

**FUTURE NEWS:
CONSTRUCTING THE AUDIENCE CONSTRUCTING THE NEWS**

Warren Sack

MIT Media Laboratory
20 Ames Street, E15-487
Cambridge MA 02139

phone: 617/253-9497
fax: 617/258-6264
email: wsack@media.mit.edu

Abstract§

Each new medium (from print to television) has introduced a series of ratings technologies which, predominantly, quantifies the audience as *passive commodity*, i.e., as a number which is “delivered” by the broadcasters and “bought” by the advertisers. New electronic media demand a representation of audience that breaks with the traditional audience-as-commodity representation. Contemporary television technologies, e.g., the remote control channel changer, make it *impossible* for one to realistically conceptualize an audience as passive. An audience member can now jump from channel to channel, from soap to sport broadcast quickly and easily. This contemporary activity of channel “zapping” will be the ancestor of far more powerful text and video manipulation tactics that audiences of future electronic media will employ. Future electronic media will allow users to search for or filter out particular kinds of stories, scenes, words and phrases and then, if they so desire, to reassemble these bits of media together into new presentations which may bear only a passing resemblance to the contexts in which the bits were originally embedded. In this presentation I introduce a new way of thinking about audiences which assumes neither that audience members are passive nor that audiences are a commodity. I call this conceptualization *audience-as-social-network*. My focus, for this presentation, is on news audiences.

§ This paper appears in the *Proceedings of WRITE'94*, Vancouver, Canada, June 1994.

Introduction

This paper is a rationale for and a description of a possible, decentralized (Resnick, 1992), constructionist (Papert, 1991) technology for news production and reception. While today's news is a highly centralized endeavor controlled by a small number of companies¹ which mostly publish and broadcast stories based on the words of public officials², it is foreseeable that tomorrow's news will become a "cottage industry" with an eclectic product.

As decentralized ideas infiltrate the culture -- through new technologies, new organizational structures, new scientific ideas -- people will undoubtedly begin to think in new ways. People will begin to see the world through new eyes.
(Resnick, 1992, p.145)

There are at least two good reasons why decentralized ideas will infiltrate the design of technologies of the news of the near future: (1) News subscription rates have been declining as news publishing and broadcasting practices have become increasingly centralized:

There is a steady decay in public loyalty to the media. There is hostility or indifference toward modern newspapers, and the same fate is hovering over television. [...] The best quantitative measure of the newspaper's standing in society is how many papers are sold daily per one hundred households. It has not been a heartening index:

1930 -----	132
1940 -----	118
1950 -----	124
1960 -----	111
1965 -----	105
1970 -----	90

¹ Bagdikian (1982) reported in 1982 that there were approximately fifty corporations which own most of the output of daily newspapers and most of the sales and audience in magazines, broadcasting, books, and movies (pp. xix-xx). Herman and Chomsky (1988) detail the holdings of the twenty-four largest media giants. Lee and Soloman (1990) state that Bagdikian's number is now out of date: as of January 1990 there was twenty-three corporations now control most of the media business (pp.70-71).

² Gans (1980) states about his studies of news production in the years 1967, 1971, and 1975 that "In American news, as in the news of all modern nations, the people who appear most frequently in the news are Knowns, and, for the most part, those in official positions. [...] during the time of my study, they took up between 70 and 85 percent of all domestic news, while Unknowns occupied about a fifth of the available time or space." (p. 9) Lee and Soloman (1990) state "... a sampling of 2,850 articles in the New York Times and the Washington Post found 78 percent to be primarily based upon the words of officials. The same sources dominate TV news." (p.17).

1980 ----- 79
1986 ----- 72
(Bagdikian, 1987, pp.195-196)

(2) New television reception technologies have made it difficult for ratings companies to count the size of the audiences for TV news (and all other) shows. Namely, remote-control channel changers and VCRs have given TV viewers the means to easily avoid watching ads and to watch several shows at once (by repeatedly "channel zapping" from one to another show). Since ratings are the currency upon which the TV business is run, difficulties associated with assigning and verifying the ratings of particular shows imply large difficulties for the economic basis of contemporary television networks and cable companies and their relationship to advertisers.

