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Searching for the Leviathan in Usenet

MacKinnon, Richard Clark, M.A.

San Jose State University, 1992

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Searching for the Leviathan in Usenet

A Thesis

Presented to

**The Faculty of the Department of Political Science
San Jose State University**

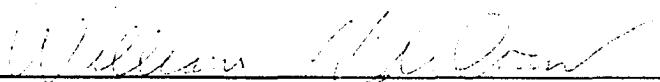
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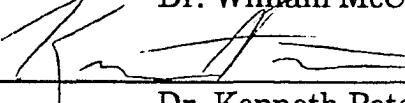
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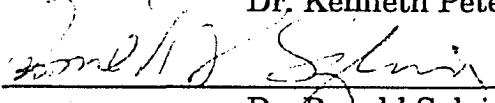
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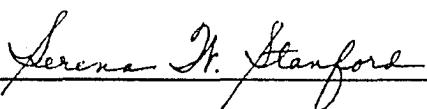
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POLITICAL SCIENCE


Dr. William McCraw


Dr. Kenneth Peter


Dr. Ronald Sylvia

APPROVED FOR THE UNIVERSITY


Serena H. Stanford

Abstract

Searching for the Leviathan in Usenet

by Richard Clark MacKinnon

The purpose of this thesis is to identify signs of Thomas Hobbes' Leviathan in the Usenet computer conferencing network. Certainly nothing that the Usenet users can experience can compare to the Hobbesian scenario in which persons are forced to give up the right to govern themselves in exchange for personal safety. This is certainly true on the surface, but there is another level of interaction within Usenet other than user-to-user. It is the level of the users' "personae," and it is at this level of understanding that the fear of vanishing from existence is ever present and near. For personae within Usenet, life can be described as "solitary, poor, nasty, brutish, and short." And it is for their sakes that this researcher has searched for and found a Leviathan in Usenet.

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Introduction

The purpose of this thesis is to identify signs of Thomas Hobbes' Leviathan in the Usenet computer conferencing network. Defined as "that mortal god, to which we owe under the immortal God; our peace and defence,"¹ Leviathan in a computer conferencing network is the institution of censorship or moderation of the messages written by the network's users. According to Hobbes, living in fear of death or wounds disposes men to obey a common power.² Certainly nothing that the Usenet users can experience can compare to the Hobbesian scenario in which persons are forced to give up the right to govern themselves in exchange for personal safety. This is certainly true on the surface, but there is another level of interaction within Usenet other than user-to-user. It is the level of the users' "personae," and it is at this level of understanding that the fear of vanishing from existence is ever present and near. For personae within Usenet, life can be described as "solitary, poor, nasty, brutish, and short."³ And it is for their sakes that this researcher has searched for and found a Leviathan in Usenet.

In order to argue this work, this paper is organized into short sections or chapters designed around major points. The first chapter introduces the reader to Hobbes, Leviathan, and Usenet. A glossary is provided to assist with technical computer terminology and an appendix contains relatively hard to find Usenet documentation. The argument itself consists of seven

¹Thomas Hobbes, Leviathan, Edited by Michael Oakeshott (New York: Macmillan Publishing Co., 1962), 132.

²Hobbes, 82.

³Hobbes, 100.

points and a survey of two hundred randomly selected Usenet articles. The survey was conducted to find measurable signs of the Leviathan as described in the argument. The findings show the degree to which Leviathan is present in Usenet. Each chapter states its purpose in the opening paragraphs and is concluded with a summary of the points covered therein. In this way it is possible to lead the reader through the theoretical worlds of Leviathan and the Usenet persona. At the end of the argument is a conclusion which summarizes all seven points and focuses on the most difficult ones. And lastly, the thesis concludes with a short discussion of future research considerations.

Hobbes, Leviathan, and Usenet

Hobbes' Leviathan was selected for this thesis primarily because it is a system of knowledge developed for the purpose of understanding the genesis of government. This system of knowledge for understanding the "matter, forme and power" of society, originally advanced during Cromwell's tenure, was published in 1651. The controversial title implied that the monarchy was the political manifestation of the Biblical beast and the work was considered scandalous.

Hobbes scholar Herbert Schneider explains that the choice of the title is curious because the mythological Leviathan is consistently the symbol of the "powers of evil,"⁴ rightfully upsetting the supporters of the Crown. Yet it is clear when Hobbes describes the Leviathan as the "mortal god"⁵ on earth that he does not share the common diabolical connotation. Certainly Hobbes was aware of this discrepancy and it is likely he intended for the discrepancy to further define his concept of a Leviathan rising from the people. There is no doubt that such a "beast" would need to be menacing and powerful in order to convince people that their lives are safer with it than in their own hands. The Leviathan is the generation of the Commonwealth, that entity consisting in the powers of all people which can protect them from their enemies. Hobbes' critics were quick to equate the evil beast with government, thus putting Hobbes at odds with the regime indeed, with any government. It is

⁴Herbert W. Schneider, "The Piety of Hobbes," in Thomas Hobbes in His Time, eds. Ralph Ross, Herbert W. Schneider, and Theodore Waldman (Minneapolis: University of Minnesota Press, 1974), 86.

⁵Hobbes, 132.

possible that Hobbes selected the Leviathan symbol in part to convey that government is a necessary evil given humans' inclination to destroy one another without it. Even this notion brought Hobbes criticism as a paranoid anti-establishmentarian. While he admits to a level of paranoia commensurate to being born the "twin of fear," he is emphatically not anti-establishment--in fact, he would have supported either Cromwell or the King as long as one of them possessed absolute power to govern as a Leviathan. Given his dim view of human nature, his predilection toward paranoia, and the execution of the King, one cannot blame Hobbes for desiring peace and order at any price.

Though never the intentional sum and highlight of his political, religious, ethical, and philosophical view, Leviathan has nevertheless emerged as such. This is because of Hobbes' precision in the use of language and his plain treatment and analysis of socially sensitive matter. In his lifetime Leviathan earned Hobbes the enmity of many who had formerly been his friends. Today it is still popularly trivialized as a dark and heretical treatise written by a paranoid exile. But Hobbes' admirers and students appreciate the giant work for what it is--a reconstitution of civil society from its most basic element. He begins his book with the ambitious sentence, "Concerning the thoughts of man, I will consider them first singly, and afterwards in train, or dependence upon one another."⁶

Considering that his goal is to explain governance, one would expect that a beginning begun with a discussion of the "single thought" would

⁶Hobbes, 21.

immediately proceed to more developed concepts such as the rights of kings. Not so. After describing the nature of thought, he discusses the senses, imagination, dreams, the development of speech, passions, virtue, and the categorization of all knowledge. It is not until Chapter Sixteen that he defines what a person is and in Chapter Eighteen he finally addresses the rights of sovereigns. It is an understatement to say that Hobbes is thorough in his endeavor. Although this thesis focuses on the generation of Leviathan (at the end of Chapter Seventeen), it is important to realize that this study covers only a quarter of the book.

The result is a self-contained, interlocking structure with every word defined and every conclusion logically sound. In the writing of his book, Hobbes incidentally produced the first comprehensive attempt at the theory of language. In other words, Hobbes had to develop a theory of language to accurately describe his theory of the commonwealth. Richard Tuck remarks that Leviathan is the "first unquestionably great philosophical work" in English.⁷ Prior to Leviathan, all scholarly works of import were written in Latin, French, German, or ancient Greek.⁸

Since his endeavor was intentionally comprehensive, his treatise is unusually suitable for examining any and all societies--including those that did not exist in his time and as in the case of Usenet, arguably do not exist now. This is possible because the treatise is presented mostly in general terms, giving it broad applicability and timelessness. While it is true that

⁷Richard Tuck, Hobbes (Oxford: Oxford UP, Clarendon, 1957), vii.

⁸And undoubtedly, Chinese and Italian.

Leviathan is a product of troubled times, Hobbes' sparing references to Britain merely illustrate his points and do not confine them to that island. Additionally, his masterful understanding of philosophy beyond the realm of politics is useful in the establishment of personae and their virtual society of Usenet.

Usenet is the largest computer conferencing network in the world. The network is composed of an estimated 2.3 million users at 45,000 sites worldwide. Most sites are academic institutions or high technology companies, but commercial and publicly supported access is available to any interested group or individuals. Usenet users can send private messages to one another via electronic mail. The mail can reach many sites on the planet within seconds. The users can also write public messages known as "articles." These articles are divided into approximately 4,000 thousand categories called "newsgroups." Newsgroups range in topics from political theory to baseball. The current volume of articles is 14,000 daily.⁹

Despite its size, Usenet has no central authority which monitors access or content. All control, if any, is exercised at the site level. Sites determine whether to provide access to users or whether they want to provide a "feed" or connection to a potential site. Users and sites may remain on the net as long as the sites that provide them with access continue to do so.

⁹Brian Reid, Usenet Readership Summary (Palo Alto, California: Network Measurement Project at the DEC Western Research Laboratory, March 1992), lines 22-28. The lines are cited rather than page numbers because the document was received electronically without pagination.

Usenet articles are distributed using a "store and forward" method. This means that when a user writes an article, the original article is stored at his or her site and a copy is forwarded via telephone or leased line to neighboring sites. Because the associated costs of storage and forwarding can become very high, economics may have more of an impact over local control than anything else. A company, for example, may decide to restrict users from participating in any of the recreational newsgroups because the volume in those groups is high and their business value is low. Still, some organizations may opt to control content for other reasons. For example, a high school may decide to block participation in sexually-oriented newsgroups. However, thousands of users around the world enjoy unrestricted access to newsgroups containing articles from the technologically informative to the obscene. Depending on the user consulted, Usenet can be an anarchic or a highly regulated medium of communication.

Usenet is a Distinct Society

In order to apply Hobbes' political philosophy to Usenet, it is important to establish the distinctness of the Usenet society. Distinctness assures that Usenet differs enough from the external world--the reality outside of Usenet--to provide a unique laboratory to cultivate new insights and new conclusions. The argument for distinctness consists of Usenet's two-dimensional nature, its creation of an explicit language to describe its "physical" reality, its interference in the transfer of the social structure from the external world, and its ability to compensate for the lack of a complete social structure by developing a parallel or alternate structure to that of the external world.

Although Usenet is designed to facilitate communication among computer users, it is restricted to written communication; therefore, it mitigates the amount and quality of communication possible among them. Much like un-introduced penpals can never know the "real" persons behind their letters, Usenet users can never know the "real" persons behind the articles. It is not possible to capture the range of interpersonal interaction with only the written word, transforming Usenet into a two-dimensional substitute for three-dimensional, "face-to-face" communication. As a result there is a deception in the medium that often distorts the meaning of a message, much as a carnival mirror distorts the reflection of a person: what is "said" is not necessarily what is "heard," or more accurately, what is written is often misinterpreted. Since ambiguity has this deceptive effect in the external world, Usenet participants are especially susceptible to ambiguous statements, implied meanings, and sarcastic remarks. Whereas external world users can find clues to meaning in facial expressions and voice

control, Usenet participants cannot. But more importantly, the lack of cues available during "face-to-face" communication points not only to the absence of faces, but to the absence of all physical reality.

Lacking physical reality, Usenet users must create an explicit, written language to convey meaning as well as emotion, physical qualities, and action. As a society based in language, it relies heavily on symbol, analogy, and metaphor to re-create or transfer physical matter and actions from the external world. But since these re-creations are merely metaphors for, or "analogs" of their physical counterparts, Usenet can never be a mirror image of the external world.

Usenet users are unable to "bring" with them their respective social structures because the limitations of written communication deconstruct their external world social structure. These social structures consist of the norms, mores, and traditions which guide the users' interaction as members of the external society. The computer medium inhibits computer users from transferring these social structures to Usenet. This inhibition resulting from the absence of or limitations on physical proximity, "face-to-face" interaction, and non-verbal cues, is discussed and analyzed at length in Elizabeth Reid's Electropolis: Communication and Community on Internet Relay Chat. Reid exposes the failings of computer-mediated, i.e., written, communication as follows:

Words, as we use them in speech, fail to express what they really mean once they are deprived of the subtleties of speech and the non-verbal cues that we assume will accompany it. . . . It is not only the meanings of sentences that become problematic in computer-mediated communication. The standards of behavior that are normally decided

upon by verbal-cues are not clearly indicated when information is purely textual.¹⁰

The deprivation of the "subtleties" is exactly what makes communication and interaction among Usenet users different from a room full of computer users. Computer users, as do all persons, learn standards of behavior from their respective social structures. As Reid suggests, these standards are reinforced by "subtleties of speech and non-verbal cues." But within Usenet, users limited to written communication are denied the full range of verbal and non-verbal cues customary to interpersonal communication and required for reinforcing behavioral standards. In the external world, behavioral standards dictate that one should not provoke a visibly angry man, but in Usenet the absence, or least the distortion, of visible anger interferes with that standard of behavior.

Despite the limitations of a society based upon written communication, Usenet users are able to compensate. The "interference" or distortion caused by the written medium forces Usenet users to confront what Reid calls the deconstruction of the "traditional methods for expressing community" by developing "alternate or parallel methods."¹¹ In this way, Usenet has become an alternate or distinct society from the external world.

Usenet's parallel method or analog for conveying mores, norms, and traditions is known as "netiquette." As the term implies, it is literally "network etiquette" and it helps to reinforce the standards of behavior that

¹⁰Elizabeth Reid, "Electropolis: Communication and Community on Internet Relay Chat," thesis, (Melbourne, Australia: University of Melbourne UP: 1991), lines 495-505.

¹¹Reid, lines 200-206.

users might miss from the lack of non-verbal cues. Several attempts have been made to summarize the norms of "netiquette." The most widely cited is Gene Spafford's series of documents¹², which he compiled and edited from the suggestions of Usenet users. Either heeded or ignored by many, the estimates of the validity of Spafford's guidelines vary, but they are often invoked to resolve a dispute or to "advise" one another. In the following example, "Jack" from the University of California at Irvine advises "Bill" from The Netherlands of a breach of "netiquette":

Your reply to my post gave me mixed messages. Some of your comments are cruel. Your flame should have been sent directly to me via e-mail.¹³

Since enforcement of "netiquette" begins with the individual users, consensual interpretation by the Usenet public determines the "law." If a user's action offends one person in 10 million, that action is probably a slight breach, but nothing of wider concern; however, if an action results in thirty complaints, then it usually is treated more seriously. "Netiquette" then, is the Usenet analog for the external world's system of mores, norms, and tradition. While not a precise duplication of the external world's social structure, "netiquette" provides Usenet users with guidelines or standards of behavior. Chuq Von Rospach, author of A Primer on How to Work with the USENET Community, writes,

¹²These documents are included in the Appendix.

¹³All such examples are excerpts from actual Usenet communication. The original punctuation and spacing has been left intact to preserve the intent of the message. In the interest of privacy, the authors' surnames have been suppressed.

. . . for USENET to function properly those people must be able to interact in productive ways. This document is intended as a guide to using the net in ways that will be pleasant and productive for everyone. This document is not intended to teach you how to use USENET. Instead, it is a guide to using it politely, effectively and efficiently.¹⁴

It will be recalled that Reid suggests non-verbals cues reinforce the standards of behavior in the external world. Just as "netiquette" developed into the Usenet analog for standards of behavior, a system of written cues has developed as an analog to reinforce those standards. These cues, known as "emoticons" make use of non-standard punctuation, spelling, capitalization, and special keyboard characters to convey action, emotion, and emphasis. An excerpt from Spafford's guidelines follows:

The net has developed a symbol called the smiley face. It looks like ":-)" and points out sections of articles with humorous intent. No matter how broad the humor or satire, it is safer to remind people that you are being funny.¹⁵

This guideline emphasizes the use of emoticons to convey humor in order to avoid the consequences of ambiguous or sarcastic statements, but does not show the variety of possibilities, as in the following examples:

Steve,

hahahahahahahahahahahahahahahahahahahaa
 sniff waaaaaaaaaaaaaaaaaaaaahhhhhh

I laughed, i cried...that post was GREAT! :-)

¹⁴Chuq Von Rospach, A Primer on How to Work With the USENET Community. Compiled by Gene Spafford, 1987, lines 14-16. See the Appendix for the complete text.

¹⁵Von Rospach, lines 112-114.

