Chapter 2

New Technologies for Editing and Selecting News and Information

Far more information is produced than consmed. Measuring information in words, one census found that, on average, over 11 million words are made available to Americans over print and electronic media each day, and this figure has been growing at roughly 8 percent each year since 1980. Of these words supplied, only about 48,000 were actually read or heard by any one individual (on average).[1] Editors, whose task it is to gather, select, and organize this welter of information for particular purposes or consumers, are more crucial to the information consumer than ever. As one commentator has observed, "in the Age of Information, editors assume an even greater importance; people will pay not to be deluged with reedited data."[2]

For the electronic publisher, exercising responsibility for identifying, verifying, and policing sources of information may become difficult or impossible, raising questions about standards of liability.

It does not follow from this, however, that editing will continue to be a centralized activity, nor one conducted solely by people. Quite the contrary: the deluge of information made possible by electronic publishing technology may require technological methods of sorting information for relevance and importance. Technologies such as expert systems are emerging, which when used in conjunction with electronic publishing, can disperse editorial control to the recipients, rather than the originators, of news stories and information. Citizens may come to see "news stories" not as a standardized, authoritative, and "balanced' text, but as a largely self-selected collection of sources to be assayed in context.

The emerging electronic publishing industry will pose unique questions concerning editorial control and responsibility under the First Amendment. Traditional assumptions about the press' editorial responsibility for the information it publishes may be drawn into question. The First Amendment serves to insulate responsible press conduct from liability in the interest of robust debate on matters of public importance. But for the electronic publisher, exercising responsibility for identifying, verifying, and policing sources of information may become difficult or impossible, raising questions about standards of liability for what is carried *over* phone and coaxial cable lines. Electronic publishing also challenges traditional distinctions between publishers and common carriers, further complicating questions of liability and First Amendment protections.

[1] Ithiel de Sola Pool, et al., Communications *Flows: A Census* n *the United States and Japan (New* York, NY: Elsevier Science Publishing Co., 1984), p. 16. Survey years 1960-1980.

[2] Bruce Owen, "The Role of Print in an Electronic Society," *Communications for Tomorrow: Policy Perspectives for the 1980's,* G. Robinson (cd.) (New York, NY: Praeger Publishers, 1978); as quoted in Mark Nadel, "Editorial Freedom: Editors, Retailers, and Access to the Mass Media," 9 *Comment: Hastings Journal of Communications and Entertainment Law 213* winter 1987), which provides a useful discussion of the role and functions of editors.

ELECTRONIC PUBLISHING

Electronic publishing combines information access and retrieval capabilities with messaging and transaction services. It is a point-to-point communication system in which text, audio, or video information may be carried by telephone network, microwave transmission,

satellite relays, or even coaxial cable television lines. It is roughly equivalent to what the Justice Department calls "information services" and the Federal Communications Commission calls "enhanced services."[3] Within the ambit of electronic publishing are teletext,[4] videotex,[5] electronic mail,[6] electronic bulletin boards,[7] and electronic transactional services, such as home shopping and home banking.[8] Although there are substantial differences between the types of electronic publishing (teletext, for example, is broadcast, while videotex is telephonic), they will be referred to collectively as electronic publishing.[9]

Excluded from present consideration is broadcast radio or television, cable television unenhanced voice telephony (i.e., exclusive of voice-mail storage and forwarding systems) and conventional print publishing. The distinction between electronic publishing and conventional communications, such as TV or radio is somewhat artificial, but suited to present analyses. In the long run, the convergence of modes of communication will destroy distinctions between electronic publishing and other forms of publishing; "the one-to-one relationship that used to exist between a medium and its use is eroding. This is what is meant by the convergence of modes."[10]

Electronic publishing may look like a different kind of service at different times, depending on the use the subscriber makes of it. It may function like conventional mail at one time; book or newspaper publishing at another; a bulletin board with messages pinned to it at another; a conference room at another; or even a bank or retail store at another.

