Information and/or Communication: Interactions

Walter J. Ong, SJ
University Professor Emeritus of Humanities
Saint Louis University

With a Review of Some Recent Work on Information/Communication and Secondary Orality

W. E. Biernatzki, SJ
Editor, Communication Research Trends

A Quarterly Review of Communication Research
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Introduction

Father Walter J. Ong, SJ, University Professor Emeritus of Humanities at Saint Louis University, ranks with Eric A. Havelock and Marshall McLuhan among the earliest and most incisive explorers of two major transitions in human communication. The first is the movement from the "primary orality" of non-literate cultures to literacy. The second is the change from a civilization dominated by print to one pervaded by the electronic culture of "secondary orality."

One of his many books, Orality and Literacy: The Technologizing of the Word (Ong 1982), has become a frequently quoted classic surveying the implications of the shift from oral to literate culture and pointing the way for research into the impact of the developing environment of the electronic age on the ways we think and live.

This issue of Trends is something of a departure from our usual approach in that it is centered on an article specially written by Walter Ong. In it he develops a sharp distinction between "information" and "communication" — a distinction which frequently is obscured, even in scholarly works, but which needs to be kept clear if we are to deal adequately with either one.

In a second section of this issue, the editor reviews several recent works which are intended by their authors to contribute to a better understanding of the two concepts, information and communication, and of the cultural transition occasioned by the coming of the electronic age.

Finally, we try to draw out some of the ways in which these considerations — which may, at first sight, appear quite esoteric — affect our daily efforts to amass and use information and to carry on effective communication with each other at various levels and using various kinds of media in a time of great cultural change.

The faithful reader of the previous two issues of Trends will notice here a certain continuity with their treatment, first of books, then of computer-based communication, and now of a movement to a more theoretical level affecting many of the topics discussed in those earlier issues. —Editor

Information and/or Communication: Interactions
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I. Information and Communication

The present age of humanity is often styled an "information age" and often a "communication age." Frequently these two descriptions are taken as roughly synonymous. But they can also be distinguished, and often are. The implications of this distinction are vast and often intertwined. This is an attempt to enter into some of their intertwining that marks our age and to relate the two, information and communication, to two other phenomena that mark our age, namely, preoccupation with digitization and preoccupation with hermeneutics.

The common distinction between information and communication is well known. Information is generally understood as a message transmitted by a code over a channel through a receiving (decoding) device to a particular destination (cf. New Encyclopedia Britannica, 1987: VI: 312) and communication is commonly understood as "the exchange of meanings between individuals through a common system of symbols" (ibid. III: 496).

Thus understood, information (for example, a genetic code in living cells) does not of itself involve meaning. It does not involve human consciousness, or consciousness of any kind, including that of subhuman species. Of course, it should be noted, since we are treating here two rival characterizations of the present age of
humanity, neither the consciousness of subhuman species nor their modes of communication enter directly into our present concerns. There is a huge body of published material on information and on human communication, but the foregoing understandings of the two terms are well in line with widespread usage and will serve our purposes here. These definitions, like all definitions, of course can call for further interpretation. Indeed such interpretation will be the business of much of this present treatment. No definition ever brings matters to a permanent standstill.

The communication to be attended to here directly is specifically human verbal communication as such, although, of course, human verbal communication is associated with many other sorts of human communication, such as pictorial, gestural, or tactile. Communication by means other than verbal will be attended to here only as occasion demands.

Communication Is Interaction

"Communication," as just suggested, consists of interactions between conscious human beings (paradigmatically, "I" and "You"). By contrast, "information" is something transmitted by a mechanical operation — no consciousness as such involved, but only various signals or indicators moved spatially over "channels" from place to place. In this sense of information, familiar in information processing and information theory, the "message" has "nothing to do with any inherent meaning," but "is rather a degree of order, or non-randomness, that can be measured and treated mathematically" (New Encyclopedia Britannica, 1987: VI: 312). Thus in information as such, as here understood, and in the transmission of information as such there is nothing distinctively human, and nothing involving even subhuman animal awareness.

For example, a genetic code — such as an organic chemical pattern in DNA or RNA making for specifiable results in an organism — is "information" only, of itself not transmitting thoughts or symbols but simply bringing about physical results. Although millions of such codes are operating all the time in the bodies of living beings, such as our own, to keep these bodies alive and functioning, the codes have of themselves no place directly in human consciousness. If by painstaking research human beings have been able to become consciously aware of such information codes in other organisms and in themselves and to work with the codes in the world of human communication, such an information code and physical transmission of the encoded information nevertheless existed first, with no direct reference at all to human consciousness or to communication as here understood.

Compared to communication, information as such is thus clearly an earlier, more primitive, prehuman phenomenon. Information systems such as genetic codes have been essential to the organization and evolution of all earlier life, subhuman as well as human, all the way back to the time when DNA (or possibly RNA, followed by DNA) first appeared on earth around 3.5 billion years ago, when the now approximately 4 billion-year-old planet earth was around a half billion years old (Stringer 1990). However, until quite recent scientific thought and technology opened to inspection the organic world's all but infinite complexity, human beings have known virtually nothing of such natural information systems, despite their tremendous antiquity.

Knowledge of such systems first effectively surfaced only in 1865-66, when the Austrian monk Gregor Mendel (1822-84), reported on a series of experiments with the breeding of garden peas that he had begun in 1856. These experiments established the existence of "particulate heredity," that is, of heredity passed on to offspring by designable particular organic codes or genes in parent organisms. Once the human mind could encompass this information, the information could enter the realm of communication in human consciousness. The information system had been operating for hundreds of millions of years but first figured in communication less than a century and a half ago.

Communication Is Not Transportation

Human verbal communication is sometimes carelessly conceived of according to an information model, as simply the movement of an item from one point to another. But human
communication involves much more than simple diffusion of units of information. Contrary to common assumptions, there is no way for me to transport a concept from my mind or consciousness into yours, no "channel" carrying my thought from me to you. In communicating with you in oral words, for example, I make certain sounds which are carried over physical media such as the air and the nervous system and to which, if you know the language (symbol system) that I am using, you can react to form a concept of your own in your own mind or consciousness. In this activity, both I and you use a code, but my thoughts are not "sent" to you by the code over or through a "channel," transported from my mind to you as an electric impulse is transported from a sending telegraphic instrument to a receiving telegraphic instrument. A human communications "medium," so-called, such as speech, is more than just a "medium," more than a "channel." I cannot place my thoughts in your mind. I can perhaps influence the way you think, but you always have to produce your own thoughts. I. A. Richards put it well in 1928:

Communication takes place when one mind so acts upon its environment that another mind is influenced, and in that other mind an experience occurs which is like the experience in the first mind, and is caused in part by that experience. (as quoted in New Enc. Brit. 1987: XVI: 672)

Richards' "occurs" here is a bit noncommittal: what happens is that the second mind out of its own resources produces an experience like that in the first mind.

Marshall McLuhan's famous dictum, "The medium is the message," like its programmatically reconstituted formulation in the title of his book, The Medium Is the Message, coauthored by Quentin Fiore, (1967), is warranted because what happens in human communication is more than transmission through a medium in the usual sense of this word. In communication (between conscious persons) the medium is more than what the medium is in information processing.

II. Information Codes and Verbal Communication

Although information systems are not of themselves communication systems, they relate intimately to human verbal communication in at least three ways. First, communication, verbal and other, between self-conscious human beings necessarily involves in each human being physiological processes consisting of the operation of many massive, highly evolved biological information systems in our bodies implementing and supporting communication processes, and, indeed, life itself, without any necessary conscious awareness on the part of the person communicating as to what the information codes are or how they work or even of their existence. Such information systems have only begun to be understood, but they have been working in Homo sapiens for some 150,000 years (Stringer 1990) and, in simpler form, in the ancestors of Homo sapiens for millions of years. Human communication entails far more nonconscious operations than had earlier been known.

Second, verbal communication, besides depending on the operation of physiological information systems, can make such information systems themselves the subject of study and of communication. Communication can consciously envelop information systems. For example, the now well known human genome project is undertaking, with massive collaborative research, to establish and make immediately available to conscious knowledge the entire information system constituted by all the extant genes in the chromosomes of the cells of any and all human bodies. That is to say, human beings are making this enormous code, previously entirely unconscious, subject to conscious communication and control. Communication systems — conscious, and thus involving an "I" and a corresponding "you" (singular or plural) — unlike information systems, are omnivorous. In principle, verbal communication can bring all natural information systems of the physical world into its conscious
ambit. Whether anyone could live long enough even to begin to familiarize himself or herself with such a glut of information is another question.