Amusedly,
-Mirth-

In this message, "-Mirth-" from the Massachusetts Institute of Technology, has no difficulty sharing his or her amusement with an earlier "post" or message of Steve's. Note the use of the asterisks in "*sniff*" to convey action as opposed to simply saying "I sniffed," as is done later. Of course, the capitalization in "GREAT" indicates emphasis, presumably enthusiasm given the presence of the "smiley." Consider the next example from a user at Dalhousie University in Halifax, Canada:

You know, I agree with everything you said. However, you loosely fall into the dweeb category by admitting you actually READ most of the damn thing. It brings no fame to its creator, but only humiliation to the human species (or does Kibo not fit into the homo sapien sapien category? Maybe there is a better division for an individual who's life is overwhelmed by USENET? homo sappy postus?) *shakes his head, almost embarrassed that he has a 4 line .sig, let alone a 950 line one*

This article is an excerpt from a discussion on whether having a "950 line" signature on an article is a violation of "netiquette." The Canadian user agrees that a lengthy signature is a violation and becomes embarrassed when he realizes that his own "4 line .sig" is considered too long by most interpretations of "netiquette." He conveys this realization by using asterisks to simulate the shaking of his head.

To summarize, it is important to establish the distinctness of Usenet from the society of the external world so that new insights and new conclusions may be cultivated from the application of Hobbes' political philosophy. This distinctness is established by Usenet's explicit language for conveying meaning, emotion, and action to a two-dimensional environment. Although Usenet users are able to compensate for the lack of a physical

reality, their parallels or "analogies" with the outside world have resulted in a distinct reality of their own.

The Notion of Persona

The high level of interaction between Usenet users in their distinct society results in the development of "personae." The following discussion explores this development, the personae's ability to portray Usenet users to one another, the derivation of their "actions" from words, and the conditions for their existence.

Usenet is distinguished from other written media by the level of interaction among its users. A printed newspaper, for example, offers its readers a one-way medium. Generally, a newspaper is a medium for the writers to communicate to their readers and not with them; however, the Opinion/Editorial page does provide for selected reader response. There the opinions expressed are personal and not necessarily the view of the newspaper's staff. These opinions may be compelling or inane, but it is the names attached that remind one that there are individuals at the source. These individuals, through the interaction of their opinions, briefly create a sense of community. Granted, such a community is a fleeting one at best, for often the emergent dialogue is not a dialogue at all, but a set of coincident monologues submitted in reaction to a piece of news. Any repartee is unintentional and possibly staged--selected--by the editor to represent a diversity of views. In Usenet, dialogue is spontaneous and unedited, and the individuals at the source are users who frequently contribute on a regular basis. The most active users contribute over fifty articles per week each.¹⁶

¹⁶UUNET Technologies, Inc., Top 25 News Submitters by User by Number of Articles for the Last 2 weeks (Falls Church, Virginia: July 24, 1992).

This high level of interaction among Usenet users creates a more permanent sense of community than among a newspaper's readership. Accordingly, this high level of interaction among users provides opportunities to develop relationships.

It has been established that the medium of written communication interferes with the transfer of the users' external world social structures into Usenet. By the same means, written communication interferes with the transfer of the users' personalities and unique qualities as well. The result is the creation of "personas" which are as distinct from the users as Usenet society is distinct from the external world. The external world of the users is a world of myriad objects to be sense-perceived ultimately to be desired or avoided.¹⁷ The nature of the users' known universe possesses physical characteristics that can be sense-perceived either directly or indirectly via technological extension of the senses or a combination of these accompanied by scientific deduction. Words signify the memory of sensory experience and thought¹⁸, but the physical things of the external world exist independently of the words which describe them. Though important, words are not required for the existence of the things to which they refer. But within Usenet, words are the sole means of characterizing the network's universe. Thus, wordsmanship in Usenet is a far more valued skill than it is in the external world. Consequently, possession or lack of this skill can inadvertently give the Usenet user a radically different persona from him or herself.

¹⁷Hobbes, 48.

¹⁸Hobbes, 33.

Accordingly, a command of written language can empower a persona in Usenet beyond the relative strength of its user in the external world.

The degree to which Usenet users resemble their personae seems to vary. The representation of a user within Usenet is the attempted transfer of the user's individuality into a Usenet persona. The user has some control over the representation and the extent to which the persona resembles himself or herself. A representation is transparent when the user attempts to represent him or herself as he or she is; a representation is translucent when the Usenet persona is only a shadow of the user; and accordingly, a representation is opaque when the persona does not resemble the user at all.

A user can spend a great amount of energy wondering about the "real" users behind the personae with which he or she interacts. In all cases where there is no direct knowledge of another user, if one cares, one must rely upon the word of that user as to whether that persona is an accurate representation. Since it is in effect that user's word which is in question, relying upon it offers little relief. Without direct or revealed knowledge, the pursuit of the true nature of representations is a matter for speculation. Therefore, until the full truth is known, it is a common and expedient practice to "forget" about the users behind the personae so that any purported resemblance or dissimilarity of personae to users can be treated as if it does not matter.¹⁹

¹⁹We commonly "forget" complications for the sake of simplicity. For example, it is simpler to think of the sun "rising" than it is to think of the earth turning.

Since Usenet is a medium for communication, any resemblance it may have to external world society necessarily must be reduced to written form. Physical actions such as activating a computer or restricting access to another user's account are actions completed by users and not by their Usenet personae. Users have physical form and are able to manipulate physical objects such as power switches and keyboards, but their Usenet personae have no physical form. Therefore any interaction among personae must be derived from the written words of their users. Note that actions derived from written messages do not correspond exactly to those of the respective users. For example, the action of a persona which is "smiling," corresponds to the action of a user who is typing. Although the action of "smiling" is derived from the words that the user types, the actions do not correspond exactly because the user may or may not be smiling and the persona is probably not "typing."

It is the high level of interaction among Usenet users which gives their personae "life." In fact, a single response to one's statement is sufficient to generate a persona. That response, though minimal, is the foundation of existence within Usenet. It is obvious that a response implies a cause or stimulus worthy of reaction; however it is less obvious that by implication it signifies an acknowledgement of that cause. In terms of "cause" and "effect," a characteristic of the effect is the substantiation of its cause's existence. In terms of Usenet, a response substantiates the existence of a statement. This may seem trivial until it is recalled that Usenet personae are created as a result of the interaction among Usenet users. This interaction consists of the

cycle of statement and response. The existence of the personae, therefore, is tied to that cycle.

One may wonder why interaction is a prerequisite for a persona's existence. In a written world such as Usenet, there is a stricter burden of proof for existence than Descartes requires in the external world. A user can read and contemplate the words of another user, but unless there is a visible, i.e., written, response via his persona, the action of reading and contemplating goes unnoticed. If a user is unnoticed, then he or she is not interacting with other users. Because personae are created as a result of interaction, reading and contemplating alone are insufficient to generate or maintain the existence of a persona. As shown, "Cogito ergo sum" is an insufficient measure of existence within Usenet. If all users kept their thoughts to themselves, they certainly would be assured of their own existences, but Usenet would be reduced to a non-interactive, indistinct, written medium. Without some sort of response beyond interior cogitation, there is nothing to be perceived by other Usenet users. "Network existentialism" is therefore more skeptical than Decartes' externalism can account for.

However, a dialectical approach can be used to establish a measure for existence within Usenet. Whereas "I think, therefore I am" is insufficient for this purpose, so too is "I write, therefore I am." Again, without a visible response, a written statement remains isolated and apparently unperceived--a persona's existence is neither generated nor substantiated. A further modification to the premise results in, "I am perceived, therefore I am." Suddenly the Usenet user is no longer alone, for to be perceived requires

another. The visible response, "I hear you" generates and substantiates the existence of the first user's persona, whereby a reply would perform the same function for the second user's persona. The visible response is evidence of perception. Without that response, the perception remains as an interior cogitation of the would-be respondent and does nothing to substantiate the existence of either user's persona. The visible cycle of cause and effect, the users' statements, responses, restatements, and correspondence ensures the viability of the personae of both users. When extended beyond them to the multitude of the personae within Usenet, the existence of all of them is assured.

Where the parallel between dialectical existence in Usenet to independent existence in the external world might be difficult to follow, the parallel for the quality of life is more apparent. As in other aspects of the comparison of Usenet to the external world, persona existence is distinct from user existence. Users require air, food, water, and other essentials for basic existence. Personae, lacking physical form, do not require physical sustenance; nonetheless, they are dependent upon three essential conditions for existence.

The first condition is the continued association between the user and the persona. The loss of the user's access to Usenet severs the association to his or her persona. Once Usenet loses its utility to the user, the continued association to the persona is threatened. In other words, a persona's existence is dependent upon a user's access to Usenet; and a user maintains access to Usenet so long as Usenet remains useful.

The second condition is the visible demonstration of presence. While Usenet may have great utility to a passive user,²⁰ the lack of interaction with other users does not create a persona which exists in a way previously defined as existence within Usenet. The passive user remains outside the boundary of Usenet existence and his or her actions are unnoticed to "life" within. This study concerns itself with those users who choose to participate.

The third condition is that the participation is continuous. A persona belonging to a user who is prevented, unable, or unwilling to continue to participate will continue to exist until the memory of that existence is forgotten by the other users.

In summary, the two-dimensional nature of Usenet, caused by the medium of written communication, forces the development of personae among interacting users. Further, the derived actions of the personae from the words of the users are distinct from the physical actions of the users. Also there is sufficient distinctness to allow users to "forget" that they are interacting with representations of other users and not the users themselves. Finally, the personae exist dialectically²¹ and will continue to exist as long as

²⁰A passive user is a user who does not or cannot communicate with other users, e.g., while using a library's online catalog.

²¹Prior to the "first cause," participant A is isolated in silence and unaware of "self" and "other"--existence is undefined. Participant B, like A, is also alone and ignorant. Spontaneously, participant A wonders aloud, "What is my purpose, if any?" B, surprised by the break in the silence and the presence of another, replies, "I don't know, but let's find out together." The phenomenon of mutual awareness implies the simultaneous awareness of the other and the self. This rudimentary confirmation of existence-dependent-upon-another, i.e., co-existence, is sufficient enough to allow participants A and B to pursue the purposes of their existence together.

Usenet retains its utility to the users and the users continue to participate continuously via the cycle of statement and response.

Personae are Persons

Having established the distinctness of Usenet's society and its persona population, it is possible to proceed with a preliminary parallel to Leviathan. Establishing the parallel between persons and personae will allow for the subsequent application of Hobbes' political philosophy to Usenet. This parallel is established in the following discussion of Hobbes' definition of "person," the actions of personae, and the special form of representation known as "impersonation."

Hobbes writes,

A person is he, whose words or actions are considered, either his own, or as representing the words or actions of another man . . . When they are considered his own, then is he called a natural person: and when they are considered as representing the words and actions of another, then is he a feigned or artificial person."²²

Having established that personae represent users to one another in Usenet, this definition seems to suggest that personae are indeed persons. To explain, according to Hobbes a persona represents the "words or actions of another man." Indeed, a persona represents the words and actions of a user. Further, Hobbes defines "personation" as "to act or represent oneself."²³ This being the precise purpose for personae in Usenet, "personation" is alternately definable as the "generation of a persona." Therefore, in terms of Hobbes, Usenet users must "personate" themselves via personae because written communication prevents the users from acting and representing themselves

²²Hobbes, 125. Hobbes tends to emphasize with capitalization and italics. This emphasis will be preserved in all selected passages and quotations.

²³Hobbes, 125.

in person. In other words, personae are the Usenet analogs for persons in the external world.

While it is true that a persona's actions represent the actions of a user, the distinctness of the persona from the user allows for the distinctness of the persona's actions. Recall that all persona actions must necessarily be derived from the written responses of the users. When a user writes a hostile message to another user, his or her persona in effect "attacks" the persona of the recipient. Whether a persona is actually responsible for or "owns" the "attack," Hobbes writes:

Of persons artificial, some have their words and actions owned by those whom they represent. And then the person is the actor; and he that owneth his words and actions, is the AUTHOR: in which case the actor acteth by authority.²⁴

Strictly interpreted, personae are "artificial persons" because their words and actions are owned by the users whom they represent, but since it is common and expedient to "forget" that personae are representations of users, it is possible to understand how a persona's actions can be interpreted as the persona's own. Although Hobbes does not say specifically, he suggests that accountability for one's own actions is the consequence of acting as "owner" of the actions or with "authority."²⁵ Accordingly, the expedience of "forgetting" may lead one to treat a persona as the author of its actions, thereby expecting accountability from the persona for the actions. This is an unrealistic expectation, given that a persona is but a representation of a user

²⁴Hobbes, 125.

²⁵Hobbes, 126.

who is the owner of its actions. From this it follows that a user seeking to evade accountability for his actions might attempt to exploit the expedience of "forgetting" by acting through another user's persona. By impersonating or "impersonation," he or she can create a persona that appears to represent the personality and unique qualities of another user. Because of the expedience of "forgetting" and the uncertainty regarding the degree of representation (transparent, translucent, or opaque) between users and personae, "impersonation" is a more serious violation of trust in Usenet than it is in the external world. Reid writes, "The illegitimate use of [personae] can cause anger on the part of their rightful users and sometimes deep feelings of guilt on the part of the perpetrators."²⁶

"Impersonation" is classified as an opaque representation since the persona is intended to represent someone other than the user behind it; however, not all opaque representations are impersonations. A user seeking complete anonymity for personal privacy reasons might consider an opaque representation; however, a translucent representation is more common. A translucent representation is typified by the user who wishes to interact via a pseudonym. For the same reasons that an author would elect to use a pen name, a translucent representation is useful in masking the user's identity in certain situations. When the user is not seeking to evade accountability for his or her actions, he or she is not "impersonating."

²⁶Elizabeth M. Reid, "Electropolis: Communication and Community on Internet Relay Chat" (thesis, University of Melbourne, 1991), lines 1139-1141.

To review, having established the distinctness of Usenet's society and its persona population, it is possible to proceed with a preliminary parallel to Leviathan. This parallel establishes that personae "act or represent the words or actions" of their users. Additionally, expedience allows one to treat a person's words or actions as the persona's own. This being Hobbes' definition for "personation," personae are therefore the Usenet analogs for persons in the external world. Further, a user may exploit that expedience and "impersonate" another user to evade the consequences of his or her actions. Finally, this preliminary parallel between Usenet and Leviathan clears the way for further analysis of the latter and the development of analogs within the former.

The Powers

Given the preliminary parallel between personae and Hobbes' "persons," it is possible to establish a further parallel between Leviathan and Usenet. Hobbes explains that persons possess certain powers. The discussion continues with the consideration of these powers and development of their Usenet analogs. On the subject of power, Hobbes begins,

Natural power, is the eminence of the faculties of body, or mind: as extraordinary strength, form, prudence, arts, eloquence, liberality, nobility. Instrumental are those powers, which acquired by these, or by fortune, are means and instruments to acquire more: . . .²⁷

Three of these natural powers are severely limited in their transfer to Usenet society because Usenet personae lack physical form. They are strength, form, and arts. Obviously, physical strength is irrelevant in any environment devoid of physical things, but a Usenet persona can have strength relative to other personae. In terms of Usenet, strength is one's ability to "execute an attack." It will be recalled that the action of "attack," like all actions in Usenet, must be derived from the cycle of statement and response. Therefore, "strength" in Usenet is one's ability to write a potent or even, vehement statement.

The power of "form" comes from one's physical makeup. In essence, it is the effect that one's appearance has on others. According to Hobbes, "form is power; because being a promise of good, it recommendeth men to the favour of women and strangers."²⁸ Like "strength" it transfers poorly into Usenet

²⁷Hobbes, 72.

²⁸Hobbes, 73.

because personae lack physical form. Yet it has an analogous counterpart: "form" in terms of Usenet, comes from the impression one makes on others, not with one's physique, but with one's words. Even a pseudonym can convey form, as "Spartan" brings to mind images of frugality and warriors and "Damsel" connotes femininity and distress. "Form" can extend to actual word choice when academic language can make a persona "appear" more scholarly, or when language laden with scientific jargon might bring to mind images of laboratory coats and measurement instruments. Granted, while these images are not the clear, consistent images conveyed by "form" in the external world--in fact, they probably vary depending on the perceiver--they do serve to add a "face" to a name and a personality to the words. It is only natural to want to "fill in the blanks" that Usenet's analog for "form" leaves empty.

Regarding the power of arts, Hobbes writes,

Arts of public use, as fortification, making of engines, and other instruments of war; because they confer to defence, and victory, are power: and though the true mother of them, be science, namely mathematics; yet, because they are brought into the light, by the hand of the artificer, they be esteemed, the midwife passing with the vulgar for the mother, as his issue.²⁹

Since Usenet is a non-physical environment, the notion of "defence," like that of strength, must be derived from the cycle of statement and response. Having established that "strength" in Usenet is one's ability to write a potent statement, then it follows that "arts" in Usenet, because they "confer to defence," must be one's ability to write a rebuttal.

