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An Electronic Stroll through the Global Village

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1. Greater-than signs or other marginalia (usually inserted automatically) help readers keep track of who wrote what in a thread. There is an art to quoting enough of the previous message to provide context, but not enough to lose your own point in the morass of prior discussion. Attribution can also be confused, with results ranging from the hilarious to the outrageous. Note also that I have in many cases concealed names and references, leaving them in my raw data; the content of the quoted material should make my reasons clear.

The rhetoric and group dynamics of electronic interaction are especially interesting among participants who are geographically separated and don't know each other. These participatory observations reveal that Usenet News, an international bulletin-board system, has attributes of both written and speech communication, plus aspects unique to online media.

This paper is a semi-random walk through Usenet News, a bulletin board system that exists on the vast Internet computer network. Interaction in such a medium is an interesting hybrid of speech and writing, of monologue and dialogue and sometimes an open shouting match in a crowded room. Those who are intrigued by these matters will be able to see a number of research areas exposed in this frankly anecdotal paper. In addition to being anecdotal, this paper is a work of participatory observation. In fact, I occasionally let it be known that I was observing the sociology and rhetoric of the newsgroups. The natives appeared unimpressed.

I discovered Usenet, or "netnews," quite by accident about two years ago. One of the first attributes that I noticed was the smart and sometimes furious pace of the interaction; Usenet is very much a part of the car-phone/fax-it/FedEx culture. At its best, here and elsewhere in our lives, this technology-driven mindset can greatly enhance one's efficiency and productivity. At its worst, it can result in a lot of frantic hurry toward no particular end and cause people to snap at each other. Consider this excerpt from alt.usage.english, a largely recreational newsgroup with nothing at stake and seemingly no reason to be in a hurry:

>> Sorry if this is late; my news feed runs about a week
>> behind.¹
> You ain't whistlin' Dixie, sunshine. Following up such
> ancient articles with points we've heard several times
> now is probably going to get a little grating after a time.

This admittedly extreme vignette shows an important point. A Usenet newsgroup is an asynchronous conference—in some cases, annoyingly asynchronous. An article propagates all over the world (or whatever other distribution area was specified) by fits and starts as other systems store and forward it. This results in numerous "followups" to some postings, most of them independent and, sometimes, most of them redundant.

Another important aspect of Usenet is the way threads can unravel into a variety of subtopics and new topics. Sometimes the Subject line gets changed to reflect the new focus, but the asynchronous, distributed nature of the network makes this only partially successful—some people, perhaps most people, will still be talking about new topics under the old name. Consequently, you might have to read a fair number of postings that no longer have much interest to you, lest you miss the interesting ones.

Although Usenet is organized into a great many topical newsgroups, not everyone exercises the required degree of discipline. Crossposting of a message to several groups at once can elicit a flame. For example, a thread on the mythical beast called the "jackelope," a truck-stop postcard favorite, began on alt.folklore.urban. At one time it had something to do with real animals and was crossposted to rec.pets. At another point, as people on alt.folklore.urbanswapped stories, someone crossposted it to a railroads newsgroup for a tongue-in-cheek discussion of the effect of railroads on the jackelope's spread. Someone soon wrote:

>> I am a member of rec.pets. I don't want to read any
 >> more folklore or railroad postings—I couldn't care less
 >> about jackalopes etc. and it is arrogant of you to assume
 >> that we of rec.pets are interested.

Actually, it was due to carelessness rather than arrogance; i.e., people follow up without checking the Newsgroups line carefully to see where their postings were going. One suspects that a great deal of annoying crossposting occurs in this way: a thread diverges from its original content but the now-inappropriate crossposting lives on.

Inattention had wasted someone's time—and waste was perceived even on these recreational newsgroups. Which brings us to perhaps the most important question of all: Is netnews worth your while? It can certainly use quite a bit of time; the question is whether the benefit is proportional. Here is an excerpt from my posting in a thread on "Mainstream academic acceptance of Usenet." A previous poster asked:

>> How many top scientists think that any newsgroup is
 >> worth reading?

And I answered:

> The network gets heavy use among scientists for E-mail
 > and file transfer. That's pretty easy to document. The
 > usefulness of Usenet per se is a tougher question.
 > Marvin Minsky and Donald Norman are examples of
 > big names seen on Usenet. I'm not sure (not personally
 > knowing either of 'em) whether they and other "top
 > scientists" find the newsgroups useful in their actual
 > research fields, or just spend their coffee breaks here in
 > Caffe Cyber, chatting away like the rest of us.)
 > Note also that it takes time to read Usenet. Ruthless use²
 > of the d and k commands has whittled my netting down
 > to less than an hour a day. Even as a junior assistant
 > nobody, I don't always have that hour to spare. A "top
 > scientist," after taking care of funds-wheedling,
 > personnel-reviewing, budget-juggling, paper-refereeing,
 > congressman-touring, and 1001 other nonscience duties,
 > usually has precious little time left over for research.
 > (You're lucky if a highly visible bigwig even personally
 > reads his or her e-mail instead of having a secretary
 > filter it just like phone calls—this isn't snobbery; it's
 > kung-fu for self-defense of one's most precious
 > possession, time.) A Usenet group has to be pretty
 > darned good to get a slice of that busy day!