Third, besides creating in itself conscious knowledge of such natural unconscious information systems, human verbal communication can and does also consciously construct and, in the process, build into itself and its activities any number of artificial information systems, such as those consciously designed for writing and now the almost unbelievably more massive systems designed for computers. These linguistic and computerized information systems are brought into being by conscious communication: they are information systems, such as the complex systems in computers, built up consciously by persons communicating with one another.

The Social Foundation of Computerized Information

But if communication can generate information systems, it can never generate information systems which do not retain some connection with communication. Philip Leith (1990) has shown, for example, that the foundation or the ground of a computerized information system is not fully formalized, not mathematical or "scientific" (as all "information" is inside a computer system), but is necessarily sociological, which means generated by communication beyond the realm of simple information. In designing this computer system, why did you start with this particular question or set of questions and not another question or set? A computer cannot tell, but sociology and the ethnography of verbalization perhaps can. Thus an information system devised by human beings cannot result simply from other information but needs also previous communication, motivation tied in with discourse between conscious human beings. Computers have their ultimate origins in people, not in another computer or in a concatenation of other computers ad infinitum.

Thus, in sum, information systems are older than verbal communication by billions of years but have been known and studied as such, that is, incorporated into communication activity, for only some 130 years (beginning with Mendel). But, despite the immensely greater antiquity of information systems, the far more recent verbal communication systems have been the much older subject of human attention and reflection. They have, in various ways, commanded widespread and acute conscious attention long before writing was developed around 6000 BCE. Among the ancient Greeks, for example, written works on communication (rhetoric) are abundant from the time of the Sophists, Plato, and Aristotle in the fourth century BCE. The study of tremendously old information systems is brand new, while the study of communication, a phenomenon younger than information systems by billions of years, is relatively old.

III. Speech and Power

Communication in the broad sense (not restricted to verbal communication) is essential to the development of each human individual from earliest life: it begins for each individual with the vagaries of infant nonverbal interpersonal communication and reaches a significant climax in the process of moving a child gradually out of infancy (Latin infans, non-speaker—\textit{in}, non+\textit{fari}, to speak) into the world of speech. All parents or others engaged in child care must attend in one way or another to the development of communication, and at a certain peak to verbal communication. Communication is empowerment, and, most especially, speech is empowerment. Power is not of itself exploitative: it can be at the service of love for others. But speech is still power. Even in texts words are powerful, but we can restrict the present discussion to oral speech, which (except for the congenitally deaf) is the usual entry of a human infant into the world of verbal communication.

Naming and Power

The power that communication involves is exemplified in naming, an operation essential to full communication. To know any subject, one has
to master a nomenclature, a battery of names or nouns (the English terms name and noun come from the same Indo-European root; in Latin the single word nomen, from the same Indo-Germanic root, is the term for both name and noun). A self-proclaimed pharmacist who does not know any names of any pharmaceutical products is powerless, quite unable to operate as a pharmacist. In ordinary life, naming, in the case of proper names as well as of common names or common nouns, such as tree, bird, fence, is conspicuously empowerment. This is one reason why children find learning names so much fun. It gives them power and freedom.

Nothing in the world comes equipped with a name. Names are all given by intelligent beings, applied from outside the person or object or action to which they are attached. The proper names of individuals deserve attention here. The individual does not find his or her name within. Someone else outside, operating in a (quite necessary) power role, enveloped in parental love (mother and/or father, typically) gave me "Walter" as a name, which I soon appropriated as my own. But however passionately a person may feel that his or her own name is a deeply personal possession, a name as such is exterior to the person — a "handle," as a name is sometimes appropriately called, for a name is indeed like a handle in both establishing contact and in distancing what it is attached to — what it names.

The power inherent in names is indicated by the fact that on occasion an individual will also give himself or herself a name, if he or she feels and/or wants to establish extraordinary personal power — as Josip Broz named himself "Tito" and Josif Vissarionovich Dzhugashvili named himself "Stalin," which means "steel." This is the ultimate in assertion of power: naming oneself, asserting what all others are to call you, proclaiming fundamental and total independence of domination by others. But such a self-given name comes also from the outside: it is given, applied, to himself or herself as to a kind of exterior object by the very person it names.

"I" Is Not a Name

However, if human beings are all normally given names from without, each human being finds something else within which is too interior to be expressed by a name given from outside. Each of us at one point in learning to speak (somewhere around the age of three or four years) discovers within himself or herself an "I" (or its equivalent in whatever language a child first acquires). This "I" is not a name, for it is precisely not given from outside by another or by the individual attaching it to himself or herself. The sound "I" in an English-speaking environment, or its equivalent in any other language environment, is picked up of course from outside, by hearing others use the word, each this same word for himself or herself. But the sense it expressed comes not from without but is felt from within. The meaning of my "I" is different from that of every "I" that I hear others utter. To me, every other person's "I" is "you." The meaning of my "I" simply presents itself from within as applying from within my own consciousness (after much work in talking and otherwise interacting with others), and then, far from being applied from the outside, is "outered" or "uttered" from the inside of the person whose "I" it is (etymologically, "uttered" is simply a by-form of "outered"). "I" is not a name or a noun (as earlier noted, the etymological roots of these latter two words are the same in English).

The Uniqueness of "I"

"I" is not a noun but a pronoun (Latin pro means in place of — a pronoun is something "in place of" a name). A child learns from others to form and utter the sound "I," but the "I" means for the child something it means to none of the others whom the child imitates in uttering the sound of his or her "I." No other human being gave me the "I" which I alone can "outer" or utter, discover in and project out of my own interior. If I were named Tom, Dick, or Harry, instead of Walter, the "I" that I now utter would be entirely the same. In sum, a name comes from outside, but the "I" is always discovered from within — of course with help from outside in discourse with others (other "I"s", other interiors known from the interior of the discovering "I" as "you"). By discourse with others using the pronoun "I," the child finally...
manages to sense how her or his own use of "I" can work. Earlier, before learning how the "I" works, the child refers to himself or herself by a name (noun, not pronoun) — Johnny or Mary or as a kind of object, not as the person the "I" expresses.

It is an anthropological and linguistic commonplace that in oral cultures, innocent of all writing, commonly the "man (or woman) of words" is a consummately powerful social and/or political figure because such persons preserve much of a culture’s heritage (the epic poet or storyteller) or dominate its political life (the orator, politician, political leader), knowing, as they do, so many names or words, and being skilled in using them.

IV. Greeks and the Study of Communication

Writing and the Birth of Analysis

After the development of writing, which made formal analytic "study" possible (Ong 1982 [1988]: 78-115), communication became and has remained the object of intensive, reflective analysis. With the rest of the human race, from time immemorial, long before writing existed anywhere, the ancestors of the ancient Greeks, like peoples in other human cultures, had made at least unreflective use of rhetoric, understood widely as the practice of persuasion. In this broad sense, rhetoric pertained to and governed communication in its nonverbal as well as verbal contexts, operating not simply through words but through gesture, facial expression, and in countless other nonverbal ways. Indeed, understanding rhetoric in this comprehensive way, as "general rhetoric," a means for one individual to induce another individual to a desired action, George F. Kennedy has argued that, as a nonreflective activity, "general rhetoric" antedates humanity, being found pretty well through the animal kingdom in the signals animals give to one another to elicit varying responses (Kennedy 1992).

However, once the ancient Greeks had developed the first complete (vowelized) alphabet in the world, they formed rhetoric, as other activities, into an "art" (Greek, techne), an analytically rationalized procedure dealing largely with words but also reflectively with ethos, the perceived character of the speaker as registering with his hearers, and with pathos, the nonverbalized dispositions of the hearers, such as emotions.

Before rhetoric was thus formed into an "art," Greeks and other human beings had of course practiced persuasion from time immemorial, learning by a kind of imitative apprenticeship. The emergence of formal rhetoric was a complex development, and one with roots antecedent to writing. In fifth-century and fourth-century ancient Greece, its primary models were not what they have often been imagined to be, that is, uses of pragmatic discourse or demonstrative reasoning, but were, rather, the epideictic or poetic performances long familiar in earlier epic singers, as a recent study by Jeffrey Walker (1996) has shown.