Even these two symptoms alone seem to be adequate cause to reconsider the current architecture of news production and distribution. Neither of them necessarily points to the news businesses' centralized structure as their cause. However, I am of the opinion that by rethinking the news as decentralized praxis several very interesting possibilities for the future news technologies can be envisioned.

The rethinking of the news that I present in this paper is based upon a social constructivist methodology. Such methodologies have been successfully applied to the analysis of the workings of science and engineering (e.g., Latour, 1987; Bijker, Hughes and Pinch, 1987) and to the analysis and design of educational technologies (e.g., Harel and Papert, 1991). Constructivism contrasts the notion of socially constructed meanings with the objectivist (e.g., Hirsch, 1967) preference that meaning exists independently of the act of interpretation. The constructivist view is that knowledge and meaning are produced by a (perhaps) identifiable group of people for strategic, practical purposes. Activities of knowledge production (e.g., science) and reproduction (e.g., education) are about convincing, recruiting and enculturating others.

In so far as the news is, presumably, a way of informing and thus educating the public I will submit that my analysis shares several affinities with constructivist analyses of other kinds of educational technologies. Specifically, my analysis pivots upon a reexamination of the "students" or viewers of the news. As I have already mentioned, remote-control channel changers and VCRs make it extremely difficult for the ratings corporations (like A.C. Nielsen) to determine who watches the news on TV. Seen from an historical perspective, however, these recent difficulties in audience measurement are only just contemporary manifestations of old problems in the ratings industry. Drawing off of the work of several other media scholars I piece together a short history of ratings of the news and contend that even a quick look at this history can tell one that the way that the ratings companies, advertisers, and news producers talk about the "audience" reveals that

all of them have an extremely shallow understanding of who watches the news. In the raters'/advertisers'/producers' discourse the audience is a commodity. I insist that conceptualizing the audience as a commodity is an extremely impoverished means of thinking about how the audience, i.e., the "public" should, or wants to be, informed by the news.

In contrast to the cardboard-cut-out dimensions of the conceptualization of audience-as-commodity, I propose a social constructivist view of the audience-as-social-network. In a centralized news economy it is necessary for news producers to caricature the audience as a commodity. However, in a more decentralized economy the audience will not necessarily have to be bought by and sold to advertisers. The shift from a centralized to a decentralized news production culture is akin to what Ivan Illich (1974) calls a shift from service industries of the right to service industries of the left³, or what might be exemplified by the difference between present day news broadcasting practices (information production and delivery) and current telephone services (client-initiated, communication). Thinking about the audience-as-social-network is a fruitful means of designing future technologies for news production and reception. After a brief history of the audience-as-commodity, I present how news might be rethought as a decentralized network.

The audience as commodity

Since there exist hundreds of millions of television viewers in the United States and billions worldwide it is certainly *a priori* obvious that no given producer or director with a widely distributed product can "know" more than a tiny fraction of their audience. Nevertheless, within commercial television it is up to the networks to convince advertisers that they "know" what kind of an audience watches their programs. The price of a commercial announcement is tied to the size and spending potential of a show's audience. In addition, finding long term sponsors for a series of shows requires that the networks "prove" to potential sponsors that a series' audience is "productive" (i.e., buys the sponsor's products) and either stable or growing. Thus, in economic terms it is essential to the networks that the audience be a stable, easy to define commodity for it

³ "At both ends of the spectrum we find service institutions, but on the right the service is imposed manipulation, and the client is made the victim of advertising, aggression, indoctrination, imprisonment, or electro-shock. On the left the service is amplified opportunity within formally defined limits, while the clients remains a free agent. Right-wing institutions tend to be highly complex and costly production processes in which much of the elaboration and expense is concerned with convincing consumers that they cannot live without the product or the treatment offered by the institution. Left-wing institutions tend to be networks which facilitate client-initiated communication or cooperation."
(Illich, 1974, p. 60)

is the size, economic resources, and dependability of the audience that networks must sell to advertisers.

