

## THE ANALOG EXPERIENCE OF DIGITAL CULTURE

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*Stuart Moulthrop*

*...ecouen magnetisme...african cichlids...stickyimages...  
pokem...*

If there really is a state of "being digital" then it must be possible for this condition to occur in excess, leaving us in conceptual organization at least *far too digital*. I do not raise this notion as prelude to some Postmaniac rage against the machine. My starting point for this discussion is not the pervasiveness of computing technologies but rather a common misunderstanding of our media environment: a certain excess of labeling. *Digital communication, digital media, digital culture*. I use these phrases myself, no doubt far too often. Lately I have begun to wonder what they mean, and to suspect they are fundamentally misleading.

In technical contexts the term is strictly and usefully defined, but as one might expect, blurs out quite a bit as it reaches the general tongue. Popularly speaking, the word "digital" when applied to modern technical practices refers to our ability to process information in discrete quantities: binary bits and bytes, blocks of hexadecimal code, waveform samples, packets of data, Internet Protocol numbers, Web addresses. In this sense "digital" signifies specificity, the unerring testimony of devices like atomic clocks and Global Positioning Systems. By this reckoning, though, the term declines toward the trivial – a thin coat of fresh paint on an old factory floor. This is best proved by experiment:

... elemento quimico ... mail order checks ... nipple thumbnail ... erdbeben in chili fassungen ... free nude
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sense that it was produced initially as computer code, displayed using a Web browser, captured as image by a graphics program, inserted into a word-processing document, a page-layout program, and on through a long chain of electronic reproduction. But this list dwells perhaps too much on material conditions. We could answer yes again in a more abstract sense, in that the information you see here comes in convenient, discrete packages neatly located in a clearly defined space. Cryptic, fragmentary information, densely packed into some mysterious array – what else could it be but digital?

Yet the image above could have been produced by equipment and techniques for which "digital" has a very different meaning. Except for the trace of perspectival drawing represented by the shaded box, you are looking simply at a sequential stream of characters. If you are reading this essay on paper, that sequence does not and cannot change. Very digital; and at the same time, very typographic. Which raises an interesting question: in what sense is an old-fashioned, mechanical typewriter not a digital device? It is, after all, operated by finger-pressure, turning the oldest meaning of the word (counting on one's fingers) to new purpose. But to place the term "digital" thus at our fingertips changes its reference to the point of collapse. If fixed type can capture the essence of digital communication, then surely the daily newspaper has always been an instance of this form, and if as Bruno Latour says we have never been modern, we may claim that since the time of our great-great-great-grandparents we have been well and truly digital.

*...how to configure routers...when the moon hits your  
eye...Trivia...*

All of which is so much nonsense. Typography can no more capture the most important features of contemporary information culture than film (even a self-described digital film like Mike Figgis' *Time Code*) can show comprehensively what goes on in a street scene, bazaar, flea market, wedding, or riot. Whether you are reading this text from a screen or a printed page, you will notice that subject and medium are radically misaligned. The first is inherently dynamic, the second necessarily static, and no amount

of being-digital rhetoric can overcome this disparity. Our present tools for textual inquiry must inevitably operate at a certain remove from the reality of writing on the Internet, or from what we might call the analog experience of digital culture.

The example above is a case in point: it is not simply an approximation of an initiating text but a *triple* approximation. As will be apparent, the term "original" has no purchase here, but we might speak instead of a first-order simulacrum, which in this instance was output from the Java applet "queryTicker" which was first shown to me by the artist and theorist Rob Nideffer during a talk he gave in 1998 ("Public Spaces"). The applet (authors unknown) was located in a public directory on a World Wide Web server operated by the WebCrawler search service. Anyone who knew the location of this directory and a few things about Hypertext Markup Language could create a Web page displaying output from the applet. This output consisted of a narrow window in which a continuous stream of characters moved steadily from the left to right in imitation of a telegraphic tickertape machine or a Times Square news marquee. The content carried by the Java ticker, however, consisted neither of stock prices nor wire service copy but rather a flow of queries typed in by users of WebCrawler. In the original, each query served as cue to a hypertext link, so that the viewer of the ticker could click on any item as it scrolled past, submitting the query and receiving the same results seen by the person who typed it in.