The Centrality of Rhetoric

Since ancient Greek times, formal rhetoric has been one of the most central and intensive preoccupations of Western academia and the academic subject most immediately and widely operative in the Western human lifeworld through the Enlightenment. Rhetorical activities have been guides to much of actual human behavior, intellectual, political, and other (see the texts in Bizzell and Herzberg 1990). In skilled, reflective study of rhetoric, study of communication systems takes formal shape as a reflective art. Greek civilization and those civilizations which have opted to follow its intellectual lead in the West were all decidedly self-consciously communication cultures. But they were far from being information cultures in any sense at all comparable to our modern information age.

From what has thus far been surveyed here, it is evident that identifying the present age in the West and/or elsewhere as distinctively the age of communications can be seriously misleading. Because of the longstanding and intensive focus on communication from classical antiquity in the
West, and because of comparable attention to communication in all other known human societies, styling our present age a communications age does not differentiate it so readily from past ages so much as styling it an information age does. The age of the ancient Greeks was conspicuously an age in effect at least as concerned with communications as we are. And later on, as is well known, the Western European Middle Ages, the Renaissance, and later centuries were obsessed with the study of communication under the banner of rhetoric.

Our own age’s tremendous growth in the design and use of communications media and thus its growth in the use of communications derives not from a new enthusiasm for communications as such but from the vast increment of information that the technologies of writing, print, and electronics have made available to us, with today’s resulting explosive electronic enlargement. The glut of information today is available for use in communications as well as in virtually all other human activities. In sum, human beings in the West had been attending reflectively and analytically to communication for more than two millennia. They have not been studying information systems, which have existed for billions of years, for more than a few generations. Now they know very well what information systems are. They are exceedingly useful. Can they be threatening as well?

V. Information Overload

Where are we in our evolving universe when information in the quantities we know today is being loaded into human consciousness? When this loading gives no signs of ever decreasing but of becoming exponentially greater and greater for the foreseeable future?

Richard Lanham’s *The Electronic Word: Democracy, Technology, and the Arts* (1993) is one of the very best of several recent books suggesting how the noetic world is changing and how the neat world view rooted in ancient Greece and notably dominant worldwide since the time of Newton is being supplanted by a world in which rhetoric is attaining a new dominance. For, as Lanham shows, rhetoric was dominant through the Western European Renaissance, which can be earmarked as the restoration of rhetorical culture after the relative ascendance of logic in the High Middle Ages — relative ascendancy, for the Middle Ages remained far more basically rhetorical in their cast of mind than many have commonly allowed.

A Role for Rhetoric Today

Rhetorical thinking serves some purpose in our present communication chaos. Rhetoric is more comprehensive than logic. Rhetoric is not contained in logic, since logic has no use for rhetoric and from its beginnings has fought to keep itself free of rhetorical "contamination". But logic is contained in rhetoric, since it can be used and is used within rhetorical thinking and expression for rhetorical purposes. In this age of an information explosion and information chaos, rhetoric is coming to the fore again. From the study of well over twenty significant Western thinkers, a recent two-volume work edited by Chip Sills and George H. Jensen (1992), generates its telling title, *The Philosophy of Discourse: The Rhetorical Turn in Twentieth-Century Thought*. Rhetoric has to do with human communication as such, not with merely information, although it of course now includes the use and study of information systems.

Information Buildup

As preoccupation explicitly with information systems as such has recently overwhelmed our human lifeworld, entering in depth into our communications revolution itself, we are today flooded with processed information to an extent quite unimaginable only a few generations ago. Human beings have never had to cope with information even remotely so abundant as that with which we now live. Of course, the present state of affairs shaped up in stages. The
information buildup in oral cultures that accelerated with the development of writing and was intensified with the development of the alphabet increased exponentially with the development of printing from movable alphabetic type in the mid-1400s and has now increased even more exponentially following on the development of the first modern computers some five decades ago.

With the proliferation of computers, the quantity of information on hand or accessible to human consciousness is already billions upon billions of times what it was even a hundred years ago and is increasing by the hour beyond any readily assignable limits. Inevitably, information theory in the past few generations has deeply affected the study of communications itself, for, as just noted, communications can include any and all information, and increasingly will do so in one way or another.

**Computer Frustration and the Quest for Intimacy**

To understand even in a preliminary fashion what has happened as a result of our present flooding of information into communications activity calls for a comprehensive historical and philosophical view of all human existence of a scope which we are only beginning distantly to imagine. In computerized communication (e-mail, bulletin boards, and the rest) the overwhelming preoccupation with achieving intimacy is indicative of haunting frustration: the more information we flood in to facilitate intimacy, the more virtual everything is. How do I know that the one I am electronically communicating with is the one I think he or she is?

The modern communication age, swollen by its enveloping of the information explosion, can be viewed as having begun with the telegraph and telephone and moving pictures. These were all initially electric in the sense that they used electricity, but they were not, strictly, electronic — that is, they did not operate by the emission of and control of electrons as such. But these electrically operating media were soon transmuted into electronic media proper, such as vacuum-tube radio, television, and computerized media of countless sorts, digital recording discs, and so on, increasing their ambiance exponentially into the future.

Moreover, communication in recent times was immeasurably enhanced not only by electric and electronic inventions, but also by the development of rapid transportation media, which enlarge the range and amount of person-to-person communication across the world. Thus in a very real sense our age is an age beyond a doubt distinguished by immeasurably expanded communication between human brings across the globe and out into space and back. Developments in transportation of human beings directly foster the development of communication between persons, although they can also be used for the physical distribution of mere information as such.

If our expanded media can be put to uses that increase genuine human communicative interaction, they need not thereby improve true communication between human persons at all, and can, in fact, numb and decrease it. This does not deny that our new and growing communication devices are not admirable human creations, much less make them evil, but it does advertise their extrahuman, mechanical nature and the need to inject into them massive intelligent and moral management (which in this electronic age must, paradoxically, be carried on with the aid of the new information media themselves).

**Expanding Communication Studies**

We have noted that, because it has been enlarged by incorporating within itself the vast spread of information now available to us, the study and use of communication is immeasurably more comprehensive than it was when it was limited to the older study of rhetoric. The study of communication has been deepened by many other new developments. First, the modern growth in the "human sciences," such as psychology and anthropology and cultural studies generally, has enlarged and deepened modern understanding of communication far beyond what was available in earlier ages. And, of course, this growth has been implemented vastly by putting to work more and more information systems within the network of truly human communication.
The "Information Age"

In sum then, even though communication today is more widespread and varied than ever before, our age is nevertheless more distinctively an age of information than an age of communication in the sense that it is the vast increase of information accessible to us that had made the growth in communication both possible and imperative. The widely expanded and varied use of communication today is itself often aimed not so much at simply improving human interaction, but also at laying hold of more and more information systems operating independently of human consciousness in the world around us generally — where "laying hold of" information systems means introducing them into conscious communication systems. The end result of what is going on in the study of information systems is the amplification of communication systems as well as information systems, with no end in sight at all.

VI. Digitization and Hermeneutics

How can we assess the introduction into the human lifeworld of billions upon billions of new information systems (some natural, as the human genome and other genomes, some of human origin, as new humanly devised and humanly managed information systems, such as those being generated daily on the Internet and the World Wide Web)? This vast load in human communication is new and growing so fast as to be in fact immeasurable. It is making of human consciousness something other than what consciousness used to be. What does this overload of information, or, as it is now commonly referred to, this information chaos, call for in the human being of today and tomorrow? We are moving into, or are already in, a situation where, in principle, everything that is known or has been known can be made accessible to everyone everywhere anytime. Even though this accessibility cannot ever be realized in fact, the question of where we are and where we are going in our information-saturated world of communication is of concern not simply to the designers of computer software but also to the shared human consciousness of the world.

Writing in the Information Age

David Bolter’s fascinating *Writing Space: The Computer, Hypertext, and the History of Writing* (Bolter 1991) addresses itself to the state of writing in our present information age and holds out the hope that the development of hypertext will give us some way of coping in our present situation, when the age of print has clearly been in some way superseded (although more is being printed today by far than ever before, including more and more books). In principle, though never even remotely in fact, hypertext can make available here and now everything ever inscribed about every subject under the sun. Fully implemented hypertext would function by means of a computerized index to everything ever printed. If hypertext could ever be fully activated, it would provide computer users with immediate access to every printed document in the world — a condition which of course can never be realized or, in fact, even approximated. But hypertext has no fixed boundaries, only those determined by human exhaustion. Bolter finds that the hierarchic organization of thought enabled by print (and, earlier, to a less intensive degree, by writing) is superseded today by networking, as on Internet and, most explicitly, in the use of hypertext.

