

Questions of content and questions of access to the internet¹

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ABSTRACT

One of the major issues concerning the Internet is the question of unequal access. One way to look at this problem is as a predominantly technical question: acquiring machines, network connections, and modems to allow users the chance to get online and use the Internet for e-mail, browsing web pages, and so on. But there are deeper questions at stake as well, pertaining more to the content of the Internet and its basic character as an information/communication medium; at this level, questions of access are heavily shaped by what people find on the Internet and how they respond to it. Where these patterns of interaction with online material affect different individuals and groups in unequal ways, they may constitute an issue of access as well; a more intractable one, because it goes to the very heart of questioning what it is that we are trying to provide access to. In short, the issue of access involves quality as well as quantity of access; yet few discussions of this subject ever go beyond questions of hardware and training.

One of the major issues concerning the Internet is the question of unequal access: who is becoming familiar and comfortable with this new environment for learning and communication, and who is not.² There are many dimensions of the access issue - questions of hardware, network access, training and so forth - but an underdiscussed problem concerns those who have 'chosen' not to interact with it because of what they have heard about what they may find there, or who have interacted with this new environment and who 'by choice' have withdrawn from it. The quotes are meant to indicate that the apparent voluntariness of such decisions needs to be questioned in certain cases; for if the decision was the result of content on the Internet, and if this content is such that it differentially affects some groups more than others, then the cumulative outcome of these individual, voluntary decisions is a broader pattern of involvement and noninvolvement that should concern those committed to widespread and diverse participation in all that the Internet offers: e-mail, discussion lists, chat rooms, Web pages, and so on.

In this essay I discuss four types of content that have these sorts of effects: different users find them disturbing, frustrating, or worse. While my labels for them (misinformation, malinformation, messy information, and mostly useless information) are somewhat playful, the actual experiences of encountering such content, and their effects, can be far from humourous. Moreover, aside from the initial judgement one makes about such material, further reflection on exactly what such judgements mean in cyberspace and upon what evidence they are being made raises deeper and in some ways more unsettling questions about the limits of certainty and the instability of some of the traditional criteria of truth and value that users invoke in deciding what is worth their time on the Internet and what is not. Hence, tolerance for a measure of indeterminacy and for the likelihood



of encountering what is troubling and yet cannot be entirely avoided becomes a factor in who will be able to inhabit and move freely within this new learning environment and who will not.

In other words, the question of access involves quality as well as quantity of access: as many have noted, information by itself is not knowledge, and making information useful means making critical and discerning judgements about it. For users who work and learn with the Internet, the actual benefits of what they stand to gain will be affected by how well they can make independent judgements about what they find there. But it will also depend on how willing users are to distance themselves from their initial reactions to new information and perspectives, reactions that may be favourable or unfavourable, and to reflect on the criteria by which they are making those judgements - because those criteria might themselves be operating as restrictions on access to, or understanding of, potentially important information or perspectives. Hence, the formation and revision of knowledge in cyberspace can suffer both from too accepting an attitude toward information 'as is' (what might be termed a consumerist orientation toward information) and from too unreflective an attitude toward what is taken to be false, offensive, disorganized, or useless information. Both polarities pose fundamental challenges for education.

Ι.

The first category of information that troubles users is *misinformation*, information judged to be false, out of date, or incomplete in a misleading way. Because there are so many providers of information and opinions on the Internet, in so many forums, and because there is no practical check on people putting out whatever they might, there is sure to be a high percentage of unreliable content mixed in with what may be more credible. The problem is when a user cannot decide which is which.

It is hardly a new issue to wonder about the accuracy of the information we encounter in texts (books, newspapers, television, or whatever) or in the discourse of everyday life. There is nothing unique about the electronic universe in this regard, except that the people who are creating and putting out the information are usually even more invisible. People generally assume the reliability of certain providers of information (the *Encyclopedia Britannica* or the local telephone directory). In some area's, they may know enough to evaluate that credibility against their own previous experience and expertise in certain matters. But often they will rely on indirect proxies of credibility, such as a professional degree, an institutional identification, or - in face-to-face encounters - factors of style, appearance, or manners. In the context of the Internet, some of these indicators may still be applicable; others have little meaning at all. The providers of information on the Internet, even more than in other media, operate through surrogates of representation: users see of them only what they choose to represent about themselves and users may have very little additional information against which to judge their claims. Moreover, the origins of information may be indirect, as people forward or link to information provided by others, so that a relatively reliable person may be repeating an assertion from an (unknown) unreliable source, or vice versa.

