's efforts". If MC's interactive features have appeared underdeveloped before, thus (with relatively little traffic in its discussion fora, for example), it is not because interaction is sluggish or takes place elsewhere, but because it takes place *everywhere* on the site: since MC's affiliate media sites are themselves media institutions as well as part of the community interested in media issues, the ongoing creation of MediaChannel from affiliate content can be seen as interaction in progress.

Still, the relative lack of focus on *direct* interactive community communication features found in both sites points to the fact that they remain generally produced by their editors and affiliated bodies for an audience rather than truly cooperatively prodused by gatewatchers and individual other participants. This may stem to some extent from their topical backgrounds in medicine and journalism, which both espouse a clear delineation between service provider (physician/journalist) and client – true produsers are allowed input to these sites only if they are themselves accredited industry professionals, for example medical specialists or members of affiliated media organisations, or if as directly affected people living with HIV or media activists they have sufficient 'alternative qualifications'. For topical fields such as those of HIV InSite and MediaChannel, this scrutiny of participants may also help ensure the quality of contributions, and accelerate these sites' rise to the status of 'intelprise' in Kumon & Aizu's terms, but refraining from allowing large-scale community involvement in site produsing and achieving intelprise status should not be seen as directly interlinked: as the following case studies will show, many intelprise Resource Centre Sites do allow 'average' users to help produse the sites' content.

'Supersites'

The fact that for both sites studied here we find a complex field of interactions between a variety of institutional and community interests, in contrast to the one continuum between institutions and community as it has been outlined in previous chapters, should not be seen as undermining or invalidating that model. Rather, this finding is testament to the scalability of Resource Centre Sites, that is, their ability to deal with small, unified, simple issues as well as with broad, multifaceted, complex topics. As noted above, for both sides it is possible to identify a variety of possible institution-community continua; taken together, the field of interactions between the various groups involved moves from one into multiple dimensions, from a line of interaction into a plane or n-cube of possible interactive connections. The RCS, however, remains somewhere at the approximate centre of these interrelations, and provides the venue for them. In the case of MediaChannel, in fact, we see that this also affects the content of the site itself: the answer to the question of whether MC covers media issues or issues in the media must thus be, 'both'.

This is also an effect of MediaChannel's special status as a form of metamedia; a medium about the media. Dichter recognises this dual role herself: "MediaChannel is driven by a belief that nonprofit, sustainable, independent, open, community-oriented media is possible and, indeed, necessary. We support and cover efforts to make that kind of media possible *and* we *are* that kind of media". More fundamentally, this also demonstrates the differences between gatewatchers on the one hand and gatekeepers or librarians on the other, though: neither impartial, disinterested gatekeepers nor interested, but non-participant observers, gatewatchers are interested and involved while maintaining a balanced view, and so MediaChannel itself is the very thing it covers and encourages – 'that kind of media'. (As Dichter comments, "Global perspectives on media issues in an

increasingly globalized increasingly media world – it can seem like a box of mirrors".)

Both MediaChannel and HIV InSite have been described here as 'supersites', a term claimed to have been coined by MC's roof organisation OneWorld, and a type of site intended to be, "perhaps, one day, the unmissable gateway" ("About OneWorld") to whatever major issues it covers. In the breadth of their chosen interests both sites are located towards the upper limit of what can meaningfully be described as Resource Centre Sites (beyond this limit lie Web portals and similar site genres) – by contrast, as we will see in the other case studies, many RCSs deal with much more tightly defined topics. As supersites go, however, MediaChannel also plays a subordinate, affiliate role to the OneWorld site itself, along with its sibling sites on other issues championed by OneWorld – in turn, on this higher-level 'supersite', "for example, the OneWorld News Service consists of articles and press releases from all of OneWorld's partners" ("About OneWorld"), and this site could therefore truly be described as a portal site that serves as an entry point into the OneWorld network of organisations.

By contrast, we would also be able to find a range of smaller-scale Resource Centre Sites amongst the affiliates of both the HIV InSite and MediaChannel 'supersites' studied here. This might offer a last clue to the relative lack of direct community interaction on both sites: given their sheer size, breadth of coverage, and professional conduct, users might regard them as relatively 'institutional' in themselves, for RCSs, and choose to interact as a community on some of the smaller, more topically specific sites which might have a stronger 'community' feel. We will see a number of such sites, in other fields, in the following case studies.

MediaChannel and HIV InSite, then, represent highly successful Resource Centre Sites (in terms of audience size, content quality, and ongoing operational viability) – so successful, indeed, that by becoming institutions in their own right, exploiting their status as successful intelprises, they might even already be on a drift away from the RCS genre proper to a purely 'supersite' or even 'portal' existence.

But even if that is the case, at this point they are at the highest stage of development for RCSs, and demonstrate why this genre of media forms is unique to the Web: as Dichter puts it, "our work is really only possible online (the network aggregation stuff)". MediaChannel and HIV InSite rely on their ability not only to sift through the news and information available from their contributors and affiliates, but also to produce and continually update digests and knowledge bases from this material – and further, to link back to the original sources for additional in-depth information and to provide or link to venues for communal interaction between their various audience interest groups. Having managed to achieve these aims, Dichter reports, MediaChannel has "been hailed as an ideal use of the Web, as a much-needed watchdog, resource, and 'communication for the people' model. We get enthusiastic praise from journalists and others who see MC as responding to urgent crises in journalism and public-interest media."

Two – Communities in Progress:

Female Computer Gamer Sites and CountingDown.com

Resource Centre Sites such as MediaChannel and HIV InSite can be regarded as 'supersites' not least because they address major, multifaceted topics which draw a wide and heterogeneous community of stakeholders. They did not themselves emerge from the midst of any particular community (based on shared fandom, life experience, socio-economic status, or other unifying factors), but encouraged the formation of loosely organised communities around themselves and their affiliate sites.

By contrast, many other RCSs have grown out of pre-existing interest communities on- or offline, whose principal members or would-be opinion leaders took the step from ongoing debate (online for example in mailing-lists or newsgroups) to the public display of news and debate as well as established background information for the community's field of interest. This first step of manifesting some of the community's values, views and interests in a Website need not necessarily lead to the development of full-blown Resource Centre Sites (for reasons which may have to do with external factors such as time and budget constraints as much as with individual editorial choices and skills of the site operators) – however, the following analysis of a series of resources sites within one particular field of interest (here, female computer gaming) can help chart the possible paths of site evolution towards a Resource Centre Site proper, as well as point to various pitfalls along the way.

In the absence of fully developed RCSs in 'grrl gaming', this case study will then be concluded by the analysis of CountingDown.com, a strongly community-based Resource Centre Site from another area of media fandom: mainstream movies. While the study of GrrlGamer.com, GameGirlz.com, WomenGamers.com, and CountingDown.com indicates the gradual development and fine-tuning of the RCS concept amongst its users, then, it also shows that this evolutionary work need

not necessarily be performed by the same site developers throughout: later entrants
into the community publishing field might well overtake earlier adopters, potentially
causing some strains at least amongst the community of Web publishers, if not even
amongst the wider user community itself.

GrrlGamer.com

As Websites with news and resources for female computer game players go,
GrrlGamer.com, founded and run by Nikki Douglas, certainly counts amongst the
earliest ventures: it started operations in 1997, and Douglas believes that "it was the
first site for girls and women who like to play computer and video games" (all
Douglas statements from email interview). Currently, it operates as a small-scale,
independent publication that is interlinked with Douglas's RiotGrrl.com site; it has
four staff and publishes new issues every two weeks (and is thus already somewhat
removed from the RCS model of constant updates of the latest news and rumours as
they come to hand).

GrrlGamer's early history is a classic example for Resource Centre Sites,
though: as a member of the female gaming community, Douglas recalls, she "felt a
bit shut out of the boys club atmosphere of most gaming sites and gaming
magazines" and "wanted to read reviews from the female perspective". In other
words, while there might have been a strong sense of community amongst female
computer gamers already – reinforced most likely by the shared feeling of alienation
from the male-dominated gaming industry and its publications, and expressed online
in mailing-list and newsgroup discussion – there were no published outlets for it
even on the Web: "when I began the site there were no gaming sites on the web
dedicated to the female gaming experience. … There was nothing that represented
my point of view, so I created it" (Douglas).

Douglas's desire to create a venue to express her own views (which, by
implication, are seen as those of the female gaming community at large) is clearly

evident in the structure of the site itself. At least four sections of GrrlGamer – 'Gamerrl', 'Grrlzpov', 'Geegrrl', and '.grrl' – are reserved solely for editorials and commentary features on specific games, female gaming in general, and other issues relating to women and technology, mostly written by Douglas herself; a further section, 'Grrl-X', mixes reviews and comments. 'Reviews' (computer game reviews), 'Boxes' (video game reviews) and 'Hard Stuff' (hardware reviews) by their very nature also express the individual reviewers' views, of course. It is also possible to count the 'Frag 'Em' section as a form of personal commentary: here, site visitors are given the opportunity to retaliate against sexist portrayals of game heroines by repeatedly clicking on images of *Tomb Raider*'s Lara Croft or *Dark Earth*'s Delia to reveal increasingly modified and distorted versions.

From this overall focus on individual commentary, some other sections do provide community spaces and resources. The 'Resources' section itself contains a database of around fifty game tricks and cheats (many of which are user-submitted), a list of useful links to related sites, as well as 'G.G. News' and 'G.G. Archives' (despite the name, 'G.G. News' is an archive of a short-lived dedicated news column from 1998). 'Members' allows GrrlGamer members to create personal profile pages, and lists the 625 existing member pages; finally, 'Sound Off' contains a set of discussion boards with fairly low traffic (at the time of research, the three existing boards held a maximum of only 15 postings each).

From this brief description it is already apparent that while GrrlGamer has made some efforts to provide a space *for* the community (that is, for members to show their existence and interact amongst themselves), it has done much less to work *with* the community, and involve them in producing and publishing content for the site – that is, in *produsing* the site. The original site setup already foreshadowed this, as is evident from Douglas's recollections: "initially I tried to do it all, cover news, video games, everything – and provide a community as well. At one point I had about ten freelancers writing for the site too and I've had around 20 contributors over the years. … Now I only have several freelance contributors and write mostly

everything myself"; direct community involvement, therefore, always appears to have been limited to a handful of selected collaborators. Douglas's stated aim to 'provide a community' (which we may read as 'create a community around the site') might have proved counterproductive in retrospect, then – it might have served to exclude the *existing* community from participation.

   Differences from the RCS Model

   Clearly, while sharing some of its intentions GrrlGamer did not implement the Resource Centre Site model to any significant extent; having started in 1997, in fact, its own development was contemporaneous with that of the RCS genre, yet took on a different direction. In contrast to what should be expected of resource Centre Sites, GrrlGamer contains only a limited news section without any provision for user-submitted news, rumours, or events, and attempts to improve on this weakness (such as the 'G.G. News' section) have proven unsuccessful. As Douglas notes, "I used to kill myself reporting the news for grrlgamer.com – it was a daily adventure scouring the web for stories, also lots of phone calls, interviews. It took so much time, and all the same stories were at much larger and more frequented sites so I killed the news feature of grrlgamer.com". In other words, the demands of serving the real-time drive proved too heavy for one producer to sustain – in the face of time and budget constraints, then, the only alternative would have been to let the users themselves do most of the journalistic legwork, as produsers, as in the RCS model. There are also problems with this approach, however: it would require a significant restructuring of the Website and its *modus operandi*, and its present editors might feel disempowered by such changes, losing as they would a share of their editorial control in the process. Such feelings have led to problems in the past, in fact: "the last" community member who joined GrrlGamer's staff "felt that she really should take over the entire site and run it her way, she thought I had no clue what I was doing. She didn't last long". A less exclusive, produser model beyond the traditional

producer/consumer binary, where community members can submit stories without directly influencing editorial selection (and without becoming 'staff' as such), might prevent such unease on both sides.

Such problems point to a fundamental issue which may be encountered in the move to implementing a full-scale Resource Centre Site: that of mastering the shift in attitudes from gatekeeping to gatewatching. Sites which uphold the traditional model of the journalist-gatekeeper catering for the readers' interests without direct reader involvement require a very different view of staff-community relations than those in which site staff and community members alike function as gatewatchers, with site staff only mildly more privileged than members of the general community, and the transition from exclusive to inclusive publishing processes is difficult at best. GrrlGamer itself has not made this transition yet, as Douglas's immediate aims for the future reveal: "I am looking to bring on some new blood, but many people claim to want to write for the site but have a hard time meeting deadlines. Plus, it's hard to expect much from people who don't get paid" – the solution here would be strength in numbers, through a wide involvement of the community not as full staff, but as free-lance gatewatchers and content produsers.

It is interesting to note that support from the gaming industry has developed along similar lines as that from the female gamer community – and most likely for similar reasons. "Initially the support was terrific, I had a lot of industry people who were interviewed or wanted to be a part of the site, some even wrote for me", Douglas writes, and "we have worked in the past with Sony, Microsoft, Dell, Gateway, Micron, Diamond Multimedia and Creative Labs", but this has gradually faded as the site was unable to provide an in-depth news service and involve its target community more fully; "right now I just get news for editorial stuff and keep up to date with the industry. I get a lot of press releases". Unless GrrlGamer could show stronger interest in the site by its readers, however, it is unlikely that gaming industry institutions could be motivated to show more support than this: "I used to average about fifteen new games and at least several new pieces of hardware per

month and now I get very few games and only work with large computer companies

who give me review units" (Douglas). At the same time,

> even though we are small and niche oriented there is always pressure
> from industry insiders to keep reviews positive. It's very difficult to
> write a bad review, especially of a big game company's release. I
> want to keep up relations with the companies yet have integrity at the
> same time. The way to solve this is to only review current *big* game
> releases. I don't even *bother* with crap releases that no one cares
> about. That way I am only reviewing halfway decent games

– but the question remains of whether this kind of self-censorship might not end in

self-defeat as more users stay away from the site due to a perceived lack of an

independent, critical perspective. Once again, the greater direct user involvement as

suggested by the RCS model might provide a more promising solution to this

problem: user-submitted independent reviews could serve as counterpoints to the

site staffers' carefully balanced views, and could keep readers interested and

entertained while site staff cannot be blamed by the industry for any reviews' overly

critical content. (Controversial reviews also provide an excellent means of starting

community interaction in the site's discussion boards, further binding users to the

site.)

In all, perhaps largely due to the exclusive site operations model it has employed

so far, GrrlGamer's success has been limited. As Douglas admits,

> honestly it's never been as successful as I hoped it would be. There
> was only so far I could take it with a skeleton crew (myself and
> usually one or two contributors), so there have been months at a time
> when there have only been a few updates. The pageviews have
> fluctuated tremendously over the years … . Our highest pageviews
> would be around 300,000 per month, our lowest average has been
> around 150,000 pageviews per month. Our users have been
> calculated (by MediaMetrix) at around 20,000 per month, though we
> have had higher numbers of users at different times.

Interestingly, the site's fortunes have waned, too, as other sites more closely aligned with the RCS model have made their appearance in the fields of computer gaming generally and female gamers in particular – so, for example, general gaming resources are "available at gamespot.com and avault.com and dailyradar.com and they get millions of pageviews a month and have entire staffs to maintain that information. I have just me" (Douglas). In terms of 'grrl gaming' sites, "there were a couple that followed shortly after the debut, gamegirlz.com, and years later (around 1999) womengamers.com" – and as we will soon see, especially the two sites Douglas names here seem to have contributed significantly to GrrlGamer's fading. Nonetheless, Douglas refuses to ignore these sites by removing links to them from her own site: "I don't worry about linking to other sites, I want [users] to stay at grrlgamer.com as long as possible, but linking to other sites is how it's done on the web. If they like what I have they will come back".

This further emphasises the two-fold view of the user which exists in GrrlGamer's operating philosophy. On the one hand, in their own actions users are seen as self-determined individuals capable of making their own value judgments through navigational choices, and of expressing their own opinions on their members' pages and in the discussion fora – where, Douglas confirms, "users are free to post anything, I occasionally clean up messy posts but that's about it. I even leave up the negative stuff. I think it's important to let the users rule their own community". On the other hand, however, GrrlGamer's editorial content is hermetically separated from such community input, and increasingly limited to Douglas's own reports, reviews, and comments, with users barred from direct contribution – as she agrees herself, "I am definitely *not* part of the community as it stands right now, nor do I see that in the future even as I ramp up a stronger community aspect to the site over the coming months. I believe it is important for me to keep out of the community and let them form it their own way. I just provide the tools; they have to build the beast themselves". It is questionable, however, if GrrlGamer still provides the appropriate tools for such community building and

maintenance, or whether other sites are not by now much better suited to community interaction *on-site*. Nevertheless, Douglas has vowed to persevere: "I am looking for contributors and a possible revenue source. I want grrlgamer.com to always be part of the gaming landscape. It was first, even though it's not where I want it to be I still feel that it is part of gaming history and deserves to continue, even in a limited sense if it has to".

GameGirlz.com

GameGirlz.com has a right to claim a place in 'gaming history' almost to the same extent as Grrlgamer. "Design and planning started about 4 months prior to the launch", and "officially launched on November 11, 1997" (all Beal statements from email interview) the site appeared hot on the heels of Douglas's site, but with more emphasis on direct community involvement and (perhaps due to this fact) greater ongoing success in achieving its aims. The basic motivation for both sites was very similar, though, as GameGirlz founder Vangie 'Aurora' Beal recalls: "I started GameGirlz.com after seeing a need for a gaming website more user-friendly toward the female gamer". Like Douglas's site, GameGirlz has mainly remained a one-woman operation: "at present and for the past two years I am the only staff. There are other regulars who submit guest editorials and columns however" (Beal).

As Beal notes, "the 'operating philosophy' of GameGirlz hasn't changed since its inception. 'Girlz Play Too'. Our goal is to inform gamers, and provide a girlz' perspective on what is happening in the gaming industry". Similar to GrrlGamer to some extent, GameGirlz in parts reports mainly *one* girl's – Beal's – own views; however, from a brief overview of the site's sections, it is immediately evident that GameGirlz' focus is more news- and less commentary-oriented than that of GrrlGamer. This was not necessarily Beal's original aim for the site, though: "initially it was to be a small website, more of a 'personal' site. A couple weeks after I launched GameGirlz, news of the site and its goal spread to Netscape news,

Wired Online, and many other mass media websites. It also received mentions in computer game magazines, Internet related magazines, and some newspapers across North America" – and so the focus shifted more towards the news sections.

"Since the site generated so much publicity about female gamers and myself I had no choice but to actually expand the site. I guess people came looking for a more 'commercialised' and more content focused website, and after scanning through literally thousands of feedback & comments e-mails in its first two days … I rounded up a few volunteer writers and began doing a daily news section and more features" (Beal). It seems, therefore, that GameGirlz was willing and able to adapt to the demands of its audience where GrrlGamer was not, catering for its real-time drive and allowing them (in a limited capacity) to co-produse the site – or perhaps the sudden publicity for Beal's site simply meant that its audience changed towards a readership with a greater interest in news when Douglas's stayed the same.

Whatever the causes, in any way, the news-oriented GameGirlz had a significant initial success in terms of readership numbers as a result. "In terms of pages and hits … when I first put it online a bunch of game sites linked to it and we had a few hundred individual readers a day. During the more public times we would soar to millions of impressions per week. Over the past four years however, we've settled into a nice solid daily readership of at least 1500 unique readers per day (always higher when we post new reviews etc), and average 150,000 to 200,000 page impressions per month" (Beal).

Site Content and Structure

On the site as it stands today, then, "news is very important, as most avid gamers want to know what is happening 'right now'. It is also the one section of our site that is updated every single day" (Beal). Thus, five prominently featured sections supply news to its users: 'Site Newz' points to the latest updates and articles within GameGirlz itself, 'Industry Newz' reports press releases, Website updates, and

newly available file downloads, 'Happeningz 'Round Town' lists news, reviews, interviews and other updates on affiliate gaming sites, 'Gamegirlz etc.' has news about female gamers and their gaming clans, as well as pointers to articles about female computer gaming in other (online) news sources, while 'Gamegirlz Community & Network Newz', finally, reports on community events and related news, and features some additional interviews.

News items are drawn from a variety of sources: "I actively search out related news on the online press wires (BusinessWire, PRN, Virtual Press Office, and Yahoo Business News). Many game developers and publishers also send press releases and info directly to me via e-mail" (Beal). User-reported news and rumours are not generally featured in these sections, however: "I prefer to write more industry tallied and noted views" (Beal). This limits the direct involvement of 'average users' in the site, of course (although these could still contribute reviews and other commentary features). As Beal writes, "in regards to rumours, we don't print those unless we can verify it with the company", and to do so, she "will find a contact within the company to verify the accuracy of a report sent in from an individual. In the case where another games site sends the news, if it is something 'new' and may carry the possibility of having something in it not quite right, I refer to the third party site as in 'X Site is reporting that…' in my news post". In other words, in GameGirlz a staff producer is overseeing the produsing efforts of outside participants. This degree of content verification is unusual for Resource Centre Sites (other than in cases such as HIV InSite, where – as we have seen – a lack of information quality might have very serious consequences), as it both increases the site staff's workload and reduces users' direct input into site content; many RCSs base some of their popular appeal on the extent of the unverified rumours they carry, indeed, as the urge to speculate and comment on rumours drives users to participate actively.

In GameGirlz, such urges are catered for to some extent in its sizeable commentary section – which, as a central part of its mission, also includes game

reviews, of course. Through this section, the site makes sure it represents a variety of viewpoints, rather than that of only one editor – so, in addition to the standard 'Game Reviews' and 'Game Previews' sections it also contains 'GG Features', with guest editorials, interviews, and screenshots and information about selected games, and an 'Editorials' section that is meant to provide "a chance for the staff and guest writers to sound off on a particular subject". This emphasis on guest contributions (personally invited though they may be) and interviews with industry figures looks set to avoid a limitation of content to a single point of view, instead coming closer perhaps to representing the full range of views as they exist in the female gaming community; this underlines that, as stated in the 'Editorials' section, "the point here is open discussion, folks". Interviews also play a further role in the 'Women Spotlights' section, which contains conversations with women working in the games industry. (Finally, the site also hosts the 'Mighty Times Archive', a discontinued "column designed to talk about anything and everything remotely related to the Internet, gaming, geeks, girlz, and vodka" which ran until February 2000 and provided a further outlet for commentary by Sailor Mur, one of the site's contributors.)

In addition to these news and commentary sections, GameGirlz further has a variety of gaming resources available on-site. 'Download Games' offers commercial game demos and freeware games, 'Events' provides information about all-female gaming tournaments and similar happenings, while 'Girl Gamer Links' contains pointers to general female gaming sites (including GrrlGamer and WomenGamers), female gamer clans and guilds, gaming tournaments, online gaming services, women in the games industry, and game downloads. Even if we count the news, reviews, and commentary archives as a form of background resource, this section remains a minor part of the site – partly, it appears, because with staff and financial constraints GameGirlz could not possibly hope to compete with some of the more mainstream *or* the more narrowly-focussed computer games sites: "we cover such a

wide variety of games, we don't really zero in on any one in particular. On other game or genre specific sites however, [resources] are a big part of the site" (Beal).

Finally, the site also offers a 'GG Shopping' service which enables users to buy computer games and hardware through an affiliate online shopping provider, and it hosts two separate sub-sites: the Quake Female Skin Archives which enables players of the *Quake* series of games to change the appearance of their character to that of a woman, and the homepage of the Violent Femmes gaming clan.

Community Participation

In all, therefore, it is evident that in comparison with GrrlGamer the GameGirlz site allows for a greater extent of community involvement in the shaping of the site's content – and it is therefore no surprise that it also includes easily accessible options for users to submit gaming-related news or send general feedback to the site's editors. This achieves an important part of Beal's original aims: "when I started this website, the goal was to create a common place for the many female gamers to get a few tid-bits of info, but more importantly submit their views on gaming and read other women's perspectives on gaming". Such participation opportunities appear to have been taken up well: "in terms of news contributions I get well over 50 news stories sent to us per day at the events@gamegirlz.com address (which is the address we list for people to 'send news to')". Relying in part on these submissions from users in community and industry, Beal moves away to some extent, though not fully, from the gatekeeper model, and towards that of the gatewatcher; as her strong interest in content verification shows, however, she does retain a significant level of control as her site's supervising producer.

In all, too, her own and her invited guest authors' perspectives on the gaming world still shine through, and by her own admission her site thus differs from others,

in that at GameGirlz we try to bring everything down to a personal
level. In our writings, the authors talk about themselves and provide
some personal observations. For example in an editorial I mentioned
being a single parent of a 4-year-old son who played games. For
weeks I received fun e-mails from other single parents who wanted to
chat about their children who played games. I love this aspect as it
really gives our readers something/someone to identify with. In most
print mags and online publications, you have an author name linked
to a 1 –2 sentence bio.

This also achieves a stronger community feeling: the role of the community is better
represented here, as are roles *within* the community: rather than offering an
unordered collection of members' pages as in GrrlGamer, GameGirlz displays the
most valued members of a structured community by featuring selected women in
gaming through interviews and guest editorials – such judgments on community
members' individual importance to the community might also serve to introduce
rifts within it, however, and to downplay the role of the 'average' girl gamer who is
silenced by the site's editorial selection of the community members it features. This
'average user' remains a content consumer almost to the same extent as on
GrrlGamer. As 'average users' go, on the other hand, a group clearly *not* excluded
are male gamers: "we don't provide any content which would possibly alienate a
male reader, we just provide a little extra for the part of our readership that is female
gamers" (Beal).

In all, GameGirlz shows a community of women in gaming, as well as some of
its internal power relations, and allows certain members of this community some
degree of access to involvement in produsing the site content itself; in the absence
of any discussion fora on the site, however, it does not offer the community
members any space to interact amongst themselves (and thus a space for 'average
users' – male or female – to have a say). This has been a subsequent change in
GameGirlz' site setup: "quite some time ago, GameGirlz removed the largest
portion of the area for interaction and community on our website. Through a mailing

list we have voices and such but we removed our public forum and discussion areas. When you run a website like 'GameGirlz' you have a huge number of people who like to act immature and they ruin the experience of a public community by posting trash messages and words that humiliate and belittle women and women gamers" – and so "we've had to spend way too much time moderating discussion groups run through our site that we no longer offer them. You'd be amazed at the number of juvenile people who would use the topic of Women who enjoy gaming to write some nasty messages" (Beal).

It appears that such disruptions hit GameGirlz unusually hard, however (perhaps due to its high early publicity) – certainly the other two female gamer sites studied here did – and do – not suffer so badly from abuse. As we have seen, GrrlGamer allows interaction, but virtually ignores any contribution to the site its members could possibly make by excluding the community from content production entirely. Thus, GameGirlz and its staff on one hand are part of the community, but community interaction takes place elsewhere, while on the other hand through GrrlGamer Douglas provides interactive space while positioning herself and her site outside the community.

Cooperation with Other Publications

At the same time, both sites clearly also are part of a community of games publications online. More so than Douglas, Beal uses this community to her advantage: "to some extent we use our affiliates for posting banners, links and our site news. We also have link exchanges set-up with a few other sites. Whenever GameGirlz does a new review etc., I also mass mail out the news to webmasters at around 30 other game sites (with news). This all helps to bring in cross-traffic". Content promotion is also mutual, bi-directional, however: "other game sites send news to us for including in our daily news links", and "if I'm unable to provide my readers with a review of X company's latest game, I think it's a service to my

readers to point out another site that does offer that review. I have no problems with linking to other sites, provided they write good quality content" (Beal). This is a practice very much unknown in comparable print publications, such as computer games magazines, and underlines that these gaming sites truly form a community where cooperation, not competition takes centre stage. As Beal notes, "in 99% of the cases, the sites will share resources and co-operate to link each other and write about each other's 'site news' which may be of interest to the readers. Unlike with print magazines, there isn't as much of a 'competitive' feeling between owners of websites", and indeed, "in regards to the worry about losing readers [by linking off-site], I have never thought of that".

