A traditional concept finds new relevance online.

Audience Analysis in Cyberspace: Defining the Invisible

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In her book *Persuasion and Privacy in Cyberspace: the Online Protests Over Lotus MarketPlace and the Clipper Chip*, Laura Gurak discusses the performance of audience analysis in cyberspace by tracing the history of two online communities and studying their composition and structure.

Traditionally, identifying target users in audience analysis is a relatively seamless task. The technical writer first might discuss audience with her client or employer and then visit the job site, interview probable users, and hypothesize about audience needs, expectations, and mindset. The direct, person-to-person contact of writer and users increases the ease and efficiency of this process. The writer gains audience information by actually seeing the users. In person, the writer can observe the users at work and gauge visual cues, such as body language and facial expressions. For the writer, such tangible information decreases guesswork and discourages over-generalization about the target audience.

But how does audience analysis change when this tangible information is not available? Without personal contact, the writer must validate her assumptions about users only through secondary sources, such as "typical" scenarios or prior experiences. The target audience's rich demography, which includes both individual and communal elements, easily can be lost in secondary sources. If the writer does not interact with an actual group of people, she may fall more readily into generalizations and overlook the importance of users' individuality. For example, considerations of gender and socioeconomic status may become diluted. Likewise, each group of users forms its own community based on shared skill sets, social/political concerns, and modes of communication. In her analysis, the writer must consider these group dynamics, yet they are difficult to visualize abstractly.

Audience analysis in cyberspace, however, requires such abstract visualization. While still bound by common interests and concerns, cyberspace communities are not physical entities. Members "meet" through electrical impulses, not in a conference room or at a neighborhood party. This forum allows for a higher degree of anonymity; in cyberspace, a person can mask his age, gender, and physical attributes. The same person can make statements—true or false—about any array of subjects without worrying if his body language supports his spoken words. Clearly, cyberspace is a communication medium of loud invisibility that does not support traditional methods of audience analysis.

So how does a technical writer perform audience analysis in cyberspace? In her book *Persuasion and Privacy in Cyberspace*, Laura Gurak tackles this question by tracing the history of two online communities and exploring their composition and structure. Using case studies of the cyberspace protest movements against the Lotus MarketPlace CD-ROM direct-mail marketing database and the Clipper chip encryption device, she studies several major elements of audience demography including community hierarchy, mode of communication (i.e., system of information delivery), and gender. Gurak offers a detailed discussion of these elements and understands their importance for technical writers working in fields that are increasingly focused on cyberspace: if technical writers are to create clear, usable online documentation, they must know how cyberspace communities function and how these communities vary from traditional audiences. To expound on this claim, I will review Gurak's discussion of the roles of hierarchy, system of delivery, and

gender in both the Lotus MarketPlace and Clipper chip protest communities, with a focus on the practical implications and applications of audience analysis in cyberspace.

The Case of Lotus MarketPlace

The first case study in Gurak's book revolves around Lotus's unsuccessful attempt to release its MarketPlace CD-ROM. Introduced in April of 1990, MarketPlace was a direct-mail marketing database that ran on Macintosh personal computers and contained information on 120 million American consumers. The CD-ROM was intended for use by small business owners who wanted to gain access to direct-mailing lists. However, within the first few months following the product announcement, Lotus received over thirty thousand calls from consumers who were concerned with personal privacy and asked that their information be removed from the database (19).

In addition to the telephone campaign, the MarketPlace protest gained prominence in cyberspace. As more people became aware of MarketPlace and the violation of privacy charges against it, more opinions about the product appeared on the Internet. Cyberspace debates grew. Messages containing the address and phone number of Lotus were reposted from newsgroup to newsgroup and forwarded from e-mail account to e-mail account. This group of Internet protesters, united in opposition to the release of Lotus MarketPlace, effectively formed one of the first widespread Internet communities (19-20).