²⁹Hobbes, 73.

In contrast, the powers of "prudence" and "liberality" are transferred to Usenet almost completely. "Liberality" is intended by Hobbes to mean "generosity." He writes,

Also riches joined with liberality, is power; because it procureth friends, and servants: without liberality, not so; because in this case they defend not; but expose men to envy, as a prey.³⁰

"Liberality" can be combined with things other than riches to produce the same effect. Consider the act of restraining oneself from easily humiliating a subordinate in public or the act of freely and genuinely offering one's assistance to the uninitiated. These acts of kindness bolster one's liberality. Additionally, they are actions easily transferred to written form.

On the subject of prudence, Hobbes writes,

When the thoughts of a man, that has a design in hand, running over a multitude of things, observes how they conduce to that design; or what design they may conduce unto; if his observations be such as are not easy, or usual, this wit of his is called PRUDENCE; and depends on much experience, and memory of the like things, and their consequences heretofore.³¹

Here Hobbes explains that "prudence" comes from "much experience" leading to "unusual observations" or insight. A person's prudence transfers to his or her persona because they share one and the same mind and experiences, despite the fact that expedience may permit one to "forget" this fact. Only when one's writing ability interferes with one's attempt to

³⁰Hobbes, 72.

³¹Hobbes, 61.

communicate prudently does a persona seem less prudent in Usenet than the user does in the external world.

Unlike the previously discussed powers, where it is clear that some have more exact Usenet analogs than others, the transferral of "nobility" to Usenet presents difficulty. Hobbes explains,

Nobility is power, not in all places, but only in those commonwealths, where it has privileges: for in such privileges, consisteth their power.³²

One's privileges come from the recognition by others of one's rank or nobility. Unless one conveyed one's nobility through a pseudonym or name such as "Dr. Oakeshott" or by the use of revealing information such as "My father, Senator Kennedy says . . .," it is not likely that external world nobility will have relevance to Usenet society. Additionally, in cases where external world nobility is transferred, the privileges and respect are not as forthcoming as expected. Perhaps this is because persons of nobility, accustomed to the "trappings" of the elite, find that without these "trappings" in Usenet, their nobility is nothing more than words. However, nobility does exist in Usenet. Users such as Spafford, the frequently cited authority on "netiquette," seem to enjoy much deference when "making appearances" in Usenet. For example, because Spafford is famous, other users may be less visibly critical of his statements while he is "present."

"Eloquence," is possibly the most important power in Usenet. Hobbes probably included eloquence among the powers because it enables one to communicate, not only functionally, but with finesse. Hobbes writes:

³²Hobbes, 73.

"Eloquence is power, because it is seeming prudence."³³ The skill of writing enables one to have "a way with words" or eloquence. Moreover, in a world where words are primary to existence and serve as the sole mode of communication and activity, their importance cannot be exaggerated. In Emily Postnews, author Brad Templeton reminds the uninitiated user that "sloppy spelling in a purely written forum sends out the same silent messages that soiled clothing would when addressing an audience."³⁴ On the other hand, actually wearing soiled clothing while accessing Usenet has absolutely no effect on one's persona. The premium that Usenet places on spelling, and writing skills in general, inflates the Usenet analog for eloquence beyond its relative worth in the external world.

Hobbes discusses additional powers which rely on or operate in conjunction with those already considered. Among those additional powers are "affability" and united power.

The power of "affability" seems similar to that of "liberality." "Liberality" was described earlier with the examples of public restraint with subordinates and generosity with the use of one's powers. Strictly speaking, these qualities of graciousness more accurately describe the power of "affability." If one reviews Hobbes' definition of "liberality," one will notice that "liberality" is power when "joined" with riches. Clearly, Hobbes is concerned with "riches" when he writes of "liberality" because "it procureth

³³Hobbes, 73.

³⁴Brad Templeton, Emily Postnews, compiled by Gene Spafford, 1991, lines 241-245. See Appendix for complete text.

friends, and servants." Hobbes believes that "liberality" or generosity with one's riches is a power because friends and servants contribute to one's defense.

The external world concept of "riches" does not easily translate into a world without physical or material wealth, but the development of the analog is possible nonetheless. In the external world, money is used to barter for goods and services. In Usenet, goods do not exist. On the other hand, services are abundant: sharing one's knowledge is a service. Assisting a new user is a service. These services may be traded in Usenet analogously to their trade in the external world. Therefore, the Usenet analog for "riches" is "services." This conclusion returns one to the original observation that "liberality" and "affability" appear to share the same definition. With respect to Usenet, indeed they do.

Finally, the power of united power or power "united by consent" is described below:

The greatest of human powers, is that which is compounded of the powers of most men, united by consent, in one person, natural, or civil, that has the use of all their powers depending on his will.³⁵

It is premature to discuss why persons would want to unite their powers in a single person before it has been considered why they would want to pursue powers for themselves. But since Hobbes includes this power with the rest, it is important to note that a power "which is compounded of the powers of most men" is the "greatest of human powers." While this may be true in the external world, the nature of Usenet's written medium may

³⁵Hobbes, 72.

subordinate united power to the power of "eloquence," since it is "eloquence" which enables users to create the environment where unity takes place.

The Pursuit of Powers

Given the discussion of Hobbes' "powers" and the development of their respective analogs in Usenet, it is possible to discuss and develop the pursuit of powers in the external world and in Usenet. This will be done by examining the benefits of power, the need for continuous participation to retain one's powers, and the effect of using one's powers to confront or compete with another person or persona.

With respect to the benefits of power, Hobbes writes,

[Powers] . . . are the means and instruments to acquire more: as riches, reputation, friends, and the secret working of God, which men call good luck.³⁶

The benefits of power then are riches, reputation, friends, and good luck. One will discover that these benefits are in some instances powers themselves, and that the pursuit of power appears to be an end in itself.

Riches are perhaps the most difficult of the benefits of power to transfer to Usenet society. In the external world, riches are clear--they are the signs and objects of material wealth, such as money and possessions. Given that Usenet lacks a physical environment, an analog for material wealth, money, or possessions is nonsensical. However, it has been established that "services," as in sharing one's knowledge, is the analog for "riches."

Reputation is significant in both the external world and Usenet. It is the most important benefit of power in Usenet society. Hobbes does not provide a simple definition with which one can grasp the full meaning of

³⁶Hobbes, 72.

reputation; in fact, he defines reputation contextually in the definitions of other powers. Consider the following passage:

Reputation of power, is power; because it draweth with it the adherence of those that need protection. So is reputation of love of a man's country, called popularity, for the same reason. Also, what quality soever maketh a man beloved, or feared of many; or the reputation of such quality, is power; because it is a means to have the assistance, and service of many. Good success is power; because it maketh reputation of wisdom, or good fortune; which makes men either fear him; or rely on him. . . . Reputation of prudence in the conduct of peace or war, is power; because to prudent men, we commit the government of ourselves, more willingly than to others.³⁷

Broadly defined, reputation is the publicly held estimate of one's worth. With that in mind, Hobbes' definition of reputation in the context of other powers make more sense. This being the case, reputation is the publicly held estimate of one's powers. For example, one may be an excellent cook known only within the private circle of one's friends, but once one establishes a reputation outside of that private circle, the estimate of one's excellence may be held publicly. In this case, the power of one's prudence in cooking is amplified by one's reputation, and Hobbes tells us that in the first line of that passage when he says "reputation of power, is power." It is in this sense of power begetting power that the importance of reputation is heightened in the external world. To the extent that reputation is the most important power in Usenet, the following discussion of the Usenet analog for reputation is critical.

In Usenet, one's powers, such as strength and eloquence, are expressed by participating in the cycle of statements and responses. Only in this way

³⁷Hobbes, 72-73.

can one's powers be perceived, substantiated, measured, and ranked by others. The resulting comparisons made among personae establish the public estimation of one's worth. This reputation-making process of comparison and worth is supported with the following two quotations from Hobbes:

"Virtue generally, in all sorts of subjects, is somewhat that is valued for eminence; and consisteth in comparison."³⁸

"For let a man, as most men do, rate themselves at the highest value they can; yet their true value is no more, than it is esteemed by others."³⁹

Indeed, Hobbes makes it clear that reputation serves to set a "market price" for one's worth. He implies that although reputation can amplify one's strengths, it can expose one's weaknesses to greater scrutiny, thereby devaluating others' personal estimate of those strengths. And with respect to Usenet, reputation is the collective memory of the comparisons of past cycles of statement and response.

Hobbes believes that the possession of friends is a benefit of power. The Usenet "public" that forms one's reputation consists of many personae, some of which are one's friends. During the cycle of the statement and response, the participants and the observers rate and compare the participants' expressions of their powers. This comparison reveals degrees of affinities among personae, that is, they may "take sides" on an issue. These

³⁸Hobbes, 59.

³⁹Hobbes, 73.

affinities are guided by what is described by Hobbes as passions,⁴⁰ which include but are not limited to appetite, desire, love, aversion, hate, joy, and grief.⁴¹ Those personae whose passions move them together out of common affinity become friends, supporters, and allies. Those whose passions disassociate them may become enemies. A persona's friends enable it to establish and build its reputation, thereby increasing its power, whereas its enemies seek to discredit it, thereby reducing its power. There is no inherent quality such as "good" or "evil" that distinguishes one's friends from one's enemies; what is knowable is only that the former seek to support and increase one's power, and the latter seek its attenuation.

The benefit of power known as "luck" describes one's ability to "know the secret working of God." Certainly Hobbes does not mean direct knowledge of God, but he does want to acknowledge the power of those who tend to draw "stronger hands" than others. The most important analog for luck in Usenet is one's ability to draw friends. While it is true that one's friends come from those who observe one's actions, luck guides one to act fortuitously in places likely to attract many and the most reliable of them.

In order to acquire the benefits of power, it is necessary to continuously participate in the cycle of statement and response. Although reputation is a benefit of power and a power, because it amplifies the other powers, the duration of that effect becomes important. If one's reputation is held by the public in collective memory, it follows that one's reputation is recalculated

⁴⁰Hobbes, 47.

⁴¹Hobbes, 50.

after each participation, with the readjusted reputation replacing the older reputation in the collective memory. Thus one's reputation lasts until it is forgotten. As one's reputation fades from memory, so fades one's power. However, to fade completely violates the condition of existence for continuous participation; therefore, to avoid the fading of one's power and the cessation of existence, one must continuously participate in the cycle of statement and response.

To summarize, the objects or benefits of power are riches, reputation, friends, and luck. Of these benefits, reputation is the most important in Usenet because it is a benefit of power and a power in itself. It enables one to increase one's power by amplifying beyond the private circle into the public arena. By subjecting one's powers to perception, substantialization, comparison, and rating, reputation is created by participating in the cycle of statement and response. Reputation sets the "fair market" value for one's worth which may be higher or lower than one's own estimation. Reputation is stored in the collective memory of past participation in the cycle of statement and response. And finally, the duration of one's reputation depends upon one's continuous participation in the cycle of statement and response.

Death

Where previously, the definition of power, its benefits and their Usenet analogs have been discussed, it is possible to explore in terms of Usenet, the pursuit of power, the notion of "death," and the competition for powers.

The possession of certain benefits of power, such as reputation, is power in itself; however, possession of power alone seems not to be enough. In revisiting the following passage on power, it is important to focus on Hobbes' use of "more:"

[Powers] . . . are the means and instruments to acquire more: as riches, reputation, friends, and the secret working of God, which men call good luck.⁴²

Hobbes does not say, for example, that powers are the means to acquire riches, reputation, friends and good luck. He says that powers are the means to acquire "more." This suggests that Hobbes believes that the simple acquisition of powers is not enough. In fact, it is clear from the following passage that there is no limit as to how much can be acquired:

And the cause of this, is not always that a man hopes for more intensive delight, than he has already attained to; or that he cannot be content with a moderate power: but because he cannot assure the power and means to live well, which he hath present, without the acquisition of more.⁴³

As can be seen, the acquisition of "more" assures one's present power and "means to live well." This implies an active life of acquisition, not a leisurely life where one waits for power to come to him or her. Hobbes is

⁴²Hobbes, 72.

⁴³Hobbes, 80.

saying that if one wants the assurance of one's "present means to live well," one must acquire "more." Hobbes is very clear on this point when he uses the word "restless" in the following passage. Note that "restless" should not be interpreted as "fidgety," but rather, more literally as "without rest":

So that in the first place, I put for a general inclination of all mankind, a perpetual and restless desire of power after power, that ceaseth only in death.⁴⁴

This indictment of "mankind" clears the way for a discussion of "death." According to Hobbes, death in the external world is the cessation of all movement, for men consist of a complex combination of motions ranging from one's limbs to one's dreams.⁴⁵ These motions, "begun in generation, and continued without interruption through their whole life"⁴⁶ distinguish the living from the not.

The Usenet analog for life is also derived from motions, the motion of the cycle of statement and response, and it is predicated upon the satisfaction of the three conditions for a Usenet persona's existence: enough utility to assure the continued association between the user and the persona, the visible demonstration of one's presence via a persona, and continuous participation in the cycle of statement and response. Without the satisfaction of these conditions, a persona cannot exist. It is clear from the conditions that utility and participation are essential: Usenet must remain useful to

⁴⁴Hobbes, 80.

⁴⁵Hobbes, 23-27.

⁴⁶Hobbes, 47.

the user and the user must continuously assert the existence of his or her persona by participating in the cycle of statement and response.

The effect of participation in this cycle is the creation and development of one's reputation. Those personae whose reputations are highly valued attract a sufficient number of responses with which to perpetuate additional cycles for statement and response. Those personae with poorly valued reputations may at first generate an intense cycle based on criticism of another and defense, but often come to be ignored and forced to face exclusion, obscurity, and thereby "death." For example, well-regarded personae only need to participate occasionally to insure that they are not forgotten, because the resultant cycle of statement and response will generate enough interest to maintain their reputations, and thereby their existence. It is also possible that little known personae may establish temporary notoriety for themselves by making outrageous statements before returning to obscurity after their cycle has run its course.

By far, the great majority of personae enjoy neither fame nor ignominy, for their participation merely consists of "skirmishes" and banter. To illustrate this case, it is common for one to state an opinion, draw criticism, and rebut it. The participants in this short cycle are then compared, rated, and their respective reputations adjusted in the collective memory. But consider the case where one is subjected to an undue amount of criticism. If the "assault" is without merit, as in the second illustration, one may choose to ignore it; but if the criticism is based on truth, one may feel compelled to defend his or her reputation. Hobbes explains this compulsion as a "right" when he says,

THE RIGHT OF NATURE, which writers commonly call *jus naturale*, is the liberty each man hath, to use his own power, as he will himself, for the preservation of his own nature; that is to say, of his own life; and consequently, of doing any thing, which in his own judgment, and reason, he shall conceive to be the aptest means thereunto.⁴⁷

As it has been shown, reputation is the "tote board" of a persona's existence within Usenet; therefore, to defend one's reputation is to exercise one's natural right to self-preservation in Usenet. But even relatively minor "skirmishes" can lead to larger "battles," because the drive to acquire "more" can accelerate the cycle of statement and response into a reputation-making machine. Consider the effect of the "perpetual and restless desire of power after power" and the lengths that Hobbes believes a person will go to assure the acquisition of "more." In Usenet, the analog for an attack designed for quick reputational gain is called a "flame." Perhaps named for their inflammatory nature, "flames" tend to be ad hominem, argumentative, and often have little to do with the original discussions in which they develop. The extremely personal nature of "flames" often draws one to respond reflexively with a statement even more insulting or offensive than the original. Again, the motivation to participate in such an exchange is to publicly defend one's reputation. A cycle containing ad hominem exchanges can gain momentum very quickly, attracting outside attention to its participants. As the number of observers increases, the reputational stakes of the participants increase. This has the effect of luring some of the observers from the "sidelines" into the cycle as well, causing the spread of

⁴⁷Hobbes, 103.

the "war." Sometimes compared to "storms," because they appear without warning, wreak havoc, and subside just as unpredictably, "flame wars" can start over spelling, grammar, semantics, or any seemingly trivial issue.

Since "flame wars" can dominate or otherwise interfere with the discussion of non-participants, the "wars" tend to diminish the utility of Usenet to those non-participants. Since utility is among the conditions of existence within Usenet, if enough non-participants feel the utility of their participation in Usenet is substantially threatened by a "flame war," the warring participants have nothing to gain reputationally and much to lose. In fact, once a "flame war" loses its audience, the participants not only lose those who would judge and compare their actions, but more importantly, a war offensive, annoying, or useless enough to drive away its observers will probably cause a net loss to the reputations of its participants.