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Moreover, electronic publishing networks can be "nested" within other networks; a serv-

[3] In *United States* v. *AT&T* CO., 552 F.Supp.131, 181 (D.C. Cir. 1982), *affirmed* 103 S. Ct. 1240 (1983) (Modified Final Judgment), Para IV J, "information services" were defined as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information which may be conveyed via telecommunications. In *Computer II*, *77* F.C.C. 2d 384, at 498, "enhanced services" are "services, offered over common carrier transmission facilities used in interstate communication, which (1) employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information; (2) provide the subscriber additional, different or restricted information; or (3) involve subscriber interaction with stored information. "

[4] Teletext is a one-way broadcast transmission of textual information, using the Vertical Blanking Interval (VBI) of a conventional television signal. Data is transmitted to a subscriber's television from a central computer, and the viewer selects from "pages" of information. Teletext requires a decoder, attached to a television set, to be received. The most common form of teletext transmission in the United States is closed-captioning for the hearing impaired. See: Efrem Sigel, *The Future of Videotext* (White Plains, NY: Knowledge Industry Publications, 1983); Richard Neustadt, *The Birth of Electronic Publishing* (White Plains, NY: Knowledge Industry Publications, 1982); Neustadt, Skall & H amrner, "The Regulation of Electronic Publishing," 33 *Federal Communications Law Journal* 331 (1981); and Anne Branscomb, "Electronic Publishing: A Global view of Videotex," 36 *Federal Communications Law Journal* 119 (1984).

[5] Videotex differs from teletext in several ways: it is "interactive," in that information flows in two directions, from the user to the host computer and back again; information is typically organized by search, rather than by preset pages; there is no theoretical limit on the amount of information that can be transmitted and stored; and videotex is normally transmitted via contained media (i.e., telephone or cable lines) in digital, computer-processable form. For present purposes, videotex includes networks accessed by personal computer, such as The SOURCE, CompuServe, LEXIS, NEXIS, WESTLAW, and ARPANET, as well as television-adapted networks, such as the experimental Viewtron, Keyfax, Trintex, and "dedicated" network systems such as the Telidon (Canada), Minitel (France), and Prestel (England) systems.

[6] Electronic mail is an electronically transmitted message from one computer terminal to another, usually via a host computer, which stores and routes the message. Electronic mail is commonly available in most videotex services. Current electronic mail services include MCImail, CompuServe, the SOURCE, GTE Telemail, and Western Union Easy Link.

[7] An electronic bulletin board is a publicly accessible videotex computer file, which is typically organized into "conferences' or "topics" that users may create and join, or limit membership to. See note 5 above.

[8] "Home banking, for example, allows a customer to handle electronic funds transfers from his or her own computer. The first system in the United States was Chemical Bank's "Pronto" system, which began in September 1983. See: U.S. Congress, Office of Technology Assessment, *Effects of Information Technology on Financial Service Systems* (Springfield, VA: National Technical Information Service, September 1984).

[9] See p. 15 of this report for a discussion of the distinction between electronic publishing and database services.

[10] Ithiel d. Sola Pool, *Technologies of Freedom* (Cambridge, MA: Belknap Press, 1983), p. 280.

ce for routing messages from one location to another maybe added on top of a network providing for their storage, which may itself lease lines and switching service from one or more networks. Members of these various networks can also "talk" to each other between otherwise self-contained networks.[11]

Electronic publishing is also interactive; unlike all previous media used by the press, where he journalistic product was a single package whose contents and priorities were controlled by editors, many electronic publishing systems permit the style, organization, order, and content of the items to be selected by the user, rather than the publisher. The converse is also true: writers and publishers may choose their readers, and differentiate their products across classes of readers.[12]

Interactivity means, moreover, that users can themselves become reporters or publishers. This feature is of great significance for the question of "who is press, " and it also suggests that the *sources* for news and information may in the future become dispersed, and less subject to centralized control by the electronic publisher. A paper publishing system which today looks something like this:[13]