Overload: The Need for Hermeneutics

When a communications system, which works between persons through symbols, is overloaded with great masses of information, you create an urgent need for interpretation or hermeneutics. Symbols, unlike shear information, are of themselves multivalent and have long fascinated and hyperactivated human consciousness. Total verbal explicitness is impossible: any statement can call for further interpretation that makes its meaning (apprehended not only explicitly but also implicitly by its unuttered but really apprehended context in a given utterance). Once the accessible information load becomes heavy, as it has become in recent years, and is interwoven into the symbolic human communication world — which is always open to being made more and more
explicit — human beings are driven inexorably to study more intensively than ever both communication as such and information itself as such. Human consciousness wants to relate everything to everything else and to do so consciously, so far as this is possible. This situation is one that underlies (although it does not entirely account for) the explosion of hermeneutics, which is to say interpretation, in recent years. How are we to understand the vast network of knowledge available in the world of consciousness today?

Digitization and Hermeneutics

Elsewhere (Ong 1995) I have examined the twin phenomena of the current growth of digitized information systems and the current burgeoning fascination with hermeneutics, attempting to show how digitization and hermeneutics are complementary. Digitization proceeds by division of what it deals with into numerically distinct binary units. Hermeneutics drives ultimately not to divide (although it may make tactical use of division) but to form wholes, ultimately to relate everything that is known to everything else that is known.

As particulate information has grown, we find in databases countless kinds and ranges of hermeneutics, under headings such as "literary hermeneutics" through "hermeneutics and analysis," "science, hermeneutics, and praxis," "Buddhist hermeneutics," "hermeneutics as method, tradition, and critique," "context and hermeneutics," "hermeneutics, tradition, and reason," "hermeneutics and deconstruction," "hermeneutics and social science," "hermeneutics as politics," "hermeneutics of modernity," "hermeneutics versus science," (sometimes hermeneutics is allied with science, sometimes opposed to science, sometimes demanded by science), "the hermeneutics of the subject," "postmodern literary hermeneutics," "religion, literature, and hermeneutics," "feminist hermeneutics," "philosophical hermeneutics," "transcendence and hermeneutics," "T. S. Eliot and hermeneutics," "Yeats’ autobiography and hermeneutics," "energetics and hermeneutics," "hermeneutics and critical theory," "Jung’s challenge to biblical hermeneutics," "hermeneutics and the social structure of language," and so on and on and on (Ong, 1995).

VII. The Technologizing of Verbalization

With the technologizing of verbalization, beginning with writing (the commitment of evanescent sound, which is not a thing but an event, to a manufactured visual object — Ong 1985) the use of words to an extent takes on special qualities associated with information systems rather than communication systems as such. Oral communication is not a technology: it uses no tools and produces no product, leaves no residue. Spoken words exist only when they are going out of existence. Spoken words are not things: they are events (Ong 1967). When I pronounce existence, the exis- has to be gone by the time I get to the -tence, or I am simply incomprehensible.

The movement of spoken words is allied to the movement of thought itself, which is also an event, although thought is not simply a parallel to words. We cannot possibly describe in its entirety all that goes on in us, unconsciously and consciously (through information systems built into our physiology, through our human reflectiveness, etc.) when we think. But even when thinking comes to a head in such cardinal actions as the juncture of subject and predicate in propositional statement, thought moves in time. *The kangaroo is a marsupial* proceeds in time from the subject to the predicate: the term *marsupial* comes along after the *kangaroo* is gone. Sounds and the thoughts they register are not abiding products at all. They can be recalled an infinite number of times successively: they cannot be stabilized, immobilized in time.

Text and Sound

Writing is a technology. It uses tools (Clanchy 1979: 88-115) and produces a material product, which we call a text. A text is a physical object,
which can be moved around in ways suggesting moving information over a "channel." But text is also related by code to always evanescent sound (DeFrancis 1989), to which, if it is to convey meaning, the text has to be reduced once more by being read (that is, reconstituted as sound either interiorly in the imagination or exteriorly). Read, the text functions as communication. Restoring a physically quiescent text to sound runs it through time, syllable after syllable, word after word, for, as just noted, sound itself always runs through time.

**Text as Information**

Although its aim is communication, the inscribed text itself, as the object that it is — written, printed, or computerized — can be viewed as belonging in a way to the world of information rather than the world of communication, as these terms have been distinguished here. Once a text is inscribed, it enjoys existence as a physical object and this existence is independent of human communication, of an active sender or receiver. The physical text exists independently of its originator (who may well be dead) and, until it is read (sounded), exists independently of any recipient or recipients. It is not of itself an exchange between living beings, as are spoken words, which are in themselves not simply information but communication. Because the technologizing of the words in texts assimilates words to things, which can be accumulated and kept in place, text encourages compilation in the sense of convenient spatial juxtaposition of written verbal materials for visual retrieval. With texts record-keeping comes into its own — as against tallying by notches or strokes (one notch or stroke equals one of whatever is being tallied — see Schmoldt-Besserat 1992). The greater part of the earliest writing we have, in Mesopotamian cuneiform, is especially thing-like in that it registers economic transactions (Ong 1982: 48). Early writing is not "literature" in the sense of belles lettres. The use of writing for aesthetic verbal effects came later, and its use for highly interiorized, personalized communication between living individuals much later still.

**Text as Pretext**

Yet all text is pretext. It is pretext in the sense that the words and thoughts that go into it have an antecedent oral existence at least in the imagination — a pretextual existence. It is pretext also in the sense that a text does to a degree pretend to be what it is not: spoken words. For — and this paradox is absolutely ineradicable from the textual situation — text, as has been indicated, functions precisely as text, and not simply as one more inert visual and tactile object that we encounter, only when it is lifted from the visual field to the auditory field, either in the imagination or in external, oral speech, and made to move in the reconstituted, nonvisual world of sound — only when it is no longer simply visible text.

If writing encouraged the engagement of sounded words with marks in space, print did so even more, for once type had been set, an indefinite number of copies could be produced from it mechanically. Handwritten texts belonged to a less mechanical world: the words in the text to be copied normally passed through the vocalized consciousness of the scribe. Printed pages were simply produced mechanically on a press. Until read — that is, until converted into something more than just print — they belonged to the world of information. By the mid-1700s print had reached the point where it was flooding the commercial market with what in our present perspectives can be seen as huge information banks — such as Samuel Johnson’s *English Dictionary* (1755) and Diderot’s and d’Alembert’s *Encyclopédie ou dictionnaire raisonné des arts, des sciences, and des métiers* (1751-72).

The age of dictionaries and encyclopedias and other materials processing words coded in writing for convenient visual retrieval immediately preceded the time when hermeneutics, labeled as such, became a major preoccupation of European scholars, largely in the nineteenth century (Gadamer 1985 [1960]: 146-147). Compilations of information continued to grow apace until the advent of the computer, when information storage entered a new phase in which information compilation and manipulation had prospects it could never have had before in cultures which, by eighteenth-century and subsequent standards, we
can see were information-poor.

The ages of writing and print moved verbalization into the age of "secondary orality," that is, orality produced by machines devised through the use of reading and writing and print — radio, television, and associated mechanical creations (Ong 1977: 298-299). In this age, sound itself is produced technologically and the resulting manufactured spoken words become like things. Spoken words (and other sounds) can be retrieved at will, as spoken words in primary oral cultures — cultures without writing — cannot be.

VIII. The Presence of Presence

Attention to the ultimately "I"—"you" ground of all communication brings awareness that the "presence" that fills communication is a "presence" not of names or of things but of persons, who figure in communication not as named items but simply as self and other, as "I" and "you." "I" and "you" and their equivalents in languages other than English are unique among words. They advertise a person-to-person relationship with which even the proper names of the interlocutors interfere. In a conversation, when one interlocutor uses the other's name, the reference of the name is in a way oblique to the fundamental relationships in the dialogue. The name is set off by a pause before and after — indicated in a text by commas: "Would you, Margaret, help us out?" The full "presence" in communication is the conscious personal presence to one another of those in a dialogic, speaking situation, the presence of an "I" to a "you," and of a "you" to an "I."