Although "flame wars" are generally discouraged because they are so disruptive, they persist, and are commonly found in newsgroups oriented toward social issues and controversy. However, the relatively sedate technical discussion newsgroups have their share. The notoriously disruptive, and futile, cycle of "Macs are better than PCs" is a recurring "flame war" which many users try to extinguish as quickly as it begins, by refusing to participate. It should be noted that a special newsgroup, "alt.flame," exists for the specific purpose of being a place where one can participate in a "flame war" without being disruptive to the discussions in the rest of the newsgroups, a sort of "O.K. Corral." It is common to see someone write, "Let's take this discussion to alt.flame."

The following passage from Leviathan may shed light on why "flaming" and contention in general occurs:

Love of contention from competition. Competition of riches, honour, command, or other power, inclineth to contention, enmity, and war: because the way of one competitor, to the attaining of his desire, is to kill, subdue, supplant, or repel the other.⁴⁸

In the preceding passage, Hobbes suggests that persons engage in lethal competition in order to acquire powers and their benefits. In terms of Usenet, "flaming" allows them to increase their reputations at the expense of others.

In summary, it is clear that personae must restlessly participate in the cycle of statement and response, which is primary to their existence within Usenet and which allows them to acquire more powers, as in reputation. It is also understood that such continuous participation, especially that of "flaming," is contentious and that one's reputation is subject to damage. The question remains, how contentious can the Usenet environment for participation become, before the conditions to maintain the existence of one's persona become so difficult to meet that one is driven to surrender his or her powers to a single authority?

⁴⁸Hobbes, 81.

Living in Moderation

This section includes a discussion of an actual Usenet example of the cycle of statement and response, the alternatives to the outright surrender of one's powers, and the submission to moderation. The following series of articles are messages from a Usenet newsgroup oriented towards the discussion of evil. Topics in the newsgroup drift between "tales from the dark side"⁴⁹ to the plotting of murder. This example is the beginning portion of a cycle of statement and response involving five personae discussing the fate of one of their teaching assistants and the moral and legal implications of the discussion itself. The personae are "Paul" from the University of Maryland at College Park, a user at Youngstown State University, a user at Malaspina College, "Jon" from Netcom Online Communications Services, and a user at the University of Maine. All articles are included in their entirety without editing to preserve the "realism" of the discussion. Paul writes,

With one single, simple, trivial, insignificant event, my life has been thrown into utter chaos.

I'm graduating this semester, or was. My TA insists I did not turn in a significant amount of assignments for her class. This is incorrect, and I have no way of proving it to her. As such, see [sic] is giving me an F. Despite the large amount of work I did, and my good test grades, she will not even consider a D. Mind you this is an insignificant little one credit Physical Education course. I explained that I had no money to take a course during the summer (\$300), was leaving in the summer for Ca., was on my way to grad school, and that this little incident was really fucking up my life. She proceeded to give me, while power-tripping and in an authoritative manner, the 'real world and responsibility' speech. As though this fucking class and this little blonde puke were representative of the real world. Needless to say, I am irate.

⁴⁹John Gilmore, Alternative Newsgroup Hierarchies, Part I, edited by Gene Spafford, 1992, line 147.

What I would like from you are suggestions to make her life a living hell. I considered killing her, or driving by her house with an uzi, but I don't want to go to jail, at least not over her. Any suggestions from the subtle to extravagant will be considered. Nothing she could easily trace me to.

I anxiously await your response.....

Paul is apparently disappointed with his poor grade, but it is never clear whether he actually intends to act on the advice he solicits or whether he is simply attempting to gain sympathy from others by sharing his plight. His first response arrives from the University of Maryland user. It will be recalled that this response satisfies Paul's conditions for existence--it proves that he is not isolated and alone:

Heh... I'm starting to like this gal. She must really like watching you squirm. Heh. You could post her name, address, etc so every horny geek can give her a call. A slight description, so they can pretend that they know her well... scare the hell out of her. My guess, though, is that she'd like it too much. Ah well...

Don't you see it?????? Come on, man... it *IS* representative of the whole world. You are getting dicked over in a way you never ever expected!! Some small "insignificant" person is ruining your life. You better learn fast... or you are not going to fare well at all.

Why are you so worried about her misery being traced to you? She doesn't mind that *you* know how very screwed you are. *SHE* doesn't mind telling you *to your face* exactly how she is going to do it. Illegal is bad...yep. Proof is tricky... but avoidable. I suggest printing this out, (assuming you save it), and deleting it immediately.

Okay... right now I'm more on her side than yours... but since you asked....

Two words: Sexual Harrasment.

Just as difficult to prove/disprove as the homework issue. Just as likely to ruin her life. I mean... how would you like to be the girl who was *so* desperate to find a date, she was blackmailing her student? Heh.

No offence to you... but this works even better if you are unattractive.

:)

Actually... this may even be what she is trying to do... how do *I* know? You said you handed the HW in, right? Okay... so she "lost" it. Maybe she wants something in return for "finding" the homework. Start

telling all your friends how she keeps coming on to you, and got really pissed when you turned her down... and that she hinted that she would ruin your grade if you didn't play along. About this time, you want to start recording conversations with this babe... keep saying that you are *desperate* to do well in this class... you'd do *anything* to make up for it... what could you do? You, obviously, may want to edit out these portions of the conversation. :) See what response you get. Ask her out. Bring sex into the conversation. Go back, now, and mention to your friends that she *really is* going to ruin your grade since you didn't play along. Get really upset. Become hysterical... say that you don't really care and that you'll go ahead and do what she wants... you just want to graduate. Call her with someone in the room. Assuming that she didn't want you to trade affection for your grade... I'm still not ruling this out as a possibility... she will most probably turn you down quite loudly. Your friend may even overhear this if she is *really* loud. As some of your friends to help decide what you should do. Eventually, this will come to someone's attention... etc. If things don't look good, keep telling the school authorities that you are going to take the matter to a more public setting if they don't fix things with your grade. This usually makes them jump. Even if she doesn't get in trouble... you should most certainly get your grade. Depending on how well you play it... you might even get to make \$\$\$ writing about it... touring... etc. Don't make up dates and times that you cannot account for her location. If you say she was harassing you and she was with 30 people playing nude twister... your story is shot to hell. Write stuff down, and memorize it.

Ok. You have the tools... it all depends on how well you play it
....Send me a copy of your book.

Take Care.

Note the tone of the Maryland user's response. At first he or she mocks Paul by "siding" with the teaching assistant, but eventually the user describes a plan of action. Also note that the user has to resort to non-standard punctuation, capitalization, and asterisks to convey emphasis since the traditional non-verbal methods of controlling voice pitch and volume are unavailable. There is even the presence of emoticons to indicate that the user is smiling at those points in the response. But again, it is still uncertain whether this user expects his or her advice to be taken seriously or whether the exchange is merely an exercise to help Paul vent his frustration.

The next response to Paul's statement comes from Youngstown State University. Generally, only two personae are needed to substantiate one another's existences, but in this case, this third user from Youngstown, rather than Paul, serves to substantiate the existence of the Maryland user:

If by some chance, you can get her address & soc. security number, I have heard that a really effective harassment goes like this:

Call the I.R.S.

Say, "I'm (name of TA), and I think I made a mistake on my 1040, could you check your records?"

Supply address & social, if asked for them.

With luck, she gets audited.

Probably kinder to just shoot her.

This response clearly contains more humor than the previous two, provided that one agrees that death is preferable to a tax audit, but it is still difficult to tell whether or not this is a harmless, but "dark" discussion or a conspiracy to commit a felony. The fourth participant, a user from Malaspina College is apparently not amused when he or she writes,

Please consider the implications of this conversation. This is an extraordinarily offensive and demeaning exchange with possible legal implications. Your conversations contribute to the oppression of women and completely undermine the human values you profess to acquire at college. Remember that your commentari}iesare read by many people throughout the world and reflect not only on you, but on the institutions you represent. All of us in the college and university community have a strong personal responsibility to ensure that our colleagues--women in particular--are protected from abusive, offensive, demeaning, belittling, harrassing, and threatening language. There is NO EXCUSE for this exchange in any conference. Fourteen women in Montreal were massacrd 2 years ago by a man whose ideas reflected the same crap you are exchanging. I am profoundly disturbed and ashamed that people who profess intellectual skills will engage in this kind of hate exchange. I am new to conference activity but fully intend to do whatever is necessary to protect my colleagues from thissort of abuse.

This user is risking confrontation by "scolding" and attempting to shame the other users for their actions. Despite the name of the current newsgroup, alt.evil, this user is convinced that this discussion has no place in "any conference." In the terms of this study, this user is "attacking" the reputations of the other three. The first user to respond to the "attack" is Jon from Netcom:

Who died and appointed you net.cop?

What a joke! You could easily argue that this TA's actions contribute to the oppression of men. Further, as to the "values" one acquires at college, this is bullshit. The only "values" most people learn at college is what case of beer is cheapest, or how best to make money.

Pahleeezee. I think you give it more importance than it has. Especially in this newsgroup, which exists to promote and discuss evil. Not social responsibility. There are news groups for that purpose. Just look. You would probably be happier there. Sorry, but this group is not going to mutate into alt.fuzzy.warm.feeling.inside because it bothers you.

Don't you get it? *This is alt.evil*. It is a newsgroup, not a conference. It is not about social responsibility.

Good luck, idiot. Have you ever heard of *Freedom of Speech?* You are clearly living in a fantasy world, and appear to believe you somehow are powerful. Ha Ha Ha. What a shit head you are.

Note that Jon's first sentence, "Who died and appointed you net.cop?" is extremely sarcastic and rhetorical. Its intent is not to elicit a truthful response, but to embarrass the Malaspina College user for assuming an authoritative role. Jon then proceeds to return the "attack" by questioning the validity of the values acquired at college. This tactic actually pits Jon's "prudence" in college experience against that of the user from Malaspina, and may actually have more of a bearing on the calculation of his reputation than everything else that he says. After this point, his response quickly becomes an ad hominem attack, mocking the Malaspina user and calling him names. This message is an example of a "flame," and as such, it is interesting to

observe that aside from the first sentence, it does not specifically have anything to do with Paul's original statement.

The fifth and final user in this example is from the University of Maine:

No moralizing on who's right or wrong, we are talking about evil not ethics. sugar in the gas tank should crystalize in the fuel lines, or use sand and ruin the engine, figure a way to give her lice (there's a# of varieties esp. pubic) or plant drugs on her etc. If you or any of your I.M.F. team are captured thesecretary will disavow any knowledge of your actions. -HAVE FUN

Again, note the humorous tone. Given that all of the responses had elements of humor, it is entirely possible that the Malaspina College user violated an alt.evil norm by dispelling their fantasy plot. The Malaspina user also may not have "picked up" on the humor given the interference of the medium and the inadequacies of emoticons and other devices to convey non-verbal information. Of particular interest in this last message is the opening sentence, "... we are talking about evil not ethics." By stating the purpose of the cycle and the newsgroup, this user effectively pits his "prudence" in alt.evil interaction against the previous two users'; and by immediately returning to the topic at hand with the remainder of his message, this user is attempting to extinguish the disruptive "flames."

It will be recalled that these articles are only the first five in a cycle of statement and response. It should also be noted that the number of observers of this cycle, if any, is unknown, but that this figure is estimated to

be five times the number of participants.⁵⁰ At the conclusion of each statement or response, the participants and the observers privately estimate the worth of each participant: the sum of that worth, held in the collective memory, is their reputation.

Given this detailed discussion of the cycle of statement and response, it is useful to recall the remaining question: how contentious can the Usenet environment for participation become, before the conditions to maintain the existence of one's persona become so difficult to meet, that one is driven to surrender his powers to a single authority? The following discussion prepares one to answer by first considering the alternatives to the outright surrender of one's powers. For this purpose the following passage from Leviathan is useful:

Civil obedience from love of ease, From fear of death, or wounds.
Desire of ease, and sensual delight, disposeth men to obey a common power: because by such desires, a man doth abandon the protection that might be hoped for from his own industry, and labour. Fear of death, and wounds, disposeth to the same; and for the same reason.⁵¹

From this passage it is clear that Hobbes recognizes that the rest-less "pursuit of power after power" takes its toll on persons who are as inclined to ease as they are to contention. The balance between these opposing desires appears to be the "fear of death, and wounds." It follows then, that it is the fear of death and wounds that persuades persons to abandon their pursuit of

⁵⁰Brian, Reid, Usenet Readership Summary (Palo Alto, California: Network Measurement Project at the DEC Western Research Laboratory, March 1992), lines 22-28.

⁵¹Hobbes, 81.

powers and surrender themselves to the power of another. This notion is apparent in Usenet, but it appears that there are other alternatives short of complete surrender. As discussed, one may ignore a user who interferes with the utility of one's access to Usenet. Additionally, to solve disputes and facilitate the interaction, one may voluntarily adhere to the general principles described as "netiquette" as outlined by Spafford. Next to be discussed is an actual example from Usenet which invokes Spafford's guidelines and the practice of using "kill files" to systematically ignore disruptive users.

It will be recalled that Gene Spafford compiles and distributes a series of guidelines designed to facilitate the smooth interaction between Usenet participants, but since there is no Usenet government to enforce them, the guidelines remain informal. Nonetheless, many individuals voluntarily abide by them and insist that others do the same. In the following example, "David" attempts to persuade "Bill" to use some self-restraint and conform to Spafford's guidelines:

Why don't you respond in private mail, and ask the person you are sending to to summarize. This prevents clutter, which this posting is as well. If everyone posted a response to every PC related hardware question they saw, this newsgroup would quickly become too bulky to work with.

In this article, David is responding to an earlier message of Bill's. Apparently, Bill had previously responded publicly to someone else's question. In all likelihood, the question was a common one and Bill's response was a common answer. Tired of seeing both "frequently asked questions" and their responses, David asks Bill in this article to observe the Usenet "courtesy" of responding to such questions in private. It should be

noted that David is relying on the following section from Spafford's guidelines:

One of the biggest problems we have on the network is that when someone asks a question, many people send out identical answers. When this happens, dozens of identical answers pour through the net. Mail your answer to the person and suggest that they summarize to the network. This way the net will only see a single copy of the answers, no matter how many people answer the question.⁵²

In Bill's response to David, "IMHO" is the common abbreviation for "in my humble opinion":

My understanding is that these groups are for the unfettered exchange of information. IMHO, too much band-width is used attempting to restrict use of the NET. I, for one, like to read like the answers. It's a lot easier for everyone than E-mailing the posters and asking them to share individually. Lot of recipients of NET-knowledge do NOT take the extra effort to summarize. It's easy enough to ignore threads which have nothing to offer. We're a divers bunch.. one person's "clutter" may be another's insight. There are first-timer joining these groups every day. Remember our roots. I have no problem with FAQ being FAQs.
(Frequently Asked Questions being Frequently Answered Questions)

Obviously Bill opts to ignore Spafford's guidelines and runs the risk of being ignored by those he annoys with his "clutter." Concerned that already too much time has been spent discussing the issue, David replies,

I suggest this is way off the topic of comp.sys.ibm.pc, if we really have to continue this discussion let's finish it in email.

David could be right. "comp.sys.ibm.pc" is a technical newsgroup for the discussion of IBM personal computers. Participants receive hundreds of messages daily and very few have the patience for non-technical discussions

⁵²Von Rospach, lines 176-181.

in the newsgroup such as Bill's and David's. It is very likely that both Bill and David are already being ignored.

Sometimes the situation arises where a user will offend or annoy another so severely that simply ignoring the user runs the risk of encountering him and being offended and annoyed at a later date. To remedy this situation, Usenet users have at their disposal a utility known as a "kill file." Basically an electronic filter, a "kill file" allows a user to screen out or block the message of another user. A "kill file" can contain the names of several users and sites, as well as offensive words, effectively preventing the display of potentially unwanted messages. Note that a "kill file" does not actually destroy Usenet articles, but merely shields the owner of the file from their existence. "Kill files" are an extreme method of self-censoring because they take the power of decision away from the "kill file" owner. Many users still prefer to run the risk of re-encountering annoyances than to subjugate themselves to an automatic censor; however, the following example of gratuitous "flaming" makes the originator of the statement a prime candidate for countless "kill files" within reading range of the message:

WHAT?!?!? You deleted the FUCKING expletives you PUSSY-STARVED DICKSUCKING BASTARD? What the FUCK kind of newsgroup do you think this is?