Distinctions between these cooperating sites are upheld nonetheless. "On other sites I have worked with, they tend to provide news … marked as a 'third-party' item. The information may be valuable or of interest to a reader, but the site doing the writing still needs to ensure that readers are aware that this type of content doesn't come directly from our publication or the game developer" (Beal), and Beal writes that she does take her own content into account: GameGirlz will only flag outside content as news "unless I have plans to do coverage on that news myself within the next 24 hours. If that is the case I don't link to the other site's coverage but I mention we'll have a report on the topic soon or simply do my own story (in most cases many of the sites will have been notified by the publisher/developer with the news – it's just a matter of which site gets it up first)". Some degree of competition between sites – in terms of the speed, scope, and accuracy of their coverage – clearly still exists, therefore, though not to the point of overwhelming the fundamental spirit of cooperation.

It is also interesting to note that this spirit is felt to markedly different extent amongst Web-only games sites than it is amongst the Web arms of print games magazines: "most print pubs have a website now which they use to provide news etc in addition to their own publication. I often find a website which also has a print pub is very happy to have you link to their content, but often will only feature their

own writing and not return links" (Beal). Print habits of fierce competition die hard, it seems. This lack of genuine cooperation is no great loss to the female gamer community, however, since "none" of these publications "are really oriented to the females involved in the industry": "very few women [are] writing about games in these publications, and at times the content to me [seems] unwelcoming to females interested in gaming" (Beal).

Industry Relations

If there is a discernible community of (female) gamer sites now, then, this community can also be seen as part of the games industry as such; indeed, Beal writes, "I somewhat consider myself to be a part of the industry, since the only journalism I do now is on games and computer hardware specifically designed for gamers". The reluctance to commit fully to the industry side – as expressed in Beal's "somewhat" – can be explained with reference to the site's aim to "inform gamers and provide a girlz' perspective" (Beal), rather than regurgitate industry press releases: for female gamer sites as well as for Resource Centre Sites in general maintaining close ties with the user community is just as, if not more, crucial than creating good relations with the industry side. Perhaps as a result of this fence-sitting position, Beal's and GameGirlz' role as part of the industry does not translate into major gaming industry support: "most companies will send out a press release to an industry business wire and also directly to me via e-mail. From that you can contact the company, make an introduction and request things like exclusive screenshots, Q&A's with the developers they represent, etc." (Beal) – support is thus limited to standard promotional activities.

Beyond this, however, Beal relies mostly on individual contacts: "in my experience developers and publishers are usually always willing to provide you some exclusives and have been quite pleased to work with GameGirlz"; in fact "developers are constantly sending me feedback on some of our stuff, and have also

used GameGirlz as a venue for themselves to find out more on what women want to see in their upcoming titles". In line with the site's overall practice to highlight women in gaming, GameGirlz has also featured contributions from specific developers: "we've posted editorials, and articles that were sent in by a developer" This support from individuals rather than companies is common practice: "many sites now run what is called a 'Developer Diary' where developers contribute self-penned editorials discussing the development of their game etc. This is great as it allows you to provide exclusive coverage of the game, and your readers know it came directly from a person who sites down and works on this title everyday" (Beal).

As a further form of industry cooperation, finally, the site has also made connections with the *online* gaming industry: "we've … just [in mid-2001] launched an online games tournament area, which is run by another company. The game site is co-branded, and we'll earn a percentage based on the number of people who use the service through registering at our co-branded site" (Beal).

Commercial Aspects

Despite such recent developments, GameGirlz has never been commercially viable.

> GameGirlz has never had **any** financial support. In the case of this website, looks are deceiving. People look at GameGirlz, see very regularly updated content, spot a banner ad and a "commercial/professional" look, and believe I make money running my site. I started the website with $0.00 and have made about $500.00 over the past 4 years. Out of my own pocket I have paid to attend events to write about them, bought games and such to review, and purchased prizes and paid for postage to have small contests etc.
>
> (Beal)

Naturally, this lack of funding slows the further development of the site and limits the scope of its content – one important reason beyond an underlying operations philosophy for the ongoing need to cooperate with other female gamer sites. Lack of funding also contributed to the current unavailability of online community discussion fora: "because we don't have a full-time staff, admin duties of the forums just, quite simply, took up too much time to continue them" (Beal).

For the same reason Beal herself can also only devote part of her time to GameGirlz: "personally under my own name (and not the site name) I freelance write about computer games and hardware for other publications", but nonetheless she is satisfied with what she has been able to achieve with GameGirlz, and aims mainly "to continue. I find presently I'm happy with the content and views and what the site has become in the last year. Coverage of the gaming industry with a girlz' perspective is always going to be the main focus. To some extend I could say one goal is to work on sponsorship for the site, but this again could mean a shift in focus to suit a sponsor, and I'm not sure if I'm ready to change the way I do things just yet". She sees the fact that this choice between seeking sponsorship to expand GameGirlz and continuing independently exists at all as directly attributable to publishing online: "the benefit of a web publication is that it is cheap to start up, and you're able to pretty much say whatever you like. Print mags need to be more sensitive in their wording as they may be relying on a company they slammed one month to foot an ad bill next month. You don't see much worry about that end of the business with an online only publication".

Nonetheless, she also points out that in an ongoing climate of .com insecurity "the web publishing business right now is a hard one. Revenues are down, so many sites like mine have completely gone under – but so many again, like mine are running on no money but keep doing it because they love it. That's the big difference – print publications are first and foremost a business – most online publications are a 'love' first and a business second". Both the female gamer sites we have seen so far clearly are such labours of love predominantly. Their tendency

to feature highly individual content has shielded them to some extent from the business side of online publishing, but has also diminished their potential to draw both commercial and community support. Following RCS ideas more closely might help here – so far, while both sites display some elements of the Resource Centre Site model neither has fully implemented it. To do so might be easier for GameGirlz, as it would mainly have to add interactive features and further strengthen community involvement in content provision and production, whereas GrrlGamer would need to overcome its strict division between producers and consumers. If either side were to move in this direction, they could also come closer to becoming true intelprises, thus enabling themselves to force stronger connections to the industry and establish a sounder financial base for their ongoing operations. How this could be achieved will be seen in the study of WomenGamers.com.

WomenGamers.com

The third site studied here combines many of the better features of GrrlGamer and GameGirlz, while adding yet more opportunity for community interaction and feedback. WomenGamers.com claims to be "largest women's gaming portal on the Internet" ("About Us"), and indeed it is a much larger-scale site than both the previous sites. Its staff

> believe it's time that female preferences and opinions are taken into account in the industry. We also believe in the necessity of providing in-depth, accurate information about gaming and game contents to gamers, and to those who have the responsibility of buying games for their families. Eventually, we hope that the true breadth and complexity of the gaming community will be taken into account in the industry. However, we have a ways to go together before that vision is realized ("Why WomenGamers.Com")

– this emphasises the gatewatchers' placement between institutions (here, the gaming industry) and community, and their self-imposed role as mediators between their interests as well as that of the Resource Centre Site as a venue for this mediation. A second, but not necessarily secondary goal is also stressed here (more so, notably, than on the other two sites): that of creating a dialogue and connection between female gamers and the overall computer gaming community. "WomenGamers.Com welcomes all types of gamers: female, male, young, old, with a passion for many different kinds of games. Our ultimate aim is to establish an environment where women gamers can be integrated with the rest of the gaming community. Unfortunately, in many ways the current gaming scene discourages and/or ignores female gamers, and thus we believe it's necessary to create a female-friendly gaming space" ("Why WomenGamers.Com"). This, then, links back to the observations made in the first case study, which found MediaChannel and HIV InSite both to be placed at the nexus of a number of different institutions-community continua.

Compared to the other two girl gaming sites, WomenGamers is a relative latecomer. "In May of 1999, the company was founded by Phaedra Boinodiris … and her sister, Ismini Boinodiris. Both avid gamers, they were searching for a gaming website that specifically addresses the needs of women" ("Our History"). The WomenGamers Website was finally launched in July 1999. This later entry, almost two years after GrrlGamer and GameGirlz, might have proven advantageous for WomenGamer, as it allowed its editors to assess the good and bad sides of existing sites, learn from their mistakes, and adjust their own site's operating philosophy accordingly. Making a fresh start, WomenGamers was also able to take advantage of the latest developments both in hypertext technology and in Website structures without a need to laboriously revise existing content – perhaps as a result of this, therefore, WomenGamers much more closely approximates the RCS ideas than do the other sites. The site's entry into the female gaming field, in fact, appears to have been felt quite directly by its competitors, speeding their decline: so,

GrrlGamer's Nikki Douglas notes that "in 1999 I narrowed the scope of the site to focus only on reviews and hardware and put less stress on community features" – features which were becoming available to much greater extent on WomenGamers at the same time.

WomenGamers also displays the most professional attitude of the three sites. Run, according to its own publicity documents, by "a team of experts" which ranges "from a practicing psychologist to programmers, and review journalists" ("Our History"), the WomenGamers organisation also offers services beyond the Website itself, including market research, consultancies, and game idea and project evaluations with a specific female gaming focus. This serves to demonstrate the commercial potential of Resource Centre Sites as intelprises, as suggested in previous chapters: while Website services to the community must largely remain free of charge in order to *keep* the community on the site, added-value services especially to the institutional sector might provide a source of ongoing revenue, and the gatewatchers' in-depth acquaintance with both industry and community makes them valuable consultants for interested parties from either side. To repeat Kumon & Aizu's views on this, "intelprises, as players in the wisdom game, will accumulate wisdom first by creating specific information and knowledge, or sharables", and then "may support research and development activities as well as the marketing efforts of enterprises" (320-1), here of firms in the computer games industry.

The Resource Centre Site itself serves as a calling card for the gatewatchers in this, and the WomenGamers team stresses its qualities: "our website offers our visitors a rich and rewarding experience: we inform them of the latest hot industry trends and provide product reviews, game reviews, and enlightening gender-focused articles written *by gamers for gamers*. We encourage our site's members to express their opinions on WomenGamers.Com so that we may serve as a platform for multiple points of view" ("About Us"). This, by implication, stresses the team's in-depth knowledge of community views and interests, as well as their ability to guide

and influence those views – which also raises the possibility that some gatewatchers might abuse this position of community trust to push for a certain political or commercial agenda, however (as gatekeepers have often done).

Site Structure

The WomenGamers site's content sections further expand on the structure we have already encountered in GameGirlz – chiefly by adding extensive discussion features. It contains a sizeable gaming industry news section, with the latest headlines also featured on the site's main page. "Many news items inspire community dialogue, and each news item is linked to a site-managed comment forum where readers can express their views and/or opinions" ("Our History"); this ability for instant community interaction is typical for Resource Centre Sites, and we will see it in its most fully developed form in the third set of case studies.

Another central section for any of the sites in this field of interest is that of 'Reviews' and 'Previews'. Due to the greater number of reviews on this site, this section is sub-divided by game type (from action to sports games), and so takes the form of a reviews database rather than that of an ongoing column; new reviews are also flagged in the news section, however. (The reviews can therefore be seen both as belonging to the 'news and commentary' category of RCS content, and as part of the on-site resources.) Once again, too, reader feedback is encouraged, and WomenGamers goes even further to ensure a wide range of views: "to make it easy for visitors to compare our reviews with what is being written about the games on other websites, WomenGamers.com provides links to other sites and reviews, thus providing our readers with a full spectrum of knowledge about the game" ("Our History"). This is a further sign of its embrace of RCS ideas, as this way the site adds to its original content by collating additional material from elsewhere on the Web. In keeping with its own aims, and possibly also to distinguish its own from such external reviews, WomenGamers' own coverage particularly stresses the

female gamer's perspective, however – so, for example, one of its ratings categories is that of "marketing efforts towards women", which awards marks for the non-sexist, empowering portrayal of female game characters.

Other sections of the site are similarly concerned with the empowering of female gamers and game designers. 'Articles' contains some sixty essays on women in gaming as well as women within games; many of these pieces take on a lengthy academic or educational format. 'Interviews', while not exclusively focussing on female players and game designers, also strongly concentrates on issues of female gaming in its discussions with players, programmers and producers: "many of our articles explore the female gaming market, and female roles in games and the gaming community" ("Our History"). In the 'Digital Women' section, on the other hand, "many lead female game characters are reviewed and ranked as a way to give gamers and consumers more information, and to spark discussion" ("Our History"); this section links back to the critiques of female characterisation found in the review section, and provides further ongoing criticism and commentary. Even the 'Hardware Q&A' section could be seen as contributing to the empowerment of female gamers, who are frequently belittled by hardware sales people as technologically naïve: here, "in-depth articles help build consumer awareness and put the purchasing power decision into our readers' hands" ("Our History").

One of the more unusual sections within WomenGamers is the 'Dr K. Wright' column, where the site's "resident consultant psychologist" publishes articles "on hot issues in the gaming industry, the portrayal of gender in games, and the effect of games on individuals and on society" ("Our History"). These articles are also linked to the site's discussion fora, where they frequently serve as starting points for lengthy and animated discussions. Other comparatively unique sections in WomenGamers are 'GameQuest', a "game recommendation service with a database of over 3000 software titles" ("Our History") which can be searched according to game type, hardware platform, target age, level of in-game violence, sexual content, and explicit language, and other factors, and 'JobQuest', which contains listings of

available jobs in the games industry and a general job discussion board. (This last section also further emphasises WomenGamers' function as a connection between gaming industry and community.)

Serving the Community while Using the Community

As noted before, a strong feature of WomenGamer is the site's involvement of its target community, much beyond such efforts on GrrlGamer and GameGirlz. At the simplest level, the site allows users to sign up for membership, which enables them to customise the appearance of the site and gain a more permanent identity in its discussion boards (the message poster's name is then linked to a personal information page which can include their real name, email, ICQ and Web contact details, and a brief biographical note); members can also obtain a free 'user@members.womangamers.com' email account. Beyond this, there is 'The BUZZ', an extensive set of discussion fora on various topics; at the time of writing, these contained up to over 350 postings per topic, and the quality of discussion on the site might be indicated to some extent by the fact that its most active discussion fora dealt with topics most closely aligned with the site's overall aims – topics such as sexist games advertising, sexual harassment in online fora, and sexual identity in games. 'The BUZZ' also includes the discussion sections that are attached to each article published on the site: through these, users can add their own comments and respond to those of others, with such responses becoming accessible to anyone reading the same article in the future.

In addition to this opportunity to contribute to community interaction, then, WomenGamers also contains persistent invitations for community members to contribute to the site itself, which is constantly seeking editorial writers, game reviewers, and gaming tournament organisers; further, the site also offers users the opportunity to submit reviews of games and female game characters, or to send news items and articles: "we post news of interest to women about gaming, gaming

news, and events news" as well as "particularly interesting off-topic article[s]" ("Contribute!"). There is a greater opportunity for users to become produsers here than in the other sites, therefore, even though a significant level of supervision by the site's producers still remains. It should also be noted, in passing, that these invitations to contribute (as well as those to post to the discussion board or obtain an email account) are non-gender-specific: while interested in female gaming issues, WomenGamers does not exclude males as readers or contributors, and indeed the editors state that "if you are male, we would love to include your perspectives and game reviews as well on this site" ("Contribute!").

In all, then, the site shows signs of an actively contributing community, not least in its lively discussion fora; at the same time, it also provides an in-depth coverage of current games releases and other industry news, which in its addressing of their real-time drive will be useful to male and female computer gamers alike. In addition, however, it also openly espouses an underlying agenda of supporting and empowering female gamers in particular – "we will serve as a platform to both disseminate information about games from an informed, socially-conscious, female-friendly perspective, and to gather information from you about your gaming preferences, opinions, concerns, and ideas for the future" ("Why WomenGamers.Com"); this is an agenda which is shared, though much less clearly stated, by the other two sites studied here. This once again underlines the distinct role of gatewatchers as compared to gatekeepers or librarians: WomenGamers' staff claim neither the disinterested impartiality of journalists, nor the non-participatory observer role of librarians, but instead participate in the debate as partisan, yet open-minded publishers.

It is evident that this stance and the site's focussed engagement with female gaming issues has been a success with its target audience – the quality of site content is matched by the quality of community participation, which is also further encouraged on an ongoing basis by the site's options to create permanent participant identities. "Actively soliciting [user] input on the games and the gaming industry"

and enabling them "to rate games and female characters, post … opinions, and review books on the industry", WomenGamers then harnesses the power and skills of this community to direct them towards a gaming industry that "is not meeting women's needs", in order to "educate and influence the gaming industry itself so that the myriad of female voices is heard" ("Why WomenGamers.Com"). At the same time, it is also aiming to influence the gaming community at large, where "the majority of gaming websites cater to a young male population, and are just more of the same testosterone-driven environments" ("Why WomenGamers.Com"), and even overall society – which, if it has grudgingly accepted the computer gaming phenomenon, still reserves particularly much disdain for female game fans.

Strategic Partnerships?

As is generally the case for Resource Centre Sites, and especially for those promoting a particular community agenda, these socio-political aims also lead the site to acknowledge and point to other sites operating in the same field, notably also through the links attached to the reviews it publishes. In the case of the female gaming sites studied here, and perhaps also due to the differing operating philosophies and WomenGamers' status as a relative newcomer, however, there appears to be little direct collaboration between them. As GrrlGamer's Nikki Douglas writes about GameGirlz and WomenGamer, "I would cooperate with them, but both of them have been kind of distant when I suggested working together".

One additional reason for this might also be WomenGamers' status as a commercial intelprise set up to exploit the knowledge of its staff and community for financial gain. The site therefore does not solely serve the interests of the community, as its public stance towards the industry as well as its stated aims might suggest, but also works *with* the industry (partly in order to improve the status and portrayal of women in gaming and in games): "WomenGamers.Com has opened a game consulting division that expands the $6.3 billion market opportunity of the

interactive entertainment industry by specifically addressing the needs of a currently untapped and eager market segment – women. The Company is composed of both the consulting division and the WomenGamers.Com website" ("About Us"), and its services to the industry include "two market surveys per year based on data gathered from GameQuest, quarterly posted surveys and polls. The market survey data product is available to corporations on a subscription basis and is generated bi-annually. In addition, WomenGamers.Com generates customized surveys for those customers who require very specific survey data tailored to their needs" ("Market Surveys").

In addition, the site states that it "has focused on increasing strategic partnerships, diversifying and expanding the site features, and continuing to increase their customer base" ("Our History") with the ultimate aim to provide strategic partners "with a marketplace for women of the 21st century" ("Strategic Partnerships"). This further demonstrates that in serving both institutional and community interests by connecting them with the other end of the site user continuum, Resource Centre Site intelprises can also find themselves ideally placed to use this position to their own advantage. In this, they must be careful not to undermine their mediating role by working to support their own interests so much that this affects the interests of their institutional or community-based users, however.

In the three female gaming sites studied here, then, we can see a development towards the Resource Centre Site model over time, along various lines. Site content has become more balanced and multi-perspectival (while not affecting the underlying agenda of female gamer empowerment); community involvement has become less haphazard and more focussed both in terms of interactive participation and content contribution, moving from producer/user dichotomies towards a joint produsing; partly as a result, news coverage has become at once broader and more detailed, as well as more real-time; and sites overall have become more professional in their operation even despite the larger role played by the community, and thus

better able to present themselves to potential business partners as knowledgeable intelprises. This is evident perhaps even in the site names and slogans – from GrrlGamer's "grrls who got game" to GameGirlz' "'cuz girlz play too" to WomenGamers' more restrained "because women do play".

At the same time, the sections of the wider female gaming community centred around these sites have also become more sophisticated in their engagement with the sites and interaction amongst themselves, from the unstructured staking of online territory in GrrlGamer's members' pages to the structured but largely silent community of GameGirlz to the complex and highly active community formed around WomenGamers. This development of online community can even take a further step, by which communities become so centred around the Resource Centre Site in question that the majority of their interaction takes place here, and only loose ties with an overall wider interest community, which the site ostensibly aims to cater for, still remain. In other words, rather than the RCS being anchored within the user community, the community becomes anchored in the Resource Centre Site.

While no such site appears to exist for the female gaming community yet (with WomenGamers most likely to progress towards that goal), one is easily found in another popular entertainment-related field of interest, movie fandom: CountingDown.com.

CountingDown.com

The history of CountingDown.com follows a similar trajectory from individual amateur fan site towards Resource Centre Site and intelprise as that exemplified by the study of the three female computer gamer Websites, but in this site we find a further development in the evolution to a fully-grown RCS featuring large-scale community involvement as produsers. This involvement takes centre stage, as the site suggests: "CountingDown.com is a site powered by fans, people like you who share similar interests and enthusiasm for different topics. What you read on every

page is most likely sent in by someone, rather than created by an in-house editor"
("Help: Submitting"). The lines between 'average' users and RCS gatewatchers
have become blurred almost to the point of invisibility, where both are simply
produsers.

In much the same way as WomenGamers, the later entrant to the girl gamer
field, CountingDown was also inspired by existing movie anticipation sites on the
Web, but took the ideas behind such sites further in its own setup. As
CountingDown co-founder Phillip Nakov writes, "the site was started by three
partners that met on the Internet while surfing on the site created by Tim Doyle
called www.countdown2titanic.com. It was at the time one of the largest and most
active *Titanic* community sites. It was started a full 6 months prior to the release of
the film and grew to claim one of the strongest and longest lasting Internet
communities ever" (all Nakov statements from email interview). Toronto-based
Doyle himself, Los Angeleño Nakov and Lincoln Gasking in Melbourne then
teamed up in truly international cooperation to create a follow-up site expanding on
the concept of sharing advance information and rumours in anticipation of major
movie releases, and launched the site "on June 1, 1998 with five movie
'countdowns'" (Nakov) – *Armageddon*, *Saving Private Ryan*, *A Bug's Life*, *ANTZ*
and *Star Wars: Episode I*. Since then, CountingDown has grown exponentially: "we
had perhaps a few hundred visitors from the start but now we enjoy over a million
unique visitors to the site per month and several thousands pages of content if not
more, which is all dynamically generated and created". The site has "a staff of 10
that manages all of the design, creative, data base creation and management,
marketing and PR and hosting" (Nakov).

CountingDown is now billed as a "mega movie site … a place where film fans
from around the world could go and meet and talk about the movies they care about
and build large lasting online relationships with others that share a common passion
for film" (Nakov). Such rhetoric seems justified by the site's success both from a
community and a commercial point of view: "the site started out as a small hobby or

pastime for three film lovers in three countries from around the world. The site has since evolved to a full-scale business with an acquisition by POP.com in June 2000. (Two years to the day that the original site was launched.)" (Nakov). While that .com venture has since been dismantled, CountingDown still enjoys backing from powerful industry financiers, and "continues to operate under the auspices of DreamWorks SKG, Imagine Entertainment and Paul Allen's Vulcan Ventures" (Nakov), who had originally funded POP.com itself – clearly, for these entrepreneurs, CountingDown as an intelprise seemed a lucrative venture. It remains to be investigated later if such direct industry involvement, as well as the site's additional funding through banner ads, can be found to affect its editorial independence.

In spite of its industry ties, CountingDown focusses centrally on movie fans as its participant constituency. As the self-declared "ultimate fan site", it claims to be "a place for real fans of movies", where "fans share their enthusiasm" ("Contact: About Us") about upcoming productions and continue to discuss movies after their release. Fan participation on the site is significant, therefore, as Nakov writes: "we are very popular and well known in the community of fan and entertainment sites. We receive well over 1.25 million visits per month and we have over 400,000 message posts to the message boards per month and the news is updated on the site dozens of times per day."

Site Structure

Overall, the site is mostly divided into movie-specific sections, but it also features a number of overarching pages which allow users to see "What's New" across all movie sections, with around thirty news items per day, and "What's Popular", listing the most useful or interesting contributions to any of the movie sections as they have been rated by the users themselves. In addition, there are also sections showcasing the site's own original content, such as "Features" –

interviews, major news, links to promotional sites etc. –, "Celebs" (with around 120 brief biographies of major cinema celebrities), and a "Directory" of links to other significant movie-related sites. Further, CountingDown contains a "Theater" hosting a variety of short films in streaming video or for download (these include live action and animated originals, student films, and humorous 'spoofs') and a wider "Multimedia" section with downloadable movie trailers, video interviews, posters, computer desktop wallpaper and similar files. Finally, this central entrance to the site also links to "Movies", "a list of all the movies, past, present and future, that we are covering" ("Help: Navigation") – currently around 170 films –, and the related discussion boards, focussing on around 150 movies and including up to around 1000 postings each.

This ability for users of CountingDown to participate in any number of its very active discussion boards already signals the site's concerted efforts to involve its community as content contributors, and Nakov stresses their importance: "discussion groups are huge and a great way for fans to exchange viewpoints, chat, communicate ideas and art. They are wonderful for our community." This community participation is also actively supported and sought out by CountingDown, as the site "is promoted highly on other fan sites around the web, in the media and press using TV, radio, magazine and print as a means to generate exposure and popularity" (Nakov).

Beyond the discussion groups, users also have the ability to contribute news and commentary to the individual movie-related sections, rate existing content, or join in the editing of sections, as a look at one of the central current movie countdowns (to *Star Wars: Episode II*) shows. These sections are intended to provide "anything and everything" about the specific movie that fans might be interested in, "from casting news to original photos to related links" ("Help: Submitting"); they are centred around a "What's New" sub-section listing the latest news published by the section editors (averaging around two items per day in the case of *Episode II* one year before its scheduled release date) as well as the latest user postings and multimedia
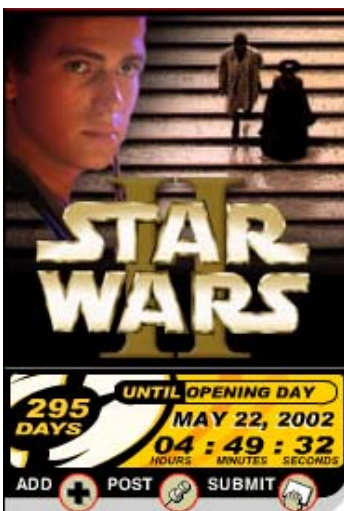
offerings. The range of news sources for this sub-section is as wide as it should be expected to be for a fully-developed Resource Centre Site: "everything that is movie related and can be news is mentioned or researched to provide additional content", as Nakov writes, including also relevant newsgroups or mailing-lists off-site (and thus further widening – if indirectly – the community's involvement in content creation).

In addition, "Movie Info" and "Fan Central" are subsections with edited news and user comments centred around the movie's industry and community aspects, respectively: the former focusses on pre-release production news and rumours (and later post-release commercial and critical evaluations), while the latter deals with community events such as fan conventions and special screenings. These sub-sections are supplemented by "Multimedia" (a sub-section for this movie of the overall "Multimedia" category), "Links" to other sites dealing with this movie, and discussions about these sites, and a "Stuff to Own" sub-section which follows the movie-related merchandise efforts and links to producers and retailers of such items. Most of these sub-sections also support a further sub-selection of their contents according to particular factors – "Movie Info", for example, allows users to list items relevant only to the film's story, cast, director, production, production credits, release dates, box office takings, and critical awards (with the latter of these obviously remaining largely inactive before the movie's actual release date).

This setup of CountingDown's sections further demonstrates why it has been described here as a fully developed Resource Centre Site: not only does it contain all three elements central to RCSs – news and commentary, knowledge resources, and community interaction –, but it easily blends them into a homogeneous whole. While much of the site ('hard news' as well as commentary) is organised by the recency of its content by default, it is also easily possible to browse sections as resource listings structured according to the type and topic of content and all sections also allow for user participation through the posting of comments. Additionally, there are also options for the submission of news items by users – "if

you spot something new on the Web or elsewhere related to a movie, we encourage you to send it in to us" ("Help: Submitting") –, rating existing items according to their usefulness, as well as to become a co-editor of a movie section. This is a policy with potential for expansion, as Nakov writes: "many of the members of the community have become feature editors and editors of countdowns. Due to budget restraint we have never been able to 'hire' anyone yet but we hope to be able to do that some day". At this point, at any rate, CountingDown has "over 400 volunteer editors (fans) from around the world who are sharing their passions and ideas with other fans by maintaining individual movie countdowns, contributing reviews and feature stories to the web site" (Nakov), which demonstrates clearly that of the sites discussed here so far CountingDown allows by far the greatest amount of user involvement in produsing the site.

Involving Community *and* Industry

With some justification, Nakov believes this significant extent of community participation to be unique in CountingDown's field: "there are many entertainment based web sites, TV and radio shows but none of them are as fan-centric and fan-driven as CountingDown.com". Some comparable sites, he writes, "are similar in the way they operate but we have pretty much isolated the area of fan driven, fan written, fan originated and fan read content on the web" – none of its competitors involve the community as contributors to the same extent that CountingDown does.