2. Commands useful in two different styles of reading: d provides a directory from which you can select the titles you are interested in; k kills the titles you are not interested in.

Someone forwarded this to Norman, who replied (Norman 1991):

> Your analysis is correct: most professionals do not read
 > most of Usenet because of time, and that is because the
 > signal to noise ratio is simply too low. I, for example,
 > estimate that I get 40 to 50,000 e-mail messages a
 > year. Netnews is just too time consuming.

Let's examine Dr. Norman's electronic predicament. How long do you think it takes to read a typical e-mail message and dash off a brief courtesy response? Five minutes? Not if you get 200 a day—just do the arithmetic. Small wonder that top people find the time for netnews only sporadically.

But what use is Usenet to those who can spare the time? Norman wrote:

- > I do read netnews for three reasons:
- > 1. As an object of study: I am fascinated by the sociology of the nets.
- > 2. As amusement: my mid-morning break
- > 3. For professional reasons. Some, highly selected newsgroups provide valuable, solid information, sometimes deeply buried, alas.

The first reason, of course, is what we're doing here, and it leads to a tension between the second and third reasons. I have come to participate extensively in netnews, and I like to think that I both teach and learn there. But there are times when it seems more like an electronic salon than the virtual university some have envisioned. Norman provided a brief list of groups that have consistently meant more to him than a coffee-break diversion, and notes that they "have a very high proportion of very senior readers and contributors." He concludes, though, that

- > Most of my scientific friends in both industry and academia³ have completely given up: they are astonished
- > that I still continue. Their objection is solely based on time.

The third reason, however, can sometimes be quite compelling. On the newsgroup misc.writing, a Swedish academic attempting to start a technical-communication course requested information. He posted this message of thanks (Gallmo 1991):

- > I got a great number of high quality replies, with exact
- > references to schools, programs and persons who would
- > know more. I have written to a number of these, and I
- > have started receiving printed material in the mail. A
- > great example of USENET at its best!

Possibly a student of the networks has to peer into the nooks and crannies of dataspace to find the truly useful newsgroups and bulletin boards. There are some project-specific and lab-specific groups that would bear watching for a student of net.usefulness; LBL.GENOME (for our slice of the Human Genome pie) and SLAC.B-FACTORY (for a multilab accelerator project) are examples. Such groups might not even be evident to those outside their geographical or intellectual area, yet might prove to be among the most useful in actual R&D.

Usenet is merely a venue for communication; the communication itself is whatever people choose to make of it. There are some attempts to actually publish journals in dataspace (e.g., Stodolsky 1991), and there are numerous data archives that can be accessed over the network (some manifested as Usenet newsgroups, most as file transfer sites). However, I will venture that the most appropriate role of Usenet is that of a near-real-time workspace where ideas can be hammered out and expert opinions sought in a manner less formal than actual publication. The dialogue is ephemeral, though not as ephemeral as speech, and as you can tell from the passages quoted in this paper, the writing style (and sometimes the thinking style) tends to be rather informal.⁴

Some newsgroups go out of their way to be serious and useful; others become a hiss of noise or a gale of giggles. The latter effect can coexist with seriousness, serving as a correction for a subject that has gotten too heavy for the particular community. As an example, a posting on rec.bicycles about a cyclist striking back at a motorist contained a typo in a strategic location:

- >> It's true that there is potential that the area could get

3. This point about senior participation is important. Many newsgroups are like freshman classes. An ever-changing array of novices keeps arguing about the same old chestnuts. Such a group could be a decent forum for teaching (though random and spontaneous rather than systematic and guided), but is not likely to be either attractive or usable as a workspace for advanced practitioners.

4. I occasionally wonder about the effects of immersion in net.culture—the informality, the emphasis on haste over quality, the reliance upon approximation and subsequent correction by others—upon my own style.

>> scared by the press into thinking that cyclists are
 > particularly violet.
 To which someone promptly replied:
 > Actually, it's my observation that cyclists *are*
 > particularly violet. Also particularly neon and
 > fluorescent.