Source(s) → Reporter → Publication → Distribution → Point of Sale → User

may one day be joined by an electronic publishing system that looks more like this:

Source(s) → Interconnection → User

These features of electronic publishing-the decentralization of editorial control, the multiplicity of versions of news and information products, the loss of an authoritative text, the many roles of electronic publishers, the dispersion of news and information sources—raise significant questions about liability for false, inaccurate, defamatory, indecent, obscene, and infringing information. Holding the electronic publisher liable for injurious information[14] entails conflicts with the "profound national commitment' made in the First Amendment "to the principle that debate on public issues should be uninhibited, robust, and wide open . . ."[15]

[11]These internetwork links are known as "gateways. See Quarterman and J. Hoskins, "Notable Computer Networks, " *Communications of the ACM, vol.* 29, October 1986, pp. 932-171, for a good summary of computer networks and related concepts.

[12]The press has already begun this differentiation process with, for example, the publication of domestic and international versions of *Time* and Newsweek, inclusion in newspapers of supplements aimed at suburban readers, and the circulation of *TV Guide* to different viewing audiences. Electronic publishing will enable finer distinctions along different classificatory lines,

[13]From an OTA staff conversation with Mr. R. Taylor Walsh, Electronic Information Services Development, Silver Spring. MD.

[14]The term "injurious information will be used to refer to defamation, negligence, copyright infringement, fraud, invasion of privacy, intentional infliction of emotional distress, and other uses of information that cause pecuniary, emotional, reputational, or bodily harm. This is in accordance with a recent appeals court decision that held that "First Amendment protections apply to all actions whose gravamen is injurious falsehood. " *Blatty* v. New York *Times, Inc.*, 12 Med.L.Rptr. 1928 *(2nd* Cir. 1986), cert. denied, No. 86-1803) (1987).

[15]New *York Times v. Sullivan*, 376 U.S. 254 (1 964).

EDITORIAL CONTROL AND LIABILITY

The editorial decisions of the press go to the heart of the First Amendment protection of its freedom. As the Supreme Court said in *Miami Herald Publishing Co. v. Tornillo,*[16]

> The choice of material to go into a newspaper, and the decisions made as to the limitations on the size and content of the paper, and treatment of public issues and public officials—whether fair or unfair-constitute the exercise of editorial control and judgment. It has yet to be demonstrated how governmental regulation of this crucial process can be exercised consistent with the First Amendment guarantees of a free press as they have evolved to this time.

A corollary to editorial *freedom* is editorial *responsibility;* under common law, the exercise of editorial discretion over whether and what to publish is the basis for liability for defa-

[16]418 U.S. 241 (1974).

mation and other forms of injurious information.[17] An assumption underlying conventional theories of press liability is that the press—be it newspaper, journal, magazine, radio, or television–is capable of exercising editorial discretion over the content of its publications. Where the press is required by law to accept content "as is, " it is generally absolved from responsibility for damages caused by false or inaccurate publication.[18] Where a medium is treated by law as a common carrier, and is therefore forbidden from discriminating against any speaker or otherwise exercising editorial control, it is absolved of any legal responsibility for statements made over the medium.[19]

This simple symmetry between control and liability may become hard to apply to electronic publishers. On a network, electronic publishers may resemble conventional print publishers insofar as they can or do choose which speakers may use their services.[20] They may in fact choose who shall "speak," but they are less often in control over what is said over the network. The choice of who speaks may be made explicitly-as where a computer network contracts with news or database services for the provision of information to subscribers.[21] Or it may be made tacitly, and involve nothing more than permitting subscribers to speak, or allowing the creation of bulletin board conferences.