On the other hand, advertisers have a set of different, but comparable concerns:

The mass marketer who advertises on TV is trying to reach the demographic group most likely to buy the maximum quantity of detergent, toothpaste, fast food, appliances, or clothing. The mass marketer hopes the ads are placed around programs which appear to deliver the audience. For example, beer commercials are usually seen on sports programs, while detergents are usually seen on daytime soap operas and game shows.

(Harper, 1986, pp.85-86)

Advertisers and networks, then, both share a need to "know" an audience as a commodity which can be bought and sold.

Advertisers and networks share an interest in ratings that measure audience quality; but their interests conflict over the accuracy of ratings that measure audiences quantity. [...] Since prices were tied to reaching the right audience in the right numbers, higher estimates of that audience's size meant higher prices. Although advertisers wanted fairly accurate demographics describing targeted listeners, their economic interests lay in methods of measurement that focused on the commodity audience yet underestimated the size of that audience, and thereby kept network prices down. This bifurcation of demand has persisted to the present.

(Meehan, 1990, p. 121)

Meehan (1990) traces the economic and technological history of the ratings industry. She is able to show how the history of ratings has been a constant struggle between the networks and the advertisers to define the audience in terms most suitable to one or the other of them.

For example, in 1928 the Association of National Advertisers (ANA) hired Archibald Crossley to devise a means to measure radio listening. Not surprisingly, Crossley invented a technique commensurate with the advertisers needs and at odds with the networks needs. Crossley's technique was to call people on the telephone and ask them what radio shows they had listened to on the previous day. In 1928 very few households had telephones in comparison to the total number of radio sets. Consequently, Crossley's technique thereby cleverly pre-selected the audience to be those people with enough money to have both a radio and a phone and also predisposed the survey results to yield smaller audiences than the "real" audience sizes because most of the respondents to these telephone interviews were unable to remember everything that they had listened to the day before.

As a response to Crossley's techniques C.E. Hooper devised a set of survey techniques more amenable to the networks' needs. Hooper's measurements of audience size were done by telephoning and asking respondents to identify whether they were currently listening to the radio, and, if so, what the name of the program and its sponsor were. Consequently, by Hooper's count, audience sizes were large in comparison to the sizes measured by Crossley (Meehan, 1990, pp. 122-124). Meehan investigates each new "improvement in objectivity" to the ratings industry as a technical or technological development designed to skew the description of radio and TV audiences one way or another, either in favor of the needs of the advertisers, or to the advantage of the networks. Current struggles between the A.C. Nielsen Company and its competitors (e.g., Percy and AGB companies) can be seen in the same light: the ratings industries is the means by which audiences are packaged to be bought and sold as commodities.

"Objectivity" and the Commodity Audience

Television *news* audiences in any privatized television industry are -- at least generally -- seen by advertisers and networks alike as commodities and, as such, akin to all other audiences. However, it is worth looking at, at least one, difference which arises in the characterization of a news audience: the news audience as a group which prefers "objectivity" over "subjectivity."

In French history it is possible to find a juncture in the mid-nineteenth century when newspaper readers ceased to be *citizens* and came to be known as *consumers*. (Similar developments have been charted for Great Britain and the United States (e.g., the work of Herman and Chomsky (1988, pp.3-4)). In 1830 the total quotidian production of Parisian newspapers was 50,000 copies a day. By 1880 circulation had increased forty-fold to over 2 million copies a day (Terdiman, 1985, p. 129). Up until the 1830's newspaper were run as political party organs. Party members subscribed to their party's paper and annual subscriptions were expensive; typically, ten percent of a worker's annual salary (Zeldin, 1973-77, pp.494-495). Subsequently, several entrepreneurs (notably in Paris, Moise Millard, the founder, in 1863, of *Le Petit Journal*) radically changed the market by selling the newspaper as a commodity. Prices were slashed and "objectivity" in journalism was emphasized to promote the commodity newspaper to a large, multi-party audience (Terdiman, 1985, pp. 117-146). Here then we have one extra dimension applicable to a news audience that is not applicable to all audiences: news audiences can be constructed using the marketing technique which is known as "objectivity in journalism." According to at least one French writer, who quotes an American source, American "objectivity in journalism" pre-dated and influenced French "objectivity in journalism."⁴ Regardless of