This aint FUCKING rec.tv.family-channel.

Leave the FUCKING expletives in, it annoys the SHIT out of me when ASSHOLES [do that] . . .

However, the threat of "kill files" do not necessarily prevent or curb disruptive behavior. Mark from Denver illustrates this:

So put me in your kill-file, dac. Simple solution. What makes you think I give a hoot about *what* you think of my writing? I post for my own enjoyment.

Not yours. Live with it.

Of course, Mark should probably think twice about such a challenge if his name begins to appear in too many "kill files."

As the amount of clutter or "noise"⁵³ increases, more and more users voluntarily submit to "moderation." A moderated newsgroup prevents unapproved statements from being distributed. All statements are submitted to a moderator who screens the messages for content, posts the appropriate ones, and rejects the ones he feels are unfit for the discussion. In the case of a moderated newsgroup, the moderator has tremendous control of one's network existence.

The price or reward for such restraint is the decrease of noise and the increase of relevant information. Moderated newsgroups are not without problems and as David reminds us, "one person's 'clutter' may be another's insight." Additionally, the degree of censorship varies from moderator to moderator. In the case of "comp.dcom.telecom," a moderated newsgroup dedicated to telecommunications issues, many individuals are unable to tolerate its highly-opinionated moderator, Patrick Townson. As a result, they have created an alternative or unrestricted newsgroup called "alt.dcom.telecom." To this day Pat's group remains very popular while the much smaller alternative group is commonly cluttered with articles critical of him. This offers little choice for users who desire the volume of messages in the moderated group, but deplore Pat's degree of restraint.

⁵³The commonly used term for "clutter," which comes from the technical phrase "signal-to-noise ratio," which basically means that the less interference there is, the cleaner the signal will be.

To summarize this section of the discussion, the maintenance of the existence of a persona requires users to continuously participate in the cycle of statement and response. As a result of this participation, the users both establish or maintain their persona's reputation and benefits from the utility of Usenet. As a matter of participation, the users may receive challenges to their statements or "actions" and may also challenge the statements or "actions" of others. In rare cases, they may participate in or observe a cycle that generates "flames" or escalates into a "flame war." This sort of message and other messages they find personally uninteresting, offensive, or annoying decreases the utility of Usenet for them and threatens the existence of their persona. To protect themselves from this threat, they have the alternatives of ignoring the offensive articles, requesting that offensive users conform to "netiquette," "killing" the offensive users by placing them in their "kill file," or participating in a moderated newsgroup.

Looking for the Leviathan

It has been established that in a contentious environment, offensive or uninteresting articles may diminish Usenet's utility to its users. As a result, users may opt to restrict their participation to the moderation of another user. In terms of Usenet, too many attacks and disruptive actions by other personae threaten their existence to the point that they may consider surrendering themselves to the control of another persona. It is on this level, the level of the personae, that Hobbes' Leviathan operates. The following discussion describes and analyzes a random survey of the participation within Usenet and the degree to which the participation is moderated.

If one were to search for a Leviathan in Usenet, one would obviously begin with the moderated newsgroups because the discussions therein consist of articles previously approved by a "common power." However, there are other less obvious indications of restraint such as conformity to or compliance with "netiquette" as a general guide to behavior; and conformity to or compliance with Spafford's more specific set of guidelines.

A survey was conducted on a randomly selected sample of two hundred Usenet articles. The articles were selected from a list of 3,971 existing newsgroups with each group having equal chances for selection. A computer program was written to randomly select a newsgroup from the list from which it randomly selected an article. The selected article became part of the sample population. If the newsgroup did not contain any articles, the computer program selected another newsgroup until the sample population was equal to two hundred.

After the sample population was determined, each article was examined for signs or indication of a Leviathan. These indicators were operationalized as "Leviathan Factors" with each increase in factor representing a greater sign or indication of coercion. The "Leviathan Factors" (LF) are described as follows:

Leviathan Factor	Description
0	No signs of coercion to conform or self-restraint.
1	Unmindful conformity to/compliance with "netiquette" such as the use of "emoticons" or other characters to convey physical actions.
2	Reference to "netiquette" as means of conformity/compliance.
3	Reference to Spafford's guidelines. More specific than LF 2.
4	Article is from a moderated newsgroup or is otherwise censored.

Table 1. The operationalization of Leviathan

The factors are at the ordinal level of measurement such that LF 4 means "more Leviathan" than LF 3, but it does not mean than LF 2 represents twice as much as LF 1. Given the operationalization of Leviathan as "Leviathan Factors," it was possible to read each article and ask: Does this article contain any signs of coercion to obey a common power? If an article contained more than one indicator, then it was coded with the greatest LF for which it satisfied the requirements. The findings help one to conclude "how much" of a Leviathan is present in Usenet. A survey of the sample population produced the following figures shown in Table 2,

LF	Frequency	Percentage
0	162	81.0
1	14	7.0
2	3	1.5
3	2	1.0
4	19	9.5
Total	200	100.0

Table 2. Articles containing progressive signs of Leviathan

Based on the data, 9.5% of the articles surveyed showed the greatest amount of Leviathan (LF 4), and 81% showed no signs of Leviathan (LF 0). It was expected that there would be progressively fewer articles with each increasing factor of Leviathan, but the unusual distribution for LF 1-3 suggests possible operationalization problems. In retrospect, it was not correct to identify "emoticons" as a form of Leviathan because they are signs of compensation for the medium of written communication and not necessarily signs of compliance to or conformity with "netiquette." The unexpectedly high number of observations coded LF 1 bear this out. Additionally, the sample size did not support a five-way breakdown with any degree of accuracy between the extremes of LF 0 and LF 4. This resulted in a negligible difference between the number of observations coded LF 2 and LF 3 from which a meaningful conclusion can be drawn. In order to account for operationalization and sample size problems, the data can be presented in Table 3 in a way to emphasize the measured extremes.

LF	Frequency	Percentage
0-1	176	88
2-4	24	12
Total	200	100

Table 3. Articles showing signs of a Leviathan

Presented in this way, the articles are divided into two consolidated categories. The first category, LF 0-1, consists of articles with no measured signs of a Leviathan, including "emoticons" which are indicators of compensation and not coercion. The second category, LF 2-4, consists of articles which do contain signs of a Leviathan. This category describes the range of articles including those in which someone asks another to observe "netiquette" to articles submitted under moderation. Based on the findings, some measure of Leviathan is present in 12% of the articles surveyed.

Conclusion

The conclusion consists of a summary of the major points, a discussion of the quantitative study, and a consideration of the avenues for research.

This study has sought to establish seven major points. First, Usenet is a distinct society because the exclusively, written medium keeps much of the three-dimensional, external world out. Second, personae are created by the interaction of Usenet users. A user always interacts with the personae of other users because it is impossible to interact three-dimensionally via a written medium. This always being the case, expediency allows one to "forget" that interaction is via personae. Third, Hobbes helps prove that personae are persons within Usenet. Fourth, like persons, personae have powers, although they may be different. Fifth, users participate in Usenet to maximize its utility, thus persona existence is tied to user participation and utility. Sixth, participation may become contentious or uninteresting, thereby decreasing Usenet's utility and threatening personae existence; however, users can increasingly subject their participation to restraint. Seventh, to maximize Usenet's utility and to maintain personae existence, some users may decide to allow another person to control or moderate the extent of their participation, thus controlling or moderating the existence of their personae.

The following is a review of each point:

1. Usenet is a distinct society because the exclusively, written medium keeps much of the three-dimensional, external world out. With the help of Elizabeth Reid's work, it has been established that the written medium of Usenet "filters" or interferes with communication among users.

The effect of this interference is the "deprivation of the subtleties" of verbal and non-verbal communication. Reid's research suggests that such subtleties reinforce the standards of behavior in the external world. Without that reinforcement, Usenet users have had to develop "alternate or parallel" standards of behavior such as "netiquette" and Gene Spafford's guidelines. This compensation for the shortcomings of the medium plus the development of new written language subtleties known as "emoticons" has enabled Usenet to become a society distinct from that of the external world.

2. Personae are created by the interaction of Usenet users. A user always interacts with the personae of other users because it is impossible to interact three-dimensionally via a written medium. This always being the case, expediency allows one to "forget" that interaction is via personae. This is perhaps the most difficult point to establish because it relies upon the notion of "persona." Furthermore, it is the most critical point, because it is on the level of the personae, not the users, upon which Hobbes' Leviathan operates.

To review the notion of "persona," one must understand the perspective of the user. From the user's standpoint, he or she accesses Usenet because it satisfies some personal need that is, it has utility. During the course of accessing, the user may decide that writing an article, rather than exclusively reading, will increase Usenet's utility. When the user drafts the article it is probable that he or she has one or more recipient users in mind. It is here that the notion of "persona" arises. If the user thought about what information was used to create the "image" of the recipient in mind, the user would discover that surprisingly little is actually known. Yet, gender,

stature, appearance, intelligence, and other characteristics are somehow attributed, sight unseen, to the recipient user. This is only natural for the user to want to "fill in the blanks" which the written medium leaves open. Moreover, if the user realized that any information garnered about the recipient user was probably unverified externally to Usenet, he or she should come to the conclusion that the recipient user may bear little resemblance to the user he or she has in mind.

This distinction between a user in Usenet and the "actual" user in the external world is in the concept of "persona." Although the user preparing to send the message may not realize it, as far as other users are concerned, he or she is a persona as well. Therefore, all users of Usenet interact with one another via personae. Moreover, the personae are perceived to engage in a range of pursuits which is derived from the words of the users. For every exchange of articles at the level of the users, there is an analogous "action" at the level of the personae. Furthermore, the existence of the personae depends entirely upon the users' willingness to continue accessing Usenet. With this complex duality always present, it is often expedient for users to "forget" the dichotomy between user and persona, but for the purposes of this thesis, it can never be forgotten because it is on the level of the personae upon which the concepts of Leviathan are established to operate.

3. Hobbes helps prove that personae are persons within Usenet. With the notion of "persona" having been established, it is possible to establish a preliminary parallel to Hobbes' political philosophy in Leviathan. This is done by using Hobbes' definition of "person" to prove that personae

are indeed analogs for persons in Usenet. This proof clears the way to apply Hobbesian theory to personae rather than users.

4. Like persons, personae have powers, although they may be different. During this stage of the discussion, further parallels are drawn from Hobbes' "persons" to Usenet personae. These parallels include the several powers which Hobbes suggests are possessed in persons. Among these powers are "extraordinary strength, form, prudence, arts, eloquence, liberality, and nobility." From these powers of the external world, Usenet analogs are developed to "fill in the blanks" or add form and personality to the images of one another in the minds of all users. Of these powers, "eloquence," is supreme in Usenet because finesse in language is highly valued in a world of words.

5. Users participate in Usenet to maximize its utility, thus persona existence is tied to user participation and utility. Here the benefits of powers are examined by analyzing Hobbes' relevant passages and developing Usenet analogs. It is established that the personae, like persons, are inclined to pursue "power after power" to insure their "present means." On the level of the users, this pursuit of power is actually a continuous cycle of statement and response intended to maximize the utility of Usenet. Their reputations are the "collective memory" of their participation in the cycle. As long as continuous participation is provided by the users, the existence of their personae is insured.

6. Participation may become contentious or uninteresting, thereby decreasing Usenet's utility and threatening personae existence; however, users can increasingly subject their participation to restraint. As a matter of

participating in the cycle of statement and response, users may encounter offensive or insulting articles called "flames." These articles and others which "clutter" the various newsgroups threaten the utility of Usenet to the users. To bolster utility, users have several alternatives other than moderation. They may ignore the offensive or uninteresting articles, conform to the "netiquette" standards of behavior, or block the display of "clutter" from their screens. On the level of the personae, the "flames" are perceived as "attacks" which ultimately threaten their existence. In "fear of wounds, or death," they may be forced to surrender themselves to the protection of a common power.

7. To maximize Usenet's utility and to maintain personae existence, some users may decide to allow another person to control or moderate the extent of their participation, thus controlling or moderating the existence of their personae. In this point, a sample cycle of statement and response is analyzed leading to the discussion of moderation as the last resort to coping with the "clutter" or "noise" in the newsgroups. On the level of the personae, moderation represents the joint surrender of their individual powers to common power for the purpose of preserving their existence in a hostile environment.

The quantitative portion of this study raises provocative questions regarding trends towards moderation in a forum hailed by many as a "modemocracy" and a realization of the "global village." A future study could track the frequency of the Leviathan in Usenet over a period of several months. These data could be contrasted with the failure of a completely moderated, alternate to Usenet formerly known as "InModeration." Perhaps

the combination of moderated and unmoderated newsgroups in Usenet points to the utility of "choice" and "freedom" which "InModeration" might have underestimated. Additionally, refined operationalization and a larger sample size might provide more insight into the less obvious manifestations of the Leviathan in Usenet.

Although this thesis has been limited to the Hobbesian perspective on the origins of government, future researchers should be encouraged to employ other theoretical visions to the study of Usenet, or of the internet in general. The simple act of searching for proof within the internet may more readily fasten the theories' nuances in a student's mind than traditional philosophical study. Where social studies were always possible, internet studies present an equally complex, but more easily observable, self-documenting society.

This theorist also recognizes and encourages the need for more behavioral research. While normative study is valuable in its own right, numerical analysis of internet society is needed. It is important to know the distribution of the various degrees of representation of users by personae, how the number of users affects the generation of government, and the number and types of and reasons for selecting one polity over another. These lines of inquiry do not, of course, cover the entire range, but they do suggest that the entirety of political science can benefit from internet studies.

Political scientists are not the first social scientists to explore this very new area. Current research in internet studies reveals that insufficient ethical guidelines are available for guiding research and there exists considerable debate over how to proceed. For example, this researcher is the

sole political scientist on a large, research team which is investigating computer mediated communication. Due to the global distances between them, the researchers are represented by personae which include scholars of English, communication, linguistics, theater, sociology, and history. The qualitative portion of the research involves content analysis of the communication of a specific group of network individuals. Issues of privacy and intellectual property have arisen. It is still an unresolved question whether the research team should admonish the subjects and then seek their permission for further study to be conducted. It is still uncertain whether the study requires a human research waiver. It is still debatable if this kind of analysis is closer to literary criticism than behavioral science. It is still unknown whether published research should give the subjects credit for their statements or should withhold their names to protect their identities. Despite these compelling questions, the computer allows one to cross traditional boundaries--it enables the writer to measure and the scientist to write--and to mix and combine elements from previously disparate fields. The problems described, of course, issue from the combination of scholars of literature with social scientists. A solution probably lies in acknowledging the unresolved nature of that combination once the interdisciplinary novelty subsides. The point, however, is that fertile ground for research has been uncovered and that the process of how it should be tilled has begun. To miss the opportunity to influence the process would be a major misfortune for political science.

Appendix

This section contains some of Gene Spafford's guidelines because they may not be readily available to most readers. No permission was obtained because the documents are freely distributable. The guidelines are reprinted here in a smaller point size to preserve their original format and page layout. Despite this accommodation, there are still some formatting problems because the margins in the original documents are much narrower than is permitted in a thesis. Additionally, this appendix contains four computer generated maps based on Brian Reid's Usenet Readership Summary Report for April 9, 1991 and a glossary of technical terms.

Original-from: chuq@sun.COM (Chuq Von Rospach)

[Most recent change: 7 September 1987 by spaf@purdue.edu (Gene Spafford)]

A Primer on How to Work With the USENET Community Chuq Von Rospach

*** You now have access to Usenet, a big network of thousands of computers. Other documents or your system administrator will provide detailed technical documentation. This message describes the Usenet culture and customs that have developed over time. All new users should read this message to find out how Usenet works. ***

*** (Old users could read it, too, to refresh their memories.) ***

USENET is a large collection of computers that share data with each other. It is the people on these computers that make USENET worth the effort, and for USENET to function properly those people must be able to interact in productive ways. This document is intended as a guide to using the net in ways that will be pleasant and productive for everyone.

This document is not intended to teach you how to use USENET. Instead, it is a guide to using it politely, effectively and efficiently. Communication by computer is new to almost everybody, and there are certain aspects that can make it a frustrating experience until you get used to them. This document should help you avoid the worst traps.

The easiest way to learn how to use USENET is to watch how others use it. Start reading the news and try to figure out what people are doing and why. After a couple of weeks you will start understanding why certain things are done and what things shouldn't be done. There are documents available describing the technical details of how to use the software. These are different depending on which programs you use to access the news. You can get copies of these from your system administrator. If you do not know who that person is, they can be contacted on most systems by mailing to account "usenet".