Already we have seen that the Internet has become a special haven for rumours, gossip, and conspiracy theories. These ideas (1) can be circulated very quickly through multiple cycles of forwarding (like certain viruses, in fact); (2) are therefore difficult to trace back to any original, accountable source; and (3) can have a surface credibility that looks just like 'real' news and information. In a decentralized information system with few formal gatekeeping mechanisms, how do we prevent the 'noise' from drowning out the worthwhile material?

The virus analogy, just mentioned, is no exaggeration. Many computer viruses are miniprogrammes that propagate themselves across networks and within individual machines. Most are merely nuisances, costing the user only time and inconvenience. But as the Internet facilitates users copying and reposting messages from one to another, and sometimes directly to large distribution lists, such messages can constitute a kind of virus themselves. A well-known example is the 'Good Times' virus, an alarming message warning users of a hard-drive- destroying programme that can be downloaded simply by reading an e-mail message with the subject head 'Good Times.' To this day I know of no one who ever received a version of the purported 'Good Times' virus (and, incidentally, viruses cannot be transmitted that way); but thousands upon thousands of users received the *warning*, then hurried to send it along to all their associates - and the message still resurfaces periodically among new users. The joke, of course, is that the warning *is* the 'Good Times' virus, spreading throughout the network much faster than the messages that follow it, trying to explain why the alarm is unnecessary.

A special category under misinformation is *disinformation,* knowingly false or malicious information transmitted purposely to discredit an organization or an individual. For example, false Web pages have been posted, looking for all the world like authentic ones, with believable web addresses, but with false, misleading, or derogatory information just close enough to the edge of plausibility to reflect badly on the group (for example, the 1996 Bob Dole presidential campaign in the United States was the recipient of this treatment; there are also many mock pages lampooning corporations). The line here between satire and libel becomes blurry: how 'obvious' does the joke need to be; how can the targeted group or person disavow the page as a reflection of their views; What are the appropriate margins in public political discourse between challenging opposing positions and distorting or misrepresenting them?

At the other end of the political spectrum, a leading progressive theorist in the United States was castigated in an e-mail manifesto written by a student group at her university, ostensibly for failing to support them in a protest they had posed against their administration. This message was sent out on various mass-distribution lists, and took on, as these- things do, a life of its own. But as to the particulars of the protest, what the professor's actual stance was, what her reasons might have been for not supporting the students (or not supporting them enthusiastically enough), these were not available to the recipients of the manifesto. This feature of Internet information, of information standing without context, from unknown points of authorship, transmitted or repeated from source to source until its origins are virtually impossible to recover, is not fundamentally different in kind from gossip or rumours or hand-delivered fliers that have served similar purposes in the past. But the apparent credibility of Web pages or electronic documents, which can be from all evidence of appearance as authentic as any other publication in the same medium, begins to shake conventional assumptions about what 'credibility' or 'authenticity' mean for the casual Internet denizen.

In part, these difficulties arise because Internet users have not settled the status of e-mail along the continuum between written and oral discourse. It has the print character of letters or other documents, but the spontaneity and informality of a telephone call. In the course of ordinary events, if one hears a rumour by word of mouth, or through an unsigned handwritten note slid under one's door, one might grant credence to the assertions or not, but one would certainly maintain some skepticism about the claims. If the same report is written on official letterhead stationery, and signed, it appears more credible. People have experience with judging certain media for reliability, and though these are imperfect indicators to be sure' people's assumptions about formality of presentation and identifiability of authorship usually help them in making judgements of credibility. Various forms of electronic communication occupy a middle space in terms of these measures of formality and identifiability. As a result ' when it comes to e-mail and other forms of electronic communication, users - especially new users - probably tend to grant too much credibility to what they see on screen.