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Whether an electronic publishing service should or can bear liability for information distributed on its service is a matter of some constitutional consequence. If, in lieu of action by Congress or the Supreme Court, the Federal Communications Commission (FCC) were to decide that electronic publishing is beyond its jurisdiction as being neither "ancillary" to broadcasting, nor common carriers (and thus not relieved from publisher liability),[22] an argument can be made that it should be treated in the same way as print publishers. The question then is whether the electronic publisher can, as a practical matter, exercise the same control as these other types of publishers,[2] and if requiring it to do so will inhibit the content of or access to the system. In order to

17 With torts generally, the basis for liability for "informational torts, " such as defamation, negligent misrepresentation, fraud, and even product liability, is that of misfeasance; that is, once one undertakes a discretionary action, such as publication, one is bound to exercise reasonable care in carrying it out. Although the press is, in certain instances, no longer strictly liable for what it publishes, *New York Times v. Sullivan*, 376 U.S. 254 (1964) and *Gertz v. Robert Welch, Inc.*, 418 U.S. 323 (1974), the basis for liability for defamation, invasion of privacy, and negligent misrepresentation remains an intent to publish. Where the exercise of editorial judgment and control in conveying or publishing information is prohibited by law—as is the case with common carriers such as telephone and postal services—there is no liability for the information.

18 For example, where a broadcaster is required by law to provide "equal time" for the responses of political candidates, it will not be held liable for defamatory statements made in the response. *Farmers Educational cooperative Union of America v. WDAY*, 360 U.S. 525 (1959).

19 *National* Association *of Broadcasters v. FCC,* 740 F.2d 1190 (D.C. Cir. 1984).

20 For example, services such as THE SOURCE, LEXIS NWI, and CompuServe contract with selected newswire services to provide information to their subscribers. Some electronic publishers, while they do not themselves provide particular news services, may allow such services to be "ported" from another online source to their own. National security directives may eventually force videotex providers to exclude some potential users.

21 For example, West Publishing contracts with Dow Jones News Retrieval Service to enable WE STLAW subscribers access to Dow Jones' financial analyses and news services.

22 *Telecommunications Research and Action Center v. FCC* 13 Med. L. Rept. 1881 (D.C. Cir. 1986)

23 On networks that provide bulletin board and news and information services, there may be literally hundreds and thousands of new messages each day. They may come in faster than any publisher could scan them. Even if such scanning were possible, controlling what is posted may be impossible. "To control what is posted on a network, it is necessary to control access to that network. Most existing networks are not strong on security. The safest policy in using networks is to assume that any network can be broken, that any transmission can be recorded, and that most can be forged. " J. Quarterman and J. Hoskins, "Notable Computer Networks, " *Communications of the ACM, vol. 29,* October 1986, p. 967.

avoid civil liability for defamation, negligence, or infringement of copyright, or criminal liability for fraud or theft, the electronic publisher may be forced to censor what is written to its host computer.

The spectre of "self-censorship' has caused the Supreme Court, on several occasions, to recognize First Amendment privileges that effectively limit the circumstances under which newspapers and broadcasters will be held liable.[24] Electronic publishing raises the question whether the limited types of privileges now granted the press will be adequate to avoid self-censorship. Monitoring the accuracy and truthfulness of all of the information posted to a computer conference, for example, may well be beyond the system operator's abilities. The press, in becoming electronic, may require more latitude for error than conventional print publishers.[25]

The question whether the privileges extended the press also apply to "nonmedia" defendants, i.e., to individual citizens, and whether a distinction between media and nonmedia defendants can be made at all, is crucial to the extent of First Amendment protections afforded electronic publishers. The Supreme Court was recently urged to hold nonmedia defendants to a higher standard of conduct than the media, but it avoided the issue entirely, holding instead that press privilege against defamation extended only to "matters of public concern" (an incorrect credit report was held not to be a matter of public concern).[26] However, because conventional print and broadcast media are in great part responsible for defining what constitutes a protected "matter of public concern, " that question may hinge on the medium of communication, after all. The role of technology in expanding who constitutes "the press" was recognized by Justice Brennan who wrote in his dissent that:

> "[f]irst amendment difficulties lurk in the definitional question such an approach would generate. And the distinction would likely be born an anachronism. (Brennan's footnote): Owing to transformations in the technological and economic structure of the communications industry, there has been an increasing convergence of what might be labeled "media" and "nonmedia."[27]

[24] "Beginning with *New York Times, Inc. v. Sullivan*, 376 U.S. 254 (1964) and culminating in *Gertz* v. *Welch*, 418 U.S. 323 (1974), the Supreme Court fashioned First Amendment-based press privileges with respect to defamatory speech concerning public officials and public figures. In *Rosenblatt* v. *Baer*, 383 U.S. 75 (1966), the Court recognized a similar privilege with respect to speech that is invasive of individuals' privacy.