For CountingDown's makers, this high degree of community involvement in the site has even led them to view site and community as virtually interchangeable terms. This is evident from Nakov's answer to the question "do the creators of the site consider themselves to be part of the community, critical of it, or impartial observers?" – "As one of the co-creators I am a part of the site yes! All of the creators are still very much active in the site and love it!" (Nakov). Thus, it seems,

for Nakov the site *is* the community – and editors as well as users are both

produsers.

At the same time, the significant success of CountingDown as well as its

acquisition by some of Hollywood's major players have inevitably also meant that

Nakov and company have become part of the movie industry. This intermediary

position allows them to follow a further part of their brief, by which "the site

continues to aim toward lowering the barriers that exist between Hollywood and the

fans and to grow large involving online communities on the web for films" (Nakov).

Therefore, the site does not serve the fan community alone, in a clear demonstration

of CountingDown's status as an intelprise: "the industry relies on the site and we

have heard that many of the workers in the industry use the site for reference,

information, news and to check on what the fans are talking about", and even

occasionally to participate – "they have been read on the message boards although

membership and names are with out true identity. Privacy is a critical issue.

Sometimes they do say who they are or what they did for a particular film. This is a

very cool day for the fans and they go nuts!" (Nakov). Produsers of the site, then,

appear to be drawn from both the community and the industry sector.

Anonymous or not, there is therefore also some considerable involvement in the

site by industry figures; as Nakov writes, "stars too have stopped in to say hello and

even Steven Spielberg and Bryan Singer have stopped in and left a message or

two". Additionally, CountingDown also receives official recognition: "we work

with all of the major studios to receive information, gain access to press screenings,

set visits, junkets and interviews whenever possible. We do from time to time get

special access, exclusive first look photos or videos". Staff themselves remain

firmly rooted in the fan community, however: "we have maintained a very fan base

fan driven staff. No industry specialists or big names here" (Nakov).

In all, "the creators all consider themselves part of the entertainment/Internet

industry but at the same time as fans and have a responsibility to the fans and the

site to stay grounded and close to the source" (Nakov). Thus positioned at – and

indeed providing – the meeting-point for such different, and often divergent, interests, CountingDown and its staff must maintain a fine balance of content to satisfy both sides, on whose participation in its respective forms they rely. As Nakov describes it, "we walk a delicate line … we try to give the fans what they are looking for while at the same time preserving the mystique of the business and the movie making process. We do try and provide as many scoops as possible but we do try to listen to the requests from studios if they would like us to hold back stories for a certain period of time. We do not want to alienate ourselves from either camp".

Editorial Policies

Thus, for its original content, CountingDown has "a team of editors that are self-policing and do most of the fact checking and verify that what is going out is true and correct" (Nakov). This is gatewatching in progress, as CountingDown staff evaluate the quality of the content they find and republish or point to what they deem newsworthy: "news is gathered by reading the web, searching in all traditional and non-traditional avenues, TV, radio reports, wires as well as personal reports, research and interviews. We rely on official industry releases as well, verify rumors but do no speculate or fuel them and we do not play with the rumors that are false and avoid controversy at all cost" (Nakov). At the same time, however, they do not prevent the free expression and proliferation of such rumours by members of the community using the site. Neither interest, therefore – industry nor community – is privileged on the site, while the views of both are duly respected and represented; this is a further justification for the fact that CountingDown serves as a prime example for the Resource Centre Site genre in this study. The movie industry's continued support for the site as well as the community's obvious enthusiasm for it also show that its staff have managed to straddle the fence comfortably. According to Nakov, "the only criticism we receive from time to time is that we do not post photos up fast enough or that we do not have all the details of a story".

As previously noted, however, this delicate position could be further threatened by the site's need to generate sufficient revenue – in one form or another coming mainly from the movie industry itself. CountingDown's "operation is privately financed. We are currently selling banner space, sponsorships, offer e-commerce opportunities and are designing official sites for films as a work for hire situation" (Nakov). Even in spite of such direct involvement in the marketing promotion of certain films, there appears to be no evidence on the site that these efforts skew CountingDown's critical reporting on the movies in question, or that user contributions about them are censored: the discussion boards for *Evolution*, for example, a recent movie whose official site was created and hosted by CountingDown, contained a number of critical, negative comments about the film. Notably, too, the official *Evolution* site on the CountingDown server and the *Evolution* movie countdown section within the CountingDown site itself were clearly kept separate in terms of design and content. This would seem to lend some support to Nakov's claim that CountingDown's creators "only work with advertisers who understand our demographic and will not compromise the integrity of the site for advertising", while underlining the site's potential as an intelprise.

While advertisers therefore must understand that the nature of a Resource Centre Site requires the free expression of a range of opinions from the positive to the negative, the editors of an RCS must similarly also themselves realise that the integrity of the site may demand that they take decisions which could be seen as counterproductive from a purely competitive commercial point of view – namely, to acknowledge and point to the work done by sites which may serve as alternatives to their own RCS. As noted before, the Resource Centre Site ideal puts the intention to inform before any commercial considerations. CountingDown has understood this need, as Nakov writes: "if it is a big story we give credit where credit is due. People will remember that it was us that told them about it", even if the actual report is located on the Website of a competitor: "we link to the source of the information regardless of where it came from".

As arguably the largest and most in-depth site in its field, CountingDown can draw benefits from its central status in this process: even if it did nothing but collate all its information from elsewhere, the useful nature of this collecting effort (and of the editorial verification of content as CountingDown performs it) would likely still mean that users start their searches for information here: thus, "we do not worry about dragging readers away [from CountingDown through external links] as they will know that we are the ones that found the information for them in the first place and we become the destination for all things cool and newsworthy", and in all, CountingDown "content is chosen based on its relevancy not its source" (Nakov).

This indicates a two-fold view of other sites in the cinema fandom field: "we regard them partly as competition but mostly as sites we want to work with and exchange news and information. There is a great amount of cross linking and exchange between the entertainment sites" (Nakov), rather unlike the often highly adversary relationships between news services in traditional media. This lends further credence to the view that users as well as content creators online (if this division can still be maintained at all) see online publishing as a collective and collaborative effort rather than a competitive one. Such views may even slowly filter back into traditional media now, as Nakov points out at length:

> cooperation is important in the survival of any movie site, any news publication and any other large scale web site. We try to inform other web sites and other publications of events and news items we break on the site. There have been instances where we have reported on news first and have been able to give the story to other agencies to run as a news item – which then gives us a link off of our site and more people would be drawn to CountingDown.com as their curiosity leads them in. *Entertainment Weekly* and *Access Hollywood* are both good examples of entertainment entities that use us to report on news and then link to us as well. *EW* is a magazine and they print articles on the events and news we feature. *Access Hollywood* reports on the events and happenings on our site as a feature on their TV

show. Both of these entertainment properties have also featured a link on their web site for more information on the story they reported.

(Nakov)

Keys to the Success of a Resource Centre Site

Especially considering such recognition offline, it should by now be obvious that CountingDown is a highly successful Resource Centre Site, from both the point of view of its audience and that of the industry. A fortunate coincidence of various factors has contributed to this success: to begin with, the nature of the movie industry as a field of ongoing technological innovation across a network of contributing areas means a widespread use of the Internet for communication, while movie fans at the height of their enthusiasm for films are also well represented in the Net's most active age range of young adults. Movie-related information and opinion is therefore online in a variety of venues, and thus, "there is really no way to translate what happens on CountingDown.com into a non-web format. The site exists because the web is so vast and great and such a powerful tool that is able to instantly disseminate information and link large amounts of people. Elimination of the web component from CountingDown would not be possible and would destroy the very reason for which it was formed" (Nakov).

In addition, the continuous release or leaking of new information introduces further advantages for a Web publication:

> most other publications are limited by the time-release factor. Magazines are usually published either weekly or monthly and this causes certain stories to become out of date as the magazine goes to print. What may be an uncast role on Friday may very well be the part of the year cast on Monday. This story will then go unreported for a full week, which at the end of the following week that story would be considered as old news. Web based publications are not bound by these same time constraints and are able to report news when it happens as it happens and makes updates on the

> developments of stories as the facts become known… there is no lag
> in time and gratification is immediate. (Nakov)

Mutatis mutandis the same is true for other fields of interest where new developments occur continually, and so it is chiefly in these fields that we see Resource Centre Sites (which are ideally suited to cover such news) emerge. CountingDown takes this focus on timely information to its logical extreme, however, further multiplying its appeal: none of its competitors "work from the notion of actually counting down the months, days and hours before the release of a film and bringing that excitement to the release of the movie to the forefront. This site is powered by fan-fuel and we give the fans what they want to see and read each and every day", as Nakov writes.

The high level of community involvement on this site is hardly surprising, then, and is rewarded by the range of opportunities that CountingDown offers for direct community participation. Once again this shows a consequent use of the Web's advantages as a medium, as Nakov and his colleagues have realised:

> another factor which differentiates CountingDown.com from other
> traditional print media is that fact that you are unable to respond to or
> have a conversation with the other readers of the articles you find
> compelling in a magazine. On the web site you are able to read a
> story, rate it and post a comment or thought on the story for others to
> read and eventually respond to. Communities are then born from the
> reading, posting and replying to message posts and news items.
> People become connected to each other based on a shared common
> interest and not geography, gender, age, race or national origin. It is a
> pure meeting of the minds. This immediacy and this interactivity lead
> to a greater level of intellectual intimacy. Intimacy in the sense where
> people relate to one another based on the words and thoughts they
> express and not an intimacy based on anything from the physical
> world. It is chiefly for these reasons that one may argue that
> CountingDown.com is a superior means of gathering information
> about the movies and movie stars coming to a theater near you real
> soon. (Nakov)

From RCSs in Communities to Communities at RCSs

All hyperbole of the proud site owner aside, this description then points to an interesting trend which can be observed for successful, large-scale Resource Centre Sites: they may become so valuable to their users that users do not need to look elsewhere for information, resources, or interaction any more, and thus become, as it were, sedentary at the particular RCS in question. In turn, this could lead to the evolution of a number of specific sub-communities based around a field of interest's various Resource Centre Sites, as subsets of the overall interest community but with increasingly less overlap in participants. The RCSs, to return to a previous observation made from Nakov's comments, thus become their own communities.

Where or not such subdivisions emerge, however, it seems clear that in view of an apparently endless stream of new releases coming out of Hollywood and other production centres the potential for ongoing community interaction also is unlimited. Though now long superseded by CountingDown, even the original www.countdown2titanic.com "community still meets regularly on line and still, from time to time, schedules events off line in cities for the fans of the site and the film to meet", as Nakov reports, and so it seems entirely possible that where a sufficient fan base exists CountingDown could indeed "recreate this type of online community for every film or more than one film at a time", as it aims to do (Nakov).

To achieve this ongoing success (in the field of cinema fandom or elsewhere), it seems that fully-developed sites such as CountingDown are needed, rather than GrrlGamer or others which, while effective in what they do, offer only limited opportunities for community involvement as produsers, and for community building in general. As the more highly evolved of the sites studied here indicate, too, a significant level of institutional support to match that from the community is also required. Additionally, it is also becoming increasingly apparent that RCSs will function best in areas where there is a constant stream of news to cover and

comment on (both for editors and users, if with their move to be produsers of such sites that distinction still applies at all). Where these prerequisites are met, however, highly successful Resource Centre Sites can develop and flourish, and might also come to be commercially successful as intelprises.

We have seen in the past case studies, then, that major RCSs exist in a wide variety of fields – some backed more by the institutional, some more by the community sector; some at the centre of a continuum spanning institutional and community interests, some at the nexus of a number of divergent group interests. We have also been able to chart a potential course of development for sites aiming to become Resource Centre Sites, and to point out some of the necessary operational philosophies site owners would need to adopt to follow that course – centrally, that they have to embrace gatewatching as a methodology for content production, and that they need to involve the user community on the site in active and meaningful ways. What remains to be shown is that these sites truly form a new genre of content presentation and structuring in which common approaches to these problems are emerging – a final case study showcasing the Slashdot and similar models for the creation of Resource Centre Sites will perform this task.

Three – Spreading the Concept: Slashdot and Amiga.org

On the whole, the basic model for the setup and operation of Resource Centre Sites remains the same independent of their field of interest, as the preceding case studies already indicate – only where sites have failed to fully implement this model, or where they deviate from it by failing to cater for all three audience drives (real-time, archive, and interactive) or failing to involve their users as produsers, do we see problems with the continuous update of news, the building and growth of on-site resources, and or the attraction of enthusiast communities. The nature of the content presented by a site, or of its targetted field of interest, requires only minor cosmetic or operational changes to the RCS concept. This is analogous to the situation in other genres of information dissemination and knowledge proliferation, on- as well as offline: so, for example, the format of TV news changes little no matter whether it is applied to political, business, sports, or entertainment news (even though the studio décors and the personae presented by the shows' hosts will).

Certain basic requirements are shared by all RCSs, then: most obviously, they need a Website and an understanding of the basic operational philosophy required to support it (by the analogy above, this equates to the production setup and transmission channel for TV news). Second, and underlying this, is a practical need for the hardware, software, and Webware (the hypertext pages and scripting environment which make up the site – equivalent to the actual cameras, microphones, and other studio equipment as well as the means of reception by an audience). These, thirdly, need internal staff and an external user/audience community to operate them (and frequently, as we have seen, these two groups overlap for RCSs in the shape of produsers – far more so than in TV news production). And finally, of course, Resource Centre Sites as much as any other information genre we might compare to them crucially require a constant flow of content found or created by their contributors.

The Four Steps towards Building Resource Centre Sites

There are four distinct obstacles a prospective RCS creator would need to negotiate – four obstacles, too, which would stand in the way of any further spread of the Resource Centre Site genre as such. If we accept the basic premise of this study (that the general RCS idea and the overall operational philosophy underlying it are now increasingly seen as an attractive and viable model for Website structure and operation) – and the preceding case studies have already supported this premise – then the second obstacle becomes more critical. The technology underlying RCS operation is crucial to a site's success, as it must enable easy access by users and site staff to the latest news and commentary, to archives and resources, and to interactive features, and must present these features in a constantly up-to-date and well-structured form that is also aesthetically attractive.

The complex nature of RCS content, with many interactive pages that are often generated in real time on the users' demand from an archival content database, would make the creation of a full-size Resource Centre Site difficult for small-scale, independent operators without access to the necessary site development funding – however, as we will soon see, cheap and readily available solutions for overcoming this obstacle exist. These solutions take the form of software packages linked to or inspired by some of the major Resource Centre Sites, and many of them are freely available online as open-source software – that is, jointly developed in the public domain by a community of enthusiasts. The best-known of these packages include Slashcode, PHP-Nuke, and PHPSlice. If such software can be shown to neutralise the second obstacle facing RCSs, this leaves only community and content as the remaining requirements for the success of individual Resource Centre Sites in achieving their aims, and for the spread of the genre as such – and we can confidently expect that community and content will be found wherever an RCS operating with a suitable site philosophy and the necessary Web technology

addresses a topic that is attractive and news- as well as discussion-worthy enough for its relevant interest community and institutions.

This final set of case studies will provide an in-depth analysis of one of the major software packages for Resource Centre Sites as it runs on the Website for which it was originally created. It will show one of the most elaborate systems for involving users actively and meaningfully on a site, as content contributors, produsers, and moderators, and will engage in detail with the operating philosophies and methodologies expressed by the site's creators. Finally, we will also turn to a smaller Resource Centre Site using one of the available RCS packages, to outline how the gatewatching approach survives its translation from site to site, and from topical field to topical field, through the use of such software packages.

Slashdot.org

The Slashcode software package finds its origins in Slashdot.org, and unsurprisingly this Resource Centre Site also provides one of the best examples for an RCS constructed with it. To the uninitiated, its informational aims may seem somewhat nebulous at first, however – by its own motto, Slashdot covers "news for nerds, and stuff that matters", which according to editor Jeff 'Hemos' Bates means "posting links to stories around the web that geeks will find interesting. As well, we produce some original content – feature writing from Jon Katz, as well as guest feature writers" (all Bates statements from email interview). While the definition of 'nerd' or 'geek' may be difficult to put into words, it is evident from the site's popular success that it has managed to address and bind its target audience through the range of the content it presents – the very name of the site, in fact, also helps to increase its 'nerd credibility', as site creator Rob 'CmdrTaco' Malda writes: "'Slashdot' is a sort of obnoxious parody of a URL. When I originally registered the domain, I wanted to make the URL silly, and unpronounceable. Try reading out the full URL to http://slashdot.org and you'll see what I mean. Of course my cocky

little joke has turned around and bit me in the butt because now I am called upon constantly to tell people my URL or email address. I can't tell you how many people respond confused 'So do I spell out the 'dot' or is that just a period?'" ("FAQ: About Slashdot").

Slashdot "was started as a way to post ideal musings about sites found around the web"; as the Slashdot on-site FAQ states, it "was originally created in September of 1997 by Rob 'CmdrTaco' Malda. Today it is owned by Andover.net, which, in turn is owned by VA Linux Systems" ("FAQ: About Slashdot"). It is "run primarily by … Jeff 'Hemos' Bates who posts stories, sells advertising, and handles the book reviews and Robin 'Roblimo' Miller who has recently come on board to help … handle some of the more managerial sides of the site, as well as (surprise!) posting stories" ("About This Site"), and the overall team consists of nine staff within Slashdot itself and eight further technology staff at Andover. In its four years of operation, it has won multiple awards and has become loosely affiliated with a group of over 400 supporting individuals and institutions. More directly, it is connected to OSDN, the Open Source Development Network, which lists Slashdot as one of its sites; by its own description, this network "is the leading news, exchange, collaboration and distribution community for Open Source development, implementation and innovation. OSDN sites offer development tools, distribution and discussion channels, cutting-edge editorial, ongoing education and evangelism with Open Source luminaries" ("Media Kit: Introduction") – and many of them are themselves Resource Centre Sites targeting the Open Source community. In turn, the OSDN is itself ultimately owned by VA Linux, owners (through Andover) of Slashdot.

While such commercial ownership of an RCS is still unusual, perhaps, the Slashdot FAQ states that given the popularity of the site it was simply unavoidable: "it's difficult for the reader to grasp exactly how big and complex an operation running Slashdot has become. While we do sometimes experience a little nostalgia for the old days, Slashdot at its present readership level simply couldn't exist

without the infrastructure that the OSDN provides. Also, the fact that the OSDN has taken over things like network operations and advertising sales means that we can work on the things that we enjoy, like posting stories and code development" (Malda, "FAQ: About Slashdot"). Once again, this commercial interest in Slashdot also points to the fact that it has been identified as a lucrative intelprise. That Slashdot's owners should come from the Open Source community with its stated ideals of collaboration and open access for all, rather than from amongst the 'closed-shop' representatives of the traditional computing or media industries, also serves to underline the extent to which the RCS model is at odds with traditional operating philosophies in these industries (and conversely how well suited to the RCS philosophy Open Source ideals are).

Site Popularity

While affiliated with the OSDN, and while sharing a significant portion of its readership base with the Network's other sites, Slashdot's own interests go beyond a narrow (or even a general) interest in open-source software development and the intellectual principles behind it. The site's overall coverage of 'nerd news', therefore, has attracted a broad audience, as many of its statistics indicate: Slashdot's "Hall of Fame" (HOF) shows its most active news story to have attracted over 2000 commentary postings, while its most visited story (about a prospective lawsuit by Microsoft against Slashdot) received nearly 340,000 viewers alone. This figure is further surpassed by one of Slashdot's on-site readership polls, which had over one million voters participating (some inflation of numbers through multiple votes might be possible here, though). In addition, the HOF also shows the ongoing high-level involvement of its main editors: Rob 'CmdrTaco' Malda edited and posted over 5700 of the news stories featured on Slashdot, Jeff 'Hemos' Bates more than 3800 items (thus between them averaging about 46 stories per week in the site's four-year existence).

The ongoing popularity of the site is visible throughout: during the timeframe of this study, many news stories received up to 1000 comments within their first day of publication – as Bates reports, in fact, Slashdot serves around "1.2 million pages per day, with an average of 230k unique IPs per day, and nearly 400k registered users" (indeed, the Slashdot user identification number obtained for this case study was in the mid-400,000s). As active contribution goes, "500 stories are submitted per day", and "users in discussion groups" number "15,000 or so" (Bates). Remarkably, this significant user base has developed purely by interpersonal communication, as Bates notes: "we do not, and have not promoted the site. I am proud to say that Slashdot has never paid a dime for advertising, and have always relied on word of mouth. Advertising, IMHO [in my humble opinion], is mostly a waste in this area".

Such popular success, then, has also led to some unexpected side effects, mainly for the Websites featured in Slashdot news stories:

> when Slashdot links a site, often a lot of readers will hit the link to read the story or see the purty pictures. This can easily throw thousands of hits at the site in minutes. Most of the time, large professional websites have no problem with this, but often a site we link will be a smaller site, used to getting only a few thousand hits a day. When all those Slashdot readers start crashing the party, it can saturate the site completely, causing the site to buckle under the strain. When this happens, the site is said to be "Slashdotted."
> Recently, the terms "Slashdot Effect" and "Slashdotted" have been used more generally to refer to any short-term traffic jam at a website. (Malda, "FAQ: About Slashdot")

The Slashdot Front Page

Similar to the setup we have seen in CountingDown.com, on Slashdot news and commentary blend and become the central focus of the site – in Bates's own words, Slashdot's news section plays "the whole role" in the context of the site. Slashdot news stories are also immediately interactive, however, as they contain a feature for

users to add their own comments to a story (this is somewhat similar to the annotation mechanisms postulated for 'ideal' hypertext as they were discussed in Chapter 1) – and the discussions arising around a posted news story therefore frequently serve to enhance that story by providing further detail or background information. Thus, it is no contradiction if Bates also writes that "the groups are the lifeblood of Slashdot, IMHO. It's where people come to talk about things, and thousands read. It's over half of the daily traffic, to read the comments". At the centre of the Slashdot site, then, is an inextricable blend of news, commentary, and community interaction.

Therefore, the main page of the site features pointers to about a dozen of the day's main news stories, selected by the editors. At the top of the page are also five quick link buttons to the topical sections that the first five of these stories are located in. Further strengthening this focus on news, a sidebar on the main page also lists 'older stuff': the headlines of Slashdot front page news from the previous two days. This box also contains a link to "Yesterday's Edition", the archived Slashdot front page from the end of the previous day – and this function is recursive, so that users can step back in time through Slashdot front pages day by day if they so wish.

In addition to this option to view the latest, most important news of the day, Slashdot can also be read with a focus on a variety of topical sections, links to some of which are featured on the front page. The selection of directly accessible sections on this front page reveals Slashdot's ongoing Open Source affiliation, perhaps: topics listed here include the Apache suite of open-source projects, news about the freely distributed BSD flavour of the Unix operating system, and a section with developers' news; more general topics featured in this listing are 'science' and 'yro' ("Your Rights Online", covering online law, security, and privacy issues). In addition, included here is also a section with book reviews, featuring roughly one to two new reviews per week (which are usually well-informed and lengthy, often submitted by users, and always inviting comments from them); 'askslashdot', containing an average of three user-submitted questions per day, with up to around

350 answers or comments by the other users; and 'features', which has editorial-style pieces written by users (this section adds around two essays per week). Features require prior approval from the editors, as the FAQ's submission guidelines show: "before you get carried away, mail me a synopsis of your idea … . That way I can tell you if it is something we would consider posting before you bother to write the whole thing" (Malda, "FAQ: Editorial"). Finally, these specially featured sections also include two less frequently updated areas: Slashdot interviews – which are advertised on the site first, with an invitation to readers to submit questions to be put to the interviewee –, and the "Geeks in Space" Internet radio series – "Slashdot's 'whenever we feel like it' radio broadcast" with 35 episodes so far.

The latest additions to some of these sections are also featured in more detail in a sidebar on the front page, along with quick links to the latest external "Cool Sites" (which always include an affiliated "Support Slashdot" merchandise Website on the Andover network), the separate Freshmeat site (billing itself as "the Web's largest index of Unix and cross-platform open source software") and its latest featured software releases, and the current Slashdot poll. Poll topics here are often semi-humorous (for example, "how long [do you take] from wake-up to email", with 36% of participants choosing "under 10 minutes"), and generally attract significant participation numbers well into the tens or even hundreds of thousands.

Finally, the front page also carries a selection of standard links to specific Slashdot features, such as its full list of 84 topical sections from "AMD" to "Ximian", and from "Games" to "United States", as well as Slashdot's lengthy list of frequently asked questions about the site. Also included here are links to further interactive features, most importantly the option to submit a new news story to be checked by the editors; there is also a link to SlashNET, a Slashdot-sponsored Internet Relay Chat (IRC) network which supplements the on-site community interaction possibilities with real-time community communication. Finally, there are further links to external Websites: the Slashcode site aiding the further development

of Slashdot's operating software, and offering that software for download; the Open Source Development Network itself, and an OSDN-run site with job offers for open source developers; as well as editor Rob Malda's own personal homepage.

Slashdot News Stories: Presentation and Selection

Although it may seem, then, that for a Resource Centre Site Slashdot focusses mainly on news, commentary, and interactive features, to the detriment of knowledge resources as such, this is not necessarily so – Slashdot news stories and the ensuing discussions around them usually carry their specific resources (such as background information and outside links) with them. At the very least, they always include a 'related links' box to sites with further information, and often also include links in the body of the main stories as well as user comments (and further user comments with additional background and detailed information as well as Web links are always invited, of course). Thus, Slashdot news stories immediately become both their own background resources and their own interactive discussion boards.

Slashdot stories are generally submitted by the site's users, and edited by its staff. Submission of news is also possible anonymously (unnamed authors are then listed on the site as 'Anonymous Coward'), despite some concerns from the editors: "we think the ability to post anonymously is important. Sometimes people have important information they want to post, but are afraid to do it if they can be linked to it. Anonymous Coward posting will continue to exist for the foreseeable future" ("FAQ: Comments and Moderation"), even though anonymous submissions may be more difficult to verify by staff and users. "And furthermore, anonymous submission will not increase or decrease the chances that we'll select it" to be featured on the site ("FAQ: Editorial").

Beyond such basic considerations concerning user identity, content control and editing mechanisms on Slashdot are generally very advanced even for Resource

Centre Sites, and may provide a model for the future development of the genre (especially since the philosophy behind this editorial setup filters into the Slashcode software package) and for gatewatching processes wherever they may occur. Overall, all submitted stories are checked by the editors before they are posted on the site – however, the focus here is less on the truthfulness of their content than on its quality – Slashdot's standard answer to a user question about how staff verify stories, in fact, is "we don't. You do. :) If something seems outrageous, we might look for some corroboration, but as a rule, we regard this as the responsibility of the submitter and the audience. This is why it's important to read comments. You might find something that refutes, or supports, the story in the main" ("FAQ: Editorial"). This demonstrates that the site's editors treat its users as equals rather than as a merely passive audience for whom news must be especially prepared and packaged – users can become produsers easily enough, and the site's editors are merely produsers charged with an additional quality-control responsibility. As Bates notes, "we have had a couple problems publishing unverified information – however, we have always been extremely careful to say something has not yet been verified. Usually, since we are linking to news stories, we rely on them. However, in outrageous cases, we double-check and reach people within the company, rather then the PR firm, as that is more trustworthy" – in all, therefore, Slashdot's role as a gate*watching* site, reporting on news stories as they are emerging elsewhere, relieves it of the task of being a traditional-style gate*keeper*.

Only on the Slashdot front page do some gatekeeping values apply, and as Malda writes in the Slashdot FAQ, "I have always been the final decision maker on what ends up on the homepage" ("FAQ: Editorial"). Even this is hardly strict gatekeeping, though – users may always bypass this 'editor's selection' of what stories are considered most newsworthy, and delve directly into their specific areas of interest. This is intentional: "Slashdot has too many submissions to post them all, but many submissions are worth posting for folks specifically interested in them. We post many stories in the sub sections that don't appear on the homepage.