My name can represent me. The "I" that I utter does not represent me as a name does, but simply presents me to you, as your "I" presents you to me. One conscious person can be present to another in a way no mere object can be present. Consciousnesses are interpenetrative: in the given context of a given speech act I can tell that you know that I am present to you and you to me. And you can tell that I know that you know that I am present to you. And so on ad infinitum. Without such reflectiveness, there is no full "presence." The "presence" of things, even directly to the senses, is a weak analogy for this personal, interpenetrative presence.

Of course, personal presence in a text is not the same as the presence of two persons to one another in spoken dialogue. And indeed in some texts — such as lists, certain perfunctory reports, and the like — the presence of the text's author can be minimized. But, however remotely, it is there, although it lies in the background. Someone had to make this list, or program this computer. As Leith insists (1990: 208-211), the base of computer activity is sociological. Why was the computer program begun this way and not another way? The answer will have to be found in human society, not in a computer.

In "literary" texts (as against such relatively impersonal discourse as a list), the presence of the person of the author of a text and the person of the reader is insistent, directly or indirectly. In the course of literary history, this presence may be exquisitely derivative and complex, as we have been made well aware by the flood of printed works — and talk — on intertextuality with which we are surrounded. Bakhtin (1981) has insisted that such derivative and complex relations between the person of the author and the person of the reader are to be found par excellence, and in their greatest complexity, in the novel, but that, however complexly realized, a personal and somehow interactive presence remains even there.

"I" - "You", and Discourse

All discourse, that is to say, every speech act, spoken, written, printed, or computerized, rests somewhere, however remotely, in "I"—"you" dialogue. In our reader-response milieu, we need no longer be told that different readers — each of whom is a different "I" — react to the same text with different responses that call up different potentials within the text itself. Although "the writer's audience is always a fiction" (Ong 1975), it is still a personalized fiction and involves personal presence, at whatever distance and with whatever variety. In the reading of any text, there
is an "I" (or "we") at one end, however obscurly or self-effacingly or disguisedly or fugitively, and a "you" at the other. Words ultimately do not generate themselves: they derive from persons. No computer can say "I."

"I" is not a marker, such as deconstructionists refer to. It is self-referential. It comes from within personal consciousness and no one else can say "I" and make it mean what I mean when I say "I."

You will say, "Yes, I can. I mean 'I' in the sense you mean it when you say 'I.'" But here it is the "you" which carries the burden. No matter how great the number of individuals in the universe is, one feels no real danger that one of them will be a duplicate me, saying an "I" that means what I mean when I say "I."

IX. Conclusion

The present age is referred to sometimes as the information age and sometimes as the communication age. We have seen here that there is warrant for both because of the interrelation between communication (among conscious, reflective human persons) and information (impersonal and not necessarily conscious at all). Conscious communication can build into itself an indefinite amount of information and today is exponentially increasing the amount of information it is accessing. Recorded and retrievable as communication in countless manuscripts, books, and in computerized storage, this information-within-communication is doubtless billions of times as great as it was, let us say, a century ago. In this sense, our age is distinctively a communication age. Communication has laid hold of information in quantities and degrees unimaginable to earlier generations.

The reason why the field of communication is so enlarged today is less developments within the interpersonal field of communication, with its always present symbol system, than it is developments enlarging immeasurably the information systems available for possession and/or retrieval by human consciousness. But much of the information incorporated or capable of being incorporated into human consciousness cannot as yet be integrated into other information accessible to consciousness so that most of the information accessible to the mind remains in a deep sense unprocessed. Such is the state of most of the huge quantities of information now available through the computerized "information highway."

For this reason it appears more warranted to style ours an information age rather than a communication age. Even as communicators, we are captives of information, for uninterpreted information can create an information chaos and, indeed, has done so, and quite clearly will always do so. Information-wise, we don’t know which end is up. Hermeneutics (interpretation) remains a major concern, and will so remain for the foreseeable future, because of the felt need to interpret in depth what the information is around and in us and to realize what it all does or can mean.

Our evident inability to create a hermeneutic adequate to interpret the information flooded into human consciousness shows the plight we are permanently in. Human life must be ultimately managed humanly by more than information-plus-hermeneutic, which is to say by what it has always been managed by when it has been humanly managed, that is, by interpersonal and intergroup personal interaction and the love of human beings for one another that has held human society together, when it has been humanly held together, from the start of humankind. Information and also hermeneutic are, so far as accessible, helpful and necessary, but in the last analysis they are inadequate to the world lying ahead. The ultimate solution to human existence cannot be found in anything humanly accessible. Yet we hope for a solution. So long as we hope, we must be reaching for a solution that lies beyond mere information — in the human lifeworld, and, believers will be convinced, in access to a personal God.
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Review Article: Recent Work on Information/Communication and Secondary Orality

W. E. Biernatzki, SJ, Editor, Communication Research Trends

I. Information: Useful and Harmful


Information as "Garbage"

Neil Postman, citing other observers, ranging from philosophers Ludwig Wittgenstein and Martin Heidegger to poet Edna St. Vincent Millay, has commented bluntly that in contemporary society, with its electronically augmented information glut, information "has become a form of garbage, not only incapable of answering the most fundamental human questions, but barely useful in providing direction to the solution of even mundane problems" (in Strate, Jacobson and Gibson, 1996: 380).

Few would hold that all information is garbage, but most would have to agree with Postman that to make the mass of available information at all useful some means of prioritization and selection are needed. Postman, like Ong, recommends a humanistic solution to the problem.

We must now turn to our poets, playwrights, composers, theologians, and artists, who, alone, can create or restore the narratives that will give a meaningful pattern to our lives. (ibid., pg. 382)

Cyberspace: A New Environment

In their Introduction, the editors use the metaphors, "electronic landscape" and "electronic environment," to describe a milieu which has become known as "cyberspace." The abilities offered by computers to store and access information and to facilitate communication have created a new kind of context for human social interaction. This is not some kind of miraculous transformation, nor is it a complete break with the earlier environments in which people have communicated, but it has added some new elements — including the new form of social space called "cyberspace" — which both make their own special contributions to our environment and alter the ways in which older forms of information and communication function in the new context (pp. 1-4). The new situation has its positive aspects, but, as Postman is quick to point out, it also has negative effects — not the least of which is the immense amounts of "garbage information" he describes. Nevertheless — and even Postman would have to admit this — the new environment is our current and future environment, from whose electronic clutches it is already almost impossible to escape and which in the future inevitably will influence everything we do and even the ways we think.

The contributions to Strate, Jacobson and Gibson's book are dedicated to helping us find our way through this environment — not, strictly speaking, unexplored territory, but much of it previously familiar territory that has been drastically transformed, making it even more daunting than if it were totally unfamiliar. The first seven chapters try to put the idea of cyberspace in theoretical perspective. Some of the authors continue the useful geographical metaphors appropriate to exploration. "Between the two ["hype, hoopla, and how-to-oriented discourse" on the one side and "denial, dismissal, and silence" on the other"] lies the path we must follow if we are to take cyberspace seriously" (pg. 23). "Paths of safety, streets of gore" (pg. 25). "...the highway...reduced to a connection between hostile zones" (pg. 31). "CyberWalden" (pg. 39). "Don't Fence Me In." (pg. 59). "Back to Plato's Cave..." (pg. 83). Jay David Bolter sees cyberspace as artificial space: "Virtual space is the abnegation of the space of personal cognition that Descartes envisioned... Virtual space, cyberspace, is one of pure, if utterly artificial, sense perception" (pg. 118). Gary Gumpert and Susan J. Drucker caution: "...although we may use
cyberspace as a substitute for the physical environment, the two are by no means equivalent" (pg. 25).

**Form, Function, Meaning**

Remaining sections of the book discuss cyberspace in terms of its function, form and meaning. A chief function of "cybernetworks and cyberplaces" is seen to be as alternatives to physical location and transportation. Their ability to substitute for face-to-face meetings and "snail mail" is obvious; although it has limits and raises new questions about the kinds of social interactions which it encourages. Historical backgrounds are described, in Mark Giese's historical sketch of the development of the Internet (pp. 123-141) and Joseph Barrett's description of how, "over the past 25 years, money in our own country has changed from a relatively stable, gold-backed currency to a free-floating electronic abstraction," by computer processing and telecommunications (pp. 155). Ronald Jacobson raises several public interest questions about access to the information superhighway, envisioning cyberspace, alternatively, as "a contested site, and different segments of society are staking their claims in what may well be the greatest 'land grab' since the closing of the frontier" (pg. 143).