⁴ "Le culte de l'objectivité journalistique remonte, historiquement parlant, aux années 1920 et nous vient d'Amérique (Weir & Noyes, 1983). [...] Il s'agissait, en somme, d'"homogénéiser le

objectivity's "true" genealogy, it is clear that at various points in history, for news producers trying to attract and define an audience, it has been important to claim that their product is written in an "objective" manner and that, transitively, their audiences are attracted to them because of their "objectivity."

Note that here I am not claiming that a news audience necessarily believes that a particular news product is "objective." Rather I am simply saying that, historically, it has been important for news producers to claim that their audience believes that "objectivity in journalism" is a virtue and that their audience buys their news product because their audience believes the product exhibits this virtue of objectivity. Indeed, all of my remarks in this section are to point out that a news audience is a highly artificial construction created by news producers and advertisers for the purpose of having a commodity to buy and sell from one another. Neither networks nor advertisers can possibly get to "know" hundreds of millions or billions of people and, so, it is necessary for them to invent something which they can claim to know.

The news audience then is characterized, at least partially, as a public which receives and evaluates the news with respect to its "objectivity." In contrast, it often suffices, for the purposes of advertisers and commercial networks in the United States, to characterize an audience as a market, as a group which, in some minimal sense "pays attention" to a show, regardless of whether or not they actually "understand" the show. Ien Ang, provides sharply contrasting descriptions of these two sorts of audiences: *audience-as-public* and *audience-as-market*.

The difference between the two paradigms of audience is impressive and can be clarified by placing them in two diverse theoretical models of mass communication. The *audience-as-public* idea is in fact the more classic one of the two and fits in the so-called transmission model of communication: here, communication is defined by such terms as sending or transmitting messages to others. Implied in this model is the conception of audiences as 'receivers' of those messages, and a more or less 'ordered transference of meaning' as the intended consequence of the process as a whole forms its basic rationale (McQuail, 1987, pp. 43-44; Carey, 1989). In *audience-as-market* idea, however, such purposive transfer of meaning is only of secondary importance. As McQuail (1987, p.45) has remarked, 'the essence of any market is to bring goods and services to the attention of potential consumers, to arouse and keep their interest.' Thus, the essence of what McQuail calls the attention model of communication is

produit", comme on dirait en langage de marketing -- de le rendre uniforme et lisse, en vue d'une distribution aussi large que possible (Schudson, 1980). Accessoirement, l'objectivité de l'information-message, supposée résulter de ce procédé, pouvait être utilisée en prime comme "argument de vente" au bénéfice de l'information-marchandise. La nouvelle formule se vit propagée dans les écoles de journalisme et, par la suite, traversa l'Atlantique."

(Freund, 1991, pp.57-58).

comprised by the mere gaining or attracting of attention: communication is considered effective as soon as attention is actually given by the audiences, no matter its quality or impact. This is the model of communication that undergirds the institutional arrangement of commercial broadcasting, but it is clearly insufficient and inadequate from the institutional perspective of public service broadcasting [or news broadcasting], for whom attention would only make sense when connected with some meaningful communicative purpose.
(Ang, 1991, p.29)

In summary then my points are these: (1) audiences are highly selective descriptions created by ratings companies, advertisers and networks for the purpose of having a commodity that can be bought and sold; (2) one particular dimension which currently distinguishes descriptions of news audiences from audiences of other spectacles is that a news audience is supposed to be an audience which pays enough attention to the content of a news product to be able to determine, or at least be convinced, as to whether or not given a news product is "objective."