Examples are Ask Slashdot, Your Rights Online, and Apache. Each of these sections has a smaller, more devoted group of readers with a more specific interest in these subjects" ("FAQ: Editorial"). For submitted news stories featured here, then, only some general selection criteria apply: editors "go through these submissions, and try to select the most interesting, timely, and relevant ones to post to the homepage", and reasons for rejection include

- Badly worded subjects
- Broken or missing URLs
- Confusing or hysterical sounding writeup
- It might be an old story
- It might just be a busy day and we've already posted enough stories
- Your story just might not be interesting!

("FAQ: Editorial")

At best, this is a very mild form of pseudo-gatekeeping which is further undermined by the fact that any rejected story could easily be re-sent as the user commentary attached to an accepted submission on the same topic.

The Slashdot Approach to Gatewatching

Clearly, the Slashdot front page plays a special role in the site, and selection of its features throws a particularly interesting light on the gatewatching processes involved in the running of Resource Centre Sites. It is worth quoting Slashdot's creator Rob 'CmdrTaco' Malda at length here, as he explains his editorial philosophy in the Slashdot FAQ:

> Let me try to give you an analogy for Slashdot's homepage. It's like an omelette: it's a combination of sausage and ham and tomatoes and eggs and more. Over the years, we've figured out what ingredients are best on Slashdot. The ultimate goal is, of course, to create an

omelette that I enjoy eating: by 8pm, I want to see a dozen interesting
stories on Slashdot. I hope you enjoy them too. I believe that we've
grown in size because we share a lot of common interests with our
readers. But that doesn't mean that I'm gonna mix an omelette with
all sausages, or someday throw away the tomatoes because the green
peppers are really fresh.

There are many components to the Slashdot Omelette. Stories about
Linux. Tech stories. Science. Legos. Book Reviews. Yes, even Jon
Katz. By mixing and matching these things each and every day, we
bring you what I call Slashdot. On some days it definitely is better
than others, but overall we think it's a tasty little treat and we hope
you enjoy eating as much as we enjoy cooking it.

<div align="right">("FAQ: Editorial")</div>

This analysis encapsulates many of the basic principles of gatewatching: Malda
and the other Slashdot editors watch the gates by reading user-submitted news
stories (as well as collecting content in their own Web travels), and select the most
interesting of these to be featured on the homepage, while others may end up in the
site's topical sections. They are not gatekeepers, because they have no control over
the gates, but instead simply highlight the most useful of the material which passes
the gates every day; they are not censors, because they do not prevent their readers
from access to specific stories or from making their own voices heard, but indeed
openly invite such participation; they are not librarians, because they participate in
the use and creation of the library's – the Web's, and more narrowly Slashdot's –
contents; they are not journalists because they do not claim independent,
disinterested observership, but rather make openly subjective value judgments – 'an
omelette that *I* enjoy eating'. As Malda himself writes in the FAQ, "deciding the
interest level of a story is a very subjective thing, and we have to take into account
not only the intrinsic interest of the story itself, but what else is happening that day.
On a day when lots of things are happening, we reject some very good stories. But
on a day when nothing interesting is happening, we may post something not really

as cool" ("FAQ: Editorial") – and even the so-called 'intrinsic interest' of the story itself is just another subjective judgment.

Such judgments may even be reversed later on, further undermining any remnants of strict gatekeeping selection: "a lot of times, we don't use a particular story on a particular day, but at some later point, someone else submits it, and it ends up getting used. We have 4 to 6 guys working together to post things on Slashdot. What one of us finds stupid, the others might find interesting. Or it just might be the rest of the stuff that's going on that day. There are a variety of factors: the personality of the post, the quality of the submission, or even the quantity of stories already posted when your submission entered the queue" ("FAQ: Editorial"). This competitive element to the submission of Slashdot news stories might thus in fact even lead to readers submitting stories of better quality, in order to get *their* contribution accepted over others. RCSs may therefore experience a 'critical mass' effect at some point of their evolution as individual sites: when their user base grows beyond the point where grateful editors publish almost every story that does not arrive with severe factual or typographical errors (as is perhaps still the case in sites like GrrlGamer), story submission takes on the nature of a competition where the users with the most published stories are also the most respected or influential (or certainly the most *visible*, at any rate), and this competition further attracts and binds active (prod)users to the site, while strengthening the quality of article submissions. Beyond this point of 'critical mass', in other words, and as long as site staff and infrastructure can keep up with increasing article traffic, the site virtually starts to run itself.

(We might link this observation back to Talbott and Debray's views from Chapter 2: here indeed we do see a more ludic engagement with information, with site contributors as players and editors as umpires in the 'great information hunt' which Talbott describes. Far from his view that this playful approach to knowledge-building "stands for the scattered, distracted mind, impelled by automatic reactivity" (208), however, we can now see it as a constructive, collaborative process

contributing to the interest community's public resources. It is a competition without adversaries, without losers.)

To have a consistently edited homepage, however, is also important, as it helps define the site's identity as it first appears to users. As Malda writes in the FAQ, "Slashdot is an eclectic mix of stories maintained by a small group of people, but contributed to by anyone who wants to. I think that the personality and character of Slashdot is part of the fun and charm of the site, and I think it would suck to lose it. That's why the decision of what ends up on the homepage will continue to be determined by me, Hemos, and the rest of the guys". Thus, "my first goal has always been to post stories that *I* thought were interesting. I think a lot of people share my idea of interesting, and that's part of why Slashdot became successful" ("FAQ: Suggestions"). And again, the subjective choices made for the front page do not interfere with the rest of the site's content, which is much more lightly edited, or the opportunity to comment, which is always offered – "the only time we ever delete comments is if the comment contains malformed HTML that is somehow causing Slashdot to fail to display properly. Comments are not deleted on the basis of content" ("FAQ: Comments and Moderation"). In essence, Slashdot also clearly is a dialogue between its editors and users, where editorial selection of major stories for the front page is frequently questioned by users, and editors' views as evidenced in their framing of the stories are criticised and commented upon. Thus, "Slashdot is a very open community; in the user comments our readers are free to say whatever they please. But we feel that the unique nature of Slashdot is largely because the contents of the homepage are determined by a handful of people" ("FAQ: Suggestions").

The editors also note that there would be other options for the site's editorial organisation, including full user control over site content. However, they are sceptical about the success of such models: "I'm sure a very cool website could be developed based on the concept of allowing public voting to determine the content of the homepage, but that website wouldn't be 'Slashdot'. If we tried to do it 'by

committee' it would suffer from the same problem that most projects done by committee suffer from: it would get bland" (Malda, "FAQ: Suggestions"). As it happens in many mailing-lists or discussion groups, the site's focus could easily shift from the reporting of interesting news to the endless repetition of popular topics – as Malda writes, "I don't want to read the 'Bitch at Microsoft' website, but if ruled by popular consensus, Slashdot would very likely degenerate to this point" ("FAQ: Suggestions").

Users as Editors

The makers of Slashdot have encountered this problem themselves: "each day we grew, adding more and more users, and increasing the number of comments submitted. As this happened, many users discovered new and annoying ways to abuse the system. The authors had but one option: Delete annoying comments. But as the system grew, we knew that we would never be able to keep up. We were outnumbered" ("FAQ: Comments and Moderation"). However, they have also found an elegant way to overcome the problems with debate quality found in many unmoderated high-participation discussion fora on- as well as offline, where meaningful interaction between participants often either veers irretrievably off-topic, or else becomes swamped amidst the overall high level of message traffic.

Today, "Slashdot gets a lot of comments. Thousands a day. Tens of thousands a month. At any given time, the database holds 50,000+ comments. A single story might have a thousand replies – and let's be realistic: Not all of the comments are that great. In fact, some are down right terrible, but others are truly gems" ("FAQ: Comments and Moderation"). Therefore, Slashdot now uses an elaborate system of (self-) moderation, "designed to sort the gems and the crap from the steady stream of information that flows through the pipe. And wherever possible, it tries to make the readers of the site take on the responsibility" ("FAQ: Comments and Moderation"). Its aims are listed in the Slashdot FAQ:

1. Promote quality, discourage crap.

2. Make Slashdot as readable as possible for as many people as possible.

3. Do not require a huge amount of time from any single moderator.

4. Do not allow a single moderator a "reign of terror."

("FAQ: Comments and Moderation")

As moderators, users are able to add or deduct 'usefulness' points from comments which have been contributed to one of the myriad of discussions occurring on the site, and by default Slashdot will only display those comments in a discussion which are ranked above a certain threshold value, with the most 'useful' comments featured most prominently. In other words, this system helps to highlight what are commonly (that is, by those users who have moderated in a discussion) held to be the most interesting and useful comments, and the system conversely serves to downgrade and ultimately screen out less useful or even disruptive contributions.

If their comment is subject to moderation, furthermore, this also affects the contributor of the comment, who similarly receives an increase or decrease in their personal 'karma' points score; users are thus similarly ranked (though not publicly) by the overall quality of their comments, and their ranking in turn again affects the initial 'usefulness' score of any new contributions they make in the future. In effect, 'good' users are recognised as such; "as a good poster, you earned a bonus: you are allowed to speak slightly 'louder' than other people" ("FAQ: Comments and Moderation") – while 'bad' users are progressively silenced as their 'karma' score decreases. As in most groups where certain members have gained more personal status than others, though, with that status "comes a responsibility – you have to justify that bonus score. The louder you speak, the more likely you are to be moderated down, unless you're sufficiently interesting to prompt the moderators to let you keep your bonus score. This is how the system is designed to work: you

can't just rack up big karma scores, and then post nonsense" ("FAQ: Comments and Moderation"). The 'karma' score which users have gained might also be useful for Slashdot's editors in evaluating new story submissions, of course – it may serve as an indicator of a user's trustworthiness as a contributor.

Slashdot's Approach to Moderation: Allowing the Gates to Watch Themselves

The success of any such moderation system is entirely dependent on the quality of its moderators, of course. Slashdot's moderator team has undergone a number of changes in the past: at first, site founder Malda simply "picked people to help. Just a few. 25 or so at the end. They were given the simple ability to add or subtract points to comments. The primary function of these brave souls was to weed out spam and First Post and flame bait. Plus, when they found smart stuff, to bring it out" ("FAQ: Comments and Moderation") – but as traffic on the site increased this team was found to be insufficient. "So", as Malda recalls, "we picked more the only way we could. Using the actions of the original 25 moderators, we picked 400 more. We picked the 400 people who had posted good comments: comments that had been flagged as the cream of Slashdot. Immediately several dozen of these new moderators had their access revoked for being abusive, but they settled down" ("FAQ: Comments and Moderation"). Thus, in addition to the ever-increasing demand for moderators as the site grew, these specially selected moderators also introduced an unintended group of especially powerful users, who would occasionally abuse their powers to push personal agendas – a tendency which would become even more difficult for the site's staff to control as the number of moderators increased.

Therefore, Malda writes, he "needed to limit the power of each person to prevent a single rogue from spoiling it for everyone" ("FAQ: Comments and Moderation"), and so "today any regular Slashdot reader is probably eligible to become a moderator. A variety of factors weigh into it, but if you are logged in when you

browse Slashdot comments, you might occasionally be granted moderator access" ("FAQ: Comments and Moderation") – by default, Slashdot users are expected to be 'willing to moderate' (but can decline to do so if they wish).

Only registered, regular, long-term Slashdot users with good 'karma' scores are offered the opportunity to moderate, and only randomly and temporarily: "moderation is like jury duty. You never know when you're gonna have to do it, and when you get it, you only do it for a little bit" ("FAQ: Comments and Moderation"). In practical terms, "when moderators are given access, they are given a number of points of influence to play with. Each comment they moderate deducts a point. When they run out of points, they are done serving until next time it is their turn" ("FAQ: Comments and Moderation"). This limits both the power of any individual moderator, and the opportunity for them to 'gang up' to push a certain agenda, while also securing the quality of moderation – "it all works to make sure that everyone takes turns, and nobody can abuse the system, and that only 'regular' readers become moderators (as opposed to some random newbie ;)" ("FAQ: Comments and Moderation"). For these moderators, then, "moderation takes place by selecting an adjective from a drop down list that appears next to comments containing descriptive words like 'Flamebait' or 'Informative.' Bad words will reduce the comment's score by a single point, and good words increase a comment's score by a single point. All comments are scored on an absolute scale from -1 to 5. Logged-in users start at 1 (although this can vary from 0 to 2 based on their karma) and anonymous users start at 0" ("FAQ: Comments and Moderation").

Although the highly limited powers of individual moderators and the overall anonymity and randomness of the process effectively seem to prevent any agenda-setting by moderators, there still remains some threat of 'group-think' or overly conservative conformism to perceived Slashdot site goals, but in reality this threat, too, seems limited. The encouragement of a mild dose of conformity might even be welcomed by the site's editors, indeed, as it helps sharpen the site's overall profile and maintain its topical focus. Therefore, they provide guidelines for recognising

'good' or 'bad' content: "a good comment says something interesting or insightful. It has a link to a relevant piece of information that will add something to the discussion. It might not be Shakespeare, but it's not Beavis and Butthead. It's not off topic or flamey. It doesn't call someone names. It doesn't personally attack someone because of a disagreement of opinion" ("FAQ: Comments and Moderation"). Overall, in any way, by the evidence visible in Slashdot this form of self-moderation appears successful in its goals "to share ideas. To sift through the haystack and find needles. And to keep the children who like to spam Slashdot in check" ("FAQ: Comments and Moderation") – in essence, through self-moderation the Slashdot editors have enabled the gates to watch themselves, and to highlight the best of what material passes through them.

(Finally, to further neutralise any remaining threat of moderation abuse, Slashdot also allows users to police the moderators themselves: the site's "metamoderation is a second layer of moderation. It seeks to address the issue of unfair moderators by letting 'metamoderators' … 'rate the rating' of ten randomly selected comment posts. The metamoderator decides if the moderator's rating was fair, unfair, or neither". Metamoderation relies on the participation of seasoned Slashdot users: "in order to be a metamoderator, your account has to be one of the oldest 90% of accounts on the system. This means that once you've created your account, you'll have to wait for anywhere from a few weeks to a month or two, depending on the rate at which new accounts are being created" ("FAQ: Meta-Moderation").)

As noted before, by default posts with low moderation scores are rendered invisible to Slashdot readers, and so moderation of comments could be seen as a form of consensual censorship; however, such visibility levels can also always be changed according to users' personal preferences – thus, "each reader will be able to <u>read Slashdot at a level that they find appropriate</u>. The impatient can read nothing at all but the original stories. Some will only want to read the highest rated of comments, some will want to eliminate anonymous posts, and others will want to read every last drip of data, from the First Posts! to the spam" ("FAQ: Comments

and Moderation"). Slashdot's creators are clearly proud of the adjustable balance between quality and openness of discussion offered by this system: "read Slashdot at a threshold of 3 and behold the quality of the comments you read. Certainly you aren't reading a wild and freewheeling discussion anymore, but you *are* reading many valid points from many intelligent people. I am actually pretty amazed" (Malda, "FAQ: Comments and Moderation").

Karma and Competition

For contributions to Slashdot, then, this system adds a further competitive edge, this time in terms of commentary rather than the submission of original news stories: not only are the ten highest-rated comments listed in the site's "Hall of Fame", increasing their authors' prestige as community members, but the individual 'karma' ratings given to each user might also spur them on to become even more useful contributors in an effort to reach the top 'karma' score of 50. As noted, and explained in more detail in the FAQ,

> Your karma is a score that primarily represents how your comments have been moderated in the past. If a comment you post is moderated up, your karma will rise by 1, and if it is moderated down, you will lose a point.
> In addition to moderation, other things factor into karma as well. You can get some karma by submitting a story that we decide to post. Also, metamoderation can cause your karma to change. This encourages good moderators, and ideally removes moderator access from bad ones.
>
>   ("FAQ: Comments and Moderation")

Users are also warned, however, not to become fixated on their 'karma':

> karma is used to remove risky users from the moderator pool, and to assign a bonus point to users who have contributed positively to Slashdot in the past. It is not your IQ, dick length/cup size, value as a

human being, or a score in a video game. It does not determine your worth as a Slashdot reader. It does not cure cancer or grant you a seat on the secret spaceship that will be traveling to Mars when the Krulls return to destroy the planet in 2012. Karma fluctuates dramatically as users post, moderate, and meta-moderate. Don't let it bother you. It's just a number in the database.

("FAQ: Comments and Moderation")

Nonetheless, even if "it's simply not a big deal", as the FAQ suggests ("FAQ: Comments and Moderation"), it seems likely that the prestige that 'karma' at least *appears* to point to would further drive users to maintain and improve the quality of their contributions.

In all, Slashdot's points system for comments and users is a form of self-moderation, but without an excessive, intrusive push for conformity, and without censorship by the editors or the users themselves: "nothing is deleted: if you want to read the raw, uncut Slashdot, simply set your threshold to -1 and go crazy! This system is simply a method for us to try to work together to categorize the thousands of comments that are posted each day in such a way that we can benefit from the wisdom contained in the discussions. It's in there! It just takes some work to find it" ("FAQ: Comments and Moderation"). Slashdot performs that work effortlessly and elegantly, without burdening editors or users.

Slashdot as a Resource Centre Site

"Since this system is essentially an experiment in trying to solve the problems inherent in mass communication, one would expect its success to be variable, and indeed, this is the case. Some days it works great, and some days it doesn't", but on the whole the system appears very successful. Malda agrees: "of course it is flawed! It's built upon the efforts of diverse human beings volunteering their time to help! Some humans are selfish and destructive. Others work hard and fair. It's my opinion that the sum of all their efforts is pretty damn good" ("FAQ: Comments and

Moderation"). This might also be a reason for the fact that Slashdot has no other discussion fora attached to it (beyond the real-time SlashNET IRC network). The Slashdot discussion setup constitutes a form of technology that is uniquely suited to Resource Centre Sites, as it is directly linked to the site content, but openly accessible, and able to cope with mass participation, yet without a need for censorship. This could not be done in the form of mailing-lists or newsgroups: "the moderation system really doesn't have a counterpart" ("FAQ: Suggestions") in such Internet media forms, and they do not offer any significant technological advantages over the Slashdot Web interface to compensate for its loss. It could even be questioned whether SlashNET itself is really a necessary feature for Slashdot – discussion on the site itself is already occurring virtually in real time (since user comments are made visible to other users almost immediately, without a need for prior approval by the Slashdot editors), and this immediacy would be the only real advantage of IRC-based discussion fora over the Web.

We can see, then, that Slashdot takes the Resource Centre Site model to its logical conclusion in almost all important aspects: the three tiers of RCSs – news and commentary, resources, and community interaction – are inextricably interwoven because of the central role that the Slashdot news story-and-discussion system plays for the site; Slashdot editors assume the role of gatewatchers, policing to some extent what items make it into the news as presented by the site, but not excluding further material from being introduced into the discussions; and Slashdot users are themselves not only offered a role as produsers, contributing and editing site content, but even as associate gatewatchers, highlighting interesting and demoting undesirable material through moderation. Not simply site readership, but *user participation* has reached a significant extent for Slashdot, therefore.

However, the nature of this audience, and the range of topics that the site covers to cater for its readers, still seem to undermine a categorisation of Slashdot as a true Resource Centre Site along the lines of the model described in Chapter 3. As the site's editors themselves point out, "Slashdot is many things to many people. Some

people think it's a Linux site. To others, it's a geek hangout" ("FAQ: Editorial").
How does this sit with the expectation that RCSs cover a topically unified area of
interests, thus becoming news and resource centres for users interested in this area?

The Slashdot FAQ notes that the site frequently receives "comments saying
things like 'That's not News For Nerds!' and 'That's not Stuff that Matters!'",
playing on its stated motto ("FAQ: Editorial"). It is hardly necessary to point to
such comments to realise that on the surface the 'news for nerds' tag covers an
almost impossibly wide, and only vaguely definable, range of interests, which will
furthermore differ markedly from user to user. Slashdot addresses this problem by
allowing far-reaching user customisation of the site: once registered (for free),
Slashdot readers have the opportunity to exclude stories from particular topical
sections from being displayed on the Slashdot homepage as they receive it. They
can also alter the selection of 'Slashboxes' with brief listings of recent news which
appear on the right side of the homepage (by default, these Slashboxes include the
links to "Older Stuff", book reviews, quick links, and the Slashdot poll, for
example); interestingly, in addition to Slashdot's own sections – such as "Ask
Slashdot" or "Geeks in Space" – the about 150 different boxes on offer here also
include content from other online organisations, from *CNNfn* to *Wired* magazine
and from *Linux Today* to direct search interfaces for Yahoo! and other search
engines. This more or less direct cooption of outside news and other services helps
Slashdot achieve its aim to cover all 'news for nerds', no matter the 'nerd' in
question.

Finally, Slashdot customisation also allows users to set moderation thresholds,
hiding user comments below a certain moderation score. As mentioned before, this
achieves two goals: users can thus alter the balance between news and commentary
on the site (more commentary will vanish the higher the threshold is set), and they
can adjust the quality of visible Slashdot discussion, opting to view the full range of
user contributions or to grant 'speaking rights' (as they perceive them) only to
particularly privileged members of the community. In combination, these options

further help to place user choices over editorial selections – the customised Slashdot

site as it appears to an individual user is produced by *them* first and foremost, *based*

on the work done by Slashdot's editors and the other (prod)users.

News for *Whom*?

Overall, this high degree of customisability means that Slashdot constitutes

many Resource Centre Sites in one – or perhaps more accurately, it can be a

different RCS for each of its users, depending on their own personal preferences. If

it is difficult to define what a 'nerd' really is, and what constitutes 'stuff that

matters' to them, the site creators do not necessarily have to make this decision

themselves, therefore – they can simply provide a set of building blocks from which

users can piece together a personal Slashdot that best represents their own interests.

Once again, the user is firmly in control of shaping the content they receive.

However, there is no need to assume that Slashdot users are simply completely

individualistic in their preferences, with no shared interests at all – a great many of

the 'personal Slashdots' they have created through customisation probably differ

only in minor aspects. Few users will change the predefined Slashdot setup

completely (and additionally the frequent 'Anonymous Coward' postings on the site

suggest that there is a great number of unregistered users without the ability – or,

Slashdot registration being free of charge, the apparent desire – to alter the default

Slashdot appearance). Indeed, that there *are* certain fields of interest shared by the

majority of Slashdot users also appears to be supported by Slashdot's listing of

recent postings within its various topical areas, which (apart from an obvious

interest in 'news' in general) showed "Technology", "The Internet", and the

"Linux" operating system as comparative front-runners. 'Nerds' as attracted by

Slashdot might be a heterogeneous group, but they do have *some* common interests

after all.

At the same time, the mid-field of popular topics does uphold the view that Slashdot's range of topics is widespread – it covers "Science", "Games", "Hardware", "Microsoft" and "Music", and thus fields from work to leisure, from the concrete practice of computing to its abstract legal and corporate framework. Slashdot's makers obviously take the view that such topical heterogeneity is necessary in order to truly cover all the 'stuff that matters' to their 'nerd' constituency, and they cherish it: "Variety Is The Spice Of Life and all that, right? We've been running Slashdot for a long time, and if we occasionally want to post something that someone doesn't think is right for Slashdot, well, we're the ones who get to make the call. It's the mix of stories that makes Slashdot the fun place that it is" ("FAQ: Editorial"). Perhaps, then, the apparent heterogeneity of topics covered by this RCS merely obscures a much more fundamental, if unspoken, consensus on what are 'interesting' and 'important' topics for this community: as Malda notes in the Slashdot FAQ, "it turns out that a lot of people agree with me" on the news fields he has chosen to include in Slashdot's brief ("FAQ: Editorial").

The problem, then, may be less one of defining the extents of Slashdot's coverage, but rather one of nomenclature – no terms other than 'nerdy' or 'geeky' appear suited to describe Slashdot content as a homogeneous body of in-depth news coverage for a specific audience, but it is evident that this body exists nonetheless. It becomes clear, too, that whatever term is used to refer to the site's user base, it *does* form a distinct group and community: "Slashdot's audience is one of the most technically savvy groups on the Web, with an enormous number of systems administrators, programmers, and others heavily involved in the information age" ("About Advertising on Slashdot"). The Open Source Development Network's audience demographics for its sites (including Slashdot) underline this – according to the OSDN, 83% of Slashdot's users have IT-related jobs (in which 70% use open-source software), with an average income above US\$ 63,000. Half of its users have university degrees, and 80% spend over 18 hours per week online, including

more than three hours at Slashdot and other OSDN sites ("Media Kit: Demographics", "Media Kit: Targeted Bundles").

In spite of such detailed demographic breakdowns, however, it should also be noted that Slashdot does not *target* its audience as much as *attract* it, and so another way to describe the typical Slashdot reader is through the affinity of their interests with those of the site's editors. As Malda writes, "I've always worked very hard to make sure that Slashdot matches up with my interests and the interests of my authors. We think we're pretty typical Slashdot readers … but that does mean that occasionally one of us might post something that you think is inappropriate" ("FAQ: Editorial"). Since on the other hand "the majority of the work is done by the tons of people who e-mail stories" ("About This Site"), it thus becomes crucial for the site to maintain this compatibility of interests – after all, as Bates notes, Slashdot is highly dependent on its users for content: "submissions to stories on web sites, as well as full featured submissions, rants from readers – that is 100% of our news gathering".

Content Quality *and* User Involvement?

This high level of dependency on user participation is virtually unavoidable for a site that has the breadth and depth of Slashdot's news coverage, especially considering it is run by only nine staff. As we have seen, to involve users so deeply in content production is a typical feature of the RCS model, though, and so while Slashdot does not "guarantee the veracity, reliability or completeness of any information provided on our site or in any hyperlink appearing on our site" ("About This Site"), it nevertheless aims for good information quality – and again, user participation in and feedback to news stories helps ensure that quality.

The need for news quality *and* for community involvement in news research can also create conflicts, as we have already seen in the other case studies – even more so since like MediaChannel and HIV InSite Slashdot finds itself at the nexus of a

variety of individual community, industry and institutional interests rather than more simply at the centre of a one-dimensional continuum of interests, from community to institutional sectors. Thus, as Bates writes, users tend to push for still greater coverage: "we have had requests from readers to cover certain stories … – in a sense, every submission is a request for that". On the other hand, the institutional side tends to avoid coverage of anything but the most obvious facts – "companies have asked restraint, but in every case, it's been their PR firm trying to spin something" (Bates). Almost unavoidably, Slashdot's policy of open access to the discussion fora, and of allowing anonymous news story submissions, tends to put it on the community's side in this struggle of interests – as the FAQ notes, "we've got a ton of legal correspondence to prove" that "this open posting policy" gets the site "into trouble", but "we regard this as a risk of doing what we do" ("FAQ: Comments and Moderation").

The most celebrated of such cases occurred in May 2000, when lawyers acting on behalf of the Microsoft Corporation requested that Slashdot remove certain user comments from a discussion about Microsoft's legal tactics to protect its trade secrets. Slashdot made the legal correspondence itself public, and asked users for comments: "instead of reflexively going into rant mode, we are calmly posting the full text of the e-mail we got from Microsoft, along with our initial response to it, so that you can see what news and community Web sites like Slashdot are up against now that the DMCA [Digital Millennium Copyright Act] has become law. We are talking to our lawyers, of course, but we would also like *your* suggestions on how we should handle this situation" ("Microsoft Asks Slashdot").

Stressing their "hesitation to engage in censorship" ("Microsoft Asks Slashdot"), therefore, the site's editors upheld their users' rights to free speech, while involving them in the case. This is a clear manifestation of their ongoing policy in running the site, by which "users are given the powers to moderate comments, but no comments are deleted, unless ordered by court, which has only happened twice", as Bates writes, and it can be seen as an important test both for the level of commitment that

Slashdot's staff have to their own stated principles, and for the status of user participation as produsers in Resource Centre Sites itself. Slashdot's response to Microsoft's lawyers certainly makes clear its views on user participation as a critical element of such sites – directed at Microsoft, it states "please realize that if we censor our readers' posts because they contain ideas Microsoft does not wish to have made public, we may set an unhealthy precedent for other online news outlets and online service providers, including those owned in whole or in part by Microsoft itself" ("Microsoft Asks Slashdot").