**Conceptions of "Self"**

The form of cyberspace has implications for conceptions of the self, and Sue Barnes points out (pp. 193-216) that different "selves" are suited to different cyber environments. In extreme conceptualizations, consciousness may be thought to exist solely in cyberspace. When the cyber environments impinge on everyday life they impact "the delicate balance between self and environment" with many potentially dangerous consequences.. The hypertextual potential which is almost intrinsic to learning in cyberspace is "fluid and disembodied" and "dissolves forms and disrupts established procedures and relationships," stable patterns that the use of printed texts had imposed and maintained (pg. 243). Hypertext is defined as, "any program that allows readers to navigate nonlinearly through a body of text." essentially picking and choosing what they want to get out of the given text to create their own text, with a meaning which may differ widely from that of the original source or sources. Although pedagogically useful, hypertext raises serious questions of coherence and control. Already evident in the United States is a progression — described by O. B. Hardison, as quoted in the chapter by Stephanie B. Gibson — in which hypertext plays a role, "wherein American culture is slowly disconnecting from its history and floating into.. paradigmatic isolation — the cutting off of culture from any heretofore familiar paradigms of interaction" ( pg. 245).

**A New Rhetoric**

Finally, section four discusses meaning in computer-mediated spaces, which "are much more than alternatives to physical space" (pg. 271). Judith Yarosz Lee believes that the unique juxtapositions of symbols in cyberspace has given rise to a new form of rhetoric. For example, e-mail, as a quasi-oral expression in print, is a hybrid form of a special kind:

"Rather than represent a middle ground moderating the characteristics of oral and written language, e-mail constitutes a junction in which orality and literacy, in their extreme or purest forms, meet. One reason is obvious: e-mail adapts the technology of the keyboard, a by-product of print, to the requirements of talk." (pg. 291)

Capitals, for example, can be used to indicate loudness of speech, and special programs ("emoticon") can manipulate the 107 characters of the usual keyboard in widely varying ways to express different meanings (ibid.). Legal arguments have hinged on whether e-mail is more like written documents, subject to freedom-of-information laws, or like telephone calls, which are privileged (pp. 292-293).

**Cybertime/Dreamtime**

Lance Strate considers the relationship between cyberspace and time, a concept which "is just as integral to understanding a given context, situation, scene, or environment as that of space..." and "a key element in the formation of cultures, communities, identities, and meanings" (pg. 351). Philosophical and ethnological insights can yield some understanding of the implications of cybertime.

St. Augustine (1961) suggests that only the present is objectively real, whereas past and future exist solely in the mind; as the computer is an extension of the mind, it likewise creates 'a present of past things and future things.' In cybertime, past and future collapse into the present, contributing to the almost mystical sense of timelessness sometimes associated with cyberspace. (pp. 368-369).

From an ethnological perspective: "Cybertime is in
some ways a form of sacred time, a mythic time or
dreamtime." But, "...no other media provide the same
sense of active personal presence as the computer; no
other media allow us to construct and encounter other
versions of ourselves: dream selves." (pg. 371). We
create different "selves" for different correspondents.
"Much of our online doubling is not a matter of
choice." As our electronic communications increase
"we are pulled in more and more different directions.
This form of cybernetic cloning seems to promote
identity diffusion, multiple personality disorders, and
schizophrenic behavior" (pg. 372).

II. Some Practical Implications


Thomas F. Baldwin, D. Stevens McVoy, and Charles Steinfield. Convergence: Integrating Media, Information and


Information Seeking in Organizations

The distinction between Communication and
Information may seem unnecessarily subtle, but it has
practical significance in real situations such as those in
the inner workings of large organizations which J.
David Johnson discusses.

Information is an essential factor in any
organization. Each entity within the organization, from
the individual person on up through working teams,
sections, divisions, etc., needs certain kinds and
amounts of information in order to accomplish its
appropriate tasks. On the other hand, efficient
functioning requires that certain kinds of information
be withheld from some entities. Organizations are
fallible, and it can and often does happen that needed
information is blocked from some entities, which
therefore cannot accomplish their goals, while other
entities are so flooded with unnecessary information
that they are distracted from their proper activities.

Formal and Informal Structures

All organizations have both formal structures —
their tables of organization — and informal structures
— the relationships among their members which are
defined by various factors not accounted for by the
table of organization. Blockages of necessary
information in the formal structure can be compensated
for by going through various channels in the informal
structure to obtain the information. Conversely, too
much information can be obtained through the informal
structure, distracting the receiving entity from its
appropriate activities. Both these anomalies seem to
prevail most of the time, to varying degrees and in
varying ways, in most organizations. As Johnson
summarizes the situation:

...organizations are faced with a fundamental
dilemma: bureaucracy, stemming from efficiency
needs and the need to maintain existing power
positions, often limits the access of individuals to
information. Yet, structural designs are often flawed
and circumstances change, requiring indivi-duals to
seek information normally unavailable to them.
Innovation, and often survival, depend on allowing
free and open access to information for those
individuals who seek it. How these conflicting
imperatives are resolved is a critical dilemma for the
modern organization. (pg. 144)

The author notes that although "volumes have been
written on formal organizational design, comparatively
little is known about the forces that shape individual
information-seeking within organizations" (pg.1). Ignorance of the process of information seeking has led
to the loss of billions of dollars "spent inappropriately
on information technologies" (pg.xi).
"Transportation theory"

In Johnson's view, considerations of communication in formal structures often fall back on the definition of information originated by Shannon and Weaver (1949). They were engineers, concerned with "how to send messages efficiently, with minimal distortion, over mediated communication channels" (Johnson 1996: 6). But this approach has a "mechanistic, engineering transmission focus, which slight[s] the meaning of messages" (ibid.). It tends to treat information transmission in an oversimplified way, as if information were merchandise, only needing to be packaged and sent from one place to another, retaining its original character in the process.

Johnson opposes that conceptualization with a more user-centered descriptive definition. In its most general sense, he says, "information is, the discernment of patterns in the world around us" (pg. 7). Among its other uses, it serves to relieve uncertainty and to create a sense of confidence, comfort and familiarity with one's situation. It should be noted here that Johnson is referring to information only as it is involved in human communication, not in the broader sense which Ong distinguishes in the first part of his article, above (pp. 3-4).

Information Revolution/Economic Revolution

Because of certain characteristics of information, an information society, such as is now developing globally, creates an economy which is radically different from the economies which preceded it, according to Johnson following H. Cleveland (Johnson 1996:7; Cleveland 1985).

First, information is expandable in that new knowledge interacts with old knowledge to create new information while leaving the old intact, and "the limits to expansion are primarily in the users of information systems."

Second, information "does not deplete a finite store of material resources."

Third, it "is substitutable; it can replace itself and it can be readily exchanged."

Fourth, the means by which information is transported "can overcome the limits of time and space of the material world."

Fifth, it is hard to prevent the spread of information to others who are interested in it.

Sixth, information can be shared among people who use it in very different ways (Johnson 1996: 7-8).

"Decline of Hierarchies"

Johnson repeats Cleveland's suggestion "that these characteristics of information are inevitably going to lead to the decline of hierarchies in organizations, just as they have led to the decline of authoritarian states" (Johnson, ibid.; Cleveland 1985; Buckland 1991).

The dominance of information as a value in modern society therefore presents a whole new set of challenges to people used to treating communication and value according to the model of material exchange. The paradigm shift this implies might correctly be termed "revolutionary"; although the author limits himself to a more functional consideration of how a pragmatic balance might be achieved which will enable organizations to maintain their stability through appropriate means by which information seeking might be both facilitated and controlled.

"The End of Authority"

The undermining of hierarchies by increasing availability of information, cited by Johnson and Cleveland, is paralleled by "the end of authority" as embodied in the printed book, which Jay David Bolter sees as an effect of the movement towards greater emphasis on the electronic media.