The audience as social network

Today, the text is society itself. It takes urbanistic, industrial, commercial, or televised forms. But the mutation that caused the transition from educational archaeology to the technocracy of the media did not touch the assumption that consumption is essentially passive -- an assumption that is precisely what should be examined. On the contrary, this mutation actually reinforced this assumption: the massive installation of standardized teaching has made the intersubjective relationships of traditional apprenticeship impossible; the 'informing' technicians have thus been changed, through the systematization of enterprises, into bureaucrats cooped up in their specialties and increasingly ignorant of users; productivist logic itself, by isolating producers, has led them to suppose that there is no creativity among consumers; a reciprocal blindness, generated by this system, has ended up making both technicians and producers believe that initiative takes place only in technical laboratories. Even the analysis of the repression exercised by the mechanisms of this system of disciplinary enclosure continues to assume that the public is passive, marked, and has no historical role.
(de Certeau, 1984, p.167)

A conceptualization of the audience-as-commodity presumes that the audience is passive and so it is no surprise that when the audience begins to act demonstrably active (e.g., through the activities of "zipping" commercials and "zapping" channels) any explanation based upon the assumption that the audience is a commodity (or even a market or a public) immediately loses its persuasive powers. Indeed, I find it surprising that advertisers are still willing to accept the

current ratings systems which are based upon an outdated technique of counting viewers which does not take into account the prevalent activities of "zipping" and "zapping" by the viewers.

Neither of the two conceptions of audience that Ang (1991) describes (audience-as-market and audience-as-public) is sufficiently supple to characterize the activities or desires which play a part in an audience's reading, or viewing, practices. For example, neither of these models have any predictive powers which could explain why -- or, the pattern of how -- members of an audience "zip" over certain commercials or "zap" from channel to channel. An alternative to models like these, which portray the audience-as-commodity, both enables much more subtle descriptions of the viewing practices of audiences and, thereby, engenders a much richer design vocabulary with which one can articulate the function of current and possible future news technologies. This alternative is to think about the audience, not as a commodity, but rather as a set of interrelated, interdependent communities of individuals: audience-as-social-network.

To see the audience as a socially constructed network is to reframe the problems of news production and reception in a constructivist manner. This rearticulation allows one to focus on the myriad of possible activities of a group of viewers rather than forcing one to insist that a television audience is a sample of passive, "couch potatoes."

"But," the opposing viewpoint insists, "television viewers really are couch potatoes." This, point of view, is extensional of the logic that de Certeau (1984) encourages us to rethink; i.e., to assume that viewers are "couch potatoes" is to also assume that TV consumption is a passive activity. This is both an unlikely conclusion given the prevalence of "zipping" and "zapping" technologies in the home (i.e., the VCR and the remote control channel changer) and, furthermore, it is a suspicious conclusion because it is tautological with the current raters'/advertisers'/news-producers' current and past working agreement to define the audience-as-commodity.

What would TV news (or any news for that matter) look like in a world where the producers assumed that the viewer/reader was not passive, but was, rather an active and involved participant in a larger community? Hints to the answer to this question can be found in the literature of education which deals with the student, not as a passive receptacle of knowledge, but rather as an active, constructing learner and member of a larger community (e.g., Lave and Wenger (1991), *Situated Learning: Legitimate, Peripheral Participation*). Answers to this question can also be found by contemplating the role of "production" in more decentralized electronic industries.