But not everyone enjoys being laughed at. A rec.autos.tech participant was asking for advice on building one of those monster car stereos. Someone responded with:

>>>> Wow! I wish I could get my stereo to do that. I could
 >>>> impress my friends with how powerful it is. Just
 >>>> crank it up and watch the Electric Chair Effect!
 Then back came the original author:
 >>> Listen, Spud, I don't need your wisecracks. Save your
 >>> lame attempts at wittiness for the humor group, ok?
 >>> If you don't have advice to offer, then stay off your
 >>> keyboard. I'm sure others would appreciate it also.

But not everyone did. Further responses defended the jokester:

>> Hey buddy. Why don't you lighten up? This is not a
 >> life or death newsgroup. I happen to like humor and
 >> saw nothing wrong with it.
 > Agreed. There was absolutely nothing wrong with
 > [respondent's] post. I appreciated it a lot more than I did
 > [originator's] comeback. Reading [originator's]
 > reply will certainly make people want to help him out
 > with his problem, too. Sheesh!

Even though they may all be in the same virtual country, each newsgroup is a little village unto itself, with its own local good ol' boys, its own rules—and its own ducking stool. The citizens as well as the newcomers can get into trouble, because as we sit around the campfire and tell our stories by CRT-light, we don't see who all is listening. On rec.martial-arts, one participant was musing about the self-defense utility of household objects. He observed that one of his recent purchases, a gasoline-powered weedwhacker, would be very useful for "crowd control."

It was obvious to most readers that he was using "crowd control" as a figure of speech—that he was referring to improvised defense against a group of intruders. But one reader, interpreting the humor as a literal endorsement of weedwhackers for police use in riot control, posted a "flame" about how horrible the idea was.

Cooler heads talked him down, but only in the course of a long thread of responses.⁵ The best of the responses pointed out what I would like to emphasize here: that a newsgroup becomes a community of friends. People who consider themselves to be among friends are, of course, not nearly as careful with their speech.

Unusual friends, though. All they know of you is what they read. I was recently invited to a gathering of participants in one newsgroup by someone who wanted to meet "the man behind the brain." A jarring reminder that in some ways, my fellow netters know me quite well, but in other ways, they don't know me at all. Keep this in mind as I tell the story of a stranger who came to town. Writing from a very "Green" perspective on the newsgroup sci.environment, she posted alarmist news items and allegations about environmental devastation, governmental coverup, and scientific myopia. The level of emotion that her postings engendered was considerable, and she

5. Research topic: Comparing networks on which the participants do not know each other, such as Usenet, to networks on which the participants are acquainted and perhaps set in a mutually understood social hierarchy such as a corporation.

was not shy about engaging advocates of science and technology in debate.

There's more to this story than the obvious fact that not everyone in a small town, much less the global village of Usenet, is going to like everyone else. This lady approached sci.environment as "Ph.D." It became apparent to her critics that her degree was not in any physical science closely related to the environment (sociology, as it turned out). Because she either did not know or chose to ignore the rule that "all they know of you is what they read," her use of "Ph.D." amounted to presumably unintentional misrepresentation.

Later, she branched out into sci.geo.meteorology with scientifically questionable talk about the effects of the Persian-gulf oilfires. There, a long and rancorous dispute apparently resulted in communication with the administrator of her host system; subsequently she largely removed herself from the meteorology group. Bulletin boards and the networks in general can let you communicate your ideas almost instantaneously with colleagues all over the world. But sometimes—as an engineer friend of mine said about a conferencing system—you find yourself holding up your ideas to be shot at by people who shouldn't have guns.

These were merely extreme cases of how knowledge is arrived at upon the network, a process I call "muddling toward consensus." Many times—largely by inadvertently posting incorrect information and by watching others do the same—I have observed that the secret to getting information is to cajole, entice, or provoke its holders into responding.⁶ Usenet News has such a volume of traffic, so much of it irrelevant to any one user, that people who hold knowledge must be given a reason to share it. (There are also cases where the experts do not agree; the resulting dialogue is particularly rewarding and enlightening.)

It seems that establishing a dialogue, however rocky, can reveal more of the truth than declaiming a monologue, however accurate. Perhaps the scorched-earth type of research and writing we are taught in academia can be a mistake, at least early in a thread.⁷ The network community hunts the truth by firing many arrows from different directions, and the hunt can lead to unexpected territory. In electronic dialogue as in interviewing, the content and phrasing of both questions and answers should be engineered to foster rather than conclude the interchange, for this is above all a participatory medium.

The network is open to anyone who is willing to pay for public access or who gets it for free at work. As the saying goes, it takes all kinds. Users of the network express formidable support for free speech and open access; nonetheless, someone occasionally pushes the limits of tolerance. As of this writing, one or more historical revisionists are issuing postings from "Banned CPU" claiming that the Holocaust never occurred. (Having darkened your day by mentioning it, let me assure you that they appear to be shouted down wherever they spread their poison.)