To discover how that community functioned, Gurak dissects its history. Membership in the cyberspace community increased in direct proportion to the publicity about privacy concerns. In May 1990, Marc Rotenberg, then director of the Computer Professionals for Social Responsibility (CPSR), used MarketPlace as an example of privacy infringement when he testified before a Congressional subcommittee investigating the need for a data protection board in the United States. Soon after, an article critical of MarketPlace was published in the *Privacy Times*, which was followed in November by a *Wall Street Journal* article entitled "Lotus Product Spurs Fears about Privacy" (24-25). Responses on the Internet grew in number and content. As Gurak notes, "Quickly, postings moved away from simply informing....People began to debate the privacy issues raised by the product...and to make efforts to mobilize" (26).

Rapid mobilization was possible because of how the community was structured. The Lotus MarketPlace protest strongly resembled a grassroots movement; its originators were everyday consumers, not leaders of special interest groups or Lotus competitors. (However, the "everyday" consumers did have to be wealthy and experienced enough to own and operate computers and Web programs. This threshold of common experience cannot be ignored in the formation of a community.) Because issues of privacy were important to many people, protest messages snowballed; often participants built their comments from the opinions already posted by others. In this way, the protest's impact grew because so many people spoke in agreement and from a common foundation.

In addition to a united foundation, the cyberspace community gained strength because it was able to deliver its views quickly and over a wide geography. As an example of cyberspace's powerful system of delivery, Gurak discusses the Larry Seiler message. Seiler is a computer professional on the East Coast of the United States who downloaded a message about MarketPlace, added his own commentary, and reposted the result via e-mail and newsgroups. Within days, Seiler's message had traveled from the United States to locations as varied as British Columbia and Saudi Arabia (26-27). Almost instantly, this cyberspace community received international attention and gained a larger collective voice.

While the overall organization of the MarketPlace protest community can be considered grassroots in nature, individual membership was skewed toward dominant social structures. In a chapter devoted to gender in cyberspace, Gurak points out that "[I]n the MarketPlace protest, more than half the participants were male..." (106). She surmises that the imbalance arises from the historical inequity of access to Internet equipment and training between men and women. Noting that the computer science field historically has been dominated by men, Gurak correlates that male dominance to the Internet,

which was spawned in the computer science discipline. Additionally, she emphasizes the statistical fact that women often occupy lower socioeconomic strata, which makes access to computers and modems more difficult (106). So while women comprised a large number of the 120 million Americans affected by Lotus MarketPlace, only a small fraction of distinctly female voices was heard in cyberspace.

The MarketPlace protest community, complete with both its democratic ideals and its pattern of gender inequality, ultimately succeeded in the effort to stop the release of Lotus's product. Gurak ties this victory to Lotus's lack of audience analysis. After Lotus identified cyberspace as the origin of most consumer complaints about MarketPlace, company officials scrambled to formulate a response that would be posted to the Internet. The result was a stiff, businesslike message that aimed to "clear up some of the misinformation surrounding the product" (28). This patronizing tone was not well received by a strong grassroots movement that had established itself quickly through a far-reaching network of cyberspace members. Had Lotus examined MarketPlace from a consumer's perspective—or perhaps from a female consumer's perspective—its response likely would have better matched the protesters' attitudes and concerns, and a more favorable outcome might have resulted.

The Case of the Clipper Chip

In 1993, the White House announced plans to use the Clipper chip as the government standard for computer encryption, and as a result another protest community gained prominence in cyberspace. Because personal electronic devices such as modems and cellular phones were increasing in power and popularity, the government needed to institute a more sophisticated encryption standard. The standard's algorithm had to be complex enough to ensure that government agencies could continue to decipher electronic messages in legal surveillance activities of persons or industries under federal investigation. The Clipper chip's complexity lies in its decryption method: two keys, each housed at a different location, are required to decode an encrypted message (32-33, 36). If adopted as the federal encryption standard, the Clipper chip largely would guarantee that national security would not suffer from lagging technology.