[25] Of course, the sources of information posted on a computer network may also be held liable for injurious information. While straightforward in theory, this may be difficult to implement in practice. Database providers to the network offer thousands of "pieces" of information, most of which they have no involvement in creating; mediated by artificially intelligent "front ends, " information may come to consumers that is a machine-compiled synthesis of many sources, which may themselves not be cited in the allegedly defamatory or negligent report; and the long and complex chains of distribution that are possible in value-added networks may give a totally different and often circuitous meaning to the nature of what counts as a "fact" or the "truth' for purposes of verification of information. See generally, Ithiel de Sola Pool, *Technologies of Freedom*, ch. 7 (Electronic Publishing) and Anthony Smith, "Information Technology and the Myth of Abundance, " *Daedelus*, vol. 111, fall 1982, pp. 1-16.

[26] *Dun & Bradstreet, Inc. v. Greenmoss Builders, Inc.,* 472 U.S. 749 (1985). In a recent State court decision, *Culliton v. Mize*, *403* N.W.2d 853 (1987), the court held that the First Amendment privileges recognized in *New York Times v. Sullivan* apply to nonmedia defendants.

[27] 472 U.S. 749 (1985) at 34.

GLOBAL NETWORKS AND THE INTERNATIONAL PRESS

Electronic publishing may blur distinctions between "domestic" and "foreign" press. Internetworking (communicating between two or more networks), in combination with global communications satellites, the emergence of "metanetworks," and the eventual conformance of worldwide communications protocols, makes the concept of a "purely domestic" electronic publisher an anachronistic term. Except with respect to cost, geography is largely irrelevant to modern telecommunications systems.

Congress and the courts may eventually have to confront the question of whether First Amendment rights extend to the foreign press publishing in the United States. The question may take many forms—whether standards of liability will apply to foreign-originated transmissions, whether domestic regulations apply, whether import/export laws conflict with First Amendment rights, or whether control, even if permitted under the First Amendment, is possible."

The First Amendment status of the foreign press, and foreign speakers in general, is one of the least understood areas of First Amendment jurisprudence. A case involving deportation of aliens for allegedly subversive speech under the McCarran-Walter Immigration Act of 1952 is currently pending before a Federal court.[29] In the only case on point, *Times Newspapers Ltd. (Of Great Britain) v. McDonnell Douglas Corp.*,[30] the court held that *The Sunday Times of London, an* English newspaper with offices and a small circulation in the United States, was protected from having its publication suppressed. The court said that freedom of the press is not limited to what is published in America for American readers, but was also "designed to protect the rights of readers and distributors of publications no less than those of writers or printers."[31]

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[28] These issues belong to a class of emerging issues concerning "transborder data flows"; the movement of data between countries. For an overview of the legal and policy issues surrounding transborder data flows, see: A. Branscomb, "Global Governance of Global Networks: A Survey of Transborder Data Flow in Transition," 36 *Vanderbilt Law Review 985 (1983).*

[29] "Federal Judge Declines To Rule on Free Speech Rights of Foreigners," *New York Times,* May 21, 1987. The case of Margaret Randal is still pending as of December 1987.

[30] 387 F. Supp. 189 (C. D. Cal. 1974).

[31] Id. Quoting *Quantity of Copies of Books v. State of Kansas*, 378 U.S. 205 (1964).