Never Forget that the Person on the Other Side is Human

Because your interaction with the network is through a computer it is easy to forget that there are people "out there." Situations arise where emotions erupt into a verbal free-for-all that can lead to hurt feelings.

Please remember that people all over the world are reading your words. Do not attack people if you cannot persuade them with your presentation of the facts. Screaming, cursing, and abusing others only serves to make people think less of you and less willing to help you when you need it.

If you are upset at something or someone, wait until you have had a chance to calm down and think about it. A cup of coffee or a good night's sleep works wonders on your perspective. Hasty words create more problems than they solve. Try not to say anything to others you would not say to them in person in a room full of people.

Be Brief

Never say in ten words what you can say in fewer. Say it succinctly and it will have a greater impact. Remember that the longer you make your article, the fewer people will bother to read it.

Your Postings Reflect Upon You -- Be Proud of Them

Most people on USENET will know you only by what you say and how well you say it. They may someday be your co-workers or friends. Take some time to make sure each posting is something that will not embarrass you later. Minimize your spelling errors and make sure that the article is easy to read and understand. Writing is an art and to do it well requires practice. Since much of how people judge you on the net is based on your writing, such time is well spent.

Use Descriptive Titles

The subject line of an article is there to enable a person with a limited amount of time to decide whether or not to read your article. Tell people what the article is about before they read it. A title like "Car for Sale" to rec.autos does not help as much as "66 MG Midget for sale:

Beaverton OR." Don't expect people to read your article to find out what it is about because many of them won't bother. Some sites truncate the length of the subject line to 40 characters so keep your subjects short and to the point.

Think About Your Audience

When you post an article, think about the people you are trying to reach. Asking UNIX(*) questions on rec.autos will not reach as many of the people you want to reach as if you asked them on comp.unix.questions or comp.unix.wizards. Try to get the most appropriate audience for your message, not the widest.

It is considered bad form to post both to misc.misc, soc.net-people, or misc.wanted and to some other newsgroup. If it belongs in that other newsgroup, it does not belong in misc.misc, soc.net-people, or misc.wanted.

If your message is of interest to a limited geographic area (apartments, car sales, meetings, concerts, etc...), restrict the distribution of the message to your local area. Some areas have special newsgroups with geographical limitations, and the recent versions of the news software allow you to limit the distribution of material sent to world-wide newsgroups. Check with your system administrator to see what newsgroups are available and how to use them.

If you want to try a test of something, do not use a world-wide newsgroup! Messages in misc.misc that say "This is a test" are likely to cause large numbers of caustic messages to flow into your mailbox. There are newsgroups that are local to your computer or area that should be used. Your system administrator can tell you what they are.

Be Careful with Humor and Sarcasm

Without the voice inflections and body language of personal communications, it is easy for a remark meant to be funny to be misinterpreted. Subtle humor tends to get lost, so take steps to make sure that people realize you are trying to be funny. The net has developed a symbol called the smiley face. It looks like "-)" and points out sections of articles with humorous intent. No matter how broad the humor or satire, it is safer to remind people that you are being funny.

But also be aware that quite frequently satire is posted without any explicit indications. If an article upsets you strongly, you should ask yourself if it just may have been unmarked satire. Several self-proclaimed connoisseurs refuse to use smiley faces, so take heed or you may make a temporary fool of yourself.

Only Post a Message Once

Avoid posting messages to more than one newsgroup unless you are sure

it is appropriate. If you do post to multiple newsgroups, do not post to each group separately. Instead, specify all the groups on a single copy of the message. This reduces network overhead and lets people who subscribe to more than one of those groups see the message once instead of having to wade through each copy.

Please Rotate Messages With Questionable Content

Certain newsgroups (such as rec.humor) have messages in them that may be offensive to some people. To make sure that these messages are not read unless they are explicitly requested, these messages should be encrypted. The standard encryption method is to rotate each letter by thirteen characters so that an "a" becomes an "n". This is known on the network as "rot13" and when you rotate a message the word "rot13" should be in the "Subject:" line. Most of the software used to read usenet articles have some way of encrypting and decrypting messages. Your system administrator can tell you how the software on your system works, or you can use the Unix command "tr [a-z][A-Z] [n-z][a-m][N-Z][A-M]". (Note that some versions of Unix don't require the [] in the "tr" command. In fact, some systems will get upset if you use them in an unquoted manner. The following should work for everyone, but may be shortened on some systems:

tr '[a-m][n-z][A-M][N-Z]' '[n-z][a-m][N-Z][A-M]'
Don't forget the single quotes!)

Summarize What You are Following Up

When you are following up someone's article, please summarize the parts of the article to which you are responding. This allows readers to appreciate your comments rather than trying to remember what the original article said. It is also possible for your response to get to some sites before the original article.

Summarization is best done by including appropriate quotes from the original article. Do not include the entire article since it will irritate the people who have already seen it. Even if you are responding to the entire article, summarize only the major points you are discussing.

When Summarizing, Summarize!

When you request information from the network, it is common courtesy to report your findings so that others can benefit as well. The best way of doing this is to take all the responses that you received and edit them into a single article that is posted to the places where you originally posted your question. Take the time to strip headers, combine duplicate information, and write a short summary. Try to credit the information to the people that sent it to you, where possible.

Use Mail, Don't Post a Follow-up

One of the biggest problems we have on the network is that when someone

asks a question, many people send out identical answers. When this happens, dozens of identical answers pour through the net. Mail your answer to the person and suggest that they summarize to the network. This way the net will only see a single copy of the answers, no matter how many people answer the question.

If you post a question, please remind people to send you the answers by mail and offer to summarize them to the network.

Read All Follow-ups and Don't Repeat What Has Already Been Said

Before you submit a follow-up to a message, read the rest of the messages in the newsgroup to see whether someone has already said what you want to say. If someone has, don't repeat it.

Be Careful About Copyrights and Licenses

Once something is posted onto the network, it is effectively in the public domain. When posting material to the network, keep in mind that material that is UNIX-related may be restricted by the license you or your company signed with AT&T and be careful not to violate it. You should also be aware that posting movie reviews, song lyrics, or anything else published under a copyright could cause you, your company, or the net itself to be held liable for damages, so we highly recommend caution in using this material.

Cite Appropriate References

If you are using facts to support a cause, state where they came from. Don't take someone else's ideas and use them as your own. You don't want someone pretending that your ideas are theirs; show them the same respect.

Mark or Rotate Answers and Spoilers

When you post something (like a movie review that discusses a detail of the plot) which might spoil a surprise for other people, please mark your message with a warning so that they can skip the message. Another alternative would be to use the "rot13" protocol to encrypt the message so it cannot be read accidentally. When you post a message with a spoiler in it make sure the word "spoiler" is part of the "Subject:" line.

Spelling Flames Considered Harmful

Every few months a plague descends on USENET called the spelling flame. It starts out when someone posts an article correcting the spelling or grammar in some article. The immediate result seems to be for everyone on the net to turn into a 6th grade English teacher and pick apart each other's postings for a few weeks. This is not productive and tends to cause people who used to be friends to get angry with each other.

It is important to remember that we all make mistakes, and that there are

many users on the net who use English as a second language. If you feel that you must make a comment on the quality of a posting, please do so by mail, not on the network.

Don't Overdo Signatures

Signatures are nice, and many people can have a signature added to their postings automatically by placing it in a file called "\$HOME/.signature". Don't overdo it. Signatures can tell the world something about you, but keep them short. A signature that is longer than the message itself is considered to be in bad taste. The main purpose of a signature is to help people locate you on the net, not learn your life story. Every signature should include your return address relative to a well known site on the network. Your system administrator can give this to you.

Summary of Things to Remember

Never forget that the person on the other side is human
Be brief
Your postings reflect upon you; be proud of them
Use descriptive titles
Think about your audience
Be careful with humor and sarcasm
Only post a message once
Please rotate material with questionable content
Summarize what you are following up
Use mail, don't post a follow-up
Read all follow-ups and don't repeat what has already been said
Be careful about copyrights and licenses
Cite appropriate references
When summarizing, summarize
Mark or rotate answers or spoilers
Spelling flames considered harmful
Don't overdo signatures

(*)UNIX is a registered trademark of AT&T.

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excerpted by anyone wishing to do so.

Gene Spafford
Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-2004
Internet: spaf@cs.purdue.edu uucp: ...!(decwrl,gatech,ucbvax)!purdue!spaf

Original-from: mark@cbosgd.att.com (Mark Horton)

[Most recent change: 17 September 1987 by spaf@purdue.edu (Gene Spafford)]

This message describes some of the rules of conduct on Usenet. The rules vary depending on the newsgroup.

Some newsgroups are intended for discussions and some for announcements or queries. It is not usually a good idea to carry on discussions in newsgroups that are designated otherwise. It is never a good idea to carry on "meta-discussions" about whether a given discussion is appropriate -- such traffic mushrooms until nobody can find articles that belong. If you are unhappy with what some user said, send him/her mail, don't post it.

Before posting, think about where your article is going. If it's posted to a "comp", "news", "misc", "soc", "sci", "rec" or "talk" newsgroup, it will probably go to the USA, Canada, Europe, Korea, and Australia. Certain articles are only of local interest (e.g. used car ads) and it is inappropriate to post them to the whole world. Use the "Distribution" feature to restrict distribution to your local area. If you don't know how to use this feature, read "Frequently Submitted Items" in another article in news.announce.newusers.

Don't post announcements regarding major news events (e.g. the space shuttle has just exploded!) to news groups. By the time most people receive such items, they will long since have been informed by conventional media. If you wish to discuss such an event on the net, use the "misc.headlines" newsgroup.

Announcement of professional products or services on Usenet is allowed; however, since someone else is paying the phone bills for this, it is important that it be of overall benefit to Usenet. Post to the appropriate newsgroup -- comp.newprod -- never to a general purpose newsgroup such as "misc.misc". Clearly mark your article as a product announcement in the subject. Never repeat these -- one article per product at the most; preferably group everything into one article. Advertising hype is especially frowned upon -- stick to technical facts. Obnoxious or inappropriate announcements or articles violating this policy will generally be rejected. This policy is, of course, subject to change if it becomes a problem.

Some newsgroups are moderated. In these groups, you cannot post directly, either by convention or because the software prevents it. To post to these newsgroups, send mail to the moderator. Examples:

Newsgroup	Moderator	Purpose
news.announce.important	cbosgd!announce	Important announcements for everyone
comp.std.c	cbosgd!std-c	ANSI C standards discussion
comp.std.unix	ut-sally!std-unix	ANSI Unix standards discussion

comp.std.mumps discussion	plus5!std-mumps	ANSI Mumps standards
comp.unix and bugs	cbsogd!unix	Discussion of Unix* features

Some newsgroups have special purpose rules:

Newsgroup	Rules
news.announce.important	Moderated, no direct postings, important things only.
misc.wanted	Queries, "I want an x", "Anyone want my x?". No discussions. Don't post to more than one xxx.wanted. Use the smallest appropriate wanted (e.g. used car ads to nj.wanted.)
rec.humor	Requests for sources, termcaps, etc. should go to the "comp.sources.wanted" newsgroup. Clean humor only; anything offensive must be rotated; no discussions -- humor only. Discussions go in rec.humor.d
rec.arts.movies	Don't post anything revealing part of a movie without marking it (spoiler) in the subject.
rec.arts.*	Same as movies -- mark spoilers in the subject line.
news.groups	Discussions about new groups: whether to create them and what to call them. Don't post yes/no votes, mail them to the author
misc.test	Use the smallest test group possible, e.g. "test" or "ucb.test". Say in the body of the message what you are testing.

It is perfectly legal to reproduce short extracts of a copyrighted work for critical purposes, but reproduction in whole is strictly and explicitly forbidden by US and international copyright law. (Otherwise, there would be no way for the artist to make money, and there would thus be less motive for people to go to the trouble of making their art available at all. The crime of theft is as serious in this context as any other, even though you may not have to pick locks, mask your face, or conceal merchandise.)

All opinions or statements made in messages posted to Usenet should be taken as the opinions of the person who wrote the message. They do not necessarily represent the opinions of the employer of that person, the owner of the computer from which the message was posted, or anyone involved with Usenet or the underlying networks of which Usenet is made up. All responsibility for statements made in Usenet messages rests with the individual posting the message.

Posting of information on Usenet is to be viewed as similar to publication. Because of this, do not post instructions for how to do some illegal act (such as jamming radar or obtaining cable TV service illegally); also do not ask how to do illegal acts by posting to the net.

If you have a standard signature you like to append to your articles, put it in a file called .signature in your home directory. "postnews" and "inews" will automatically append it to your article. Please keep your signatures concise, as people do not appreciate seeing lengthy signatures, nor paying the phone bills to repeatedly transmit them. 2 or 3 lines are usually plenty. Sometimes it is also appropriate to add another line or two for addresses on other major networks where you can be reached (e.g., ARPA, CSnet, Bitnet). Long signatures are definitely frowned upon. DO NOT include drawings, pictures, maps, or other graphics in your signature -- it is not the appropriate place for such material and viewed as rude by other readers.

If you post an article and remember something you've left out or realize you've made a factual error, you can cancel the article and (if cancelled quickly enough) prevent its distribution. Then you can correct whatever was wrong and post a new copy. In "rn" and "readnews", an article that you posted can be cancelled with the "C" command. Be aware, however, that some people may have already read the incorrect version so the sooner you cancel something, the better.

--
Gene Spafford

Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-2004
Internet: spaf@cs.purdue.edu uucp: ...!(decwrl,gatech,ucbvax)!purdue!spaf

Original-from: ofut@gatech.edu (A. Jeff Offutt VI)

[Most recent change: 7 September 1987 by spaf@purdue.edu (Gene Spafford)]

I would like to take a moment to share some of my knowledge of writing style. If you read the pointers below, remember: it's easy to agree that they make sense but it's much harder to apply them.

References:

Cunningham and Pearsall, "How to Write For the World of Work"
Strunk & White, "Elements of Style"

The above references are both excellent books. Cunningham is a standard in Tech writing classes and won an award for the best tech writing book from the Association for Teaching of Technical Writing. I was lucky enough to take a class from him as an undergraduate. Strunk is a standard in college composition classes. Other ideas here come from my own experience on the net and hints from other people.

This is a "long article". The rest of it is simply a list of pointers.

Writing style:

- * Write *below* the readers' reading level. The avg. person in the US reads on a 5th grade level. The avg. professional reads on about the 12th grade level.
- * Keep paragraphs short and sweet. Keep sentences shorter and sweeter. This means "concise," not cryptic.
- * White space is not wasted space -- it greatly improves clarity.
- * Pick your words to have only *one* meaning. Vagueness is considered artistic by literary critics. We are not being literary here.
- * People can only grasp about seven things at once. This means ideas in a paragraph, major sections, etc..
- * There are several variations on any one sentence. A passive, questioning or negative sentence takes longer to read.

Net style:

- * Subtlety is not communicated well in written form - especially over a computer.
- * The above applies to humor as well. (rec.humor, of course, not included.)
- * When being especially "flame-boyant", I find it helpful to go the bathroom before actually sending. Then, I often change the tone considerably.

- * Subject lines should be used very carefully. How much time have you wasted reading articles with a misleading subject line?
- * References need to be made. When you answer mail, you have the original message fresh in your mind. When I receive your answer, I don't.
- * It's *much* easier to read a mixture of upper and lower case letters.
- * Leaving out articles (such as "the," "a" "an," etc.) for "brevity" mangles the meaning of your sentences and takes longer to read. It saves you time at the expense of your reader.
- * Be careful of contextual meanings of words. For instance, I used "articles" just now. In the context of netnews, it has a different meaning than I intended.
- * Remember - this is an international network.
- * Remember - your future employers may be reading your articles.

'Nuff said.

These pointers are all easily supported by arguments and research.
There's a lot more to say, but....

--
Gene Spafford

Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-2004
Internet: spaf@cs.purdue.edu uucp:

...![decwrl,gatech,ucbvax]!purdue!spafOriginal-author: brad@looking.on.ca (Brad Templeton)
Archive-name: emily-postnews/part1
Last-change: 30 Nov 91 by brad@looking.on.ca (Brad Templeton)

**NOTE: this is intended to be satirical. If you do not recognize it as such, consult a doctor or professional comedian. The recommendations in this article should be recognized for what they are -- admonitions about what NOT to do.