Some time in the first quarter of 2000, WebCrawler removed "queryTicker" from its Web site without comment, though a slightly different service, Metaspy ([www.metaspy.com](http://www.metaspy.com)) continues to provide live, performable samples of query traffic. The screenshot of the ticker given above was taken from a second-order simulation I produced by recording a large number of items from this source. I built it because I strongly suspected the WebCrawler ticker would eventually disappear (as it did), because it deeply fascinates me, and because I wanted others to share the experience. I cannot of course reproduce the ticker as I first saw it, either on-line or certainly on paper. What you see on the page is an image of an image of an image, and inevitably unlike the thing its-ineffable-self.

*...motherlode...tombraider 1 hints...konzerte stuttgart...  
Gamez...*

When Nideffer used the query ticker as backdrop for his discussion of Internet culture, and on several later occasions when I have borrowed his prop, the result was an academic pratfall. However engaging the talk may have been (Nideffer's at least), the audience paid virtually no attention. All eyes tracked the steady slide of words across the screen, fascinated both by the ticker's unpredictable content and by the curious, voyeuristic experience they were having. When the lights are left up you can see the linear flick of eye motion, the telltale bob of heads as readers lose one item at the left margin and pick up another on the right. When this happens, the speaker may make the most outrageous and insupportable claims with impunity, because as he will discover, the query ticker is the Web's antithetical answer to THX: the audience is not listening.

Or rather, the ticker in itself is obviously far more interesting than anything that can be said about it. It raises a host of salient questions, the most fascinating of which are ontological. What exactly are we looking at? Text? Video? Performance? Commerce? Invasion of privacy? No single metaphor or description seems sufficient.

To begin with, the ticker probably represents the closest we can come to a reading of the World Wide Web, not in any exhaustive review of its billions of pages, but rather *as a process*, in the way one might read the pattern of clouds or the flow of a river – a river well above flood stage that passes through many urban areas and trailer parks, picking up tons of debris.

Or one could avoid such incipient lyricism and try for a more objective note. There is a wealth of data here. To a specialist in human-computer interaction, the ticker might offer a remarkably rich resource, offering an utterly unsystematic but amazingly candid record of user behavior. On my first encounter I noticed a large number of queries expressed in sentence form (e.g., "What was the popes onion on the atomic bomb?"), suggesting that many users do not think of search engines simply as pattern-matching systems but almost as artificial intelligences, conflating Web browsing with

the Turing test. One wonders, though, if an AI will ever be able to sort out the relationship of onions, opinions, and popes.

In a sense the ticker provides more than simply raw data, but rather confronts us with unknown dimensions of information technology and its social-textual use. It probably tells us far more about humans than machines, and thus may have even more to say about the unconscious than it does about the domain of reason. As the writer John McDaid said after his first taste, the ticker is "like watching yourself asleep, dreaming, problem solving below the level of awareness" ("Re: warning: addictive"). Watching the query ticker is a bit like standing in a crowded shopping mall and suddenly acquiring the ability to read minds: it seems to give unprecedented access to a primary process. Indeed, the experience can be both deeply personal and decidedly uncanny.

During Rob Nideffer's memorably unmemorable talk, someone typed the query, "good restaurant within walking distance of Meyerhoff Symphony Hall." My partner, Nancy Kaplan, and I were in Des Moines, Iowa at the time, but we were fairly sure this query originated in our home town of Baltimore, Maryland, because that is the only place we know with a Meyerhoff Symphony Hall. Baltimore is about 5,000 kilometers east of Des Moines, not a very large city by U.S. standards, pretty well connected technologically but nothing to compare with New York, San Francisco, or Atlanta. WebCrawler, on the other hand, is used by millions of people every day, mainly in North America but potentially anywhere on the Net. These facts made the appearance of that particular query before these particular witnesses most unlikely in itself – though this was not the reason we suddenly broke out in gooseflesh.