While clearly also critical of its own users, then (as is evidenced by the elaborate on-site moderation system that can be used to hide all but the most intelligent of user contributions), the site thus nonetheless stands firmly on the community's side when dealing with the industrial heavies. This supports the image of the partial, but critical gatewatcher that we have come to expect. It also means that certain industrial and institutional bodies will not directly support the site, however (for example through the provision of advance news or the granting of interviews), if they come to feel continually slighted by Slashdot news and commentary. Many organisations still do, however – especially those which do agree with the site's overall aims and interests (as many companies and organisations in the Open Source community do, for example), so that Slashdot's overall industry-critical stance does not constitute a threat to its further existence. At any rate, there is always news from *people* in the industry, as it seems (much in the same way that despite MediaChannel's criticism of the mainstream media industry media workers within that industry will still make worthwhile contributions to the site), and these are indeed preferred as sources by Bates and the Slashdot team: "I don't pay attention to information from PR firms and company flacks. Best news is from people inside, who send the stuff directly to us, as real people".

Cooperation, Not Competition

These people might in fact be regarded as 'nerds inside the industry', and thus part of both community and institutional sectors. In terms of the Open Source industry in particular, this then also applies for Slashdot and its staff, both as publishers of an open-source software package – the Slashcode – and through their affiliation with the OSDN. In effect, this enables Bates to regard himself and his fellow Slashdotters as "critical of it, and part of the industry".

Slashdot's attractiveness both to the 'nerd' community and to (at least parts of, and people within) the industry results from this stance that sees it placed in both camps, but maintaining a critical distance from either at the same time. "Slashdot is committed to the idea of a completely free and open forum" ("FAQ: Comments and Moderation"), and users can regard themselves as largely in control of the site (both since they can adjust what parts of its content they see, and because they can contribute to the shaping and evaluation of it), but they cannot simply take it over and degrade it to a 'Bitch at Microsoft' site as foreshadowed in the FAQ. At the same time, the industry can expect a treatment that is as fair as that which it gives its customers – self-moderation and wide user participation mean that outrageous claims about good or bad industry behaviour will soon be debunked and brought back in touch with reality, but that reality will also be discussed by users without much sympathy for industry concerns. In all, however, it is clear that this still benefits the community more than the industry, and so some community members have also "asked to help" (Bates) as a way of showing their appreciation of Slashdot's service to the community, and have even become full staff members.

Clearly, for a site receiving several hundred story submissions per day this administrative support is highly necessary – as is some degree of commercial sponsorship: thus, Slashdot runs banner ads on its pages. The need to meet the ongoing costs of running Slashdot was also a major contributing factor to the sale of the site to Andover and its affiliation with the OSDN, but as the site claims, while "the sale of Slashdot has affected the business way we're operating around here … , the editorial style you've grown to love is intact" ("About Advertising on

Slashdot"). Andover's handling of commercial matters ensures this, as Bates writes: "we have no dealings with our advertisers, to not infringe on our editorial integrity". Indeed, Andover's and the OSDN's own commercial interests do not seem to be given preferential treatment in Slashdot's reporting, and might only receive an added boost through the fact that direct links to OSDN sites are provided in sidebars on a number of Slashdot pages. The same is true for a number of non-OSDN sites, however. For himself, certainly, Bates states that he does not accept as justified the view that linking to potential competitors may be bad for business: "I link always to outside information. Driving readers away is a myth – if your content is good, they will always come back".

Thus, it seems that Slashdot staff and their commercial backers have realised that user satisfaction is the key to the popular success of a Resource Centre Site: "our goal is to make our readers happy first and foremost" ("FAQ: Advertising"). Their aims are to remain involved in the community for which they provide a central outlet – and so, Slashdot's creator Rob Malda spends "20-30 hours a week just reading email about Slashdot. I listen, I just don't always do what other people think I should do, and sometimes people get angry and vocal about that. I can't please everyone" ("FAQ: About Slashdot"), but this is a typical experience in maintaining an RCS: gatewatchers are, as Bates describes it for Slashdot staff, both "part and critical of" the community, as well as of the industry – they are partial but fair observers who openly state their own views on their sites but allow these to be challenged by other users in the same fora.

The Slashdot Legacy

The creators of Slashdot believe that "Slashdot is successful for the same reasons anything else is. We provided something that was needed before anyone else did, and we worked (and continue to work) our butts off to make it as good as it could be" ("FAQ: About Slashdot"). They were amongst the first to realise the

potential of Internet technology to help them achieve their aims, and indeed, "publishing on the web makes our site possible. It would die in another format" (Bates). Many other RCSs that have emerged in the meantime – notably also the WomenGamers site we saw in the previous case study ("About Us: Note") – openly acknowledge Slashdot as a source of inspiration for their own operational setup. This is particularly interesting also in light of McKnight *et al.*'s earlier concern that "for most text types … there are organisational principles governing the lay-out and structure of their contents" (*Hypertext* 70), but that such common principles are still missing in hypertext: Slashdot's legacy goes beyond providing a model for Resource Centre Site operation as well as for high-level user participation in an RCS, and beyond demonstrating in action the potential for popular success of such RCSs – having made the Slashcode source code that is driving the site freely available, its creators have also substantially aided the setup and development of many other Slashdot-like sites around the world, so that at least for this hypertext genre principles of content organisation are now readily accessible.

The Slashcode "contains pretty much everything that you see on Slashdot, but cleaned up a bit for general purpose use. You can use it to create your own weblog. With features like an online story editor, mass moderation, customizable user preferences and oh-so-much more. It's a fun little adventure" ("FAQ: Tech"), and has been used on sites from *The African* (an RCS on African matters) to the *Retired Military Times*, and from *Men's Activism* to *Hempology 101*. Not all of the sites thus set up using the Slashcode are necessarily fully-featured Resource Centre Sites, of course – Slashcode makes it easy to set up the underlying technological structures to create an RCS, but can be used for other purposes, too. Also, not all sites using Slashcode will necessarily be *successful* as Resource Centre Sites: while the site setup encoded in this package is an excellent basis for RCSs, community involvement and topic choice play an equally, if not more, important role here. At any rate, however, the widespread adoption of a Slashdot site model for whatever purposes shows the great potential and influence that RCSs already have (we might

also note in passing that many of these "Slash sites" cover more immediately apparently homogeneous topic areas than Slashdot itself – another important step towards building a Resource Centre Site).

Typical for the philosophies behind open-source software and Resource Centre Sites alike, the free availability of the Slashcode puts content proliferation and user participation before intellectual property rights and competitive ambitions, benefitting the community and improving the quality of the information (be it software or news) shared – so, for the Slashcode, "better efficiency" and "tighter security" have been outcomes of making it public; "also, it's just cool when people submit patches" ("FAQ: Tech"), just as it is when Slashdot news stories are submitted and gradually furnished with more information and detail as users add their comments. Slashdot's creators even accept the possibility that someone could use the Slashcode to outdo Slashdot at its own game: "go for it" ("FAQ: Tech").

This lack of usage restrictions therefore also aids the overall spread of the RCS genre, as every "Slash site" could be a potential Resource Centre Site. In addition, there exist several other similar software solutions (which in part are Slashcode-inspired), such as PHPSlice or PHP-Nuke, the latter of which has been used to set up sites ranging from that of the Central Baptist Church in McKinney, Texas, to Corporategeeks.com, and from Designtechnica.com to the gaming hobby site Bartertown Australia. Like Slashcode, these packages also include functionality which allows users of such sites to add code to their *own* Web pages that automatically displays these sites' latest headlines on these pages – an option which may further help to raise the Web public's awareness of these Resource Centre Sites, and draw traffic to them.
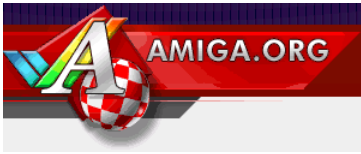
Amiga.org

Finally, it will be useful to examine a typical example for the Resource Centre Sites created with such readily available Website packages (in this case, PHP-Nuke): Amiga.org. Like many RCSs, it taps into a highly active and long-standing, if relatively small, community, the fans of the Amiga series of computers and operating systems. Existing since the mid-80s, the Amiga has had a checkered history throughout the 1990s: its original owner Commodore having gone into receivership, the technology changed hands between various ill-fated enterprises several times before being consolidated in the possession of a new and partly community-backed venture named Amiga, Inc. Once a hardware platform in its own right and competing with Apple for innovations in the market for graphical user interface-driven computing, the Amiga's strengths are now seen mainly in the field of platform-independent operating systems, with Amiga, Inc. working on the release of the Amiga Digital Environment (AmigaDE) operating system.

Remarkably, even in spite of this radical repositioning of the Amiga brand in recent times, and the lengthy gap in official Amiga development activity (Amiga, Inc.'s new products running AmigaDE are the first new Amigas to be launched in over six years, and the first real technology evolution in more than a decade), the Amiga enthusiast community has remained resilient and loyal, with highly active newsgroups and a number of surviving software and hardware manufacturers and retailers. Partly, this may be due to the spirit of ongoing development established amongst Amigans from early on: always neglected by the mainstream computing industry, many of the Amiga's most popular softwares emerged from public domain and shareware programmes. This spirit mirrors (and, indeed, to some extent predated and inspired) that of other collaborative development ventures, such as the Open Source movement.

As a Resource Centre Site serving this community, it is therefore easy for Amiga.org to access this feeling of communal cooperation; in fact, Amiga.org's

own motto is stated as "Community First! Community Always!" It has addressed this community with considerable success: according to the Amiga.org FAQ, the site attracts "anywhere between 2.5 and 4 million visitors per month", making it "the world's largest resource for the both the so-called 'classic' Amiga computer and the upcoming Amiga Digital Environment (DE)" ("FAQ: Amiga.org Advertising"). On the side of production, the site has seven staff, originating from the United States, the Netherlands, Australia and New Zealand.

Site Structure

Having developed through several stages of evolution, Amiga.org's site setup today follows the classic Slashcode or PHP-Nuke model (these are almost indistinguishable). Its front page is laid out very much like that of Slashdot, with a focus on the latest news from the various topical sections. As in Slashdot, news items featured here are linked to pages with the full text of the news report, existing user comments on the story, and a further commentary function – at the time this case study was conducted, some of these news items had been read over 550 times within 18 hours of publication, and had attracted more than 30 comments per story.

While it is not clear whether front-page stories are hand-picked by Amiga.org's editors as they are in Slashdot, the site highlights "Today's Big Story" in a similar way. In addition, it also contains links to the front page articles for the last seven days, as well as to a general listing of "Older Articles". As in Slashdot, stories can also be tracked within individual topical sections, ranging from the AmigaDE to virus alerts, and also covering news of only indirect relevance to the Amiga (there are sections on chipmaker AMD and computer manufacturer IBM, for example). In addition to this, the site also has a search function, and an option to submit new stories.

Several other features, again similar to those found in Slashdot, round out the site. In addition to the site news (about Amiga.org itself), there is a section on

events news and interviews (usually not contributed by Amiga.org staff themselves) as well as to a roughly monthly series of editorials; further, similar to "Ask Slashdot" there is "Ask Amiga.org", which provides more or less monthly answers to user questions, and further discussion on these topics as well as related news and links to them. Finally, Amiga.org, too, contains a user survey similar to the Slashdot polls on its front page, with links to past polls; currently, there has been a total of up to about 2000 votes per poll.

Figures such as these establish Amiga.org as clearly much smaller than major RCSs such as Slashdot, CountingDown or MediaChannel, but nonetheless still as a significant centre for its own community. The Amiga.org top ten page provides further indication of the site's user base and the involvement of its staff: news stories posted on Amiga.org have been read up to 12,000 times, and have received up to 100 comments per story; its site manager Wayne Hunt has contributed over 400 news stories to date. It is also interesting to see that there are a number of users regularly submitting news – currently, the leading participant of these has contributed over 20 news items since Amiga.org began using PHP-Nuke as its site model.

Like Slashdot, Amiga.org allows users to register on the site and thus create an online identity; the site's members pages list about 1900 such registered users. According to a counter on the site, up to 50 of such users as well as unregistered guests appear to be using the site at any one time. Other than to attach their personal identity to any comments users make in response to news stories, registration is necessary mainly to participate in Amiga.org's discussion fora (which also offer the use of a private user mailbox). This Webchat discussion system is not linked to any particular story on the site itself, and can thus be compared with SlashNET; it is divided into 15 topical sections which contain up to 2500 postings each. (In addition to these fora, Amiga.org also provides pointers to further Amiga-related IRC channels in which it has no direct involvement.) Similar to what we have seen in the case of Slashdot, therefore, Amiga.org blends news, commentary, and community

interaction through its news sections, while providing further and more general community discussion and interaction facilities – in contrast to Slashdot, however, there are also many further communication venues for this particular community, for example in the very active Amiga newsgroups (whose existence may reduce the communication traffic on the Amiga.org site itself).

By comparison, the site goes beyond what is covered in Slashdot in terms of the resources it provides to its community, however. In addition to emerging sections with Amiga troubleshooting tips and Webmaster tools, which to date contain only one item each, it contains an extensive "Amiga Resource Directory" of Web links, divided into 16 topical sections with up to about 100 entries each. These are listed with a brief description of the site they link to, and include an opportunity for Amiga.org users to rate the site in question. The directory tracks usage of its links, and is searchable by the latest additions, most popular (i.e., most used) links, and by top ratings (at the time of this study, over 1300 users had visited the most popular site through its Amiga.org link). Users are able to add new entries to the directory.

Community and Industry Relations

While (perhaps due to the lower volume of traffic on the site) Amiga.org does not employ an elaborate self-moderation system along the lines of Slashdot, and generally operates on a much smaller scale than it, it is evident even from this brief overview that much of what has been said about Slashdot applies in a similar way for Amiga.org – like its bigger sibling, it too provides a news service, this time for a specific sub-section of the 'nerd' population, and it too relies crucially on that community's support and cooperation. Indeed, Amiga.org even receives some direct financial support from its community, by selling it mugs, t-shirts, and mousepads through the Cafepress.com online marketing service. Sailing in somewhat more protected waters than Slashdot, however, its relationship with the Amiga-related industry is also a lot more straightforward (also since Amiga industry and

community have become tightly interwoven in the Amiga's long period of dead calm), to the point where banner ads from the industry on Amiga.org include even advertisements from Amiga, Inc. itself.

Again, however, Amiga.org, too, is quick to point out that it has maintained its editorial independence in spite of such commercial affiliations, knowing full well that it must not be seen by its users to toe the company line:

> Amiga.org is not owned by, controlled by, or affiliated with Amiga, Incorporated in any way. While we may share similar views on the future of computing, we do not intend to attempt to represent the views of Amiga, Incorporated at any time. The views expressed on Amiga.org and its subsidiary sites are strictly the opinion of their respective poster and should not be construed as official in any way except when specifically stated as such (such as the posting of an article directly from Amiga, Inc's site). ("Disclaimer")

In addition to the need for such statements in order to keep the community satisfied, in this case they are also made with a view not to alienate the smaller commercial players that make up the Amiga cottage industry: thus, in advertising Amiga.org strives "to ensure fairness to all our customers, regardless of their inventory. After all, it wouldn't be fair to allow a large company 'free ads' simply because they have more product to sell, while restricting the usefulness of our smaller advertisers' campaigns. At Amiga.org, small companies matter just as much as large ones" ("FAQ: Amiga.org Advertising").

As we have already found in the case of many other Resource Centre Sites, Amiga.org similarly also puts news quality over strict commercial considerations, and freely links to other Websites even if they may be competing for a similar audience. This is despite the site FAQ's protestation that "we simply can't begin to be profitable if we keep passing off our visitors to other sites" ("FAQ: Amiga.org"): in practice, the Amiga.org front page contains a "Newest Sites" box of the latest Amiga-related off-site links, and further links are also liberally interspersed in the

news stories. Therefore, we might assume the quoted passage from the FAQ to date

back to a previous incarnation of the site, with Amiga.org's philosophy regarding

outside links now changed to bring it more into line with what we may expect of a

Resource Centre Site. (This greater openness to off-site links is only logical, in fact,

since Amiga.org encourages its users to add exactly such links – back to Amiga.org

– to their own sites: like Slashdot, it, too, offers an opportunity to include an

Amiga.org latest news box on one's own Website.)

The Growth of a Genre

Box of Amiga.org headlines
on another Website,
on 2 August 2001.

As noted before, Amiga.org is just one of an increasing number of Websites

built using Slashcode and its close cousins PHP-Nuke, PHPSlice, and others. Not all

of these sites will be Resource Centre Sites, obviously – but many have the potential

to become RCSs, since the basic RCS and gatewatching philosophies and the

fundamental site setup for functional Resource Centre Sites have been deeply

ingrained into these softwares. Where these technologies and the ideas behind them

meet a mindset on part of the sites' creators that is compatible with the RCS model

(as well as the resources necessary to maintain such a site), two of the four

prerequisites for Resource Centre Sites listed at the beginning of this third case

study are already met. Indeed, achieving the necessary technological requirements is

becoming increasingly easy: following the popular success of the Slashcode and

PHP-Nuke models, several service providers specifically geared at Slash-type sites

are now emerging, such as SlashHosting.com. It "offers **turn-key** Slashcode and

PHP-Nuke Based Accounts" ("Slash Hosting"); in other words, it provides the

space and setup to create Slash sites on its servers. Needless to say, the availability

of such services is another indication of the growing prominence of Resource

Centre Sites online.

In the previous chapter, RCSs were likened to the virtual settlements where

online communities gather. In light of these case studies, we can now draw this

analogy even further: SlashHosting.com then provides the land for the housing estate that is to become a virtual settlement, while Slashcode, PHP-Nuke, PHPSlice *et al*. are all similar building packages offered by expert developers. Whether true virtual communities will move into these estates remains to be seen, but clearly, comfortable living spaces for them are now readily available. The success of such new developments will then depend mainly on the quality of the neighbourhood – on the right balance of public policing and personal freedom, on the availability of support services, and on the range of entertainment and work opportunities on offer.

Two further prerequisites for the creation of RCSs remain, in other words: staff and content. Following the case studies considered here, we might regard these as closely linked to a site's chosen field of interest, however: suitable topics should never struggle at generating sufficient ongoing news, and should attract a community large enough to generate a steady stream of quality news submissions. Where this is the case, it should also be possible to attract a group of enthusiastic content produsers (mainly from within the community itself) who will quite possibly even end up as paid employees of the site, if RCSs from MediaChannel to CountingDown to Slashdot are any indication. All four prerequisites able to be met with increasing ease as the tools and conditions for the creation of such sites become more and more common-place, then, Resource Centre Sites might indeed become "the future of the Web", as PHP-Nuke's slogan has it – or at least one of its major content and publication genres, as well as clusters around which lucrative intelprises may emerge.

5 — News for Nerds or Stuff That Matters?

The case studies presented in the previous chapter have underlined several of the observations made about the gatewatching process and the Resource Centre Sites which this process contributes to, as they were outlined in Chapters 2 and 3. Further, the existence of ready-made software packages for the creation of new RCSs also supports a view of these case studies as especially salient examples for a wider trend towards the emergence of a site genre, rather than as isolated sites which happened upon a particularly useful model for the structuration of their content and their users' interaction with that content.

Becoming a Gatewatcher

We have also seen these sites emerge from a variety of backgrounds spanning the continuum from community to institutional Web users: with RCSs ranging from the heavily industry- and research-backed HIV InSite to MediaChannel with its NGO backers to the fan-based CountingDown, it seems that there is no one organisational environment that is particularly likely to generate Resource Centre Sites. In fact, the organisational background of the sites itself may even change significantly as the sites reach a certain level of popular success and recognition: so, CountingDown is now itself supported by significant players in the movie industry, while WomanGamers also enabled its creators (who were fans first and foremost) to add a lucrative commercial arm to their site. While we have generally found the Resource Centre Sites studied here to be located somewhere in between the positions espoused by the various stakeholders (no matter whether there exists a simple continuum stretching between community and industry, or a more complex system of divergent interests held by various involved parties), on the grounds of their organisational setup there seems to be no direct reason that these stakeholders should be unable to create their own Resource Centre Sites if they so desired.

In this respect it is also interesting to return to a re-evaluation of the distinctions between Resource Centre Sites and related site genres such as 'supersites', portals and cybermediaries. Key differences between such site genres were already covered towards the end of Chapter 3, and will not be repeated in detail here, but following the case studies we might now also see a potential for cooperation between various existing sites in these genres, as well as for the transition of individual sites from one genre to another over time. As noted in Chapter 3, RCSs are less overtly commercial than cybermediaries, and do not limit themselves to working with specific industry partners – this could easily change where particularly strong connections between gatewatchers and industry are forged. But for the philosophies of contentual independence espoused by their editors, the sites in Case Study Two might all move in this direction.

Similarly, we have seen RCSs to be more topically specialised than supersites or portals (which provide a general roof site for individual fields of interest they cover, or serve as a unified access point to a variety of Websites, respectively), but in the case of major sites such as MediaChannel or Slashdot, to what extent can we expect their growth in content to continue without a loss of contentual coherence? As the difficulties experienced in defining the Slashdot audience's common interests indicate, Slashdot may already well be a different Resource Centre Site to different sub-sets of its users, and so it would be conceivable to envision a change to its content structure which would turn Slashdot into a supersite consisting of several sub-sites catering for these different groups, from tech-nerds to online rights activists to Internet visionaries. Ironically, on the other hand, MediaChannel might be more likely to turn into a portal, despite its organisational links with the originators of the 'supersite' concept: in the presence of continuing financial limitations the balance of on-site content and discussion with links to off-site material published by affiliates might tip further towards linking to affiliate sites.

On the other hand, it also still remains to be investigated what potential there is for existing cybermediaries, portals, and supersites to become Resource Centre Sites

in their own right. In theory, this is certainly possible: supersites might find that one of the topical fields they cover is becoming overwhelmingly popular, and increasingly focus their coverage on that field alone; portals could begin to add more on-site content which does not immediately direct users towards affiliated sites; and cybermediaries could overcome commercially motivated limitations to particular industry partners to provide a more balanced, non-preferential treatment of the entire field. As the Resource Centre Site genre becomes more recognised as a viable media form, we may well see sites from these other genres adopt its structures more or less whole-heartedly.

Beyond basic organisational backgrounds, several obstacles for the creation of successful Resource Centre Sites still remain, however. Largely, these obstacles are of a philosophical rather than a practical nature: RCSs crucially depend on their editors' clear support for what is sometimes seen as the underlying ideology of the Web: support for the free expression and exchange of ideas, and for collaboration over competition, and a greater interest in the publication and discussion of new ideas than in the preservation of intellectual property. These ideals provide the fundament for all of the operating principles for Resource Centre Sites as they were outlined in Chapter 3. It is at this point that we might begin to regard RCSs as more likely to emerge from a community background than from institutional structures, as such ideals generally run counter to the operational philosophies of commercial enterprises.

At the risk of stating the obvious, it is also impossible to run a Resource Centre Site without becoming a gatewatcher. Especially for smaller Resource Centre Sites with limited funding sources the processes of gatewatching are also a way to overcome the limitations of their immediate newsgathering abilities, by adding material coopted from elsewhere to their own, self-produced content. But this is only a welcome side effect serving to place bigger and smaller RCSs on a more level playing-field. The more important reason for engaging in the gatewatching process is that only in this way can the editors of Resource Centre Sites achieve

what is a (perhaps *the*) fundamental aim of such sites: to cover their chosen field of interest extensively, and thus to truly become a *resource centre*. While none of the constituent elements of the publication drive is inherently privileged over the other two, in the case of emerging RCSs there *can* be a clear temporal sequence according to which the drives are catered for: the real-time publicising of news and rumours after some time leads naturally to a satisfaction of the archive drive (as older news is gradually added to that archive), and – given suitable functionality and interest – will also lead to the emergence of engaged interactive discussion amongst users and with the gatewatchers behind the site. Without the constant addition of content found in the course of the gatewatching effort, sites will find it nearly impossible to satisfy their users' real-time drive; this, in turn, also frustrates the archive drive and leads to a drying-up of interaction on the site. The fate of would-be RCSs such as GrrlGamer provides a clear warning of this.

Significantly, then, to adopt gatewatching as a major process contributing to the contents of a Resource Centre Site also means accepting fully the need to link to off-site content. Statements on their willingness to do so echo through all of the interviews with successful gatewatchers, and are perhaps most strongly expressed by Slashdot's Jeff Bates: as noted, he believes that "driving readers away is a myth – if your content is good, they will always come back". Once again, however, this will most likely seem severely counter-intuitive to commercial operators hoping to set up RCSs.

Where the ideals of gatewatching and the operating principles of Resource Centre Sites *are* fully accepted, then, we have seen sites emerge that are well-respected and heavily used by their target audience on both community and industry sides of the user spectrum, and which are often also commercially and even intellectually successful (respectively in terms of their ability to sell added value, attract advertisers or buyers, and in terms of the quality of content and debate contributions they are able to attract). Involvement from both sides of this spectrum

remains crucial, too, as RCSs depend on a perception of their contents as balanced and largely unbiased.

This may once again be explained in part by referring to the three elements that make up the publication drive: if news provided to cater for the real-time drive is seen as biased, missing crucial items, this also undermines the usefulness of the archive into which news items are ultimately deposited; finally, interaction will also remain limited or fail if those interacting on a site have only one-sided information available to them or if due to its bias the site attracts only users with already fairly homogeneous views. Again, a perception of too much bias towards the community's point of view may also have contributed to the gradual withdrawal of industry support from GrrlGamer as well as the weakening interest in it expressed by the female gamer community. (The case of GameGirlz, by contrast, demonstrates that the earlier caution of a need for 'suitable interactive functionality' is by no means a minor condition: it, too, must be addressed by RCSs.)

As noted in outlining the processes of gatewatching and the structure of Resource Centre Sites, however, attempting to provide a good balance of views in an RCS does not mean a return to journalistic ideals on part of the site editors. Whereas the onus for balance in journalism lies with the journalists themselves, who are by and large the only significant news and commentary content contributors to their publications (letters to the editor and similar sections notwithstanding), the shift towards a joint produsing of Resource Centre Sites by inside gatewatchers *with* outside users means that a balance of views need not be achieved on the level of individual content items, but rather through the juxtaposition of conflicting views in equal measures. As long as the site editors do not directly discourage the expression of user views which contradict their own (or a spirited debate amongst users themselves), sites with sufficiently sizeable contributor bases should be able to display a good mixture of opinions.

From Publishing to Publicising

This point connects back to an observation made at the end of Chapter 1 and further investigated in Chapter 3: in some contrast to the production of journalistic publications, gatewatching shifts the focus of Resource Centre Sites from the *publishing* of information to *publicising* official news and unofficial rumours as well as views and commentary by gatewatchers and external users alike. In reality, the contrast with journalistic methods is one of degrees, not a fundamental change, however: as Turner *et al*. have noted, following Franklin, increasingly "the practice of journalism is being contaminated from outside. The 'fourth estate' is in danger of being overwhelmed by the 'fifth estate', the growing number of 'PR merchants and spin doctors' influencing the news agenda" (29). In other words, there already occurs a certain amount of publicising (of repurposing PR statements and other primary material) rather than publishing (of printing the original results of investigative efforts) in journalistic publications. Resource Centre Sites, at least, usually bring these processes into the open, by skipping the journalist's now all too familiar step of reworking press releases in order to pass them off as original content and simply publicising such press releases *as* press releases on the site. While hardly a press release as such, Slashdot's handling of Microsoft's cease-and-desist request provides a clear example of this approach.

If what they do in the main is the publicising of interesting material (whether sent to them directly or found in the course of their gatewatching efforts), alongside some publication of their original thoughts much in the way that the sites' users are also able to publish *their* views, the question emerges to what extent the Dichters, Nakovs, Bateses and Maldas of the Resource Centre Site genre can still meaningfully be classed as producers or editors of their sites. One answer to this question is to keep in mind the technological dimension of running an RCS: due to their often very significant level of automation (especially if they are based on the package models for Resource Centre Sites – Slashcode, PHP-Nuke, PHPSlice –

which are now readily available), the most important *editorial* choices may in fact be made already in the site setup process. Technology does not determine the content of Resource Centre Sites, but it significantly shapes it throughout the course of their operation. (This is also evident in the problems with changing technological paradigms that we can envisage for GrrlGamer and GameGirlz, would they attempt to reach true RCS status.)

In other words, the creators of Resource Centre Sites take on the role of editor mainly as they define the visible form and the content management mechanisms of their Websites; once the site is operational, they work mostly as gatewatchers and especially influential produsers (going back to a subdistinction introduced in Chapter 3, we might stress this as *prod*users) alongside all other users (who are themselves also prod*users*). On the other hand, those users can themselves also become gatewatchers quite easily, even though they may not engage in this process to the same extent and with the same dedication as the site's creators do: any submission of news, rumours, or other forms of pointers to information that can be publicised on the site is already an act of gatewatching.