If a user is fairly knowledgeable about an issue or topic, it will often be possible to make estimations from what one knows to what one does not know; if a source is known to be credible on certain issues, then it is more likely to be credible on others, within the same field of concerns. But how does one judge the reliability of a source if one does not have that kind of background expertise to rely upon? There are several very broad proxies of credibility_ imperfect, certainly, but



general guidelines - that might play a role in making such judgements. One might look for information in the Internet address of the provider: does it identify with a known organization or institutional entity? is that institution regarded as credible? (Of course, one can lie about these associations.) Is it part of a commercial institution or business that may have some financial benefit in representing certain kinds of information and perspectives but not others? If it is a Web page address, is it a shorter address, which sometimes connotes a more established source, or a long address, indicating a folder buried several layers deep within a server that might be moved or dropped from circulation at any time?

What is the general care and quality of the design, organization, and presentation of the material? Does it look as if it were put together by someone with attention to detail - on the assumption that someone who has taken time to make a page look good will also be careful about the content they put on it? Yet, conversely, is there too much flash and gimmickry on the page, and does that connote a certain lack of seriousness? Now, again, the relation between the aesthetics of design and the reliability of content is not unique to the Web, and it is only an approximate indicator; it can lead one astray, and sometimes a great deal of care and attention can go into just such simulacra of authenticity. The dates that show when a page has been 'last updated' also might show something about the dedication and care of the page's designers (although one can lie about these things as well). Similarly, the number counters that show how many visitors a page has had *may* be a proxy of credibility (assuming that it is an accurate counter and not a dummy); but then popularity per se is a poor sign of credibility in many other contexts - why should it be different on the Internet?

More subtly, the avenues through which a message has been forwarded to one, or the links that provide access to a particular page (and the other pages to which it links), provide another way of assessing credibility. Where these sources are known, or have independent kinds of credibility, they transfer some of that legitimacy to the sources they endorse; where they are unknown, the question of credibility is, obviously, pushed back a level. But the idea here is that the Web or the Net is *itself* a mechanism of credibility, to a large extent self-supporting and self-referencing through the network of links or e-mail passages that tie individual sources into larger patterns of transmission. Although each Internet node is one and only one point within the larger rhizomatic net, the pragmatics of use over time pass more and more traffic through particular points, making more and more links to and from specific sites. This pattern creates foci of importance and credibility because of the Internet and its rhizomatic structure, the pragmatics of use create relatively 'core' and relatively 'peripheral' points within it: it is easier to find certain sites, for example. From the standpoint of credibility, this network of links tends to support the credibility of the sources linked to, and of the sources linked from.

In short, the Internet highlights the ways in which intrinsic indicators of credibility (that is, markers identifiable within the text or site itself) are at best rough approximations or proxies of reliable authority; in most cases they simply lead to a recursive chain of judgements, the credibility at each stage relying upon assumptions of credibility at yet another. Conversely, extrinsic indicators of credibility (that is, judgements that rely upon the indirect assessments of others) reflect the dynamics of citation and authorization within a community of interest and its patterns of collective wisdom. And, of course, even 'intrinsic' indicators of credibility may ultimately rest on such extrinsic associations. What is most interesting about this indeterminacy is that while it is highlighted in technological contexts, these reflections reveal the extent to which they are true of other intellectual contexts as well.

ΙΙ.

A second type of information I am calling *malinformation* is what some users will consider 'bad' information: sexual images or material; potentially dangerous or damaging information (how to

build a bomb, for example); political views from militant fringe groups; and so on. All of this information may be true enough - it may not be misinformation - but in some instances it is all the more dangerous because it *is* accurate (no one worries about false directions on how to build a bomb). Even free speech purists will feel uncomfortable with some of what is in openly accessible circulation on the Internet, either in topical discussion groups, chat rooms, or on open W eh pages. The radical decentralization and anarchic spirit of much of the Internet is both one of its greatest strengths and its greatest problems.