We realized that something even more bizarre than simple coincidence was at work here. As the query slipped away, both of us knew with great confidence that a certain page would come up in the return listings: namely, a profile of a bistro located across the street from the concert hall. We knew this because we had written that Web page ourselves in 1995 as part of a public service project. Watching the query scroll across the screen, we had the weird experience of mentally completing a hypertext link, or of being ourselves, in our lives and histories, somehow caught up in its circuit. It is odd enough to find yourself eavesdropping on the hive mind, but truly strange when the World Wide Web seems wired to your head.

*...Poems by Halpern...transvesti executive...largest city  
populations in wisconsin...*

When I was an awkward, bookish teenager I used to envy my wilder friends who would do things like hitchhike to Arizona, climb mesas, chew peyote, and wait for the flying saucers to come. Now I get the later laugh (who knows about the last) because in moments like the one just described, I have all the fun of hallucinating without the stomach upset that sometimes comes with indole alkaloids. (The economics are moot: in constant dollars, I spend about as much on computing equipment as my buddies used to lay out for drugs.) More to the point, my so-called hallucinations are in some sense real, or at least "consensual," as William Gibson famously put it (1984, 51). For the moment, the Internet has made some parts of our world more open to connections, correspondences, and emergent structure, a source of wild signal in the general background of noise.

As such, the query ticker is not so much a freak of technology (or a technology for belated freaks) as a wonderfully accurate indicator of the profound divergence that underlies Internet culture. Somewhere along the fault line we seem to have passed into another dispensation, if not dimension, a different kind of social space woven from a new sort of discourse. In words that might have been written about the ticker itself (though they were not), Christopher Locke describes this change as a re-emergence of voice or conversation:

There are millions of threads in this conversation, but at the beginning and end of each one is a human being. That this world is digital or electronic is not the point. What matters most is that it exists in narrative space. The story has come unbound. The world of commerce became precipitously permeable while it wasn't looking and sprang a leak from a quarter least expected. The dangers of democracy pale before the dangers of uncontained life. Life with the wraps off. Life run wild. (1999, 36; emphasis added)

"Narrative space" is a marvelously resonant phrase, especially to those of us who have tried to think about the way its twin terms intersect, both practically and theoretically. But resonance or suggestiveness is one thing and

denotative meaning is another. Locke's phrase is not exactly self-evident. I would certainly agree that "the story has come unbound," but am unsure which story we mean. Several might come into play.

The last time I came across language like this was not in a book like Locke and company's *Cluetrain Manifesto*, ostensibly (if cheekily) addressed to Internet entrepreneurs. It was in Thomas Pynchon's *Gravity's Rainbow*, in one of those late, dithyrambic passages where the good witch Geli Tripping apprehends "an overpeaking of life so clangorous and mad, such a green corona about Earth's body that some spoiler had to be brought in before it blew the Creation apart" (1973, 720). By "God's spoiler" Pynchon means man, specifically male and western man with his dependence on fossil fuels and other wasteful, wasting, one-way practices. Man, bringer of fire, digger of coal, synthesizer of polymers, splitter of atoms; but also singer, dancer, writer, broadcaster, screen actor, and lately (along with increasing numbers of non-Westerners and women) author of a great many Web pages. Narrative space is a complicated domain, and the stories it supports may have various turns and re-turns. This certainly includes the grand narrative called history. Even in the spoil and wreckage of the humanized world – perhaps even among the twisted passages of high technology – some vital principle survives.

In another sense, though (and closer to the main line of *Cluetrain's* argument), "narrative space" may be more intimate than historical, less a matter of neo-paganism than of personal discovery. This point is nicely illustrated by yet another marvelous query that floated through the darkness behind Rob Nideffer's back. Late in the session, after a long deluge of banal and numinous content had streamed across our eyes, someone somewhere typed: "Where can I find ideas for my writing?"

"Here! here!" I found myself saying; a rude outburst which I hope passed for applause, though I suspect our speaker knew better. I had violated decorum, but what I really meant to puncture was the ticker's screen of anonymity. I wanted to reach through the looking-glass and call the unknown quaerent's attention to all that he was missing here on the other side. In this sense the "narrative space" of the ticker is an ironically, ludicrously isolated space, defined by the "threads" that lead out to thousands of users, each one with a story of curiosity, puzzlement, or desire. Perhaps the story that matters most in this narrative space is not cultural or cosmic but individual: the story of a seeker who finds something, though it may not be what she meant to discover. We can demarcate the social space of the

Net in terms of "threads," but since these vectors of connection are meant to be traversed, we could also call them paths. The most important act in narrative space is pathfinding, or as we might also say, path work.