For example, consider the role that the telephone companies play in the "production" of news. Phone companies support client-initiated communications; they provide the infra-structure which allows clients to organize and inform one another. Also, now with the increasing computational powers of phone connections, a variety of new, communication services are being offered; e.g., voice-mail, call-waiting, call-forwarding, and conference calls. All of these phone services might

be characterized as tools which individuals and institutions can use to further efforts to contact and stay in-touch with other individuals and institutions: they are *social networking* tools. Even the phone companies' marketing strategies reflect their awareness that they are servicing a social network and not a commodity. I would point to, in particular, the recent marketing campaigns aimed at encouraging clients to tell the phone company the names of their parents, children, business partners, and best friends: anyone who a subscriber calls a lot. In exchange, the phone companies are offering reduced rates to subscribers who frequently call these important people in their lives.

In short, what I am partly predicting (because of the existence of "zapping" and "zipping" and their destabilizing effects on television ratings) and partly advocating (because I would like to see more democratically produced news products) is a news industry of the future which will look remarkably like the telephone industry of the future. The news industries' job will be more focused on facilitating news-like discussions between communities of users than it will be directed at delivering the "content" of the news as it now does.

The newscast of the future: a collaborative effort

It is probably a safe guess to assume that, within the not-too-distant future, digital technologies will be ubiquitously available, in the western world, for the production and reception of the "news." I would assume that such technologies will allow one to send and receive voice, video, and text. But, for my piece of futurology which I will present here, I will only assume that the more modest abilities now available to most users of electronic mail: the transmission and reception of text.

Some more sophisticated electronic mail systems already exist which demonstrate some of the capabilities that could be developed if close attention were paid to the social structure of the news. For example, (Winograd and Flores, 1986) describe a system which can be used to structure commitments between participants in an electronically-mediated discussion. The electronic mail handling facilities of the system of (Crowston and Malone, 1988) also allow users to encode social relations into a form which can then be used by a computer to select and order incoming messages. The facilities provided by these existing email systems could be described as more advanced versions of the, by now, mundane facilities provided by the telephone and its associated machinery (e.g., the answering machine) to allow users to screen, forward, and archive calls. I would label all of these telephone and email apparatuses as *networking devices* because they allow one to mediate one's relationships to others through control of the flow of information between oneself and others.

It is important to emphasize that, even though these existing telephone and email systems provide clear illustrations of how a technology can be defined around networks, or presumed networks of groups of people, it is methodologically foundational to constructivist analyses of technology to assume that *any* technology can be shown to be reification of the relationships between members of some group (or set of groups) of people.⁵ (See, for example, Bijker's (1987) analysis of how present and past forms of the bicycle are reflective of an argument between racers and leisure riders.)

Imagine then an electronic mail service in which users' political, social, and economic relations to one another can be encoded by the users themselves.⁶ The news that one would receive would be a combination of the number and quality of relationships one had defined with respect to existing institutional and individual news producers.⁷ For example, one could scheme to receive something akin to the current *New York Times* by first defining a relationship between oneself and the various editors of the *Times* and then by articulating rules specifying when, or when not, one prefers to receive news from each of the editors. Presumably then, each of these editors would, in turn, specify their own relationships to a set of journalists. Thus, an article authored by a particular journalist would arrive in one's own "New York Times" if and only if one of the stated editors had a relationship defined to that journalist and decided that journalist's article was worth passing on to others. It's simple to imagine more complicated relationships to many and various news producers especially if everyone subscribed to the electronic mail service was also capable of sending messages (as is usually the case). One could, for example, specify that any article that showed up in two or more of one's friends' copies of the "New York Times" should also appear in one's own "Times." Or, one might specify that any news producer labeled as trustworthy and competent in a friend's definitions of relationships should also be labeled as such in one's own defined relationships.

⁵ "A machine, as its name implies, is first of all a machination, a stratagem, a kind of cunning, where borrowed forces keep one another in check so that none can fly apart from the group." (Latour, 1987, p.129)

⁶ The computational notation for alliances and interpersonal relations developed by Stephen Slade in his dissertation "An Interpersonal Model of Goal-based Decision Making" (Slade, 1992) could be of use in the context of user articulated descriptions of their relationships with others. My own work in creating computational representations of "spin" and ideology might also be applicable for these purposes (Sack, 1994a; Sack, 1994b).