Malinformation has received disproportionate attention in the media, where love of crisis and alarm is perfectly tailored for sensationalistic stories about ten-year-olds looking for naked pictures on the Web, or the more bloodthirsty pronouncements of neo-Nazi groups, or the bomb-building instructions just mentioned. The fact that all of the same can be pulled off the shelf in any well-stocked book store, and in many libraries, is a comparison rarely made. Yet the fact is that the Internet is different, in the sense that it can be accessed without restriction (one can put salacious or dangerous material in a special section of a library or bookstore; one can screen users by age, and so forth) and because it is not just a repository of information, but also a medium of communication and connection among the producers and fans of such materials.

Such concerns gave rise to federal legislation in the United States, the 'Communications Decency Act,' which was not a proposal to censor material per se but a provision allowing users to sue providers of 'indecent' materials (it was ruled unconstitutional in its present form by the U.S. Supreme Court, but will be resubmitted in revised form). This proposal would have had two chilling effects: one was to replace the relatively well-defined term 'obscene' (in the sense that there is ample statutory precedent for demarcating what should and should not be included in that category) with the much more inclusive and vaguer term 'indecent'; the other was to allow any user anywhere on the Net to apply suit to anyone else - so that a person in a very conservative and religious area of one part of the country could sue an online discussion group among, say, HIV-positive gay men in the San Francisco Bay Area because *they* find it offensive. Previously, the standards of such regulations were very much restricted to the standards of particular communities. Now, the way that the Internet has become a globalized information and communication space, in which users can access information across any distance, has raised new questions about whether a localized group can proclaim a protected space for its own consensual interactions, when that information or material might be found or accessed by others.

Another approach to this concern, a strategy followed by CompuServe in Germany and on some university campuses in the U.S., is to block access to particular sites for *all* users; the service provider has decided that it does not want to condone the provision of certain sorts of materials through its servers. A user does not have to use that service, but if they do they tacitly agree to the restrictions imposed on them (assuming that they are told of such restrictions). If they do not like the restrictions, they will have to find some other service provider. Other users, of course, may *prefer* to use (and subsidize) such providers.

Yet another approach is to obtain software that blocks reception of certain categories of material at the point of reception: this allows parents, for example, to prevent their children from accessing certain types of materials. These software packages are often updated periodically (like anti-virus software) to include new addresses or categories in the continually shifting terrain of what people find dangerous or undesirable. A variation of this approach is to create pages that are themselves lists of 'approved' sites (approved, that is, by some person or entity who is trusted to filter out unwanted materials and select desirable ones in terms of the values of the group concerned - certain religious groups, for example).

One other approach can be termed 'partitioning': establishing a mechanism, whether by rating systems or some other procedure, for creating zones of coded content that provide the user with fairly consistent indicators of what they might find distasteful, either on their own behalf or for their children. This is roughly the process already followed with rating systems for films, television shows,



and CD music disks, with telephone sex lines, and with certain publications. If one knowingly enters into and browses such materials, then consent is assumed; in many cases, a required credit card charge acts as a barrier to underage users (and accrues revenues to the site, of course). Now, what other sorts of buffers will need to be in place to prevent either accidental encroachment across such partitions or, in the case of children, intentional exploration that adults consider inappropriate, is yet to be worked out. This approach seems to offer the best compromise between allowing consenting participants to share and discuss whatever they wish on the Internet, while not confronting unwilling parties with materials they find undesirable. It does not address the issue of where some groups or individuals do not want others to be sharing or discussing certain topics or materials *at all*, because they are considered dangerous, immoral, or politically threatening.

Proclamations that the Internet needs to be restricted overall because of the need to 'protect the children' is, although in many instances expressing a sincere concern, easily subject to manipulation by groups who wish to censor the Internet for their own political or religious purposes, but who press their case in the name of protecting the children. This motivation can be easily teased out by presenting these groups with the choice between procedures that restrict access (effectively protecting children as much as they need to be protected) from procedures that seek to censor the existence of such material at all.