Most cranks and flamethrowers do not have that incandescent purity of hatred. They are ordinary people who, as my wife once put it, ate live wasps for breakfast. After the Oakland/Berkeley Hills fire, a local bicycle racer posed the request excerpted here:

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>> In addition to these private losses, our nice white team
>> van is now a piece of black charcoal . . . I'd love to
>> find a sponsor to contribute toward the purchase or
>> lease of a new van.
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6. Research topic: Identifying and categorizing the roles played in these discussions—for example, the "minuteman" who posts a hasty first approximation, the "scholar" who weighs in later with a more thorough analysis, the "coordinator" who tries to steer the discussion, and the various members of the chorus who add me-too comments, embellish upon peripheral matters, and provide metadiscussion.

7. Research topic: How is authority established on Usenet? As time goes by, most groups acquire a semi-permanent array of participants who are recognized as resident experts. It would be interesting to learn what attracts them and how their expertise is recognized, and whether they stay or drift away with time. One must remember—emphatically—that not all the people on Usenet, even on the moderated groups, know whereof they speak. This is especially important with respect to readers who are novices in the subject matter; to them all sources are credible and all statements plausible.

Seemed like an innocent request, but someone in a part of the country untouched by the physical flames decided to send forth the electronic kind:

- > Why is that every time California has one of its
- > Commonly Occurring Disasters, the Californians come
- > whining for money from everyone else ?
- > Californians never paid for any blizzard damage in New
- > York, why do they expect New Yorkers to pay (via the
- > FedGov) for their fires, mudslides, earthquakes,
- > medflies, droughts, et cetera ?
- > And _this_ whining is for "donations" to replace a
- > bunch of TOYS, essentially. Or does [originator]
- > NEED these bikes and a van to earn a living ?

Let me emphasize that the original poster was asking for private largesse, not a single dollar of public money. One is reminded of a passage on etiquette in Strunk and White's *The Elements of Style*—the one about gracious and ungracious ways for a cat-hater to decline an invitation to appear at a cat show. Perhaps many people think of bicycles as unimportant toys, but few would presume to announce this conclusion on the newsgroup for cyclists. Takes all kinds, indeed, including what I believe to be a commendably small minority of bigots, idiots, overgrown children, and humorless petty tyrants. Network interaction may have many features of oral dialogue, but some important ones are missing.

Although not anonymous, it is not quite face-to-face either; as our keynote speaker John Barlow said, there is no *prana* to it, no breath. People will say things from the safety of a terminal that they wouldn't dream of saying to your face. Think of how a telephone conversation is somehow less than a face-to-face meeting, how you lose an entire class of conscious and unconscious clues about what your partners in conversation mean and what pressures they might be under. A computer dialogue has an additional degree of abstraction, entailing just enough dehumanization to result in flaming (see Stewart; also Kiesler and Sproull). Ph.D.s on sci.geo.meteorology scream at a dilettante who crossposts inappropriate discussions and will not go away; students on rec.autos curse at each other over whether a Mustang is better than a Camaro. Although networks and bulletin boards are an important new venue for human interaction, the interaction can seem curiously deformed.

Perhaps, as is so often the case in our high-tech world, both the cultural matrix and the path ahead can be glimpsed in science fiction. As I learned more about Usenet, I began thinking about a sort of debate, conducted in print over a period of years, between Arthur C. Clarke and Robert A. Heinlein. Clarke, most notably in his novel *Imperial Earth*, postulated a future in which people tended to sit at home and interact online. Heinlein recognized the usefulness and fascination of networks and databases (cf. *Friday*), but held fast to the opinion that we monkeys have to get together and groom each other. I shall merely observe that we have traveled great distances to sit together in a room and talk about electronic interaction. Communicating electronically has no prana, and it has a degree of impersonality that can lead to rudeness. But it also has its advantages, and I look forward to continued exploration.

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Re: *Mainstream Academic Acceptance of USENET*," sci.research posting

<16932@dog.ee.lbl.gov> on newsgroups comp.lang.fortran, sci.math, sci.math.symbolic, sci.research, and misc.writing, 27 August 1991.

GALLMO, Bengt

Re: technical writer education, sci.edu posting
<1991Nov5.094117.34698@eds.ericsson.se>.

NORMAN, Donald K.

Electronic personal communication, 27 August 1991

STEWART, Doug

Omni Magazine 13:12 (September 1991) 26; see also SPROULL, Lee, and
KIESLER, Sara. *Connections: New Ways of Working in the Networked
Organization*, Cambridge, MA: The MIT Press 1981

STODOLSKY, David S.

Consensus Journals: Invitational Journals Based Upon Peer

Consensus, Electronic personal communication, 28 April 1991, based on
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