I want to suggest that the search ticker stands for an important conceptual category which, while not really new to human experience, has not previously assumed the importance it now demands. There is no appropriate existing term for this activity, so I will borrow and adapt one. Speaking of imaginative or aesthetic discourse, Espen Aarseth coins the word *ergodic* (1997,4). The term comes from Greek roots meaning "work" and "path," giving the combined sense of "pathwork," or as I take it here, the act of finding some valuable articulation in a symbolic field that allows a finite but very large number of variations.

In borrowing Aarseth's excellent term I am taking it away from its native ground. The World Wide Web differs in crucial respects from even the most open-ended of the cybertexts that Aarseth discusses, most of which are works of art or entertainment; and while the Web may be considered both of these things, it fits those descriptions more metaphorically than exactly, and it is at the same time many other things to many other people. In fact this great extensiveness presents a primary problem. In what sense can we consider the Web a finite semiotic field? The idea is a bit of a stretch, but perhaps less so if we concentrate not on the field or ground but on the figure that emerges from it in the form of search queries. Even if the paths that seekers find through the Web are rudimentary and fleeting, they are paths nonetheless: ways of moving from one locus to another that express, imply, or develop a relationship between one and the other. Moreover, we can think of the query ticker, the aggregate of all these connections, as itself a piece of path work: a gigantic and largely unconscious project of collective interpretation in which we repeatedly witness at least the first stage in a process of discovery, the call and response of seeker and search engine.

*auburn mens swimming... 'Touched By An Angel'*  
*petition...animal sex...Fleisch...*

Sometimes Utopia is No-place and sometimes, as Nancy and I found one Sunday in Des Moines, it can present itself as no-place-like-home, a strange

burg in which we awaken only yesterday to find we've lived there our whole lives. Large textual constructions have a way of enveloping us, especially we who live by signs. The science fiction writer Walter Jon Williams has a character in a far distant future observe: "It's an annotative age we live in" (1992, 116). The age in question is several millennia from now, but as always in SF, objects in the fictional mirror are closer than they appear. Williams' character, an artist, laments the fact that a galaxy-spanning data system – significantly named "the Hyperlogos" – has for centuries recorded nearly every trace of human experience that can be rendered symbolically. If as George Landow suggests, hypertext is a means of "testing" the poststructuralist paradigm (1992, 11), then Williams may have described the test apparatus. With a text-mass so huge, all expression becomes *quite literally* a matter of reference.

Just as the Hyperlogos is already with us in the guise of the World Wide Web, we are clearly well into the Age of Annotation. In the late 1980s a gang of young comedians launched *Mystery Science Theater 3000* (known to fans as "MST3K"), a recombinant television show in which a group of talking heads, a human and several robotic puppets, are projected over some terrible old sci-fi flick. The program, which subsided last year after a decade-long run, records pop in the act of eating itself. MST3K's *mise-en-scene* parodies the goofy set-ups of kiddie shows from the fifties and sixties: marooned on a space station, the characters are forced to watch bad movies as part of a sadistic psychological test. To maintain their nominal sanity, they dispense a constant stream of improvised wisecracks which on a good night could be as funny as the pathetic films themselves.

While this may not appear at first a major aesthetic advance – the obstreperous on-screen audience in some sense simply updates Shakespeare's "rude mechanicals" as loud-mouthed 'bots – MST3K does seem to inaugurate a new move in the language game of postmodern comedy. It collapses spectatorship into performance in a process Steven Johnson calls "media riffing" (1997, 25–28). The trend continued into the 1990s, with the high-school antics of MST3K replaced by the sophomoric cool of "Pop-Up Video," a program that makes running interventions into music videos, using superimposed, animated bubbles to insert notes on production trivia and cultural commentary. Now with television poised (perhaps) for its long-desired convergence with the Web, one can well imagine the annotative forms about to come, including full-time, on-demand super-textual mockery.