"Dear Emily Postnews"

Emily Postnews, foremost authority on proper net behaviour,
gives her advice on how to act on the net.

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Dear Miss Postnews: How long should my signature be? -- verbose@noisy

A: Dear Verbose: Please try and make your signature as long as you can. It's much more important than your article, of course, so try

to have more lines of signature than actual text.

Try to include a large graphic made of ASCII characters, plus lots of cute quotes and slogans. People will never tire of reading these pearls of wisdom again and again, and you will soon become personally associated with the joy each reader feels at seeing yet another delightful repeat of your signature.

Be sure as well to include a complete map of USENET with each signature, to show how anybody can get mail to you from any site in the world. Be sure to include Internet gateways as well. Also tell people on your own site how to mail to you. Give independent addresses for Internet, UUCP, and BITNET, even if they're all the same.

Aside from your reply address, include your full name, company and organization. It's just common courtesy -- after all, in some newsreaders people have to type an *entire* keystroke to go back to the top of your article to see this information in the header.

By all means include your phone number and street address in every single article. People are always responding to usenet articles with phone calls and letters. It would be silly to go to the extra trouble of including this information only in articles that need a response by conventional channels!

Dear Emily: Today I posted an article and forgot to include my signature. What should I do? -- forgetful@myvax

A: Dear Forgetful: Rush to your terminal right away and post an article that says, "Oops, I forgot to post my signature with that last article. Here it is."

Since most people will have forgotten your earlier article, (particularly since it dared to be so boring as to not have a nice, juicy signature) this will remind them of it. Besides, people care much more about the signature anyway. See the previous letter for more important details.

Also, be sure to include your signature TWICE in each article. That way you're sure people will read it.

Dear Ms. Postnews: I couldn't get mail through to somebody on another site. What should I do? -- eager@beaver.dam

A: Dear Eager: No problem, just post your message to a group that a lot of people read. Say, "This is for John Smith. I couldn't get mail through so I'm posting it. All others please ignore."

This way tens of thousands of people will spend a few seconds scanning

over and ignoring your article, using up over 16 man-hours their collective time, but you will be saved the terrible trouble of checking through Usenet maps or looking for alternate routes. Just think, if you couldn't distribute your message to 30,000 other computers, you might actually have to (gasp) call directory assistance for 60 cents, or even phone the person. This can cost as much as a few DOLLARS (!) for a 5 minute call!

And certainly it's better to spend 10 to 20 dollars of other people's money distributing the message than for you to have to waste \$9 on an overnight letter, or even 29 cents on a stamp!

Don't forget. The world will end if your message doesn't get through, so post it as many places as you can.

Q: What about a test message?

A: It is important, when testing, to test the entire net. Never test merely a subnet distribution when the whole net can be done. Also put "please ignore" on your test messages, since we all know that everybody always skips a message with a line like that. Don't use a subject like "My sex is female but I demand to be addressed as male." because such articles are read in depth by all USEnauts.

Q: Somebody just posted that Roman Polanski directed Star Wars. What should I do?

A: Post the correct answer at once! We can't have people go on believing that! Very good of you to spot this. You'll probably be the only one to make the correction, so post as soon as you can. No time to lose, so certainly don't wait a day, or check to see if somebody else has made the correction.

And it's not good enough to send the message by mail. Since you're the only one who really knows that it was Francis Coppola, you have to inform the whole net right away!

Q: I read an article that said, "reply by mail, I'll summarize." What should I do?

A: Post your response to the whole net. That request applies only to dumb people who don't have something interesting to say. Your postings are much more worthwhile than other people's, so it would be a waste to reply by mail.

Q: I collected replies to an article I wrote, and now it's time to summarize. What should I do?

A: Simply concatenate all the articles together into a big file and post that. On USENET, this is known as a summary. It lets people read all the replies without annoying newsreaders getting in the way. Do the same when summarizing a vote.

Q: I saw a long article that I wish to rebut carefully, what should I do?

A: Include the entire text with your article, particularly the signature, and include your comments closely packed between the lines. Be sure to post, and not mail, even though your article looks like a reply to the original. Everybody *loves* to read those long point-by-point debates, especially when they evolve into name-calling and lots of "Is too!" -- "Is not!" -- "Is too, twizot!" exchanges.

Be sure to follow-up everything, and never let another person get in the last word on a net debate. Why, if people let other people have the last word, then discussions would actually stop! Remember, other net readers aren't nearly as clever as you, and if somebody posts something wrong, the readers can't possibly realize that on their own without your elucidations. If somebody gets insulting in their net postings, the best response is to get right down to their level and fire a return salvo. When I read one net person make an insulting attack on another, I always immediately take it as gospel unless a rebuttal is posted. It never makes me think less of the insulter, so it's your duty to respond.

Q: How can I choose what groups to post in?

A: Pick as many as you can, so that you get the widest audience. After all, the net exists to give you an audience. Ignore those who suggest you should only use groups where you think the article is highly appropriate. Pick all groups where anybody might even be slightly interested.

Always make sure followups go to all the groups. In the rare event that you post a followup which contains something original, make sure you expand the list of groups. Never include a "Followup-to:" line in the header, since some people might miss part of the valuable discussion in the fringe groups.

Q: How about an example?

A: Ok. Let's say you want to report that Gretzky has been traded from the Oilers to the Kings. Now right away you might think rec.sport.hockey would be enough. WRONG. Many more people might be interested. This is a big trade! Since it's a NEWS article, it

belongs in the news.* hierarchy as well. If you are a news admin, or there is one on your machine, try news.admin. If not, use news.misc.

The Oilers are probably interested in geology, so try sci.geo.fluids. He is a big star, so post to sci.astro, and sci.space because they are also interested in stars. And of course comp.dcom.telecom because he was born in the birthplace of the telephone. And because he's Canadian, post to soc.culture.Ontario.southwestern. But that group doesn't exist, so cross-post to news.groups suggesting it should be created. With this many groups of interest, your article will be quite bizarre, so post to talk.bizarre as well. (And post to comp.std.mumps, since they hardly get any articles there, and a "comp" group will propagate your article further.)

You may also find it is more fun to post the article once in each group. If you list all the newsgroups in the same article, some newsreaders will only show the the article to the reader once! Don't tolerate this.

Q: How do I create a newsgroup?

A: The easiest way goes something like "inews -C newgroup ...", and while that will stir up lots of conversation about your new newsgroup, it might not be enough.

First post a message in news.groups describing the group. This is a "call for discussion." (If you see a call for discussion, immediately post a one line message saying that you like or dislike the group.) When proposing the group, pick a name with a TLA (three-letter acronym) that will be understood only by "in" readers of the group.

After the call for discussion, post the call for flames, followed by a call for arguments about the name and a call for run-on puns. Eventually make a call for "votes." USENET is a democracy, so voters can now all post their votes to ensure they get to all 30,000 machines instead of just the person counting. Every few days post a long summary of all the votes so that people can complain about bad mailers and double votes. It means you'll be more popular and get lots of mail. At the end of 21 days you can post the vote results so that people can argue about all the technical violations of the guidelines you made. Blame them on the moderator-of-the-week for news.announce.newgroups. Then your group might be created.

To liven up discussion, choose a good cross-match for your hierarchy and group. For example, comp.race.formula1 or soc.vlsi.design would be good group names. If you want your group created quickly, include an interesting word like "sex" or "activism." To avoid limiting discussion, make the name as broad as possible, and don't forget that TLA.

If possible, count votes from a leaf site with a once-a-week polled connection to botswanavax. Schedule the vote during your relay site's head crash if possible.

Under no circumstances use the trial group method, because it eliminates the discussion, flame, pun, voting and guideline-violation accusation phases, thus taking all the fun out of it. To create an ALT group, simply issue the creation command. Then issue an rmgroup and some more newgroup messages to save other netters the trouble of doing that part.

Q: I cant spell worth a dam. I hope your going too tell me what to do?

A: Don't worry about how your articles look. Remember it's the message that counts, not the way it's presented. Ignore the fact that sloppy spelling in a purely written forum sends out the same silent messages that soiled clothing would when addressing an audience.

Q: How should I pick a subject for my articles?

A: Keep it short and meaningless. That way people will be forced to actually read your article to find out what's in it. This means a bigger audience for you, and we all know that's what the net is for. If you do a followup, be sure and keep the same subject, even if it's totally meaningless and not part of the same discussion. If you don't, you won't catch all the people who are looking for stuff on the original topic, and that means less audience for you.

Q: What sort of tone should I take in my article?

A: Be as outrageous as possible. If you don't say outlandish things, and fill your article with libelous insults of net people, you may not stick out enough in the flood of articles to get a response. The more insane your posting looks, the more likely it is that you'll get lots of followups. The net is here, after all, so that you can get lots of attention.

If your article is polite, reasoned and to the point, you may only get mailed replies. Yuck!

Q: The posting software suggested I had too long a signature and too many lines of included text in my article. What's the best course?

A: Such restrictions were put in the software for no reason at all, so don't even try to figure out why they might apply to your article. Turns out most people search the net to find nice articles that

consist of the complete text of an earlier article plus a few lines.

In order to help these people, fill your article with dummy original lines to get past the restrictions. Everybody will thank you for it.

For your signature, I know it's tough, but you will have to read it in with the editor. Do this twice to make sure it's firmly in there. By the way, to show your support for the free distribution of information, be sure to include a copyright message forbidding transmission of your article to sites whose USENET politics you don't like.

Also, if you do have a lot of free time and want to trim down the text in your article, be sure to delete some of the attribution lines so that it looks like the original author of -- say -- a plea for world peace actually wrote the followup calling for the nuking of Bermuda.

Q: They just announced on the radio that the United States has invaded Iraq. Should I post?

A: Of course. The net can reach people in as few as 3 to 5 days. It's the perfect way to inform people about such news events long after the broadcast networks have covered them. As you are probably the only person to have heard the news on the radio, be sure to post as soon as you can.

Q: I have this great joke. You see, these three strings walk into a bar...

A: Oh dear. Don't spoil it for me. Submit it to rec.humor, and post it to the moderator of rec.humor.funny at the same time. I'm sure he's never seen that joke.

Q: What computer should I buy? An Atari ST or an Amiga?

A: Cross post that question to the Atari and Amiga groups. It's an interesting and novel question that I am sure they would love to investigate in those groups. There is no need to read the groups in advance or examine the "frequently asked question" lists to see if the topic has already been dealt with. In fact, you don't need to read the group at all, and you can tell people that in your query.

Q: What about other important questions? How should I know when to post?

A: Always post them. It would be a big waste of your time to find a knowledgeable user in one of the groups and ask through private mail

if the topic has already come up. Much easier to bother thousands of people with the same question.

Q: Somebody just posted a query to the net, and I want to get the answer too. What should I do?

A: Immediately post a following, including the complete text of the query. At the bottom add, "Me too!" If somebody else has done this, follow up their article and add "Me three," or whatever number is appropriate. Don't forget your full signature. After all, if you just mail the original poster and ask for a copy of the answers, you will simply clutter the poster's mailbox, and save people who do answer the question the joyful duty of noting all the "me (n)s" and sending off all the multiple copies.

Q: What is the measure of a worthwhile group?

A: Why, it's Volume, Volume, Volume. Any group that has lots of noise in it must be good. Remember, the higher the volume of material in a group, the higher percentage of useful, factual and insightful articles you will find. In fact, if a group can't demonstrate a high enough volume, it should be deleted from the net.

Q: Emily, I'm having a serious disagreement with somebody on the net. I tried complaints to his sysadmin, organizing mail campaigns, called for his removal from the net and phoning his employer to get him fired. Everybody laughed at me. What can I do?

A: Go to the daily papers. Most modern reporters are top-notch computer experts who will understand the net, and your problems, perfectly. They will print careful, reasoned stories without any errors at all, and surely represent the situation properly to the public. The public will also all act wisely, as they are also fully cognizant of the subtle nature of net society.

Papers never sensationalize or distort, so be sure to point out things like racism and sexism wherever they might exist. Be sure as well that they understand that all things on the net, particularly insults, are meant literally. Link what transpires on the net to the causes of the Holocaust, if possible. If regular papers won't take the story, go to a tabloid paper -- they are always interested in good stories.

By arranging all this free publicity for the net, you'll become very well known. People on the net will wait in eager anticipation for your every posting, and refer to you constantly. You'll get more mail than you ever dreamed possible -- the ultimate in net success.

Q: What does foobar stand for?

A: It stands for you, dear.

--
Gene Spafford

Software Engineering Research Center & Dept. of Computer Sciences

Purdue University, W. Lafayette IN 47907-1398

Internet: spaf@cs.purdue.edu phone: (317) 494-7825

Glossary

Address: If a computer is multiuser or belongs to a network, addresses are used to differentiate the various users. An address is often the user's name, such as "rich" or "spartan." To differentiate between the "rich" using "SJSUVM1" and the "rich" using "portal," an addressing scheme is used, e.g., "rich@portal." This is pronounced "rich at portal." This form of addressing is known as "internet-style." Other forms of addressing exist, such as "portal!rich," but internet-style addressing is emerging as the standard form of address across networks.

Bulletin board system: Also known as "BBS." See "conferencing."

Computer: At its most basic level, it is an electronic device capable of carrying out millions of instructions per second. The instructions it executes are determined by its programming or software. The software enables the computer to perform tasks such as word processing, numerical calculation and communication.

Conferencing: This is a form of electronic mail which requires a specialized type of communication software. Rather than being sent to a specific user, a message is distributed across the network or internet as an open letter. These open letters are organized by the conferencing software into categories of interest, such as "cat lovers" and "Italian culture." Users subscribe only to the categories that interest them and ignore the rest. Tens of thousands of personal computers around the world are dedicated to providing conferences between their users. Known as "bulletin board systems" or BBS's, they provide an important source of information for users with similar interests. Some BBS's belong to a network of BBS's using the same conferencing software. This allows local users to "conference" with users at other sites.

E-mail: Users can send written messages to one another using a special form of communication software called electronic mail. Provided that both users' sites have electronic mail and that both sites belong to gatewayed networks, electronic mail is an amazingly fast and efficient way for users to communicate. The Internet network (not to be confused with the general term "internet") spans the globe and transmits mail between sites within seconds. Slower networks, such as Fidonet, can take hours or even days. Mail delivery is limited by the speed of the slowest network along the delivery route. For example, if a machine is a gateway between the Internet and the Fidonet networks, mail can take

seconds to reach the gateway via the Internet and then a few days to reach its destination site within Fidonet.

Feed: The Usenet connection between two sites. The site that provides the connection "feeds" the site that wants it.

Fidonet: A network of personal computers running the Fido bulletin board system software.

Gateway: A computer that belongs to at least two networks and is registered with each network's NIC. A gateway computer allows users and computers from one side of the gateway to communicate with users and computers on the other side. A machine serving as a gateway to several networks can be a sort of network hub. The proliferation of gateway sites has facilitated the linking of previously isolated networks. The global community of linked networks is known as the "internet."

Internet: The internet is the global community of linked networks. It is essentially a network of networks. The National Science Foundation's network or NSFNet is confusingly known as the Internet. The Internet is a high-speed network linking the nation's military and research institutions with corporations and foreign institutions around the world. While only a part of the internet, the Internet is considered its backbone because of its high-speed connectivity. Because of increasing demand for commercial access, the Internet is being restructured as the National Research and Education Network (NREN). Management for this new network will be contracted out to a consortium of private corporations.

Kill file: Blocks the display of the articles originating from the users and sites listed in the file.

Moderation: A moderated newsgroups requires all users to seek approval prior to posting an article.

Multiuser: See "user."

Networks: One or more computers linked for the purpose of communicating or of sharing resources such as printers and disk drives.

Newsgroup: The categories of discussion available via Usenet. There are currently approximately 4,000.