Though the right of foreign journalists to publish in the United States is not yet firmly established in constitutional law, the right of readers, viewers, and listeners to receive news and information has been established in other contexts, and may be indirectly available to nonresident electronic publishers. Even this rationale, however, is tenuous; relying as it does on cases involving very specific circumstances and court dicta.[32] The fact that section 310 of the Communications Act requires that broadcast licenses be held only by citizens of the United States, and that a recent Supreme Court decision upholding registration and labeling requirements for Canadian made films,[33] suggests that the foreign press may have lesser First Amendment rights, if they have any.

Short of monitoring all international data traffic, there may be no way to stem news and information from foreign sources, even if it were desirable.

The political and legal impetus for recognizing First Amendment rights for the international press may not necessarily come from judicial interpretations of the Constitution; it may come from international authority, and from the interconnectedness of nations that has accompanied technological change.[34] For

[32] In *Red Lion* Broadcast@ *Co.* v. *FCC*, 395 U.S. 367 (1969), in the context of the constitutionality of the fairness doctrine, the Court said that "the people as a whole retain their interest in free speech . . . [it] is the right of viewers or listeners, not the right of the broadcasters, which is paramount." See also *Virginia State Board of Pharmacy v. Virginia Citizens Consumers Council, 425* U.S. 748 (1976), *Board of Educ. v. Pico*, *457* U.S. 853 (1982); which are commonly cited as constitutional foundations for a right of the public to receive information under the First Amendment. See, e.g., Mark Nadel, "A Unified Theory of the First Amendment: Divorcing the Medium From the Message," 11 *Fordham Urban law Journal 163, 187 (1982)*, and Emerson, "Legal Foundations of the Right to Know," 1976 *Washington University* Law *Quarterly* 1.

[33] *Meese v. Clarkson*, 55 U. S.L.W. 4586 (Apr. 28, 1987).

[34] This topic will be developed in a forthcoming OTA special bicentennial report on *Science, Technology, and Constitutional Governance.*

example, Article 19 of the Universal Declaration of Human Rights proclaims that:

> Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information *through any medium regardless of frontiers.*[35]

This does not have legal effect, but it is widely recognized as the basis for international law. Whether the foreign press may avail itself of First Amendment rights or not may become an academic exercise. Short of monitoring all international data traffic, there may be no way to stem news and information from foreign sources, even if it were desirable. A hoax on April Fools Day in 1984 on a computer network named USE NET may be a harbinger of things to come—"kremvax! kgbvax!chernenko" joined the network.[36] (The notation is the name, address, and routing message used on the network.) As Leonard Marks, a former director of the U.S. Information Agency, couched the issue,

> Global electronic networks . . . will be effectively beyond the reach of the traditional forms of censorship and control. The only way to "censor" an electronic network moving. . . [at] 648 million bits per second is literally to pull the plug.[37]

In other words, the only effective means of controlling foreign speakers speaking in the United States may be to disable the communications abilities of American citizens,[38] an action that would directly raise First Amendment rights.

[35]Universal Declaration of Human Rights, G.A.Res. 217 (III) U.N. Dec. A81O, at 71, art, 19 (1948) (emphasis added); as quoted in John Eger, "The Global Phenomenon of Teleinforma tics: An Introduction, 14 *Cornell international Law Journal 203, 20'7 (* 19!31).

[36]"Notable Computer Networks, " *Communications of the ACM*, vol. 29, October 1986, p. 967.

[37]L. Marks, *International Conflict and the Free Flow of Information in Control of the Direct Broadcast Satellite, Values in Conflict* (Palo Alto, CA: Aspen Institute Program on Communications and Society, 1974); as quoted in J. Pelt, on, "The Technological Environment, " *Toward a Law of Global Communications Networks, Science* and Technology Section of the American Bar Association, A. Branscomb (cd.) (New York, NY: Longman, 1986), pp. 37, 44-45.

[38]Though not in the context of foreign speech, this step is not unprecedented; computers and communications were confiscated from a system operator in 1984 whose communications facilities were used for telephone credit card fraud. "Free Speech Issues Surround Computer Bulletin Board Use, " *New York Times, Nov.* 12, 1984, p. Al, co1. 1.