Banging out a power chord of reflexivity, the original theme song for MST3K said: "Just repeat to yourself *it's just a show*." And repeat, and repeat, and repeat. Wrapping the mockery of show-biz past in yet another layer of irony, the convergence of spectator and performer seems simply a variation on the old, old metafictional gambit, the play within the play or the story that swallows its own tale. Yet there may be somewhat more at play here, especially if we look beyond MST3K to some of its cultural surroundings. The fairly strong vogue for inscribed commentary and "riffing" parallels a steady increase, especially among the younger demographics, in participatory entertainments like role-playing games, fan fiction, and communal on-line environments, from multi-player games to MUDs and MOOs. Participation, or as Henry Jenkins calls it, "textual poaching" (1992, 24), may not always be confined to TV and the movies.

*...how do you beet N. Cortex in Crash Bandicoot 1...  
palm pda...sink and ink...*

These digressions carry us some distance from the Web, to say nothing of search engines and query tickers. How do these phenomena fit into the Age of Annotation? Like MST3K, the ticker seems to turn reception into entertainment: we watch other people consuming the information services of the Web. Again, there is a doubled perspective, if not a literal stage-within-a-stage, at least a looking-glass sense of watching the watchers through some mysterious one-way screen. Yet in spite of these superficial similarities, the query ticker may tell us more about the way media like the Web depart from its predecessors than about its points of commonality. Perhaps the ticker does not really fit within the Age of Annotation, but rather marks a boundary of that phase.

The content of the ticker is not really comparable to that of MST3K or "Pop-Up Video." It consists not of wisecracks or fatuous analysis, but as we earlier suggested of pathfinding – Aarseth's ergodics taken here not as a category of aesthetic response but as a more general aspect of Web textuality. In this sense perhaps the query ticker is not "just a show," and only tenuously a "show" at all. The contributors are of course unaware that they are taking part in an entertainment, so self-consciousness reverses into unconsciousness in this instance.

More significant, perhaps, any query displayed in the original Java applet (and also in Metaspy's less frenetic version) can be resubmitted to the search engine. Thus the ticker transforms every act of pathfinding into a concomitant act of path *making* or "trailblazing," as Vannevar Bush and Ted Nelson both called it. Seen from this perspective the ticker becomes the antithesis of those well-focused, corporate "portal" sites that emerged in the last years of the 1990s. Portals are designed to filter the staggering possibilities of the Web down to something whose scale more closely resembles the array of cable television channels (hardly a coincidence). In contrast, the ticker is more truly a broadband service, a non-discriminating filter that proliferates rather than concentrates the desired signal. As such it may represent the next step in a continuing process, the move that takes us beyond mere "riffing" in our continued exploration of electronic media and "narrative space."

Consider what might be at stake in such a transformation. Painting with his customary 10-kilometer brush, Marshall McLuhan declared that print produced "the public," while broadcast media displaced that social formation in favor of "the mass," a human identity marked less by habits of abstraction than by deep, "tactile" participation (1996, 68). Picking up McLuhan's line, we might speculate about a third coming or next generation, one that is shaped neither by the hierarchical technosystems of heavy industry nor by the hegemonic, old-style networks of the broadcast era. *Homo informaticus*, child of the Web, will find herself at home in distributed networks and massive aggregations of data. She will be a pathfinder and trailblazer without equal; and if she takes her cue from key symbolic practices like the query ticker, she will understand the act of navigating as a social transaction, mediated by information deployed as a public resource.

While this vision may have great appeal for the sort of egregious fool Pynchon describes as a "sentimental surrealist" (1973, 695), others may be less prepared to call this No-place home. There is more than a little fantasy at work here. There are as yet no reliable sightings of *homo informaticus* or post-mass humanity, even on this verge of the next century. Instead we have an emerging social condition that might be described as culture at critical mass: increasingly concentrated, highly energetic, and susceptible to the emergence of hitherto unknown properties and forces.