The reality is that no censorship strategy can work reliably on the Internet: the number of providers is too large and too rapidly expanding; the mechanisms of centralized control and filtering too subject to manipulation for political and not only 'moral' purposes.³ As a result, there will always be errors on the side of blocking too much information, or too little; each bas serious consequences, and one mark of Internet citizenship is whether one is willing to live with excesses on one side or the other. But the dream of an entirely 'safe' Internet, where nothing will shock or offend, is an idealized fiction. What most users find appealing about the environment, its richness, diversity, and freedom, is also the condition that makes misuses inevitable. And this condition also highlights the ways in which malinformation from one perspective is valuable knowledge from another; individual users may invoke particular screening procedures to keep material away from themselves or their children, but it is impossible in principle to have a system of this size and complexity in which certain content will not be there for those who do desire it. Here, too, a dilemma surrounding the Internet highlights an issue of broader concern in public spaces more generally.

III.

The third kind of information is *messy information;* poorly organized and presented, to the point where it is not useable to the user. Questions about the useful organization of information begin to introduce questions about how 'information' becomes 'knowledge.' The electronic universe is very good at offering raw information, lists of facts, and so forth, because it is quick and relatively cheap to take textual, numerical, or graphic data from other sources and slap it into an e-mail message or a Web page for others to sample. But the problems of selection, organization, interpretation, and synthesis of information - what one could call, in shorthand, turning information into knowledge - is the more time-consuming, intellectually challenging, and potentially controversial process that actually allows people to do something with that information. And because it is more time-consuming, more intellectually challenging, and potentially more controversial, the natural inclination for some people is to say, 'Here, you take it. Make of it what you will.' Now messy information, poorly organized information, raises only some of these issues, but it does make us think about the responsibility of providers of information to choose, select, and filter information - which someone, somewhere, is likely to take issue with. So, it's easier not to do it at all.

Another element of this process is bad World Wide Web page design: long lists of links with no organizers or annotation to tell you what you will find from them, or links that are no longer active, indistinguishable from working links. Pages with poorly organized and undependable links often

lead to the problem that users feel 'lost,' uncertain of their position within the relational network of links that make up the Web. How did I get here? Where can I go next? This becomes a major source of frustration for new users, despite improved navigational capabilities with Web browsers.

Another aspect of poor design is gratuitous logos or other graphics that clutter and distract. The multimedia potential of Web pages can provide multiple forms of information, through multiple channels of access, with flexible user interests in mind. Sometimes it can be for entertainment or amusement. Other times it appears to be adding bells and whistles to show off the designer's programming skills or flash for its own sake. In the increasingly noisy environment of the Internet (and, of course, the media generally) some features are added merely to attract attention to one source rather than another. The result is overburdened (and to some tastes, aesthetically horrific) design. Commercial sponsorship of sites who display their logos, moreover, often raises the possibility (as it does in other media) of conflicting motivations, and hence reinforces some of the credibility problems already discussed.

Yet another element of this process is indiscriminate inclusion of material. Given my earlier comment that the networks of dissemination of information provide one of the few potentially reliable procedures for evaluating the credibility of material, when people simply pass along material indiscriminately it denies users of one of the measures they rely upon in evaluating it. Another, related issue (discussed in a recent book, *Data Smog*⁴) is that too much information can be as paralyzing as no information at all. As the Internet becomes more and more compendious, as every point of view or truth claim has its node, a user seeking information to guide personal or public policy decisions has three sorts of problems, two of which have already been mentioned: one is *finding* relevant information, another is *evaluating* what is credible information. But here we see a third issue: that where there is an *excess* of information, much of it apparently credible, much of it supported by plausible arguments and persuasive evidence, pulling in multiple, incompatible directions, it offers little or no guidance to decisions and actions. One can support almost any point of view in an apparently data-driven way. Does one then simply select information that reinforces pre-existing preferences and inclinations? Does one follow the most apparently popular or prevalent views? Or does one accept what accords with conventional wisdom?

Messy information, then, becomes yet another source of frustration, confusion, and even cynicism about the value of the Internet and what it can offer. In an era where people are already deluged with stimuli, information, opinions, and claims on their time and attention, the Internet becomes another unwanted complication. The hype promoting the Internet has been about the potential of this new technology to provide useful, entertaining, liberating information that can help to inform choices; for many users, however, especially beginning • users, it is experienced as simply chaotic.