However, a major argument arose that business, industry, and individual citizens would suffer from government infringement of privacy rights. Headed by the Digital Privacy and Security Working Group (DPSWG), a protest movement formed and sent a letter of concern to President Clinton, citing lack of public input and unclear impacts on U.S. export controls. This letter soon landed on the Internet, and the cyberspace community responded actively. DPSWG increased the intensity of the protest by presenting testimony before the Congressional Computer System Security and Privacy Board. Again, the testimony was posted to the Internet, which spurred more debate and discussion in cyberspace (37-38).

Participation in this cyberspace debate varied in significant ways from the MarketPlace case. While community hierarchy, system of delivery, and gender were important issues in both cases, the Clipper chip cyberspace community was more technical and insular in nature, and therefore its structure and function followed more traditional patterns.

Because the issues surrounding the Clipper chip were based on highly specialized information, the cyberspace community was guided by computer professionals and encryption specialists. As a result, the protest against the Clipper chip became a top-down endeavor. The people at the top of the community's hierarchy largely controlled the direction and scope of cyberspace discussions by posting original messages that gave instructions rather than invited discourse. Gurak cites the example of a petition written and circulated by CPSR that asked recipients simply to add their signatures to the end of the document in a show of acquiescence (41). While debate did ensue in the community, it usually occurred only on the most technical levels and therefore relegated the less-specialized participants to names on a petition list.

However, Gurak emphasizes the significance of those names in her discussion of the community's system of delivery. As with the MarketPlace case, the Clipper chip community gained publicity because of cyberspace's ability to circulate information quickly and widely. In the instance of the CPSR petition, however, circulation occurred in a somewhat questionable manner. Because it required only a signature, the petition made it easy for anyone to support the community's views, regardless of

forethought or consideration of evidence. In Gurak's words: "Critics claimed that the speed of online delivery allowed anyone to send in a signature quickly without reviewing the facts of the case or truly understanding the complexities of cryptography in general and Clipper...in specific" (41). In a later chapter about ethos, flaming, and inaccuracy, Gurak expands on this criticism by noting that the same speed, ease, and reach of information that make Internet delivery beneficial also make it dangerous; Internet delivery invites inaccuracies in a community's statistical data as well as misrepresentation of individuals who dwell in cyberspace communities (96-103).

Within the Clipper chip cyberspace community, distinctly different representations of women and men arose. At first glance, it might seem that the women in this community, (and in cyberspace in general) misrepresented themselves. Gurak offers a transcript of a highly technical message written by a woman who obviously has specialized knowledge about encryption. The complex message ends as follows: "Has anyone else made this sort of connection, or am I just hallucinating pink elephants here? :)" (112). Gurak's subsequent commentary debates whether the self-deprecating question and the use of the emoticon reduce the validity of the rest of the message. Does the writer appear less credible because of her nonauthoritarian conclusion? Has she misrepresented herself as a professional? Gurak brings these questions back to the fundamental differences in how men and women speak. She notes that in spoken language men use strong assertions, authoritarian language, and challenges to others, while women use attenuated assertions, supportive language, and extensive justifications. Gurak then asserts that while these differences should not determine perceptions of validity on the Internet, cyberspace does, in fact, reflect "real life" which continues to be dominated by male perspectives and ways of doing (109-113).

Just as cyberspace is affected by social influences, it also is susceptible to political domination. The Clipper chip protest community kept the debate in the forefront of privacy-related news by documenting and encouraging a continuous stream of journal articles, conference presentations, and Congressional hearings about the Clipper chip and privacy. However, despite the community's efforts, its campaign ultimately failed. In early 1994, the United States government adopted the Clipper chip as the federal encryption standard (40-41). Obviously, much of the defeat must be credited to the government's political power, but audience analysis issues also impacted the outcome.