⁷ These proposed user-definitions differ from the sorts of news filters and agents now being advocated by a number of groups (e.g., Sheth and Maes, 1993; Bender et al., 1991) in two ways: (1) the definitions I am advocating here are user authored rather than crafted by the computer through the application of machine learning techniques and, (2) these definitions are definitions of social relationships in contrast to the combination of keywords and topic names that are usually the content of the patterns used by news filters to find and weed through large archives of news stories.

In general, I think that a social constructivist news technology of the future which recognizes the audience-as-social-network could be built upon a sound analysis of how one can recommend or request a piece of information from another.

Conclusions: audience-as-commodity versus audience-as-social-network

As more and more "tactical" technologies (which allow television news viewers to perform actions such as "zipping" through commercials and "zapping" between channels) become widely distributed, it becomes less and less likely that the current practices (employed by ratings firms, advertisers, and news producers) which treat the audience-as-commodity, will remain as economically effective "strategies."⁸ It is my hope and prediction that future news producers will treat the audience, not as a commodity, but rather as a socially, interrelated community of individuals, i.e., as a social network.

Digital technologies for a social-network-audience can be built around the audience members' own definitions of their relationships to others in a community. These user-authored definitions of how users see themselves in relationship to others could provide a computational substrate that would facilitate the construction of "personalized" newspapers. In contrast, using a model of the audience-as-commodity it is not clear how such a substrate could be formed. For example, it was pointed out how the audience's perception of the "objectivity" of a news source is considered a determining factor in analyzing a news sources' acceptability in the audience-as-commodity model. Unfortunately, it is impossible to express how a commodity audience might perceive a news source to be "objective" or "subjective" because the audience is defined in only the vaguest of terms. However, a working definition of "objectivity" can be easily incorporated into a model

⁸ The French philosopher, de Certeau, makes an interesting distinction between individual tactics and institutional strategies that can be employed to state a one-line summary of the point of this paper: News producers of today are strategic, news producers of tomorrow will need to be tactical.

"I call a strategy the calculation (or manipulation) of power relationships that becomes possible as soon as a subject with will and power (a business, an army, a city, a scientific institution) can be isolated. It postulates a 'place' that can be delimited as its own and serve as the base from which relations with an 'exteriority' composed of targets or threats (customers or competitors, enemies, the country surrounding the city, objectives and objects of research, etc.) can be managed. As in management, every 'strategic' rationalization seeks first of all to distinguish its 'own' place, that is, the place of its own power and will, from an 'environment.' A Cartesian attitude, if you wish: it is an effort to delimit one's own place in a world bewitched by the invisible powers of the Other. It is also the typical attitude of modern science, politics, and military strategy. [...] By contrast with a strategy, a 'tactic' is a calculated action determined by the absence of a proper locus. No delimitation of an exteriority, then, provides it with the condition necessary for autonomy. The space of a tactic is the space of the other. Thus it must play on and with a terrain imposed on it and organized by the law of a foreign power. [...] It operates in isolated actions, blow by blow. It takes advantage of 'opportunities' and depends on them, being without any base where it could stockpile its winnings, build up its own position, and plan raids. It poaches [...] It creates surprises [...] It can be where it is least expected."

(de Certeau, 1984, pp. 35-37).

of the audience-as-social-network: a news story might be considered "objective" if it is received by a user from another user who is self-described, with respect to the issue considered in the news story, as neither a friend nor a foe of any of the recipient's friends or foes. Such a definition of an "objective source" may not be exactly right, but the point is that, in a digital technology of decentralized news production and reception users could describe, for themselves, what sorts of news they perceive to be acceptable through an articulation of how they relate to other news producers and recipients.