Hence the very decentralization, size, and diversity of the Internet creates a need for intermediaries (call them archivists or editors) to select, filter, and organize information relevant to a topic so that others can find it more easily. This means, of course, that one is entrusting others to perform such tasks in one's place, with all the potential issues that entails. Yet for most users who do not have the time or expertise to perform this function themselves, it is that or nothing. Here we see a contradictory relation between the organization and availability of information, on the one hand, and the dangers of selectivity and bias on the other.

IV.

Finally, the category of *mostly useless information.*⁵ There used to be an entire Web page that was a collection of 'Useless Web Pages.' It contained items such as: real time photos of the coffee machine on the first floor of a large research building somewhere else in the country - you could see on your own screen exactly how much coffee was left in the pot at any time of the day; or the fellow who provided an exhaustive, detailed, and regularly updated inventory of every item in his desk



drawer ('three felt-tip markers, one red, one blue, one black, etc.'); or the page where you could type in a word or phrase and it activated a speech synthesizer on the owner's home computer, where it spoke those words to the owner's cat (if the cat was in the vicinity of the computer). Some of these pages are amusing; some just silly.

But there are a couple of things to say about apparently 'useless' pages. One is that my 'useless' page might be very useful to someone else, or vice versa. It turns out, for example, that the 'coffee pot page' was actually created by people on the top floor of the research building, who simply wanted to save the time of walking all the way down to the first floor to check to see if there was any coffee left in the machine. Now, why, you ask, don't they just buy their own coffee pot? This just shows that you don't understand how computer folks think.

Another point is that sometimes an apparently useless page can actually be illustrating a principle, or a technological capacity, that in other contexts might be extremely useful. Saying 'hello' or 'eat the mouse' to Steve's cat, halfway across the world, might seem pretty trivial, but without much effort one can imagine uses of that same technical capability that might in fact prove invaluable.

Finally, and at a different level, the apparent triviality of certain pages (such as the desk contents page) highlights in a satirical way some of the larger concerns I have been discussing here: how a technically impressive medium does not in itself insure the importance or quality or reliability of what it delivers; how what is important or interesting to one person may be trivial to another; how the 'truth' of certain information is only one way of evaluating its importance or worth; how what some find amusing others find irritating or offensive; and How the remarkable diversity of content on the Internet sparks many ingenious ways of attracting attention *for its own sake.*

V.

As mentioned before, these four issues do not only highlight the complexity of making discriminations between worthwhile and non-worthwhile content on the Internet. It is a straightforward enough observation to point out that the criteria for making such judgements are contested and imperfect, that different people will make those judgements and reach different conclusions, that the enormous content of the Internet will continually present instances that blur or defy such easy discriminations. But I have tried to advance a more controversial thesis here. That the nature of the Internet reveals the ways in which these discriminations have always been problematic, always rested on uncertain foundations, and not only in this particular context.

First, they reveal the ways in which judgements are always made within frameworks of value and within (perhaps implicit) communities of practice that authorize those criteria. This makes it both difficult practically and questionable morally to imagine that such decisions can be made in any general way or imposed as an overall organizing framework for the Internet as a whole. For those who do not participate in particular communities of practice, these criteria will almost certainly be felt as arbitrary and unfair restrictions.

Second, this difficulty is multiplied in an environment, such as the Internet, which is intrinsically global and cross-cultural. Without minimizing the huge gaps in participation on the Internet around the world (with most people still living in areas with no telephone service what realistic meaning can world-wide 'access' to new technologies have?), or ways in which the predominantly English-centric format of the Internet and the simple demographics of participation greatly advantage the U.S. in this global 'conversation,' the fact is that there has never been before a single medium of communication and information-sharing that could feasibly join together participants from nearly every region of the world. The Internet is both an expression of a globalized world and one of its chief causes. This means that the creators of information spaces, the audiences for that information, the participants in communication opportunities, and the myriad interests and values they represent, will not only create an environment of enormous variety; they will also be applying

criteria of judgement that lead to diverse and sometimes irreconcilable preferences. And what that means, in turn, is that participation in this global system will continually highlight the ways in which particular judgements, especially when they seek a broad, system-wide impact, imply decisions about inclusion and exclusion - about who will be able to live with those judgements and accept the criteria that underwrite them, and who will not.