It is not clear whether those forces will operate to any desirable end. In my admittedly cultic enthusiasm for the query ticker I have said little or

nothing about the drearier side of its content. If there is something uncanny and almost exalting about becoming a living link, there are also contrary experiences, such as wondering what "cameltoe" refers to... and finding out. For many users of the World Wide Web, the medium's main charm lies in its frictionless anonymity, a safety-in-millions mentality that lets puritanical businessmen (and academics) visit the porn shop unnoticed. Unless one is still in touch with a 1960s politics of desire, this feature of Web use has depressing implications for any utopian dreaming. How many revolutions begin in the peep show booth? Likewise, as Terry Harpold recently pointed out, the map of digital space is largely dominated by North America and Europe, leaving much of Africa and the southern hemisphere in the familiar colonial darkness ("Dark Continents"). Before we can think clearly about changing the world, we have to recognize that what we mean by "the world" may itself be deeply flawed.

Indeed, it may seem especially foolish to speculate about major shifts in consciousness given our immediate economic history. Almost on cue, the flip of the calendar from 1999 to 2000 brought both the abrupt end of the Internet startup bubble and the announcement that America Online would attempt to buy Time Warner Communications, a deal which if consummated would doubtless trigger a rapid wave of similar concentrations after which most digital commerce would be effectively controlled by a small number of transnational interests. Whatever the outcome of particular deals or market phases, one clear fact remains: the last decade has seen the greatest consolidation of international capital in modern history. Perhaps more and more people are beginning to see themselves as producer/consumers or performing spectators, threaded into that exploding sphere of narrative space; but we need to remember who sold them their personal computers, operating systems, and Web browsers, and who controls their access to the bitstream.

*...du kannst nicht immer siebzehn sein... 6323710...mp3  
download...mass...*

In light of all this harsh realism, maybe we must recognize the query ticker as just what it claims to be, a mere toy, a little *divertissement* filed under "fun" – and perhaps significantly, no longer available at that address. At-

tempts to reveal some vector of change or difference in this curiosity do not recognize the oligarchic, highly volatile economics of Internet development or the dismal logic of global capitalism. No doubt a sensible head would never give the ticker a second look.

For me at least (and perhaps I am alone in this), it is hard to maintain that kind of sensibility. The phenomenon of the ticker is somehow impossible to ignore. Even when its code goes offline and its privileged feed from the data source fails, a symbolic trace remains. The ticker stands in metonymy for virtual query streams unwritten, unknown, but at least virtually real, streaming through thousands of other search engines all over the Internet. At the same time an internalized ticker-of-the-mind continues to cycle somewhere out of consciousness ("like watching yourself dream").

This ghost or shadow may affect real practices as well. Certain things can never be quite the same after one has seen the ticker. Searching for *pictures of Republican officeholders in heavy drag* may entail a little more hesitation now that one knows thousands of snoopers could be looking on. The assurance of anonymity (always dubious) is not the same as an expectation of privacy. Just how anonymous is anonymous? At the same time, knowledge of the ticker may change the way one looks at any Web transaction, heightening one's awareness of the deep communal significance of this information space.

In the end it may simply be impossible to look away from the ticker or to write it off as void of meaning or consequence. For even if this phenomenon does not portend the imminent end of mass-media capitalism ("the end of business as usual," as the *Cluetrain* gang have it), it does point to a very widespread human activity; and not incidentally, to something at the heart of cybertext and the Web.

*...personality tests...unionville ohio...sign supply...icky  
icktestus...vendee urlaub...*

Though useful enough in its way, the phrase "digital culture" has always been something of a misnomer, at least with respect to texts. Discrete specificity has never been the primary characteristic of electronic writing systems. Some of us have long believed that the most important feature of cybertexts lies in their capacity to reveal the space between particulari-

ties, the nodes as yet unencountered that we know to exist or suspect to be somehow producible by the system (see Moulthrop and Kaplan 1994). No set of signs can map or exhaustively represent this space, which in the case of the World Wide Web is effectively indefinite, if not strictly infinite, but the query ticker does at least approximate, represent, and to some extent embody this interstitial domain. The Web ticker counts ultimately as more than a mere toy because it reveals for us the analog experience of digital culture: the percolating, self-replacing socio-technical medium through which we set our desires.