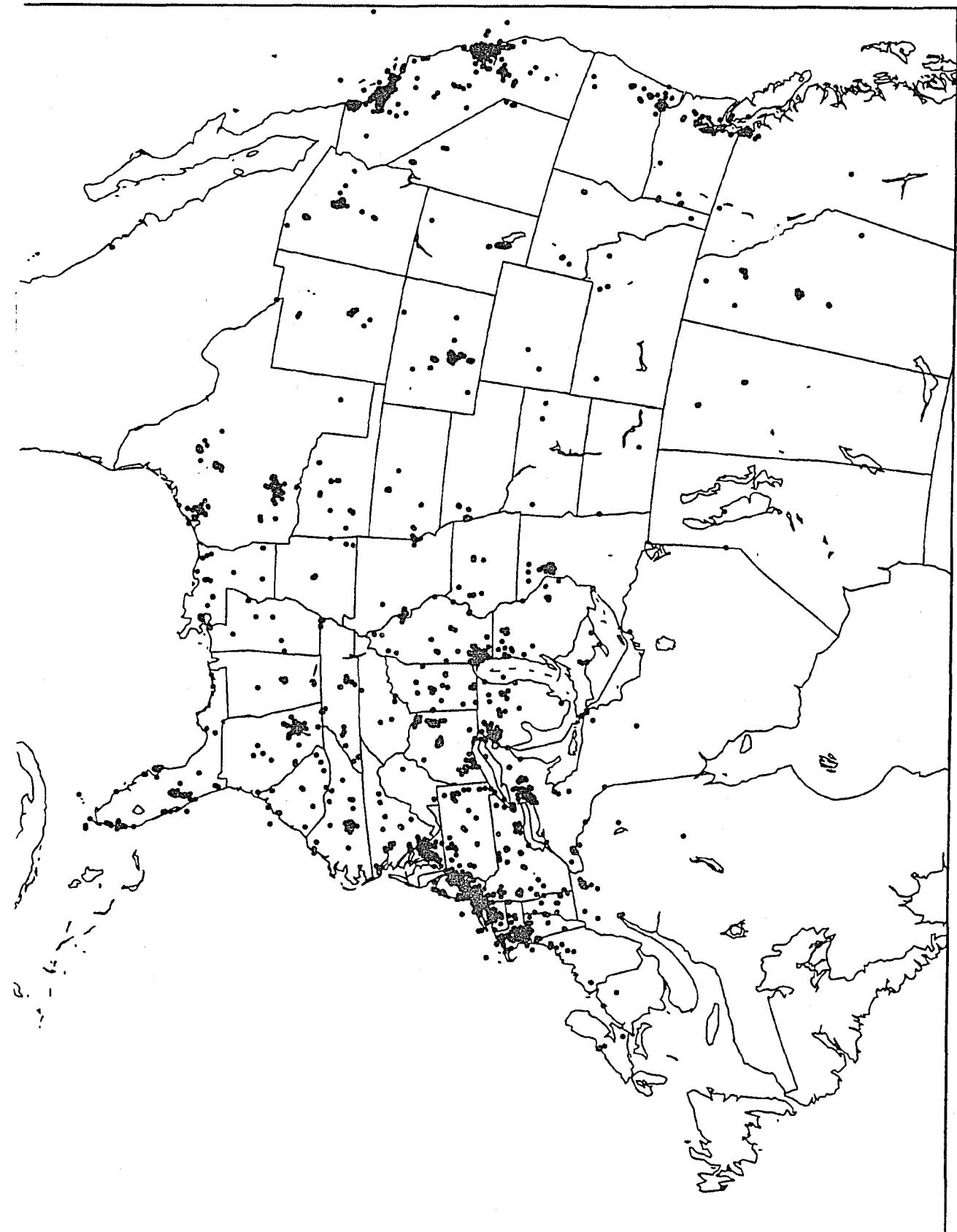
Site: This is another term for a computer. Most often it is associated with multiuser computers or computers in a network. Sites have names such as "SJSUVM1," "sjsumcs," and "portal." These names are used to

differentiate one computer in a network from another. A similar term is "node." A node almost always refers to a computer in a network.

System Administrator: Each user is regulated by his site or system administrator and each administrator relies upon his neighboring site administrators for connectivity within the network. Generally, the administrator is liable for the actions of his users, but there is a debate over the extent of this liability.

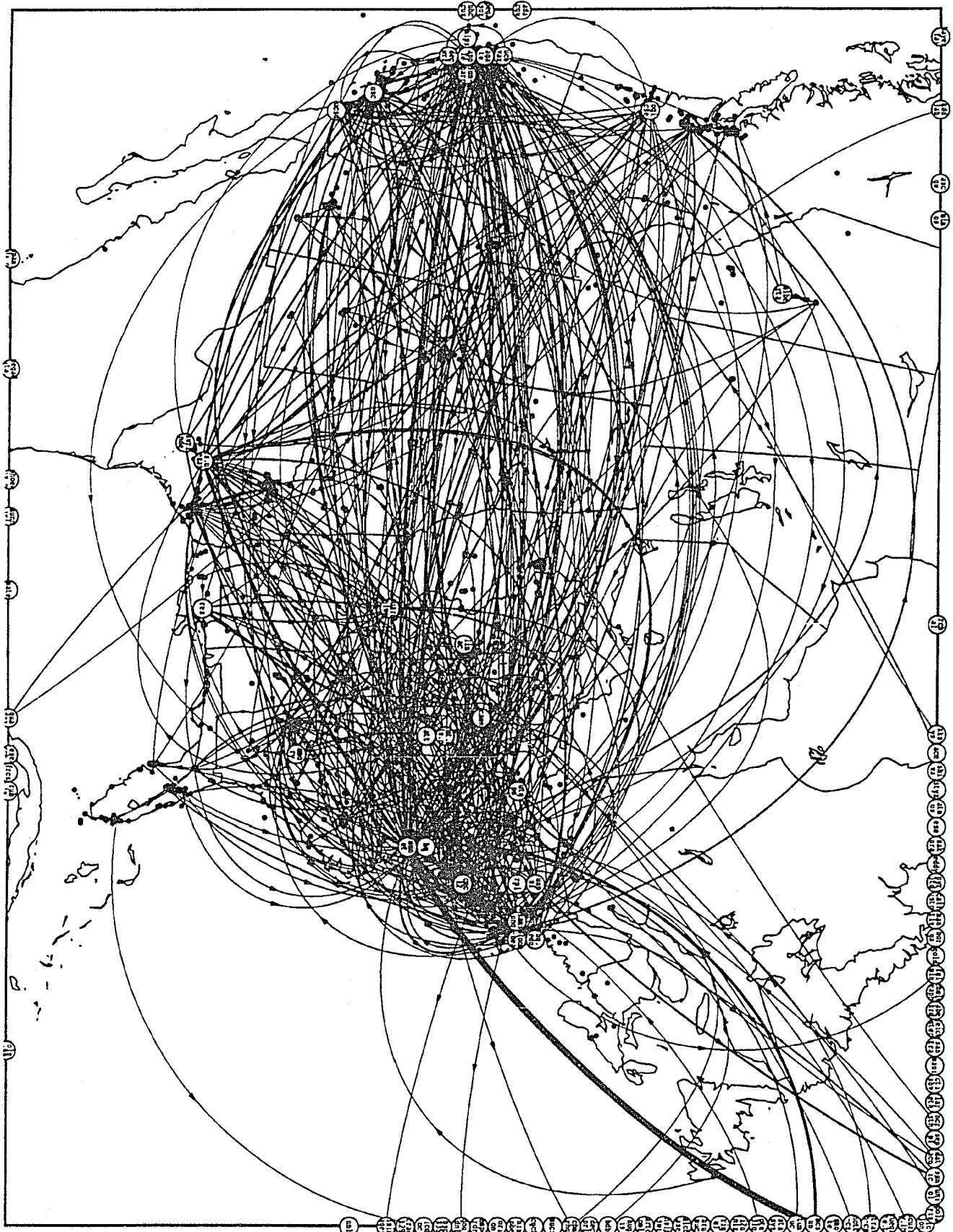
Usenet: The largest conferencing system in the world. The Usenet software is used by sites within the UUCP network. It is composed of an estimated 10 million users at one million sites whose messages are divided into over a thousand categories called "newsgroups." It is claimed that its volume of messages is doubling every two months. To participate in Usenet, a site must have Usenet software and be a node within UUCP or the Internet. Usenet messages can spread to other networks via gateways. These gateways convert messages to the format used by their own network's conferencing software. In this manner, Fidonet users can receive Usenet messages as Fido "echoes," as they are called in the Fidonet conferencing jargon.

User: The person who operates the computer. The user operates the computer via software. The user interacts with the software usually via a keyboard, video monitor and printer. A "single-user machine" is a computer that can only accommodate one user at a time. A "multiuser machine" is a computer that can interact with several users simultaneously. This implies that the computer has more than one keyboard or point of interaction. A point of interaction is commonly known as a terminal.

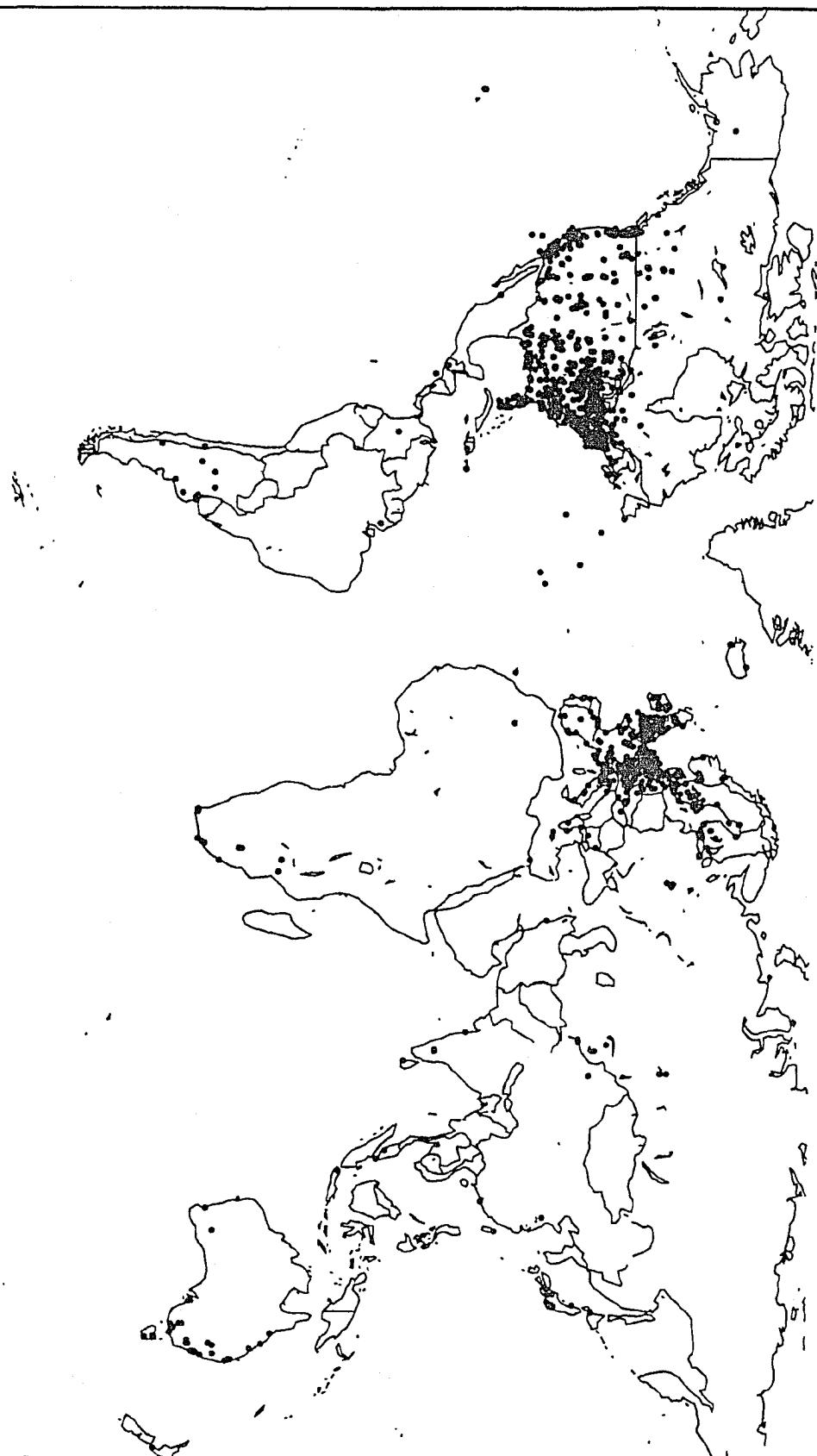


USENET sites In North America
Data taken from comp.mall.maps, Apr 91

DECWRL netmap-1.6 by Brian Reid at Tue Apr 9 17:21:42 1991
Lambert Conformal Projection [44°N,33°W]. Map center: [42°N, 90°W]
Image resolution 300/in., stroke limit 5 pixels



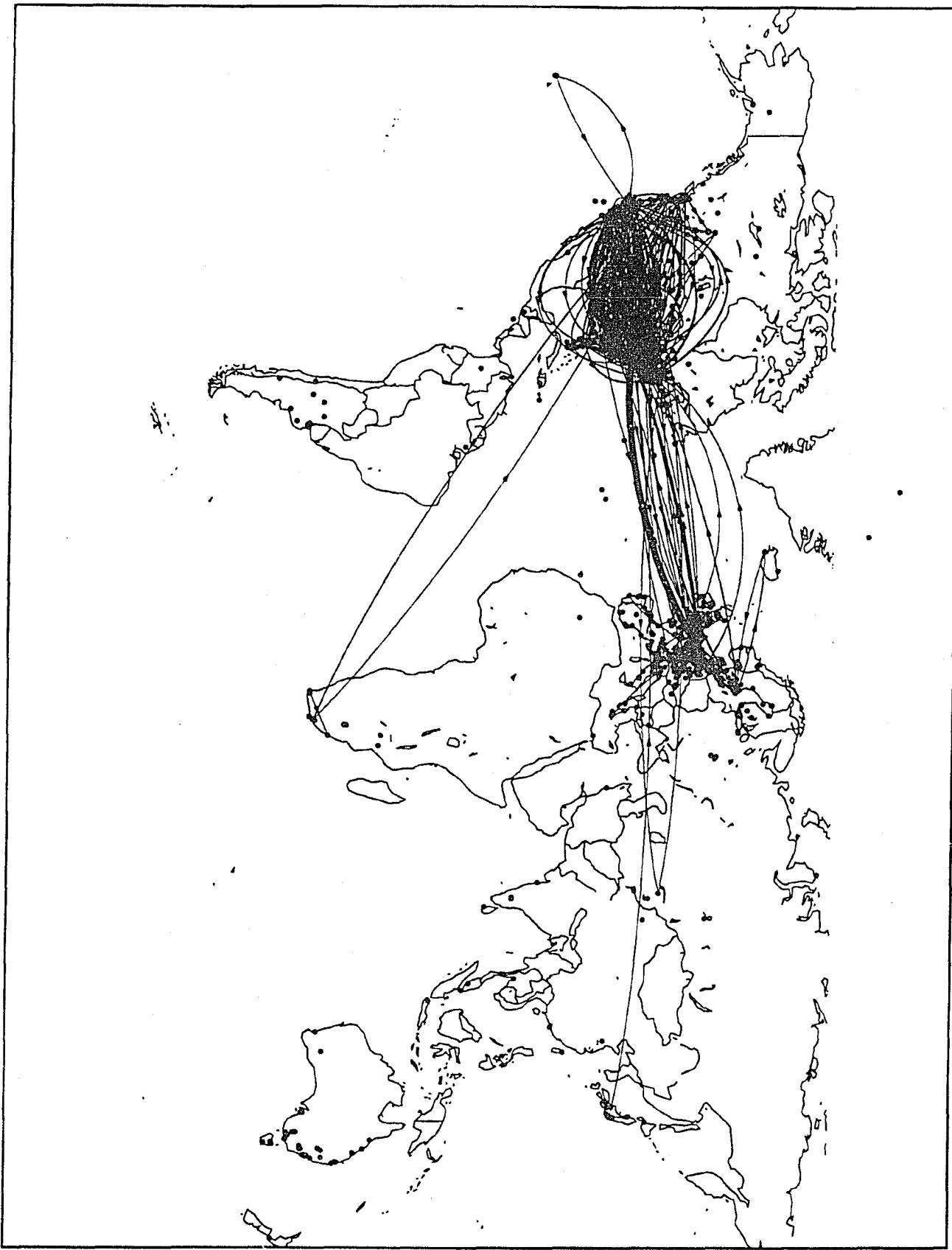
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USENET sites, worldwide
Data taken from comp.mail.maps, Apr 91

DECWRL netmap-1.6 by Brian Reid at Tue Apr 9 17:21:54 1991
Gall Stereographic Projection, Map center: [5°N, 0°W]
Image resolution 300/in., stroke limit 5 pixels

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Complete aggregate news flow, worldwide
Line width proportional to directional effective flow volume

DECWRL netmap-1.6 by Brian Reid at Tue Apr 9 17:21:54 1991
Gall Stereographic Projection, Map center: [5°N, 0°W]
Image resolution 300/in., stroke limit 5 pixels

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