As long as the printed book remains the primary medium of literature, traditional views of the author as authority and of literature as monument will remain convincing for most readers. The electronic medium, however, threatens to bring down the whole edifice at once. It complicates our understanding of literature as either mimesis or expression, it denies the fixity of the text, and it questions the authority of the author. (Bolter 1991: 153)

In Bolter's view, the interactive electronic media invite "reader" participation to such a degree that the author is challenged at every turn. "The reader may well become the author's adversary, seeking to make the text over in a direction that the author did not anticipate" (pg. 154). While adversarial reading is not new, Bolter believes that the computer "makes visible the contest between author and reader that in previous technologies has gone on out of sight." (ibid.). Authors in the past have striven to retain their authority over what the reader can draw from their texts. "The electronic medium challenges all such attempts to circumscribe the reader's participation" (pg. 153).

Need for "Seeking" Research

Information seeking has been under-researched and both conceptually and theoretically underdeveloped, according to Johnson (1996: xi-xii). Earlier focus on the sender to the exclusion of the audience and the seeker has left a gap in our understanding of communication which is only now beginning to be
recognized and filled, according to him.

Information Gap

Johnson also addresses the danger of an “information gap” between the information rich and information poor, which threatens to develop as information seeking becomes increasingly dependent on expensive technologies, such as computers and satellite links. Information poverty in an information dependent society will inhibit full democratic participation by many. Although governments are aware of this danger and policy makers try to meet it, the reluctance of many to avail themselves even of those information resources already immediately available to them makes the achievement of truly universal access to information unlikely (pp. 146-150).

Multiple Gaps as Social Threats

Similar concerns are expressed by Baldwin, McVoy and Steinfield (1996: 392-394) as they review the impacts of integrated broadband networks, which will provide the communication and information services of the future. According to those authors, economic disparities inevitably will cause not only an information gap, since the poor are unable to afford the same information resources as the rich, but also an entertainment (and sports1) gap, a social gap, a gap in TV discrimination capability, a gap in the ability to avoid commercials, a product information gap, a child gap, an urban-rural gap, and a freedom of choice gap. In short, the poor simply will not be able to share the fruits of either the information revolution or the communication revolution equally with the rich because of the charges which must be attached to the integrated technologies which make possible both advanced information seeking and advanced communication possibilities. The authors see no easy solution to this problem which will increasingly threaten equality of social and political participation with the possibility of dire results for community solidarity (ibid., pg. 396).

J. David Johnson would agree, and adds:

Even more disturbing than the information gap is the understanding gap. Our elites, both institutions and individuals, are developing a considerably different view of the world than other members of our society, in part because of their differential levels of information-seeking capacities and skills. Even between elites, constant self-selection of information sources is producing different views of the world. The information revolution is contributing to the accelerating fragmentation of our culture [Fortner, 1995]. (Johnson 1996: 149)

Johnson, again citing Fortner (1995) as well as Doctor (1991, 1992) and Lievrouw (1994), notes that elaborate information infrastructures are so expensive that they can be supported only by a few large organizations which may manipulate this competitive advantage to artificially widen information gaps in order to increase their own power and profit. Thus, "the same technologies that can serve to increase democratic participation in the workforce also can heighten control and centralization." (Johnson 1996: 149-150).

These observers agree that changes in information and communication technologies create far-reaching changes in human social and political ecology which are not in themselves necessarily bad or good but which make everyone’s situation very different and need to be taken into account as the whole “ecosystem” continues to evolve.

Interpersonal Communication


Another name for the information revolution is the era of “secondary orality” (Ong 1982), in which electronically mediated communication comes to assume, or to seem to assume many of the characteristics of the unmediated interpersonal communication which marked the period of “primary orality.” But, despite first impressions, it is not the same, and requires a reordering of skills to ensure successful on-line communication. Rob Anderson summarizes the new situation as follows:

As computers become more central in our lives, opportunities for communication change in both radical and subtle ways. With CMC [computer-mediated communication], our assumptions even about what constitutes communication change at the same time. ..active listening now becomes the communication skill that must be mastered if persons are to be competent in the new deferred

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1The “sports gap” created widespread anger in Costa Rica when the Costa Rican national team played a critical game in the World Cup playoffs in the United States, but reception in Costa Rica was restricted to pay-per-view conditions. One disgruntled Costa Rican was quoted as saying that although his children were eager to see the game, the only way they could have done so was if he had taken them to a bar! (Source: personal communication).
presence mandated by digital culture. (Anderson 1997: 158)

Anderson points out that the media cannot put "messages and meanings into our heads" (ibid., pg. 145), they can only offer them for our attention. We can turn them off or grant them various degrees of attention and put them to various uses. He sees us moving from a "directedness theory," which emphasized the sender, to an "access theory", stressing the role of the audience, to understand communication using the new media in terms of a "listening model." Functioning as person-to-person connections, computers merge media and human senses into more immersive experiences, shift message responsibility to the audience as "coauthors", rearrange time and space, and blur concepts of power and responsibility (pp. 145-147).

The database, "the prototypical example of access theory," creates a pool or "forum" of "shared access messages" which reflect the realities of the contributors and affect their experience as they draw from it information contributed by others (ibid., pg. 149). This happens in the context of "a different sense of place" and represents "a fundamentally different sense of presence" (pg. 150).

The effects of computer mediation on interpersonal communication go beyond the on-line environment to affect even the "everyday" environment of non-mediated interpersonal communication. Although Anderson sees mostly good coming from the electronic revolution, he believes we must stay alert to some of its possible seductions.

Some, who would tend towards fitting the "unfair" stereotype of the computer "nerd", might avoid face-to-face presence in favor of what seems to be the "more important" world of on-line relationships — relationships which could direct the individual into "very narrow corridors of culture". Users of computer communication may also fail to adapt to the "essentially thin versions of human presence" experienced on line, thereby risking misinterpretation and misunderstandings. The ease of disguise and misrepresentation on-line is a product of this "thin presence" which "offers new temptations of inauthenticity." Rapid access to information can encourage lazy, shallow absorption and poor retention of that information, or excessive dependence on database access rather than on one’s own human memory. Responsibility for content can be diminished, resulting in diminished quality control over the knowledge being disseminated. The emphasis on access can inhibit or diminish dialogue. Invasions of privacy are a greater possibility in the world of computer-mediated communication. Finally, people with the ability to tailor the information they access to their own interests run the risk of excluding more general information they may need to be good, constructive members of society (ibid., pp. 152-157).

III. Postmodernism and Cultural Studies


Sociology

The differences in worldviews and social relationships which have come about so suddenly as a result of the new technologies have destabilized many of the traditional pillars of the intellectual world. A new awareness of differences in cultures, values and perspectives had already undermined many of the older certainties before the coming of the computer. This process has accelerated with increasing availability of information, and it seems, since the 1960s, at least, to have destroyed the foundations on which many had rested their whole understanding of reality.

Seidman describes the relativization which took place in large areas of the social sciences, as they moved from a positivistic sociology, often caricatured as searching for social laws comparable to those of the natural sciences, to cultural studies, focussed on "the practices and meanings of everyday life" which were "to be analyzed in relation to a social context of institutions, power relations, and history" (Seidman 1996: 6).

From its British origins, at Birmingham University’s Centre for Contemporary Cultural Studies (CPCS) in the early 1960s, cultural studies had a Neo-Marxist flavor, but its structuralist themes gradually evolved "to a perspective featuring the centrality of symbolic production, knowledge, and cultural conflict in contemporary western societies" (ibid., pg. 11). American social interactionism and a stress on ethnographic method also were adopted as ways to
gather and analyze data that were congenial to CCCS interests.

British cultural studies also drew heavily from the French social theorists, typified by Baudrillard, Lyotard and Foucault, who deviated from the traditions of both Marxism and sociology (ibid.). Moving somewhat tardily into the United States, cultural studies drew heavily on both cultural anthropology and on the intellectual malaise which followed the assassinations and riots of the 1960s. American cultural studies have developed on the fringes of, and even outside sociology, and Seidman wonders why American sociologists have

...resisted making the semiotic, Foucauldian turn, especially at the very moment when European theorists look to America as the key site for a potentially second great trans-formation of Western societies? (ibid., pg. 12)

The author is neither against sociology nor unequivocally for cultural studies, and the boundaries between them are, at any rate, indistinct. He feels that sociology needs "a certain critical reflexivity" to relativize its seeming claim to provide "a privileged access to the social universe" (pg. 19). This relativization is part of "a larger project of thinking about what social knowledge might look like if we abandon or seriously rethink a modern Enlightenment framework" (pg. 21).