In effect, Resource Centre Sites are edited collaboratively, by their entire community of produsers (wherever the stress on this word may lie for any individual contributor). Most, if not all, of these produsers will engage in some form of gatewatching, and the contents of an RCS are the sum total of all of their efforts. This, then, opens up a variety of interesting definitional problems (as the use of a term like 'produser' already indicates), especially also when such definitions become legally or commercially significant. If all users are able to speak and contribute freely to a site (and if such contributions are in fact even published automatically), for example, then who takes legal responsibility for the site's content? Slashdot's celebrated encounter with Microsoft's legal team is merely the tip of an iceberg of potential difficulties for RCS creators here. In this respect, RCSs face similar difficulties to those encountered (on a larger scale) by Internet service providers (ISPs) in general: ISPs which offer their users free Webspace for the

creation of their own homepages have neither resources nor inclination to constantly check their customers' Websites for illegal material, but may by the legal systems of some countries be regarded as the publisher of such content. Clearly, RCSs cannot offer the opportunity to contribute only to 'approved members': this would not only render the administration of highly popular sites such as Slashdot with its 400,000 users impossible, it would more fundamentally undermine the very basis of open access on which the Resource Centre Site model is built. (In the Australian legislative framework, a current solution is that ISPs must take down unsavoury content once notified of its existence, but are not otherwise held accountable – similar ideas may be applicable to RCSs.)

Commercially, too, there remains a question of who should profit from any exploitation of a Resource Centre Site's position in its field: if site creators as well as external users all function as gatewatchers, would it be ethically sound to use revenue generated for example by running on-site ads to pay the site creators' salaries, or should the money rather flow into budget items (for example better equipment) which benefits all produsers – and who has the right to make these decisions? Alternative sources of funding may be more directly linked to the skills of the site creators, avoiding such questions (for example where the RCS creators function as consultants to the related industry, or to other prospective RCSs) – but at this point, too, there emerges a question of when such work begins to exploit the effort freely invested in the site by its external users.

Communication for the People

Such problems aside, however, what can be drawn from this involvement of users as produsers of Resource Centre Sites is a classification of these sites as an instance of Barrett's 'muscular', conversational hypertext, as it was introduced in Chapter 1. As noted, in Barrett's view this form of hypertext provides "more than … mere navigational guides through an already chartered database of text-objects

with some minor reconfigurations of content possible", rather, it supports "the social construction of meaning that characterises understanding and communication in the larger world beyond the computer screen" and "facilitates the creation, annotation, and exchange of new 'texts' within the community of users" (Introduction xiii-iv). While they are far removed from the 'ideal' hypertext which Barrett aimed to prophesy, it is nonetheless easy to apply this description to Resource Centre Sites as we have encountered them in the case studies, and so for all the problems with 'ideal' hypertext, in RCSs we can at least see one of its ideals realised, albeit for a local area within the wider hypertextual network only: that of user annotation and alteration of hypertextual content. Resource Centre Sites constitute one of the most advanced forms of hypertext commentary systems available to date. They do indeed provide "communication for the people" – one of the terms of acclaim that Aliza Dichter reports for MediaChannel (email interview).

As a model for this communication for (and amongst) the people, then (if by 'the people' we mean the wider community of enthusiasts in the RCS's specific field of interest), individual Resource Centre Sites will also provide excellent material for communication studies, far beyond the scope of the present discussion. We might use them to study group communication dynamics, for example – from investigating the reactions to incoming news to a study of the emergence of shared knowledges or respected opinion leaders to research focussing more on the effect of the technological characteristics of this form of computer-mediated communication on the patterns of communication exhibited by its users, for example.

A further interesting link which should be investigated in more detail is that of Resource Centre Sites' engagement with news and information to overall trends (especially amongst the Internet community) in attitudes towards intellectual property. There is, in the first instance, a valuation (familiar on the Net) of the need to inform and to be informed over the need to protect trade secrets or other forms of intellectual property; in this, the gatewatching attitude does connect back to that of truly investigative journalism. Intellectual property *created* in this process (that is,

reports and comments) is then in turn also readily offered up at no cost for public use and – since this is crucial to the operation of RCSs themselves – re-use.

An interesting analogy to the open-source software movement can be drawn here, therefore: open-source software from the Linux operating system to the Apache server suite is made available for free download on the Net, and enables its users to extend and alter the functionality of the software at will – indeed, to reuse whole code segments in their own programmes since the programming source code is included with the software. Open-source software may also be freely redistributed, while at the same time it is acceptable for such redistributors to operate as commercial enterprises. Resource Centre Sites could be described in similar terms: they make news and information freely available online, allow for the addition and annotation of such information by any user, and allow their users to republish RCS news on their own sites (indeed, often offer preprogrammed code segments to syndicate the news). At the same time, they do generally not rule out the commercial exploitation of the RCS contents by themselves or their users (syndication is usually not limited to not-for-profit sites, for example). In other words, we might well state that Resource Centre Sites treat the news and other information they publicise as open-source content.

This view is further strengthened when we consider that open-source philosophies are also supported by many of the creators of Resource Centre Site setup packages – the most significant of these packages (Slashcode, PHP-Nuke, and PHPSlice) are themselves available under terms compatible with the definition of open-source software, or the related GNU Public Licence. In other words, RCSs do not just turn news, but also the production or publication of news into an open-source endeavour. The implications of this move still need to be investigated in greater detail than has been possible here, much as the effects of open-source distribution on the overall software industry have not yet been gauged satisfactorily.

It is perhaps crucial to note at this point that we are still only at the beginning of the Resource Centre Site phenomenon. While a distinct genre of sites adhering to

the RCS model has by now emerged, as this study has demonstrated, the effects of this genre on related forms of news and information are yet to be examined. As with all media forms, we may also expect the genre to continue to evolve for some time to come; from a purely technological point of view, for example, RCS packages such as the PHP-Nuke system can be expanded almost without limits, due to their modular structure, and what extension modules will be scripted by PHP-Nuke creator Francisco Burzi or other users is impossible to predict. For our present discussion, for example, it would be interesting to see what effects a tighter integration of email, newsgroup, mailing-list, IRC, or Webchat facilities into PHP-Nuke-based Resource Centre Sites would have: how would this affect the quality and conduct of on-site community interaction? Other theoretically possible extension modules, on the other hand, could enable users to stake out some more private territory within an RCS (by allowing them to create autonomous mini-Websites within the overall site), which may lead to significant changes in the power dynamics amongst RCS users. The speed of adoption of various extensions across a variety of Resource Centre Sites could also help to indicate where the genre's most strongly felt shortcomings in comparison with other online or offline communication media forms lie. At the same time, Slashcode, PHP-Nuke, and other Resource Centre Site packages are able to be adapted for use in a wide variety of ways which can be entirely unexpected for their creators; they provide the potential for possible uses which the Web designers and site creators using the packages actualise in their own particular ways in the act of setting up their sites. It would be fascinating to study the range of such uses, and even of the effects of the open-source phenomenon as such.

In the role of the designer and editor which they take on in setting up their sites, Resource Centre Site creators make a number of crucial choices in terms of information and communication design. In this process, they truly are the structural aesthetes which Wearne called for in Chapter 2: as noted, in her view "interactivity is no longer attractive in itself. Rather it is the *design* of that interactive work which

is crucial, how its pathings relate to the content and aesthetics, and more importantly, how the choices made by the viewer feed back to them through the text" (19). Resource Centre Sites therefore also provide significant objects of study for the apprentices of this new "craft of 'structural aesthetics', a craft which has arisen due to the alternative narrative structures possible which result from new media technology" (Wearne 19). Practitioners of this craft should not be seen as being drawn only from the limited fields of information and communication design, however: given the increasing cross-pollination of practices from all over the creative industries, structural aesthetics as it plays out in Resource Centre Sites cannot be left to the information technicians alone, but crucially affects content providers and content creators as well. Indeed, as we have seen in a number of the case studies in Chapter 4, Resource Centre Sites are just as often set up by their central gatewatchers and produsers as they are by external Web designers hired for the job.

Suitable Topics for Resource Centre Sites

Clearly, many Resource Centre Sites can be classified as virtual settlements according to Quentin Jones's previously cited definition: they fulfil his criteria of having "(1) a minimum level of interactivity; (2) a variety of communicators; (3) a minimum level of sustained membership; and (4) a virtual common-public-space where a significant portion of interactive group-CMCs occur" (n. pag.). Also, as noted at the end of the previous chapter, sites such as SlashHosting and the various RCS software kits provide the land and housing packages for the creation of more such settlements. The warning remains, however, that even given this basis for their emergence virtual communities will not necessarily develop around Resource Centre Sites, and that contributors and content remain the two final prerequisites. Beyond the current study, there is therefore a need to investigate in more detail just what fields of interest constitute suitable topics for Resource Centre Sites: which

topics link to or attract a user and produser community of sufficient size to keep RCS operations viable, and in which fields is there a strong enough stream of good-quality news, rumours, and commentary to be able to provide the real-time updates which are a crucial feature of Resource Centre Sites?

If there are, in fact, certain fields of interest which are particularly suited or unsuited to the operation of Resource Centre Sites, how does this affect the future of the genre as such? Will it continue to concern itself with what might generally be classed simply as 'News for Nerds', or will its most recognised sites indeed cover 'Stuff That Matters' to the general population? Certainly, the case studies examined here point to a combination of both possibilities; while sites such as CountingDown and perhaps even Slashdot are grounded to significant degree in entertainment and fan culture, HIV InSite and MediaChannel clearly deal with issues very close to the heart of Western society as such. And beyond this, to ask the question in this way possibly falls into a Talbottian trap of applying 'our' values, posited as valuations shared throughout society, to these sites – what is more important, then, may simply be an identification of how different communities adjust the RCS genre to their specific needs, or an investigation of how Resource Centre Sites can be made to cope with the differing informational demands of highly divergent fields of interest.

Overall, a connected question may then also be that of when a Resource Centre Site truly begins to run at full steam. The case study of three female gamer sites has shown that – beyond all structural limitations of the GrrlGamer and GameGirlz models – there is also the need for what may be termed a critical mass of users (indeed, of produsers, of gatewatchers) to participate in a Resource Centre Site before it begins to operate under its own power. Somewhat similar perhaps to the process of jump-starting a car, starting an RCS requires a significant amount of energy from the site's creators at first, who initially are its only gatewatchers and produsers (since the site is known to almost nobody at this point). As more users join the site and begin to contribute their own content, a critical point is reached: is the volume and quality of content incoming from internal and external gatewatchers

sufficient to create so much ongoing interaction on the site that amongst those users involved in the interaction there are also enough gatewatchers who continue to submit new content, keeping the circle of information going – or does the excitement and interaction around particular news items quieten down again as time passes, without binding users to the RCS as gatewatchers?

From the case studies it is clear that a site such as GrrlGamer never managed to generate sufficient user participation (partly due to its non-interactive setup). GameGirlz experienced a brief window of opportunity to harness the power of its users during its initial publicity, as news of the site spread through the online media, but it, too, was unable to offer direct interactive content contribution opportunities to its users, despite Vangie Beal's best efforts to adapt the site to user demands. WomenGamers (and other sites like CountingDown and Slashdot) did cross the threshold of a critical mass for user participation, and appear to have been running on this momentum ever since, no doubt also due to the fact that their site structures enabled and encouraged user participation as gatewatchers and produsers from the beginning. What remains is a question of how to better quantify this mythical point of critical mass: how many users, how many contributions will be sufficient?

Information and Misinformation

Additionally, we might also sketch a complex of questions to do with the effects of and potential problems for the communication of information through Resource Centre Sites. We have already noted the significant importance of site structures as they are defined by the site's creators in their editorial role early on. There is a need to identify exactly how such structures affect how information is presented and used during users' interaction with the sites. By and large, Resource Centre Sites are highly flexible in their presentation of information (as the high level of configurability by individual users in the case of the Slashdot site shows, for example), to a point where individual users may even end up seeing a Resource

Centre Site that is significantly different from that viewed by any other user of the same site. Such configuration options include the exclusion of whole sections of a site, a complete re-organisation of the site's main page, the application of different design schemes to the site as such, and (where user-based moderation systems exist) the blocking of all user comments or of those below a certain 'usefulness score' as determined by participating site users.

But even without such different configurations between users, they might use the same site in markedly different ways which crucially affect the structure of the information they retrieve. This connects back to a point made in Chapter 1, following comments by McKnight *et al.* that "it remains to be seen if hypertext presentation will significantly erode [the] predominant convention for mentally ordering our world" in a linear fashion (*Hypertext* 41): Resource Centre Sites may give rise to a number of radically different hierarchies of information structure, and it will be fascinating to analyse just what forms of structuration, linear or otherwise, will emerge from this site genre, and to what end and extent they are accepted by individual users. Such analyses may provide a first answer to the question of "how 'immersion' in hypertext will affect the way that we mentally structure our world" (McKnight *et al.*, *Hypertext* 41) – how, in fact, users acquire knowledge from the information they retrieve from Resource Centre Sites.

An immediately related question then also is that of how, or to what extent, Resource Centre Sites may be able to mislead users (intentionally or unintentionally), to skew their understanding of their world. Is there a possibility for conceptual fallacies built into the very structure of a site to perpetuate and naturalise common misconceptions, for example? Can gate*watchers* who provide biased reports or intentionally misrepresent information affect an audience's world-view in the same way that this may be possible in gate*kept* media, or are Resource Centre Sites more immune from such misuses because of their prodused rather than produced nature, that is, the high level of user involvement as gatewatchers?

In an investigation of this question, it may be useful once again to return to the publish/publicise distinction: importantly, the fact that RCSs *publicise* information rather than publish it has also come about partly in response to what responses to MediaChannel have termed "urgent crises in journalism and public-interest media" (Dichter, email interview), that is, the realisation of significant levels of bias in many gatekept media which *publish* information. As noted before, the practice of publicising rather than publishing does not do away with biases and agendas, but it helps to bring them into the open; publicising acknowledges that all information it provides is inherently biased, but aims to address this through the juxtaposition of diverging biases. However, to what extent do RCS users in their reading of the sites make this switch and view information as publicised rather than published; to what extent do they carry over their reading habits from published media (habits which may, however, already have been highly sceptical)?

Further, the question of what exactly constitutes balanced or biased reporting is one which is in itself unresolved, despite much work in journalism theory (e.g. McQuail 145-8, 254-8). To speak of 'bias' implies the existence of a clearly definable point of perfect balance from which biased views diverge, but who does the defining? As noted, McQuail already identifies three broad groups (journalistic theorists, journalism practitioners, and the audience), but within these groups, too, divergent viewpoints on what coverage is balanced are bound to exist. For our present discussion, 'balance' may simply constitute the mid-point between the extremes of a Resource Centre Site audience's stated points of view – however, if this was the case, should we not truly expect Slashdot to be most balanced if it became the "Bitch at Microsoft" site which editor Rob Malda warns of ("FAQ: Suggestions")?

Additional factors may be at work here, therefore: centrally, the idea of a need for balance, far from its apparent simplicity, is itself highly ideological. In embracing it as they do RCS creators adopt what could be described as a 'public broadcasting mentality' in response to what are perceived as the shortcomings of

traditional (and often commercial) journalism: the aim is not to create a populist publication which gives 'the people' what they want (according to the journalists' 'feel'), but to provide a service in support of the public good by also allowing the expression of opinions counter to popular views. At the same time, the successful establishment of sophisticated user-driven moderation systems as they exist on Slashdot and other sites also seems to indicate that this 'balance' in fact *is* what the sites audiences want and value – how are these contradictory perceptions of audience preferences ('bitch' vs. considered dialogue) to be resolved? For now, we may only conclude that the implications of adapting the 'public good' approach for the online environment, and the effects of this ideology of balance on the sites' contents, still need to be examined.

Who Uses Resource Centre Sites?

Following on from this point, how do Resource Centre Sites affect the structure of their user base beyond the individual? In attempting to define just what the user base of a site such as Slashdot is we have already encountered various conceptual difficulties, and for most Resource Centre Sites we may ask to what extent RCS audiences form a homogeneous group. RCS interaction allows for the expression of highly divergent viewpoints in virtually the same space, but it remains to be seen for each site to what extent this opportunity is taken up in practice – again, Slashdot editor Rob Malda's warning of the descent of his site into a "'Bitch at Microsoft' website" ("FAQ: Suggestions") if it was left simply to its users is informative in this regard. We might also wonder if Resource Centre Sites can in fact cross the 'critical mass' threshold if their users form too homogeneous a group – where too many users agree to significant extent about their beliefs, ideas, and aims, spirited debates may simply not emerge.

On a yet broader level, however, we can also return to the question of whether Resource Centre Sites may be a further contributing factor to an overall

fractionalisation of society. Taking seriously the 'news for nerds' moniker, do RCSs form mainly around 'nerdy' topics, taking on board what may be viewed as the introvert aspects of nerd culture – are Resource Centre Sites an online form of 'nerd' ghettos? To put it in such terms may be exaggerating the point – we can quite easily find Resource Centre Sites on topics of general 'non-nerd' significance –, but more subtly RCSs do appear to centre around containable topics which address specific on- or offline communities, and so they may add to such communities' sense of difference, even isolation, from other societal groups. However, in this Resource Centre Sites do not necessarily *increase* the fractionalised nature of postmodern society – they may merely *mirror* it; and after all, individuals are not simply members of one subcultural community or another, but belong to many of them at the same time, activating their memberships in turn for specific contexts as they go through their daily lives.

Perhaps as a result of fractionalisation, subcultural communities are increasingly also a major target for commercial enterprises in their advertising and marketing efforts. We have noted before that this has particular implications for Resource Centre Sites as the focal points for virtual communities, especially the more mechanisms such sites put into place for generating user demographics. Many RCSs offer functionality for user registration and information customisation, and amongst several forms of demographic information which can be drawn from the database of individual details and preferences that users inadvertently create through these functions, commercially exploitable data also emerges. As we noted in Chapter 3, Hoffman *et al*. state that "technology offers … the opportunity to gather market intelligence and monitor consumer choices through customers' revealed preferences in navigational and purchasing behaviour in the Web" (n. pag.), and so corporations wishing to improve their aim in target marketing would likely be very interested to obtain the user databases kept by Resource Centre Sites in their field. There are obvious ethical implications here, which ideally would prevent independent RCS operators from sharing such information about users with commercial entities unless

this is specifically granted by the users, but at the same time RCSs will also feel the need to fund their ongoing operation and may thus be tempted to pass on at least what they regard as non-sensitive knowledge about their contributors.

The problem becomes even more complicated, however, in cases where Resource Centre Sites are themselves run by enterprises with a commercial interest in the field: here, the promotion of their own goods and services to users might prove an irresistible temptation. At the same time, cases such as WomenGamers show that a Resource Centre Site's status as an intelprise may in itself prove to be a commercially exploitable feature (for example by providing industry and research consultancy services based on the knowledge gained in the running of the site), and once again at this point there surfaces the question of when commercial exploitation of private information given by users in good faith turns into a breach of personal privacy.

Finally, beyond this there are also more fundamental problems which are common to many computer-mediated communication forms which allow technical staff to access personal information and communication: RCS systems could easily be altered to allow the surveillance of individual users' engagement with the site, tracking what information they retrieve and what debates they engage in (both publicly and privately) on the site. This opens an obvious potential for abuse by the site's creators, which should be investigated further. Also, much as archived email, mailing-list and newsgroup postings do, contributions to Resource Centre Sites as they are added to the sites' archives create a permanent record of individual users' points of view at a particular time, and could be used against them, outside their original context, much later.

Is the 'Future of the Web' the Future of News?

There are, therefore, many avenues for further study of the Resource Centre Site phenomenon, avenues which this study in its concern with outlining the practice of

gatewatching and the site genre it gives rise to has only been able to foreshadow briefly. Perhaps the central such inquiry which must still be conducted is that into the Resource Centre Site genre's effects on the network of existing news media as such, from mainstream print and broadcast news to specialised news sources and first-hand press releases. Clearly, gatewatching provides alternatives to traditional gatekeeping methods, and Resource Centre Sites offer challenges to long-standing journalistic forms of news reporting, partly because of their preference for publicising over publishing. Which news media forms will their users prefer, in the long run, and how does this affect the viability of less popular media forms – or less broadly, *which* news media will be used by *which* users for *which* purposes? In terms of the online environment, for example, does the rise of specialist Resource Centre Sites mean that general news sources (such as the online versions of established print newspapers) will fall into disuse as users interested in specific topics proceed directly to the better informed and more detailed specialist sources? Will we see the emergence of general online news sites which are entirely made up of the latest news syndicated from a variety of Resource Centre Sites? Conversely, can gatewatching methods be adopted by non-topic specific sites?

Answers to such questions are likely to emerge over the next few years, as the Resource Centre Site genre becomes more widely established and recognised both amongst its users and the general Web community, and as an alternative to offline publications. Processes of gatewatching may intrude into reporting methodologies in a variety of fields, replacing or at the very least challenging traditional gatekeeping. As a result, we might indeed find "the media to be fundamentally altered in their gatekeeping by the vast publication possibilities of the Web", as Levinson expects it (128) – and such fundamental changes would then truly constitute Stuff That Matters.

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(all links accurate as at 30 December 2001)

Interview with Aliza Dichter (liza@mediachannel.org) – see Appendix

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"Become a MediaChannel Affiliated Site"
   <http://www.mediachannel.org/affiliates/join/be.shtml>
 "Frequently Asked Questions"
   <http://www.mediachannel.org/about/FAQ.shtml>
"Ten Ways to Get Media Active"
   <http://www.mediachannel.org/affiliates/join/what.shtml>
"Mission Statement" <http://www.mediachannel.org/about/owo.shtml>

HIV InSite <http://hivinsite.ucsf.edu/InSite>

(all links accurate as at 30 December 2001)

"About HIV InSite" <http://hivinsite.ucsf.edu/InSite.jsp?page=About>
"Editorial Policy" <http://hivinsite.ucsf.edu/InSite.jsp?page=ab-02-01>
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GrrlGamer <http://www.grrlgamer.com/>

Interview with Nikki Douglas (nikki@grrlgamer.com) – see Appendix

GameGirlz <http://www.gamegirlz.com/>

Interview with Vangie 'Aurora' Beal (aurora@gamegirlz.com) – see Appendix

WomenGamers < http://www.womengamers.com/>

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"About Us" <http://www.womengamers.com/about/>

"About Us: Note" <http://www.womengamers.com/about/misc.html#7>

"Contribute!" <http://www.womengamers.com/contribute/index.html>

"Market Surveys" <http://www.womengamers.com/about/surveys.html>

"Our History" <http://www.womengamers.com/about/history.html>

"Strategic Partnerships" <http://www.womengamers.com/about/strategy.html>

"Why WomenGamers.com"

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CountingDown <http://www.countingdown.com/>

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Interview with Phillip Nakov (phillip@countingdown.com) – see Appendix

"Contact: About Us" <http://www.countingdown.com/contact/about>

"Help: Navigation" <http://www.countingdown.com/help/navigation>

"Help: Submitting" <http://www.countingdown.com/help/submitting>

Slashdot <http://slashdot.org/>

(all links accurate as at 30 December 2001, except where indicated)

Interview with Jeff Bates (hemos@slashdot.org) – see Appendix

"About Advertising on Slashdot" <http://slashdot.org/advertising.shtml>

    (visited 24 May 2001)

"About This Site" <http://slashdot.org/about.shtml>

"FAQ: About Slashdot" <http://slashdot.org/faq/slashmeta.shtml>

"FAQ: Advertising" <http://slashdot.org/faq/advertising.shtml>

"FAQ: Comments and Moderation" <http://slashdot.org/faq/com-mod.shtml>

"FAQ: Editorial" <http://slashdot.org/faq/editorial.shtml>

"FAQ: Meta-Moderation" <http://slashdot.org/faq/metamod.shtml>

"FAQ: Suggestions" <http://slashdot.org/faq/suggestions.shtml>

"FAQ: Tech" <http://slashdot.org/faq/tech.shtml>

"Microsoft Asks Slashdot to Remove Readers' Posts"

    <http://slashdot.org/features/00/05/11/0153247.shtml>

Open Source Development Network (OSDN)

"Media Kit: Demographics" <http://www.osdn.com/advertise/ad_why.html>

"Media Kit: Introduction" <http://www.osdn.com/advertise/>

"Media Kit: Targeted Bundles" <http://www.osdn.com/advertise/ad_why.html>

Amiga.org <http://www.amiga.org/>

(all links accurate as at 16 May 2001 – the Amiga.org site was vandalised by

    hackers towards the end of 2001, and is now in the process of rebuilding)

"Disclaimer" <http://www.amiga.org/sections.php?op=viewarticle&artid=7>

"Amiga.org Advertising Frequently Asked Questions (FAQ)"

    <http://www.amiga.org/faq.php?myfaq=yes&id_cat=2&categories=Amiga.or

    g+Advertising>

"Amiga.org Frequently Asked Questions (FAQ)"

    <http://www.amiga.org/faq.php?myfaq=yes&id_cat=1&categories=Amiga.or

    g>

Further Links

PHP-Nuke <http://www.phpnuke.org/>

PHPSlice <http://phpslice.org/>

Slashcode <http://slashdot.org/code.shtml>

SlashHosting <http://www.slashhosting.com/>

Appendix — Email Interviews

Interviews as presented here have been edited only to achieve consistent formatting, but are otherwise verbatim.

Aliza Dichter (Senior Editor, MediaChannel)

4 June 2001

Questions:

1. History:

1.1 Who started this site, and what was the motivation behind it?

(Not sure how much info you want here-- if you want more on the media & democracy movement, MediaChannel's role, driving mission & values and history, --or of course with any of the subjects addressed by these questions--let me know. Perhaps we could do a phone interview if you want to get in to this more)

Danny Schechter, social justice TV journalist & media critic, had been involved in the growing "media and democracy" movement and proposed in his book, The More You Watch the Less You Know (Seven Stories, 1997) that there should be a "Media Channel" in addition to the food channels and animal channels proliferating on cable TV. In 1998 he met Ken Jordan, who had been involved in the founding of pioneering Web sites SonicNet and Word.com, and Peter Armstrong and Anurahda Vittachi, founders of the OneWorld.net human rights and environmental network. With a small philanthropic donation, Danny and Ken were able to work with OneWorld to apply OneWorld's "supersite" networking and aggregation model to media issues & build a demo site for further fundraising. In January, 1999, I was circulating my resume, looking for a creative communication project to 'help citizens become more critical 'consumers' of information' and someone suggested I contact Danny--- I content-edited the demo site, we toiled-- with no money-- for the next 6 months and then finally got funding to bring on more staff & build the site.

1.2 How long has this site been running?

We "soft launched" MediaChannel -- putting it online-- in October, 1999 and officially launched the site in February, 2000

1.3 How much has the site grown in this time, in terms of pages, users, etc.?

We didn't have great tracking mechanisms & reliable stats for most of MC's early life. But I can tell you that our network began with under a hundred affiliated sites --most inherited through our relationship with OneWorld and now we have close to 700 media-issues groups and media outlets. We launched the site with about 20 pages, several of them of the "about us" sort and now have over 420 pages on the site. But even more significant is the number of stories and commentaries and Web pages we've featured since our core role is to aggregate and link to content from our affiliate network… and we have featured over 1,300 such items.

1.4 Have there been any major changes in this site, in terms of its scope, its aims and operating philosophies, its personnel, its commercial/industrial affiliations, its financial support?

MediaChannel is constantly evolving and we are learning and growing. As with any start-up, we had our share of staff turnover and changes in the early days but most of the current staff has been with MC since launch. We are currently exploring new strategies for funding and sustainability but that is still all in development.

2. Present:

2.1 What are the current aims of the site?

MC is many things: We seek to help bring media issues into broader circulation in the public discourse. We work to help enable and support and enhance the work of journalists, media-issues groups, researchers and activists and independent media -- particularly grassroots, community and public-interest media-- worldwide. We strive to create a forum for discussion, debate, activism and public participation around media issues. We seek to explore and provide information and communication on the role of media (large and small) culturally, politically and socially.

2.2 How many staff work on this site?

5 fulltime. 7 part time.