Throughout her chapters that relate to the Clipper chip, Gurak discusses several elements of what could be considered the White House's audience analysis effort, which ranged from mildly acknowledging to totally ignoring the cyberspace community. First, Gurak states that the White House responded to Internet protests "early on with a lengthy note" (41). This rapid response demonstrates that the government knew of the cyberspace community and recognized its potential power. That potential, however, was not enough to sustain governmental participation in the Clipper chip debate. Gurak offers two possible explanations for why the government did not maintain an active voice in the protest. Perhaps the government, a traditionally structured institution, did not know how to respond in the fluid format of cyberspace discourse. Or maybe the government recognized cyberspace's ability to support simultaneously an intense debate and huge amounts of information (both accurate and inaccurate) and used its political power to ignore the forum's capabilities instead of becoming overwhelmed by them (127). Whatever the reason for the government's unresponsiveness, the audience analysis implications remain the same: the White House learned enough about the structure and capacity of this cyberspace community to know that it would not or could not engage actively in the protest at that time.

Conducting Audience Analysis in Cyberspace

While Gurak never uses the phrase "audience analysis," her entire book hinges on the concept. Without audience analysis, her discussion of the Lotus MarketPlace and Clipper chip online protests would conclude in futility, a statement simply of how things stand and one that does not offer any jumping-off points toward a plan for equitable and just interaction in cyberspace. Fortunately, Gurak offers tips for audience analysis in cyberspace that are subtly interwoven with her case studies and commen-

tary:

- Familiarize yourself with the nature of online hierarchies. As a technical writer of online documentation or Web-based projects, realize that audience invisibility increases the potential for shifting community structure. As the MarketPlace and Clipper chip cases demonstrate, cyberspace communities do build definite hierarchies that are shaped largely by the level of specialized knowledge required to participate in debates and discussions. However, technology allows any person with a computer and an Internet connection to participate in any community of her choosing, regardless of subject expertise, level of education, or other "credentials." While virtual hierarchies, like their real world counterparts, tend to become concretized, the possibility for structural shifts exists more strongly in cyberspace because of increased access and suspended credentials. When researching an online community, then, a technical writer must devote even greater attention to those on the community's fringes who now are potentially active participants instead of quiet stakeholders.
- Know the implications of revolutionized information delivery. Rapid, widespread information delivery contributes to an increased potential for attitude shifts in cyberspace communities. Because Internet technology shares information faster and farther than most of us ever thought possible, the impact of individual contributions becomes much greater. Especially in communities formed around emotionally charged issues, information—regardless of its credibility or logic—gains momentum as it passes between numerous newsgroups and e-mail accounts in a short period of time. As a result, a cyberspace community can alter its collective focus and stance literally overnight. Now more than ever, a technical writer must monitor her audience continuously for changing opinions and attitudes. In addition, she must use increased forethought to anticipate highly diverse responses and reactions from a cyberspace community with unlimited access to information both within and outside of its own boundaries.
- Learn how language works in cyberspace. Communication in cyberspace communities is strictly textual; members cannot access the rich visual cues and vocal intonations that are part of interaction in the real world. Consequently, cyberspace citizens simulate face-to-face interactions through devices such as emoticons and tag questions at the end of statements. By correlating these methods to spoken language, Gurak formulates a convincing argument that women employ them more readily than do men. Whereas traditionally women use language to support others and justify ideas, men use it to exert authority and emphasize assertions. When analyzing a cyberspace audience, a technical writer must be aware of these various manipulations of language and the reasons behind them so that she does not diminish the importance of an idea, statement, or opinion that has been expressed in a more understated fashion.

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Cyberspace presents many new challenges to technical writers as they perform audience analysis. The invisibility of members inhibits the writer's ability to identify the composition and structure of the community. Compounding this dilemma is the breadth of cyberspace communities; members are scattered worldwide and have instant access to one another's information and reactions, thus creating a seemingly infinite combination of demographics, attitudes, and beliefs with which the technical writer must contend. In her analyses of the Lotus MarketPlace and Clipper chip protests, Gurak begins to dissect these problems by discussing issues of hierarchy, information delivery, and gender in cyberspace. In addition to providing insights about audience analysis, Gurak offers in-depth discussions of how people, corporations, and governments establish ethos, or character, in cyberspace and how ethos affects the interactions of virtual communities. By addressing several community issues, Gurak's book clearly demonstrates why a technical writer creating online documentation or Web-based products must understand these interactions in cyberspace.