But once again, so what? How can toys, even serious toys or techno-poetic symbols, change social and economic realities? In themselves they can do almost nothing, just as (*pace* McLuhan) no technology has any meaning in the absence of a human agency heavily influenced by many things non-electronic and non-digital. If they help anything to happen, games, toys, symbols, fictions, poems, and other symbolic productions can make a difference by influencing the developing consciousness of a generation. Maybe the first true Web cohort is not Tim Berners-Lee's and mine, or even that insistently lost generation that follows us, but a much younger crowd, the millennial brood just now learning its first lines of Java, already cruising in narrative space for stories we will not understand. In hope that this proposition may prove out, I have a practical, pedagogical idea to advance.

Some years ago, the U.S. Vice President (and Presidential candidate) Al Gore proposed that NASA place a satellite at the libration point between Earth and the Moon, about a million and a half kilometers out in space. From that position the planet is constantly visible as a complete disk. Mr. Gore wants this image of the Whole Earth to be accessible at all times over the World Wide Web (there's an irony here somewhere), constantly updated to show the flow of clouds, the rotation from day to night, even the axial tilt that makes the seasons. Mr. Gore believes that this image will instill a better understanding both of the fragility and the underlying unity of the planetary ecosystem.

While I do not begrudge the Vice President his eye in the sky, I would like to argue for a parallel – and much less expensive – probe of cyberspace. I call for the installation of very large flat-screen panels on the sides of key public buildings in all the capitals of the wired world, and for an expanded query ticker, guaranteed by U.N. sanction, to be run on these monitors at all times. I would also require any television set configured

for Internet access to give users an option to display the ticker under any and all content. In the U.S., I would require the ticker to be run at all times during certain commercial broadcasts, including the nightly news, and as an accompaniment to all political advertising.

If only as a thought experiment, imagine a world where such things exist. Try to picture a billion expressions of human desire streaming proudly, madly, obscenely above the U.S. Capitol, the U.N. General Assembly, the Japanese Diet, the Great Hall of the People, the Vatican, the Bibliotheque Nationale. Imagine a world no longer just watching itself at the movies, but able to follow itself through the spans and junctions of narrative space, seeking, finding, and wandering.

Then ask yourself why this will never happen.

## REFERENCES

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- Aarseth, Espen (1997) *Cybertext: Perspectives on Ergodic Literature*. Baltimore: Johns Hopkins UP.
- Gibson, William (1984) *Neuromancer*. New York: Ace.
- Harpold, Terence "Dark Continents: A Critique of Internet Metageographies." *Postmodern Culture* 9.2 <http://jefferson.village.virginia.edu/pmc/text-only/issue.199/9.2harpold.txt>
- Jenkins, Henry (1992) *Textual Poachers: Television Fans and Participatory Culture*. New York: Routledge.
- Johnson, Steven (1997) *Interface Culture: How New Technology Transforms the Way We Create and Communicate*. San Francisco: Harvest.
- Landow, George P. (1992) *Hypertext: The Convergence of Contemporary Critical Theory and Technology*. Baltimore: The Johns Hopkins University Press.
- Levine, Rick & Locke, Christoph & Searls, Doc & Weinberger, David (1999) *The Cluetrain Manifesto: The End of Business as Usual*. Cambridge, MA: Perseus Books.
- McDaid, John (1998) "Re: warning: addictive." E-mail to Stuart Moulthrop. 10 November.
- McLuhan, H. Marshall & Fiore, Quentin (1996 [1967]). *The Medium is the Massage: An Inventory of Effects*. San Francisco: Hardwired.
- Moulthrop, Stuart & Kaplan, Nancy (1994) "Where No Mind Has Gone Before: Ontological Design for Virtual Spaces." *Proceedings of the ACM Hypertext Conference*. Edinburgh: Association for Computing Machinery, 212–223.
- Nideffer, Rob (1998) "Public Spaces and Meaningful Traces: Interfacing to Information Personae", presentation at the Conference *Metaphor, Magic, and Power: The Web and Contemporary Cultural Theory*. Drake University, Des Moines, IA. The 7th of November.
- Pynchon, Thomas (1973) *Gravity's Rainbow*. New York: Viking.
- Williams, Walter Jon (1992) *Aristoi*. New York: Tor.