2.3 Do you publish exclusively on the Web?

Mostly, although we published our first book (on the media & the US elections) this year and also sponsor and host offline events.

2.4 How is the operation financed? Are there any commercial or community support affiliations? Do you run commercial ads?

Funded by philanthropic grants (for which we have to struggle mightily. Media education of this sort, communication rights, media improvement are not generally recognized "funding areas"-- unlike, say, animal rights or environment, media issues are not among the priorities of much US nonprofit funding). We are developing additional support and sustainability models, and will remain nonprofit.

2.5 How do you promote this site? Have you established a presence in the relevant community newsgroups and mailing-lists, do you advertise on Websites or offline, do you exchange links with competing sites?

We make our best efforts to do Web promotion when we can, making sure we are listed in relevant directories, sending out email notices of new content to groups and sites that might be interested. We don't have "competing" sites, of course, but more like solidarity sites and most of our affiliated sites link back to us, as do other sites addressing media in some way…. We have never advertised on other sites or offline but have been chosen as a "hot site" or "pick" by other Web sites. We have an offline presence through Exec. Editor Danny Schecter's frequent

appearances, speaking & media engagements worldwide as well as other staff members' attendance and participation in events.

3. Operation:

3.1 What role does your news section play in the context of your site?

Our Daily News is a core part of the mix we present- in addition to a weekly feature edition, a biweekly magazine, community resources (forums, bulletinboards etc), toolkits & guides, bookstore, etc. We try to see the news, like much of the site as a "service" a resource. While the weekly edition and biweekly magazine are timely, they are not driven exclusively by current events and can address ongoing issues, innovative projects, commentaries and other content that is not "hard news." Our news section, which consists of original briefs sourced to alternative and mainstream news outlets as well as press releases from groups worldwide, is concerned with new and breaking developments and current media news. It is produced every day Mon-Fri. And then we frequently, but irregularly, develop additional news features. For major stories, particularly complex developments, we create special in depth reports aggregating material from our network. We also run original and exclusive news reports on occasion, but do not have the budget to fund this-- predominantly we feature news reports from our affiliates. We have a few collections of "hot story" sections where we aggregate headlines on a particular story on an ongoing basis, but do not really have the staff to maintain this effectively. We also provide a directory of links to other specialized media news sites

3.2 How do you gather your news? Do you rely on industry releases, on community rumours, on both, and in what measure?

Our news editor reviews a wide range of news sources daily. We encourage our affiliates to send news releases. Other staff members are also media junkies and constantly gathering items from their media diets, emailing lists, etc. We also receive a lot of mail from individuals.

3.3 What are your editorial policies? To what extent do you verify content published on the site for accuracy, to what extent do you publish unverified rumours and leaks? Have you encountered any problems publishing unverified information?

For original content published by MC we strive for high journalistic standards of accuracy, balance and transparency. MC is an open forum for debate, discussion and interaction with ideas and information and initiatives about media issues … we seek to provide content that is provocative, insightful, relevant and accessible to a broad international audience, and also accurate, explicit in attribution, clear about commentary and criticism, and not hateful, racist, vindictive etc. We hold similar standards for our affiliates…. When we highlight material from our affiliates we attempt to be clear in attribution of perspectives and sourcing. While editorial policy and affiliation policy is at the discretion of our staff we encourage feedback and the posting of that feedback publicly on MC. In the case of rumors and leaks (which occur only occasionally, given that we aren't doing much original exclusive news reporting but rather providing a news service and original commentary and feature material) we seek documentation and additional source confirmation and also will contact the opposing party if it is a critique or accusation…. Like all news organizations, particularly underfunded nonprofit Web sites, we have had occasion to issue corrections when a number was reported wrong or something but generally we only report those facts that we feel comfortable we can verify, or

attributed facts/assertions when we determine it is valuable to report information attributed to another media outlet or group …and then we are able to update the story with additional details, perspectives, etc, as they become available. Because many of our affiliates are able to do high-quality investigative news, even if the mainstream media neglect the story we are able to feature it because of our attention to these sources.

3.4 Do you experience any pressure influencing the scope of your content - from the community asking for more insider information, from the industry asking for more restraint in publishing rumours?

No.

3.5 What role do your discussion groups play in the context of your site?

We are about to launch new discussion forum software and are very excited about it. We have featured moderated discussions ("roundtables") on specific media issues and published the results. We have had online forums since the launch of the site but are looking forward to the new software. We encourage discussion around all issues we address on MC and find certain issues (political issues particularly) attract more postings than others. We're looking forward to increasing development of our community features such as discussion groups.

3.6 How strongly do you monitor and edit the content of these groups?

At the moment we do not edit the content at all, although we do monitor it on a totally informal basis by making efforts to read the postings. We may introduce a range of moderated, monitored and open discussions, depending on community interest.

3.7 Do you monitor outside newsgroups and mailing-lists for current trends and developments, or are these generally brought to you by your users?

Both. We are constantly reading mailing lists, newsletters, and other Web sites and also receiving a ton of mail from users.

3.8 What role do general, non-news resources (background information resources, FAQs, newbie guidelines etc.) play in the context of your site?

See comment 3.1. Resources, toolkits, issue guides, links, directories, etc are a significant part of the material MC provides.

3.9 How do you choose the content of these resources? Are they biased towards what is offered on your own site, or towards the products and services of your supporters?

Both. (And primarily designed for the user-- so we try to collect the most valuable resources from wherever) Our resources are designed to help users access the vast range of valuable materials, services, and content from our affiliate network. In addition we have resources designed to help users access stuff on our own site. We have expended most energy creating resources to promote and connect the "products and services" of our affiliates but are increasingly developing features to help users around MC (like a site map, users' guide, etc)

3.10 Are there other, similar sites operating in your field? Do they operate along similar lines as your own site?

Not really. Our partners at OneWorld developed the model of featuring aggregate content and we do similar and also different things from them. I know of no other nonprofit site or group dedicated to global media issues, and MC is the largest (and perhaps only) nonprofit, public-interest international media issues network, as far as I know.

3.11 Do you regard these sites as competition, or do you cooperate with them to achieve the best possible coverage of your area?

Cooperation, collaboration, connection, networking, that is what it's all about for us. When there are other sites working on similar issues our interest is to identify our natural connections, our individual strengths and build collaborative connections to find how we can best work together or at least help cross-promote each other's efforts.

3.12 What is your policy on linking to outside information? Are you worried that this may draw readers away from your own site? Are you worried about your inability to verify outside content?

Highlighting and linking to affiliate content is the core of the MC model. The goal is to help drive users around the network. As mentioned above, we make editorial decisions about the material we link out to and attribute linked content. We are helping users connect to the most important and valuable media-issues content we find on the Web.

3.13 Would you flag new, exclusive content on competing sites as news in your own site, pointing your readers towards these sites?

Again, competing is not a relevant term for us. Flagging new, exclusive content on our affiliate sites (and any site that featured media issues content would likely become an affiliate rather than "competitor') is *what we do*!!

4. Community:
4.1 How popular is this site - how many hits does it receive, how many contributions from the community does the news section get, how many users participate in your discussion groups?

I don't have stats, actually. Perhaps you can send just this short query (noting that you are doing this research project, what it's about, that you've been in touch with me and Danny) asking about our hits/visitors to our site manager Catherine Borgman-Arboleda (Catherine@mediachannel.org) and, presuming she has that info available and isn't too swamped with work she'll get back to you soon.

4.2 Do the creators of this site consider themselves to be part of the community, critical of it, or impartial observers?

Part of.

4.3 Have any members of the community become staff members or featured contributors? How?

Yes-- if we consider that the community is the users of MC and people concerned with media issues that *is* our staff and interns … and yes, nearly all of our original content has come from submissions from our community.

4.4 Have you had any major criticism from the community? For what reason?

No, not major criticism. Some people of course wish we paid more attention to this issue or that or played a more advocacy or campaigning role. We continue to seek input and feedback regarding usability and make improvements when we can, given the technical/financial limitations (we have no money now for site design or software development or for information architecture work). People generally are pretty patient with our technical weaknesses.

4.5 Have you had any major commendations from the community? For what reason?

In addition to endorsement by experts and veteran journalists (including the legendary Walter Cronkite) and tons of fan mail, MediaChannel has been honored with invitations to participate in and cosponsor major international media events, and (as mentioned) has been recognized by various Web sites. Affiliate Manager Andrew Levy received a New Media Hero nomination from Alternet. We have been hailed as an ideal use of the Web, as a much-needed watchdog, resource, and "communication for the people" model. We get enthusiastic praise from journalists and others who see MC as responding to urgent crises in journalism and public-interest media.

5. Industry:
5.1 How well-respected is the site within the industry? Do industry members visit it and use it for information, do they use it to gauge the community's current attitudes? Do they participate in your discussion groups (and do they openly declare themselves to be industry members)?

I dunno if it's unique to the sites included in this survey, but for MC our "community" and "industry" overlap inextricably. We cover both the media industries -- including commercial, noncommercial, independent, alternative, community and public media-- AND we cover groups and efforts concerned with media & democracy (perhaps a nascent, global 'media and democracy movement')-- we both cover and seek to serve journalists and media makers as well as critics and activists and those who consider themselves audiences or consumers of media. Thus comments above in #4 apply here.

5.2 Do you carry advertising, either as general ads or as ads from your specific field of interest? Has the need to satisfy advertisers ever affected the site's coverage?

No. We don't have ads. We are noncommercial. We are seeking private and corporate sponsorship as one of our funding strategies but will remain entirely and explicitly editorially independent and intend to reveal any potential conflicts.

5.3 How much does the industry contribute to the news section, and how? Do you receive special, exclusive, or preview information?

We encourage our affiliates and others to send us press releases and respect embargoed releases. We also, in both professional and personal contexts, receive information on developments and other confidential stories that for legal, personal or other timing reasons are not to be revealed until a certain time and have respected those request -- we have not encountered a situation where the public benefit of the release of the information outweighed the value of respecting the concerns of the source, by our determination. Because of the nature of our work (and being in the public sector rather than a trade publication) we have not yet encountered a situation of potentially publishing exclusive, proprietary *business* information.

5.4 Do the creators of this site consider themselves to be part of the industry, critical of it, or impartial observers?

Part-- see 5.1

5.5 Have any members of the industry become staff members or featured contributors? How?

See 5.1

5.6 Have you had any major criticism from the industry? For what reason?

See 5.1

5.7 Have you had any major commendations from the industry? For what reason?

As above

6. The Web:
6.1 Are there publications similar to yours in other media forms (print newsletters, magazines, radio and TV shows, etc.)?

Not really. There are other media outlets & groups addressing media issues in some way, and many of these are MediaChannel affiliates. MediaChannel's coverage in many ways represents the collective scope of the affiliate media outlets-- the greater-than-the-sum-of-the-parts value of the vast range of concerns and issues covered by the participants in the MC network.

Our work is really only possible online (the network aggregation stuff). As for our editorial focus: international news & perspectives on the political, cultural and/or social role of media… ? There are some radio & TV programs and publications that look at media in their own countries but also cover international stories but none that I know of that include quite the range that MC does (corporate media to rural development projects, policy and activism, media literacy tools to industry and business news, efforts for journalism reform and cultural studies critiques, grassroots videomaking, news criticism to culture-jamming…. etc)

6.2 Do you cooperate with these publications in any way? Do they have Websites of their own?

For any publication that is covering media issues we cooperate as much as possible. We invite and encourage "media covering media" to join the MC network, most of them have Web sites and do.

6.3 How do these publications differ from yours, and to what extent (if at all) do you see publishing on the Web as an advantage?

See 6.1.

6.4 Have you considered working in a non-Web format?

There are things we can do offline-- from hosting events to creating print publications and audio and video programs. We have done some of these and certainly are open to more depending on the project.

7. Any other comments?

MediaChannel is driven by a belief that nonprofit, sustainable, independent, open, community-oriented media is possible and, indeed, necessary. We support and cover efforts to make that kind of media possible AND we ARE that kind of media. Right now the windows in the dotcom boomtowns are boarded up, media companies are hemorrhaging workers and the money-throwing speculators have long left the casino. We'll cover those developments and we'll also see what that means for our noncommercial Web project. Global perspectives on media issues in an increasingly globalized increasingly media world -- it can seem like a box of mirrors.

8. Would you be available to answer some follow-up questions if they should arise?

Sure. Although I am always busy, never able to get to most of the things I'd like to and answering this survey took me over a month to get to.

Aliza Dichter
Senior Editor
MediaChannel
liza@mediachannel.org

Nikki Douglas (Founder, GrrlGamer)

19 April 2001

Questions:

1. History:

1.1 Who started this site, and what was the motivation behind it?

I started this site, Nikki Douglas, that is. The motivation behind it was the fact that when I began the site there were no gaming sites on the web dedicated to the female gaming experience. As a female gamer, I felt a bit shut out of the boys club atmosphere of most gaming sites and gaming magazines. I started grrlgamer.com because I wanted to read reviews from the female perspective. I like many of the same games as guys like, yet my take on them is unique. There was nothing that represented my point of view, so I created it.

1.2 How long has this site been running?

I started the site in 1997. It was the first site for girls and women who like to play computer and video games. There were a couple that followed shortly after the debut, gamegirlz.com and years later (around 1999) womengamers.com. There are a few new sites out there too moxxi.com and gamegal.com.

1.3 How much has the site grown in this time, in terms of pages, users, etc.?

Honestly it's never been as successful as I hoped it would be. There was only so far I could take it with a skeleton crew (myself and usually one or two contributors), so there have been months at a time when there have only been a few updates. The pageviews have fluctuated tremendously over the years, at one point in time grrlgamer.com had more pageviews than riotgrrl.com, my flagship site, but that was only for a short period of time. Our highest pageviews would be around 300,000 per month, our lowest average has been around 150,000 pageviews per month. Our users have been calculated (by MediaMetrix) at around 20,000 per month, though we have had higher numbers of users at different times.

1.4 Have there been any major changes in this site, in terms of its scope, its aims and operating philosophies, its personnel, its commercial/industrial affiliations, its financial support?

Yes, many changes over the years. Initially I tried to do it all, cover news, video games, everything – and provide a community as well. At one point I had about ten freelancers writing for the site too and I've had around 20 contributors over the years. In 1999 I narrowed the scope of the site to focus only on reviews and hardware and put less stress on community features although we do have a membership of around 2,000 in our community areas. (This is not much considering riotgrrl.com has a community that has at times numbered about 20,000 active members.) Now I only have several freelance contributors and write mostly everything myself. The affiliations have dwindled considerably as well over the years. I used to average about fifteen new games and at least several new pieces of hardware per month and now I get very few games and only work with large computer companies who give me review units. The "grrlgamer" used to be of interest to the industry but she has pretty much been abandoned. The

industry didn't know how to get women to play computer and video games and decided rather to focus on the demographic that they could reach. I still keep up with many companies and as far as I know am one of the only female gaming sites to ever actually GO to E3 and report on it, but I have seen the excitement level of the industry people I work with extremely relax. I believe many of them still work with me only as a courtesy, they don't see grrlgamer.com or girls who game in general, as any kind of a viable market. Financially I had a small angel investment in 2000 that allowed me to make some improvements, however since 2000 it has not been an earning site. In the first 3 years the site generated income from banner advertising, though it was never more than around $1000 a month. I would love to have capital investment to help grow the site, but current market conditions are bleak and many people have told me that it is a miracle that the site is still running at all. It's not really a miracle though; I have ZERO overhead and one very passionate employee that I don't have to pay.

2. Present:

2.1 What are the current aims of the site?

Right now to get through the next six months and grow as much as I possibly can. I am happy with the redesign but I am looking for contributors and a possible revenue source. I want grrlgamer.com to always be part of the gaming landscape. It was first, even though it's not where I want it to be I still feel that it is part of gaming history and deserves to continue, even in a limited sense if it has to.

2.2 How many staff work on this site?

Right now, only myself and a couple of contributors. I am looking to bring on some new blood, but many people claim to want to write for the site but have a hard time meeting deadlines. Plus, it's hard to expect much from people who don't get paid.

2.3 Do you publish exclusively on the Web?

Yes, though I personally have written for several gaming magazines as well as having been the Senior Editor for Incite PC Gaming.

2.4 How is the operation financed? Are there any commercial or community support affiliations? Do you run commercial ads?

Currently we have no affiliations, though we have worked in the past with Sony, Microsoft, Dell, Gateway, Micron, Diamond Multimedia and Creative Labs. I did run commercial ads at that time; I also used to be part of IGN.com when they had a network. I was also part of chickclick.com, when ign.com changed into a new portal. I left in 2000 when I received the small investment (six figures).

2.5 How do you promote this site? Have you established a presence in the relevant community newsgroups and mailing-lists, do you advertise on Websites or offline, do you exchange links with competing sites?

I've never advertised grrlgamer.com or my other sites. They are listed in search engines, usually fairly prominently and there are links from other sites as well. Otherwise though, only

publicity and word of mouth gets people to the site. I've had a lot of great publicity in magazines, newspapers and on television. The rest of it is just being fairly well-known at this point.

3. Operation:

3.1 What role does your news section play in the context of your site?

I used to kill myself reporting the news for grrlgamer.com – it was a daily adventure scouring the web for stories, also lots of phone calls, interviews. It took so much time, and all the same stories were at much larger and more frequented sites so I killed the news feature of grrlgamer.com.

3.2 How do you gather your news? Do you rely on industry releases, on community rumours, on both, and in what measure?

Right now I just get news for editorial stuff and keep up to date with the industry. I get a lot of press releases.

3.3 What are your editorial policies? To what extent do you verify content published on the site for accuracy, to what extent do you publish unverified rumours and leaks? Have you encountered any problems publishing unverified information?

Everything I publish is first hand information at this point – interviews are done by me usually and reviews are first hand experiences. I don't put up rumours or even bother to get scoops. I have broken a few in my day (like Verant doing the Star Wars game) but grrlgamer.com is much more a reviews oriented site.

3.4 Do you experience any pressure influencing the scope of your content – from the community asking for more insider information, from the industry asking for more restraint in publishing rumours?

Even though we are small and niche oriented there is always pressure from industry insiders to keep reviews positive. It's very difficult to write a bad review, especially of a big game company's release. I want to keep up relations with the companies yet have integrity at the same time. The way to solve this is to only review current BIG game releases. I don't even BOTHER with crap releases that no one cares about. That way I am only reviewing halfway decent games.

3.5 What role do your discussion groups play in the context of your site?

It used to be more important, but the people who visit grrlgamer.com really want to read reviews, maybe find some cheats, check out the membership roster and that's about it. I recently changed the entire BB system over and it's really user friendly but I haven't put a big community push on it yet. It's in the plans though for the next six months to really start rebuilding grrlgamer SOUND OFF to a much stronger community, more like RiotGrrl Interact.

3.6 How strongly do you monitor and edit the content of these groups?

Users are free to post anything, I occasionally clean up messy posts but that's about it. I even leave up the negative stuff. I think it's important to let the users rule their own community.

3.7 Do you monitor outside newsgroups and mailing-lists for current trends and developments, or are these generally brought to you by your users?

I have a new mailing list which will be part of the community build-up over the next few months. We already have about 1,000 list members. I constantly monitor other BB's on game sites and read gaming news.

3.8 What role do general, non-news resources (background information resources, FAQs, newbie guidelines etc.) play in the context of your site?

That information is available at gamespot.com and avault.com and dailyradar.com and they get millions of pageviews a month and have entire staff's to maintain that information. I have just me.

3.9 How do you choose the content of these resources? Are they biased towards what is offered on your own site, or towards the products and services of your supporters?

See above.

3.10 Are there other, similar sites operating in your field? Do they operate along similar lines as your own site? Do you regard these sites as competition, or do you cooperate with them to achieve the best possible coverage of your area?

The largest and most updated sites are gamegirlz.com and womengamers.com. Both tend to be more oriented toward news, though womengamers.com has quite a few reviews. They aren't really competitors, as gamegirlz is now actually run by guys (imagine that) and the girls who run womengamers.com are quite a bit younger, focusing on gaming with a more educational bent. I would cooperate with them, but both of them have been kind of distant when I suggested working together.

3.11 What is your policy on linking to outside information? Are you worried that this may draw readers away from your own site? Are you worried about your inability to verify outside content?

I don't worry about linking to other sites, I want them to stay at grrlgamer.com as long as possible, but linking to other sites is how it's done on the web. If they like what I have they will come back.

3.12 Would you flag new, exclusive content on competing sites as news in your own site, pointing your readers towards these sites?

Unfortunately there has not been a lot that I consider to be relevant and well done. I have a real thing about people who write using their "handles" (like drdeath or cutevixen) instead of names. Also for some reason many of the reviews I've come across on competitor's sites seem to adore the word "suck" as a descriptor. That's really not the direction I would like to send my readers.

4. Community:

4.1 How popular is this site – how many hits does it receive, how many contributions from the community does the news section get, how many users participate in your discussion groups?

The site isn't nearly as popular as I would like to be but given that I have no money, no staff and very little industry support, I suppose the site does the best that it can.

4.2 Do the creators of this site consider themselves to be part of the community, critical of it, or impartial observers?

I am definitely NOT part of the community as it stands right now, nor do I see that in the future even as I ramp up a stronger community aspect to the site over the coming months. I believe it is important for me to keep out of the community and let them form it their own way. I just provide the tools; they have to build the beast themselves.

4.3 Have any members of the community become staff members or featured contributors? How?

Yes, it has happened but none to successfully. The last contributor I had like this felt that she really should take over the entire site and run it her way, she thought I had no clue what I was doing. She didn't last long.

4.4 Have you had any major criticism from the community? For what reason?

There has been some minor criticism, but very little from girls and women who game, more from guys who get their undies in a bunch over something – call me a feminazi, that kind of thing. I've been criticized the most for lack of updates to the site.

4.5 Have you had any major commendations from the community? For what reason?

Not the community itself but more from the industry, awards for the site, for my writing, for being a pioneer – a lot of publicity, initially and still over the years. I won a huge award in 1999 as one of the 25 Most Influential Women on the Web. I rubbed shoulders with Mrs. Bill Gates and Senator Barbara Boxer who were winners as well. I got a nice crystal plaque and it's fun to trot out on a resume but awards and recognition are pretty meaningless ultimately. There's always another winner, the next year and pretty soon you're like those poor old Academy Award winners that they dance out for some special part in an awards show and people say, Oh my God they're still ALIVE??? That's about how much I think of being a so-called web pioneer. It certainly never got me those million dollar stock options, or opened doors for me. No matter where I've gone in and around this industry I seem to always bump into that glass ceiling. As a woman you have to resign yourself to the fact that when the tech revolution

happened it really only happened for men. I was as talented at what I do as any Jerry Yang or those guys who sold theglobe.com. My biggest failure in the Internet and gaming industry has been being female.

5. Industry:
5.1 How well-respected is the site within the industry? Do industry members visit it and use it for information, do they use it to gauge the community's current attitudes? Do they participate in your discussion groups (and do they openly declare themselves to be industry members)?

Initially the support was terrific, I had a lot of industry people who were interviewed or wanted to be a part of the site, some even wrote for me.

5.2 Do you carry advertising, either as general ads or as ads from your specific field of interest? Has the need to satisfy advertisers ever affected the site's coverage?
5.3 How much does the industry contribute to the news section, and how? Do you receive special, exclusive, or preview information?
5.4 Do the creators of this site consider themselves to be part of the industry, critical of it, or impartial observers?
5.5 Have any members of the industry become staff members or featured contributors? How?
5.6 Have you had any major criticism from the industry? For what reason?
5.7 Have you had any major commendations from the industry? For what reason?

See the answers above

6. The Web:
6.1 Are there publications similar to yours in other media forms (print newsletters, magazines, radio and TV shows, etc.)?

Not that I know of.

6.2 Do you cooperate with these publications in any way? Do they have Websites of their own?
6.3 How do these publications differ from yours, and to what extent (if at all) do you see publishing on the Web as an advantage?

Publishing gaming info and reviews on the web is the only way to go as far as I am concerned – magazines are too dated when it comes to this information and it's much easier to find what you need on the web.

6.4 Have you considered working in a non-Web format?

I have worked on gaming magazines and would love to have grrlgamer.com be part of a magazine or a TV show as well as on the web, but it would only ever be as an addition to what is already on the web.

7. Any other comments?

I'm sorry if I seem a little bitter. It's been a long haul and not terribly productive monetarily. I have done this out of love, but even love gets a little strained when it's a constant struggle. I had hoped that my angel investment partnership would have worked out, but it ended badly and with a lawsuit (although I did get the capital at the very least). I've also had to deal with a myriad of trademark infringers, who copied my name (there is one right now called gurlgamer.com that I have pending cease and desist orders with) and in the past I have had to issue more than a few lawyers cease and desists to copycats. It's also been expensive to upkeep especially in the last year with no revenue. Yet, every time I think about calling it quits I remember why I did it in the first place – because I LOVE games, I love to play and I love to be entertained. That has never changed, and in the end it keeps me playing, reviewing, writing, uploading, creating and dreaming another day.

8. Would you be available to answer some follow-up questions if they should arise?

Of course.

Nikki

Vangie 'Aurora' Beal (Founder, GameGirlz)

23 July 2001

Questions:

1. History:

1.1 Who started this site, and what was the motivation behind it?

I started GameGirlz.com after seeing a need for a gaming website more user-friendly toward the female gamer. At that time (as is now to a big extent) most gaming sites and magazines really targeted male consumers. Very few women were writing about games in these publications, and at times the content to me seemed unwelcoming to females interested in gaming.

1.2 How long has this site been running?

The site was officially launched on November 11, 1997. The design and planning started about 4 months prior to the launch.

1.3 How much has the site grown in this time, in terms of pages, users, etc.?

When I started this website, the goal was to create a common place for the many female gamers to get a few tid-bits of info, but more importantly submit their views on gaming and read other women's perspective on gaming. Initially it was to be a small website, more of a "personal" site. A couple weeks after I launched GameGirlz, news of the site and its goal spread to Netscape news, Wired Online, and many other mass media websites. It also received mentions in computer game magazines, Internet related magazines, and some newspapers across North America.

Since the site generated so much publicity about female gamers and myself I had no choice but to actually expand the site. I guess people came looking for a more "commercialised" and more content focused website, and after scanning through literally thousands of feedback & comments e-mail in its first two days… I rounded up a few volunteer writers and began doing a daily news section and more features.

In terms of pages and hits… when I first put it online a bunch of game sites linked to it and we had a few hundred individual readers a day. During the more public times we would soar to millions of impressions per week. Over the past four years however, we've settled into a nice solid daily readership of at least 1500 unique readers per day (always higher when we post new reviews etc), and average 150,000 to 200,000 page impressions per month.

1.4 Have there been any major changes in this site, in terms of its scope, its aims and operating philosophies, its personnel, its commercial/industrial affiliations, its financial support?

We've moved the site with various "Gaming Network Affiliates" over the years, and it's design and content focus is always changing.

GameGirlz has never had **any** financial support. In the case of this website, looks are deceiving. People look at GameGirlz, see very regularly updated content, spot a banner ad and a "commercial/professional" look, and believe I make money running my site. I started the website with $0.00 and have made about $500.00 over the past 4 years. Out of my own pocket I have paid to attend events to write about them, bought games and such to review, and purchased prizes and paid for postage to have small contests etc.

The "operating philosophy" of GameGirlz hasn't changed since its inception. "Girlz Play Too". Our goal is to inform gamers, and provide a girlz' perspective on what is happening in the gaming industry. We don't provide any content which would possibly alienate a male reader, we just provide a little extra for the part of our readership that is female gamers.

2. Present:

2.1 What are the current aims of the site?

To continue. I find presently I'm happy with the content and views and what the site has become in the last year. Coverage of the gaming industry with a girlz' perspective is always going to be the main focus. To some extend I could say one goal is to work on sponsorship for the site, but this again could mean a shift in focus to suit a sponsor, and I'm not sure if I'm ready to change the way I do things just yet.

2.2 How many staff work on this site?

At present and for the past two years I am the only staff. There are other regulars who submit guest editorials and columns however.

2.3 Do you publish exclusively on the Web?

The site, yes. Personally under my own name (and not the site name) I freelance write about computer games and hardware for other publications.

2.4 How is the operation financed? Are there any commercial or community support affiliations? Do you run commercial ads?