Third, this is why it is important to see issues of content and issues of access as fundamentally conjoined. It is always important to ask what one is providing access to. It is important to examine whether the target of access is seen as desirable, or hospitable, for prospective accessees. It is important to examine when and how the nature of content *itself* operates as a factor of inclusion or exclusion. And, finally, it is important to examine the self-fulfilling way in which the effects of content, of including or excluding prospective participants then, in turn, reinforces the absence of certain perspectives or ideas within an information and communication space - which makes the criteria of judgement about what is or is not included seem more neutral and unproblematic than it may in fact be (from the perspective of outsiders who have no opportunity to engage or question them).

This self-reflexive awareness is not only a matter of the non-neutrality (and non-universality) of criteria, but of their tendency to be self-perpetuating and self-confirming, since those who do not or cannot share them will exit the conversation, leaving the terrain to those who do - and smugly assuming that their judgements and criteria are unproblematic because everyone *left* accepts them.

The themes of this essay - of judging the credibility and value of content, of how criteria define and are defined by communities of practice; the upsetting and offensive character of what some groups on the Internet desire (as seen by other groups); the likelihood of encountering the strange, the disturbing, the inexplicable, the offense, the silly, the unacceptable, the false, the true but frightening, and so forth - highlight the way in which the Internet is a *metacommunity*. Here I mean not a 'community of communities,' but a medium in which sharply different communities are brought into inevitably close contact with one another. Other textual media allow for, even encourage, the segregation and specialization of voices, interests, and tastes that particular communities prefer. This is especially true in market contexts where texts are produced with specific constituency niches in mind.

The rhizomatic and global structure of the Internet creates new points of fracture and bridges others: within cyberspace, radical alternatives are brought within a common avenue of communication and access. A couple of intentional or inadvertent link selections can suddenly transport the user into a strange environment. This will inevitably create points of friction, conflict, or unexpected affiliation at the points where communities engage one another. The metacommunity of the Internet exists *above* any particular community; communities that by their nature must be to some extent particularistic and insular. But the Internet is not a community itself; indeed, it cannot be. It highlights all the ways in which a universal community, or community of communities, is infeasible. What cannot be predicted (or ruled out of possibility in advance) is where specific cross-community engagements may create opportunities for learning, understanding, and affiliation. In some instances, such contacts may yield trans-community standards and practices that participants will come to share (that is, the formation of a new community). In other instances, specific coalitions of interest or purpose may emerge, within a broader maintenance of separate communities. In still others, attempts to be inclusive and welcoming will rest upon implicit standards that others will find in fact exclusionary. All of these possibilities, and others, will develop out of the situated dynamics of dialogue and conversation between the communities themselves. The Internet provides an unprecedented forum in which such exchanges can occur; but it in no way guarantees the outcomes of such engagements.



Notes

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- Nicholas C. Burbules and Thomas A. Callister, Jr., 'Who lives here? Access to and credibility within cyberspace.' To appear in Chris Bigum, Colin Lankshear, et al., eds., *Digital Rhetorics: New Technologies, Literacy, and Learning - Current Practices and New Directions* (Canberra, Department of Employment, Education, Training, and Youth Affairs/Brisbane, Queensland University of Technology, forthcoming).
- 3. Nicholas C. Burbules and Thomas A. Callister, Jr., 'A post-technocratic policy perspective on new information and communication technologies for education.' To appear in James Marshall and Michael Peters, eds., *Educational Policy* (Edward Elgar, forthcoming).
- 4. David Shenk, Data Smog: Surviving the Information Glut (San Francisco: Harper Edge, 1997).
- 5. Here I should credit Billy Crystal, in the movie The Princess Bride: 'He isn't dead. He's only mostly dead.'