References

- Ang, I. (1991) *Desperately Seeking the Audience*. London: Routledge.
- Bagdikian, B. (1987) *The Media Monopoly, second edition*. Boston: Beacon Press.
- Bender, W., Lie., H, Orwant, J., Teodosio, L., Abramson, N. (1991) "Newspace: Mass Media and Personal Computing." In *Proceedings of USENIX*, Nashville, TN, June, 1991.
- Bijker, W., Hughes, T., Pinch, T. (1987) *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*. Cambridge MA: MIT Press.
- Crownston, K. and Malone, T. (1988) "Intelligent Software Agents: Using AI techniques in groupware has the potential to dramatically alter the way we organize our work." *Byte*, December, 267-271.
- de Certeau, M. (1984) *The Practice of Everyday Life*. Rendall, S. (translator). Berkeley: University of California Press.
- Freund, A. (1991) *Journalism et Mésinformation*. Paris: La Pensée Sauvage, Editions.
- Gans, H. (1980) *Deciding What's News: A Study of CBS Evening News, NBC Nightly News, Newsweek and Time*. New York: Vintage.
- Harel, I. and Papert, S. (eds.) (1991) *Constructionism*. Norwood, NJ: Ablex.
- Harper, R. (1986) *Mailing List Strategies: A Guide to Direct Mail Success*. New York: McGraw-Hill.
- Herman, E. and Chomsky, N. (1988) *Manufacturing Consent: The Political Economy of the Mass Media*. New York: Pantheon Books.
- Hirsch, E.D., Jr. (1967) *Validity in Interpretation*. New Haven, CT: Yale University Press.
- Illich, I. (1974) *Deschooling Society*. London: Penguin Books.
- Latour, B. (1987) *Science in Action: How to Follow Scientists and Engineers through Society*. Cambridge, MA: Harvard University Press.
- Lave, J. and Wenger, E. (1991) *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.
- Lee, M. and Soloman, N. (1990) *Unreliable Sources: A Guide to Detecting Bias in News Media*. New York: Carol Publishing Group.

McQuail, D. (1969) "Uncertainty About the Audience and the Organization of Mass Communication", In Halmos, A. (ed.) *The Sociology of Mass Communicators*. Keele: University of Keele.

Meehan, Eileen (1990) "Why We Don't Count: The Commodity Audience" In *Logics of Television: Essays in Cultural Criticism*. Mellencamp, P. (ed.) Bloomington, IN: Indiana University Press.

Resnick, M. (1992) *Beyond the Centralized Mindset: Explorations in Massively Parallel Microworlds*. Cambridge, MA: MIT Media Lab Technical Reports.

Papert, P. (1991) "Situating Constructionism" In *Constructionism*. Harel, I. and Papert, S. (eds.) Norwood, NJ: Ablex.

Sack, W. (1994a) On the Computation of Point of View, in *Proceedings of the National Conference on Artificial Intelligence (AAAI-94)*. Seattle, WA, August 1994.

Sack, W. (1994b) *Story Spin: Machine-Mediate News Analysis*, Master's Thesis. Cambridge, MA: MIT Media Laboratory.

Schudson, M. (1980) *Discovering the news, a social history of American Newspapers*. New York: Basic Books.

Sheth, B. and Maes, P. (1993) "Evolving Agents for Personalized Information Retrieval." Submitted for review to ACM-SIGCHI International Workshop on Intelligent User Interfaces, Florida, January 1993.

Slade, S. (1992) *An Interpersonal Model of Goal-based Decision Making*. New Haven, CT: Department of Computer Science, Technical Report Number 892.

Terdiman, R. (1985) *Discourse/Counter-Discourse: The Theory and Practice of Symbolic Resistance in Nineteenth-Century France*. Ithaca, NY: Cornell University Press.

Weir, D. and Noyes, D. (1983) *Raising Hell: How the Center for Investigative Journalism get the Story*. Reading, MA: Addison-Wesley.

Winograd, T. and Flores, F. (1986) *Understanding Computers and Cognition: A New Foundation for Design*. New York: Addison-Wesley.

Zeldin, T. (1973-1977) *France 1848-1945*. 2 volumes. Oxford: Oxford University Press.