(see answer in 1.4) additionally:

For the most part there has been a revenue opportunity by running gaming network ads. Sadly with the exception of one network affiliation I seemed to have chose affiliates who never honoured their agreement to pay a percentage of ad views. At present time the network I'm affiliated with is unable to secure financing, so right now I'm doing the site with no expectations of revenue.

We've also just launched an online games tournament area, which is run by another company. The game site is co-branded, and we'll earn a percentage based on the number of people who use the service through registering at our co-branded site.
(reference: www.gamegirlz.com/playgames)

2.5 How do you promote this site? Have you established a presence in the relevant community newsgroups and mailing-lists, do you advertise on Websites or offline, do you exchange links with competing sites?

To some extent we use our affiliate for posting banners, links and our site news. We also have link exchanges set-up with a few other sites. Whenever GameGirlz does a new review etc., I also mass mail out the news to webmasters at around 30 other game sites (with news). This all helps to bring in cross-traffic.

3. Operation:

3.1 What role does your news section play in the context of your site?

News is very important, as most avid gamers want to know what is happening "right now". It is also the one section of our site that is updated every single day.

3.2 How do you gather your news? Do you rely on industry releases, on community rumours, on both, and in what measure?

In regards to rumours, we don't print those unless we can verify it with the company. Other game sites send news to us for including in our daily news links. I actively search out related news on the online press wires (BusinessWire, PRN, Virtual press Office, and Yahoo Business News). Many game developers and publishers also send press releases and info directly to me via e-mail.

3.3 What are your editorial policies? To what extent do you verify content published on the site for accuracy, to what extent do you publish unverified rumours and leaks? Have you encountered any problems publishing unverified information?

Unless the information comes directly from the company, I will find a contact within the company to verify the accuracy of a report sent in from an individual. In the case where another games site sends the news, if it is something "new" and may carry the possibility of having something in it not quite right, I refer to the third party site as in " X Site is reporting that…" in my news post.

3.4 Do you experience any pressure influencing the scope of your content – from the community asking for more insider information, from the industry asking for more restraint in publishing rumours?

People love to read rumours, but on both sides, I don't report it unless verified. Many other sites will, but I don't – and we've had very few requests to reprint more stories along those lines.

3.5 What role do your discussion groups play in the context of your site?

Presently, they don't. We've had to spend way too much time moderating discussion groups run through our site that we no longer offer them. You'd be amazed at the number of juvenile people who would use the topic of Women who enjoy gaming to write some nasty messages.

3.6 How strongly do you monitor and edit the content of these groups?

NA

3.7 Do you monitor outside newsgroups and mailing-lists for current trends and developments, or are these generally brought to you by your users?

No, I do not. I prefer to writer more industry tallied and noted views.

3.8 What role do general, non-news resources (background information resources, FAQs, newbie guidelines etc.) play in the context of your site?

On our site, very little as we cover such a wide variety of games, we don't really zero in on any one in particular. On other game or genre specific sites however, they are a big part of the site.

3.9 How do you choose the content of these resources? Are they biased towards what is offered on your own site, or towards the products and services of your supporters?

3.10 Are there other, similar sites operating in your field? Do they operate along similar lines as your own site?

Yes there are other sites. On other sites I have worked with, they tend to provide news of this type of resource marked as a "third-party" item. The information may be valuable or of interest to a reader, but the site doing the writing still needs to ensure that readers are aware that this type of content doesn't come directly from our publication or the game developer.

3.11 Do you regard these sites as competition, or do you cooperate with them to achieve the best possible coverage of your area?

In 99% of the cases, the sites will share resources and co-operate to link each other and write about each other's "site news" which may be of interest to the readers. Unlike with print magazines, there isn't as much of a "competitive" feeling between owners of websites.

3.12 What is your policy on linking to outside information? Are you worried that this may draw readers away from your own site? Are you worried about your inability to verify outside content?

I view all outside content we link to, and I simply do not write about "rumours" and any information in which no direct source is quoted. In some cases I may hear of something, then I attempt to make contact with the company in question to verify the "rumour" – if I can verify it, I'll do my own story. Basically if it can't be verified I won't publish it.

In regards to the worry about losing readers, I have never thought of that. I tend to look at it this way….

If I'm unable to provide my readers with a review of X company's latest game, I think it's a service to my readers to point out another site that does offer that review. I have no problems with linking to other sites, provided they write good quality content.

3.13 Would you flag new, exclusive content on competing sites as news in your own site, pointing your readers towards these sites?

Definitely – unless I have plans to do coverage on that news myself within the next 24 hours. If that is the case I don't link to the other site's coverage but I mention we'll have a report on the topic soon or simply do my own story (in most cases many of the sites will have been notified by the publisher/developer with the news – it's just a matter of which site gets it up first).

4. Community:
4.1 How popular is this site – how many hits does it receive, how many contributions from the community does the news section get, how many users participate in your discussion groups?

GameGirlz.com servers over 100,000 page views a month, which for our site averages 40-45,000 readers per month. In terms of news contributions I get well over 50 news stories sent to us per day at the events@gamegirlz.com address (which is the address we list for people to "send news to".

4.2 Do the creators of this site consider themselves to be part of the community, critical of it, or impartial observers?
4.3 Have any members of the community become staff members or featured contributors? How?
4.4 Have you had any major criticism from the community? For what reason?
4.5 Have you had any major commendations from the community? For what reason?

"Community Response"

Quite some time ago, GameGirlz removed the largest portion of the area for interaction and community on our website. Through a mailing list we have voices and such but we removed our public forum and discussion areas. When you run a website like "GameGirlz" you have a huge number of people who like to act immature and they ruin the experience of a public community by posting trash messages and words that humiliate and belittle women and women gamers. Because we don't have a full-time staff, admin duties of the forums just, quite simply, took up too much time to continue them.

5. Industry:
5.1 How well-respected is the site within the industry? Do industry members visit it and use it for information, do they use it to gauge the community's current attitudes? Do they participate in your discussion groups (and do they openly declare themselves to be industry members)?

Very. Developers are constantly sending me feedback on some of our stuff, and have also used GameGirlz as a venue for themselves to find out more on what women want to see in their upcoming titles.

5.2 Do you carry advertising, either as general ads or as ads from your specific field of interest? Has the need to satisfy advertisers ever affected the site's coverage?
Somewhat. We only run ads that are placed with the Stomped.com network. Right now they run gaming/computer hardware ads, which is nice since that is directly related to our site's content.

5.3 How much does the industry contribute to the news section, and how? Do you receive special, exclusive, or preview information?

We sure do. Most companies will send out a press release to an industry business wire and also directly to me via e-mail. From that you can contact the company, make an introduction and request things like exclusive screenshots, Q&A's with the developers they represent, etc. In my experience developers and publishers are usually always willing to provide you some exclusives and have been quite pleased to work with GameGirlz.

5.4 Do the creators of this site consider themselves to be part of the industry, critical of it, or impartial observers?

I somewhat consider myself to be a part of the industry, since the only journalism I do now is on games and computer hardware specifically designed for gamers.

5.5 Have any members of the industry become staff members or featured contributors? How?

Yes, we've posted editorials, and articles that were sent in by a developer. Many sites now run what is called a "Developer Diary" where developers contribute self-penned editorials discussing the development of their game etc. This is great as it allows you to provide exclusive coverage of the game, and your readers know it came directly from a person who sites down and works on this title everyday.

5.6 Have you had any major criticism from the industry? For what reason?

We've had criticism from those who play the games, as some seem to be offended by a "$7500 US Girls only game tournament" – or they simply don't think it's right to create a site about gaming and cater to the women gamers. From those working in the industry the feedback has always been positive.

6. The Web:
6.1 Are there publications similar to yours in other media forms (print newsletters, magazines, radio and TV shows, etc.)?

Yes, there are many publications about games and the game industry (although none which are really oriented to the females involved in the industry).

6.2 Do you cooperate with these publications in any way? Do they have Websites of their own?

Not really, most print pubs have a website now which they use to provide news etc in addition to their own publication. I often find a website which also has a print pub is very happy to have you link to their content, but often will only feature their own writing and not return links.

6.3 How do these publications differ from yours, and to what extent (if at all) do you see publishing on the Web as an advantage?

They differ in that at GameGirlz we try to bring everything down to a personal level. In our writings, the authors talk about themselves and provide some personal observations. For example in an editorial I mentioned being a single parent of a 4-year-old son who played games. For weeks I received fun e-mails from other single parents who wanted to chat about their children who played games. I love this aspect as it really gives our readers something/someone to identify with. In most print mags and online publications, you have an author name linked to a 1 –2 sentence bio.

The benefit of a web publication is that it is cheap to start up, and you're able to pretty much say whatever you like. Print mags need to be more sensitive in their wording as they may be relying on a company they slammed one moth to foot an ad bill next month. You don't see much worry about that end of the business with an online only publication.

6.4 Have you considered working in a non-Web format?

Yes I have, and in fact I do some freelance work for similar print magazines.

7. Any other comments?

The web publishing business right now is a hard one. Revenues are down, so many sites like mine have completely gone under – but so many again, like mine are running on no money but keep doing it because they love it. That's the big difference – print publications are first and foremost a business – most online publications are a "love" first and a business second.

8. Would you be available to answer some follow-up questions if they should arise?

I sure am!

vangie

Phillip Nakov (Co-Founder, CountingDown)

16 June 2001

Questions:

1. History:

1.1 Who started this site, and what was the motivation behind it?

The site was started by three partners that met on the Internet while surfing on the site created by Tim Doyle called www.countdown2titanic.com. It was at the time one of the largest and most active Titanic community sites. It was started a full 6 months prior to the release of the film and grew to claim one of the strongest and longest lasting Internet communities ever. The community still meets regularly on line and still, from time to time, schedules events off line in cities for the fans of the site and the film to meet. While the experience was fun and rewarding once the movie was over the three of us asked our selves why we could no recreate this type of online community for every film or more than one film at a time? So thus was born the idea of the mega movie site www.CountingDown.com… a place where film fans from around the world could go and meet and talk about the movies they care about and build large lasting online relationships with others that share a common passion for film The three original partners were TIM DOYLE (Toronto, Canada) LINCOLN GASKING (Melbourne, Australia) and PHILLIP NAKOV (Los Angeles, California).

1.2 How long has this site been running?

The site was launched on June 1, 1998 with five movie 'countdowns'.[1]

1.3 How much has the site grown in this time, in terms of pages, users, etc.?

The original site only had 5 movie countdowns and perhaps a few hundred pages of static HTML content, links and pictures. We had perhaps a few hundred visitors from the start but now we enjoy over a million unique visitors to the site per month and several thousands pages of content if not more, which is all dynamically generated and created.

1.4 Have there been any major changes in this site, in terms of its scope, its aims and operating philosophies, its personnel, its commercial/industrial affiliations, its financial support?

The site started out as a small hobby or past time for three film lovers in three countries from around the world. The site has since evolved to a full-scale business with an acquisition by POP.com in June 2000. (Two years to the day that the original site was launched.) The site continues to operate under the auspices of DreamWorks SKG, Imagine Entertainment and Paul Allen's Vulcan Ventures. (These three entities were the original investors and operators of the now defunct web effort POP.com)

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1 In response to a further inquiry, Nakov later named these five movies as *Armageddon*, *Saving Private Ryan*, *A Bug's Life*, *ANTZ*, and *Star Wars: Episode 1*.

2. Present:

2.1 What are the current aims of the site?

The site continues to aim toward lowering the barriers that exist between Hollywood and the fans and to grow large involving online communities on the web for films.

2.2 How many staff work on this site?

We have a staff of 10 that manages all of the design, creative, date base creation and management, marketing and PR and hosting. As well we have over 400 volunteer editors (fans) from around the world who are sharing their passions and ideas with other fans by maintaining individual movie countdowns, contributing reviews and feature stories to the web site.

2.3 Do you publish exclusively on the Web?

At this time CountingDown.com is only published on the web.

2.4 How is the operation financed? Are there any commercial or community support affiliations? Do you run commercial ads?

This operation is privately financed. We are currently selling banner space, sponsorships, offer e-commerce opportunities and are designing official sites for films as a work for hire situation.

2.5 How do you promote this site? Have you established a presence in the relevant community newsgroups and mailing-lists, do you advertise on Websites or offline, do you exchange links with competing sites?

The site is promoted highly on other fan sites around the web, in the media and press using TV, radio, magazine and print as a means to generate exposure and popularity. In addition, by creating the official sites for certain films (most notably EVOLUTION, the URL CountingDown.com is featured prominently on all media for the film including but not limited to TV commercials, magazines, newspaper advertisements, bus shelter posters, billboards, subway posters, merchandising and various other promotional opportunities.

3. Operation:

3.1 What role does your news section play in the context of your site?

The news section is the driving force of the site. The news is what the fans log on for and what people search for.

3.2 How do you gather your news? Do you rely on industry releases, on community rumours, on both, and in what measure?

News is gathered by reading the web, searching in all traditional and non-traditional avenues, TV, radio reports, wires as well as personal reports, research and interviews. We rely on official industry releases as well, verify rumors but do no speculate or fuel them and we do not play with the rumors that are false and avoid controversy at all cost.

3.3 What are your editorial policies? To what extent do you verify content published on the site for accuracy, to what extent do you publish unverified rumours and leaks? Have you encountered any problems publishing unverified information?

We have a team of editors that are self-policing and do most of the fact checking and verify that what is going out is true and correct.

3.4 Do you experience any pressure influencing the scope of your content – from the community asking for more insider information, from the industry asking for more restraint in publishing rumours?

We walk a delicate line… we try to give the fans what they are looking for while at the same time preserving the mystique of the business and the movie making process. We do try and provide as many scoops as possible but we do try to listen to the requests from studios id they would like us to hold back stories for a certain period of time. We do not want to alienate our selves from either camp.

3.5 What role do your discussion groups play in the context of your site?

Discussion groups are huge and a great way for fans to exchange viewpoints, chat, communicate ideas and art. They are wonderful for our community.

3.6 How strongly do you monitor and edit the content of these groups?

All content on the site is reviewed and edited by site editors. No content is ever uploaded with out an editor verifying the story and its source.

3.7 Do you monitor outside newsgroups and mailing-lists for current trends and developments, or are these generally brought to you by your users?

Yes, they too are monitored and checked out regularly. Everything that is movie related and can be news is mentioned or researched to provide additional content.

3.8 What role do general, non-news resources (background information resources, FAQs, newbie guidelines etc.) play in the context of your site?

Unknown.

3.9 How do you choose the content of these resources? Are they biased towards what is offered on your own site, or towards the products and services of your supporters?

Content is chosen based on its relevancy not its source.

3.10 Are there other, similar sites operating in your field? Do they operate along similar lines as your own site?

Yes there are a few out there. Some are similar in the way they operate but we have pretty much isolated the area of fan driven, fan written, fan originated and fan read content on the web.

3.11 Do you regard these sites as competition, or do you cooperate with them to achieve the best possible coverage of your area?

We regard them partly as competition but mostly as sites we want to work with and exchange news and information. There is a great amount of cross lining and exchange between the entertainment sites.

3.12 What is your policy on linking to outside information? Are you worried that this may draw readers away from your own site? Are you worried about your inability to verify outside content?

We link to the source of the information regardless of where it came from. We do not worry about dragging readers away as they will know that we are the ones that found the information for them in the first place and we become the destination for all things cool and news worthy. Before content from the outside is linked we have verification and read through of the story by an editor. No links are every made blindly.

3.13 Would you flag new, exclusive content on competing sites as news in your own site, pointing your readers towards these sites?

Yes. If it is a big story we give credit where credit is due. People will remember that it was us that told them about it.

4. Community:
4.1 How popular is this site – how many hits does it receive, how many contributions from the community does the news section get, how many users participate in your discussion groups?

We are very popular and well know in the community of fan and entertainment sites. We receive well over 1.25 million visits per month and we have over 400,000 message posts to the message
boards per month and the news is updated on the site dozens of times per day.

4.2 Do the creators of this site consider themselves to be part of the community, critical of it, or impartial observers?

As one of the co-creators I am a part of the site yes! All of the creators are still very much active in the site and love it!

4.3 Have any members of the community become staff members or featured contributors? How?

Yes. Many of the members of the community have become feature editors and editors of countdowns. Due to budget restraint we have never been able to 'hire' anyone yet but we hope to be able to do that some day.

4.4 Have you had any major criticism from the community? For what reason?

The only criticism we receive from time to time is that we do not post photos up fast enough or that we do not have all the details of a story.

4.5 Have you had any major commendations from the community? For what reason?

YES! We received the COOL SITE OF THE YEAR AWARD in 1999 for the MOVIES category. This was awarded in New York.

5. Industry:

5.1 How well-respected is the site within the industry? Do industry members visit it and use it for information, do they use it to gauge the community's current attitudes? Do they participate in your discussion groups (and do they openly declare themselves to be industry members)?

The industry realizes on the site and we have heard that many of the workers in the industry use the site for reference, information, news and to check on what the fans are talking about. They have been read on the message boards although membership and names are with out true identity. Privacy is a critical issue. Sometimes they do say who they are or what they did for a particular film. This is a very cool day for the fans and they go nuts! Stars too have stopped in to day hello and even Steven Spielberg and Bryan Singer have stopped in and left a message or two.

5.2 Do you carry advertising, either as general ads or as ads from your specific field of interest? Has the need to satisfy advertisers ever affected the site's coverage?

We do carry advertising on the site, yes. We only work with advertisers who understand our demographic and will not compromise the integrity of the site for advertising.

5.3 How much does the industry contribute to the news section, and how? Do you receive special, exclusive, or preview information?

We work with all of the major studios to receive information, gain access to press screenings, set visits, junkets and interviews whenever possible. We do from time to time get special access, exclusive first look photos or videos.

5.4 Do the creators of this site consider themselves to be part of the industry, critical of it, or impartial observers?

The creators all consider them selves part of the entertainment/Internet industry but at the same time as fans and have a responsibility to the fans and the site to stay grounded and close to source.

5.5 Have any members of the industry become staff members or featured contributors? How?

No. We have maintained a very fan base fan driven staff. No industry specialists or big names here.

5.6 Have you had any major criticism from the industry? For what reason?

Not of which that we are aware.

5.7 Have you had any major commendations from the industry? For what reason?

Not from the Entertainment industry. Only the Internet Industry for the COOL SITE OF THE YEAR AWARD (SEE ABOVE.)

6. The Web:

6.1 Are there publications similar to yours in other media forms (print newsletters, magazines, radio and TV shows, etc.)?

Certainly. There are many entertainment based web sites, TV and radio shows but none of them are as fan-centric and fan-driven as CountingDown.com. Also, none of them work from the notion of actually countingdown the months, days and hours before the release of a film and bringing that excitement to the release of the movie to the forefront. This site is powered by fan-fuel and we give the fans what they want to see and read each and every day.

6.2 Do you cooperate with these publications in any way? Do they have Websites of their own?

Cooperation is important in the survival of any movie site, any news publication and any other large scale web site. We try to inform other web sites and other publications of events and news items we break on the site. There have been instances where we have reported on news first and have been able to give the story to other agencies to run as a news item- which then gives us a link off of our site and more people would be drawn to CountingDown.com as their curiosity leads them in. Entertainment Weekly and Access Hollywood are both good examples of entertainment entities that use us to report on news and then links to us as well. EW is a magazine and they print articles on the events and news we feature. Access Hollywood reports on the events and happening on our site as a feature on their TV show. Both of these entertainment properties have also featured a link on their web site for more information on the story they reported.

6.3 How do these publications differ from yours, and to what extent (if at all) do you see publishing on the Web as an advantage?

Most other publications are limited by the time-release factor. Magazines are usually published either weekly or monthly and this causes certain stories to become out of date as the magazine goes to print. What may be an uncast role on Friday may very well be the part of the year cast on Monday. This story will then go unreported for a full week, which at the end of the following week that story would be considered as old news. Web based publications are not bound by

these same time constraints and are able to report news when it happens as it happens and makes updates on the developments of stories as the facts become known… there is no lag in time and gratification is immediate. Another factor which differentiates CountingDown.com from other traditional print mediums is that fact that you are unable to respond to or have a conversation with the other readers of the articles you find compelling in a magazine. On the web site you are able to read a story, rate it and post or comment or thought on the story for others to read and eventually respond to. Communities are then born from the reading, posting and replying to message posts and news items. People become connected to each other based on a shared common interest and not geography, gender, age, race or national origin. It is a pure meeting of the minds. This immediacy and this interactivity lead to a greater level of intellectual intimacy. Intimacy in the sense where people relate to one another based on the words and thoughts they express and not an intimacy based on anything from the physical world. It is chiefly for these reasons that one may argue that CountingDown.com is a superior means of gathering information about the movies and movie stars coming to a theater near you real soon.

6.4 Have you considered working in a non-Web format?

There is really no way to translate what happens on CountingDown.com into a non-web format. The site exists because the web is so vast and great and such a powerful tool that is able to instantly disseminate information and link large amounts of people. Elimination of the web component from CountingDown. would not be possible and would destroy the very reason for which it was formed.

7. Any other comments?

The web is still in its very nascent stages. CountingDown.com plans to grow with the web community and feed the every insatiable desire to learn more about the movie we watch and see behind that magic curtain where films are made and dreams are born.

8. Would you be available to answer some follow-up questions if they should arise?

Follow-up questions are welcome and I would be happy to oblige. Please contact me if necessary at Phillip@countingdown.com.

Phillip Nakov
CountingDown.com
"The Ultimate Fan Site"

Jeff 'Hemos' Bates (Co-Founder, Slashdot)

21 May 2001

Questions:

1. History:

1.1 Who started this site, and what was the motivation behind it?

Rob Malda, with Jeff Bates. It was started as a way to post ideal musings about sites found around the web.

1.2 How long has this site been running?

4 years.

1.3 How much has the site grown in this time, in terms of pages, users, etc.?

Uh...from zero to 1.2 million pages per day, with an average of 230k unique IPs per day, and nearly 400k registered users.

1.4 Have there been any major changes in this site, in terms of its scope, its aims and operating philosophies, its personnel, its commercial/industrial affiliations, its financial support?

Well, it started from being hosted on a Computer Science network, on a personal home page to having 10 machines, and being hosted on 10 machines in one of the major Exodus datacetners.

It also went from having no paid employees to having the equivalent of 8 people working on it in that time, not including salesforce people and sysadmins.

2. Present:

2.1 What are the current aims of the site?

We produce "News for Nerds" posting links to stories around the web that geeks will find interesting. As well, we produce some original content - feature writing fron Jon Katz, as well as guest feature writers.

So, basically, compiling the best links from around the web.

2.2 How many staff work on this site?

8 people, with hundreds of daily writers submitting stories.

2.3 Do you publish exclusively on the Web?

Yes.

2.4 How is the operation financed? Are there any commercial or community support affiliations? Do you run commercial ads?

Run commericial ads.

2.5 How do you promote this site? Have you established a presence in the relevant community newsgroups and mailing-lists, do you advertise on Websites or offline, do you exchange links with competing sites?

We do not, and have not promoted the site. I am proud to say that Slashdot has never paid a dime for advertising, and have always relied on word of mouth. Advertising, IMHO, is mostly a waste in this area.

3. Operation:

3.1 What role does your news section play in the context of your site?

The whole role.

3.2 How do you gather your news? Do you rely on industry releases, on community rumours, on both, and in what measure?

Submissions to stories on web sites, as well as full featured submissions, rants form readers - that is 100% of our news gathering.

3.3 What are your editorial policies? To what extent do you verify content published on the site for accuracy, to what extent do you publish unverified rumours and leaks? Have you encountered any problems publishing unverified information?

We have had a couple problems publishing unverified information - however, we have always been extremely careful to say something has not yet been verified. Usually, since we are linking to news stories, we rely on them. However, in outrageous cases, we double-check and reach people within the company, rather then the PR firm, as that is more trustworthy.

3.4 Do you experience any pressure influencing the scope of your content – from the community asking for more insider information, from the industry asking for more restraint in publishing rumours?

We have had request from readers to cover certain stories, as we don't publish that many stories - in a sense, every submission is a request for that. Companies have asked restraint, but in every case, it's been there PR firm trying to spin something.

3.5 What role do your discussion groups play in the context of your site?

The groups are the lifeblood of Slashdot, IMHO. It's where people coem to talk about things, and thousands read. It's over half of the daily traffic, to read the comments.

3.6 How strongly do you monitor and edit the content of these groups?

We don't edit or monitor it. Users are given the powers to moderate comments, but no comments are deleted, unless ordered by court, which has only happend twice.

3.7 Do you monitor outside newsgroups and mailing-lists for current trends and developments, or are these generally brought to you by your users?

Nope - the latter.

3.8 What role do general, non-news resources (background information resources, FAQs, newbie guidelines etc.) play in the context of your site?

Very little, overall.

3.9 How do you choose the content of these resources? Are they biased towards what is offered on your own site, or towards the products and services of your supporters?

We rely strictly on user submissions, so the content is very much based on the interests of our readers.

3.10 Are there other, similar sites operating in your field? Do they operate along similar lines as your own site?

Yes - too many to name, frankly. They operate on similar lines - user submission based, weblogs.

3.11 Do you regard these sites as competition, or do you cooperate with them to achieve the best possible coverage of your area?

Most of them are too small to really matter. We post links to them when they have good stories, and I think they do likewise. But no formal cooperation.

3.12 What is your policy on linking to outside information? Are you worried that this may draw readers away from your own site? Are you worried about your inability to verify outside content?

Heh. I link always to outside information. Driving readers away is a myth - if your content is good, they will always come back. As far as verification goes, I rely on my intuition.

3.13 Would you flag new, exclusive content on competing sites as news in your own site, pointing your readers towards these sites?

Yes.

4. Community:
4.1 How popular is this site – how many hits does it receive, how many contributions from the community does the news section get, how many users participate in your discussion groups?

As above, we get 1.2 million pages per day. 500 stories are submitted per day. Users in discussion groups - 15,000 or so.

4.2 Do the creators of this site consider themselves to be part of the community, critical of it, or impartial observers?

Part and critical of it.

4.3 Have any members of the community become staff members or featured contributors? How?

6. They asked to help.

4.4 Have you had any major criticism from the community? For what reason?

Too much to mention. People ahve problems with the moderation system, our story selection, the way I dress, the way our stock e-mails sound, what we like. Why? i think it's because unlike many sites we've very obviously personality based, and people glom onto that.

4.5 Have you had any major commendations from the community? For what reason?

Quantifying commediations is difficult. People rely on us for updates and depend on us. So, I suppose that's probably a good one.

5. Industry:
5.1 How well-respected is the site within the industry? Do industry members visit it and use it for information, do they use it to gauge the community's current attitudes? Do they participate in your discussion groups (and do they openly declare themselves to be industry members)?

Some do, but I have no idea how I'd quantify that.

5.2 Do you carry advertising, either as general ads or as ads from your specific field of interest? Has the need to satisfy advertisers ever affected the site's coverage?

We carry general ads, but mostly they are from companies targeting our readers. We have no dealings with our advertisers, to not infringe on our editorial integrity.

5.3 How much does the industry contribute to the news section, and how? Do you receive special, exclusive, or preview information?

I don't pay attention to information from PR firms and company flacks. Best news is from people inside, who send the stuff directly to us, as real people. But anyone can submit a story.

5.4 Do the creators of this site consider themselves to be part of the industry, critical of it, or impartial observers?

Critical of it, and part of the industry.

5.5 Have any members of the industry become staff members or featured contributors? How?

No.

5.6 Have you had any major criticism from the industry? For what reason?

People bitch about critical stories, but that's about it.

5.7 Have you had any major commendations from the industry? For what reason?

slashdot.org/awards.shtml

6. The Web:

6.1 Are there publications similar to yours in other media forms (print newsletters, magazines, radio and TV shows, etc.)?

Not really - but I think doing what we do would be very difficult in other mediums.

6.2 Do you cooperate with these publications in any way? Do they have Websites of their own?

No.

6.3 How do these publications differ from yours, and to what extent (if at all) do you see publishing on the Web as an advantage?

Publishing on the wbe makes our site possible. It would die in another format.

6.4 Have you considered working in a non-Web format?

Yes, but it would have to be something different. Slashdot cannot exist in a different format.

7. Any other comments?

8. Would you be available to answer some follow-up questions if they should arise?

Yes.

Jeff "hemos" Bates
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hemos@blockstackers.com