Postmodern Social Inquiry

David R. Dickens also traces the development of cultural studies from Richard Hoggart’s (1957) shifting of cultural debates in Great Britain away from a rigid opposition between elitist high culture and lowly mass culture toward a more serious consideration of the value and meaning of mass cultural experiences" (Dickens 1996: 28, citing J. McGuigan 1992: 49).

More recently, cultural studies have become preoccupied with what Jean Francois Lyotard called, "the postmodern condition" (Lyotard 1984 [1979]). Dickens sees postmodernism in sociological terms as "a multiplicity of institutional, interactional, and identity crises... in contemporary societies" (Dickens 1996, citing Crook, Pakulski, and Waters 1992).

The ethnographic methodology stressed by cultural studies is seen as especially appropriate to deal with the postmodern condition, as long as it avoids the attribution of "scientific or objective status" to ethnographic accounts (Dickens 1996: 29).

Deconstructionist textual critiques and "experimental ethnography" of this kind "expand the methodological horizons of social inquiry and radically revise its mode of presentation... to develop more innovative techniques for social and cultural analysis" (ibid., pp. 29-30). Although

...the postmodern critique denies the possibility of 'objective,' scientific truth in ethnographic accounts, its most prominent ethnographic practitioners instead advocate a notion of truth as conditional which is remarkably similar to that found in the pragmatist philosophy of the classical socio-logical interactionists. (Dickens 1996: 30)

The relation of all this to communication is made explicit by Dickens.

Substantively, it emphasizes the heightened importance, even centrality, of culture in the structuring and functioning of everyday life. Culture, especially through the influence of the new informational and communication technologies., does indeed now seem to reign supreme. (ibid., pg. 31)

IV. Risk Aversion


A Not-So-Positive View

In two earlier books (1991 and 1995) Henry Perkinson tried to show the positive side of the development of communication technology. His latest book deals with some of the not-so-positive cultural effects of the computer, the latest of four "dominant media" that have, in his view, defined human culture.

The four media — speech, writing, television, and the computer, each in its own period of dominance — have determined "the amount of control over information, and the degree of accessibility to information" people have been able to exercise (Perkinson 1996: 2).
The earlier "dominant media" facilitated cultural progress. Speech, for example, enabled people "to create a human culture", while writing enabled them to create civilization (Perkinson 1995). Television, although much maligned by some observers, "helped uncover some of the moral inadequacies in modern culture," and it "also helped reveal some of the immoral consequences of modern science," according to Perkinson (1991, as described by him in 1996: 4).

Although computers have facilitated information storage and retrieval, reduced the time needed to accomplish tasks and made distances almost negligible in certain activities, the same author feels that "the most profound impact of computerization is the mathematization of our culture" (Perkinson 1996: 4).

He goes on to show how this fits into the evolution of human communication.

We can describe culture and explain human goings on in three ways: by means of language, by pictures, or by mathematics. We have used language and pictures since pre-historic times, but until recently, few, except for some social scientists, have used mathe-matics for this purpose. But, as a result of the proliferation of computers in the last decades, it has become more common to encode culture in statistics, in algorithmic programs, and in linear and nonlinear equations — all of which gives us new ways of looking at our culture. (Perkinson 1996: 4-5)

**Stimulation of Fear**

This mathematization has had many beneficial effects. We have been able to make more accurate estimates of demographics, social problems and trends. We have a wealth of new information about society at our fingertips. Society and culture are spread out before us in all their complexity. But this has a downside, which provides Perkinson with his main theme:

By encoding the culture in mathematics the computer has revealed that in this society we are all less protected than we believed ourselves to be. By quantifying the goings-on in our culture and presenting them in statistics plotted on charts, graphs, and tables, the computer has revealed that we are all threatened by heretofore unrecognized risks to our health, safety, and well-being. (ibid., pg. 5).

We may have better health care than ever before. The streets may actually be safer, with both accidents and violent crime declining. Food may be more abundant, varied, sanitary and healthful than in the past. We have less to fear from the weather because of better forecasting. A much more concerted effort on a broader front is being made to preserve the environment. Despite all these pluses, the computerized data emphasize the minuses, which we used to be able to ignore. We have less to fear, but we fear it more. We may have only a one-percent chance of falling victim to a particular form of disaster, but the computer reminds us that the one-percent chance is there and could devour us at any time.

**Reaction**

The result of these fears has been a reaction of "risk aversion" which may initiate defensive responses that are out of proportion to the actual dangers. They may actually create greater dangers, as well as a prevailing climate of malaise. In the United States, many cases of children caught carrying weapons to school arise not because of aggressive intent but because the child fears attack in an environment perceived as hostile.

Issues which might have been resolved in the past by compromise — if they were regarded as "issues" at all — now often become life-or-death causes for various interest groups. Politicians, in particular, are affected and frequently neglect to confront important issues squarely because of fears of alienating one or other group which the polls have shown to be significant in voting. Politicians, "confronted with conflicting demands from voters — backed by computer-generated numbers... become cautious." They avoid serious issues, and merely "reflect the opinions of their own constituents in order to win reelection" (Perkinson 1996: 156).²

**Idealized Egalitarianism**

But computer-generated risk aversion affects far more than politics. The author sees a mathematicized egalitarian ideology at the root of the issue. "Egalitarianism maintains that whenever and wherever any person or group is at more risk than others, or at less risk than others, then the system is at fault..." (pg. 172).

In seeking to move towards an "ideal" egalitarian society, intellectuals have embraced an epistemological relativism, which lies "at the heart of postmodernism" and "asserts that since we can never demonstrate any proposition to be true, then all propositions have equal epistemic standing — none are privileged" (ibid.). Computers did not originate relativism, but Perkinson feels they have hastened its growth in the humanities and social sciences (ibid.). And, "it is a short step from
epistemological relativism to ethical relativism, which holds that no person, or group of persons, and no kind of conduct should be privileged" (pg. 173).

Perkinson feels that risk aversion in environmental protection, health and safety "curtails the growth of the society," efforts to control "risky" economic activities have "curtailed economic growth," and the all-too-evident effects on government leaders "has precipitated a crisis of democracy that threatens continued political growth" (pg. 173).

**Constructive Responses to Risk**

But the author, as he earlier had said about television (Perkinson 1991), does not feel that computers are bad, only the ways we are responding to them. At least, the computer "has revealed that the world is more complex than we ever imagined. The computer has made us aware of how ignorant we are" (Perkinson 1996: 174).

Computers have increased our awareness of risks, but

...this increased awareness of risks need not lead us to risk aversion. Instead, it can lead to conscious and deliberate risk taking, one of the burdens of civilization. Without risks, there can be no growth, no progress—no economic or intellectual growth, no political or social progress. (Perkinson 1996: 178).

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The failure of either candidate to address the real issues during the presidential campaign debates of the 1996 U.S. election is one of the most serious recent examples of this tendency.

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**V. The Historical View**


"Two Cultures"

Tensions between the technological and humanistic approaches to knowledge have long been recognized. They came to a climax in the debates about the "two cultures" between F. R. Leavis and C. P. Snow during the third quarter of the twentieth century (Snow 1959; Leavis 1972: 41-99); but, according to Richard Tarnas, the tensions go back at least to the beginnings of the Scientific Revolution and the Enlightenment. One cultural pole "stressed rationality, empirical science, and a skeptical secularism," while the other, stemming from the same classical and Renaissance roots, became the "Romantic" tradition, expressed in poetry and other imaginative literature, music, and a large portion of modern philosophy, and emphasized "just those aspects of human experience suppressed by the Enlightenment's overriding spirit of rationalism" (Tarnas 1991: 366).

As Tarnas summarizes the two orientations, "While the scientist sought truth that was testable and concretely effective, the Romantic sought truth that was inwardly transfiguring and sublime" (pg. 367).

Each succeeding generation continues to feel this tension in varying ways, and it remains strong, though latent, in the distinction between information and communication which Walter Ong has highlighted in the feature article in this issue of *Communication Research Trends*. The most notable characteristic of the way the tension is manifested in the postmodern mind is the coexistence, in that mind's "maelstrom of unresolved diversity," of elements from past expressions of both polarities.

Hence any generalizations about the postmodern mind have to be qualified by a recognition of the continuing presence or recent resurgence of most of its major predecessors. Various still-vital forms of the modern sensibility, of the scientific mind, of Romanticism and the Enlightenment, of Renaissance syncretism, of Protestantism, Catholicism, and Judaism --- all of these, at various stages of development and ecumenical interpenetration, continue today to be influential factors" (Tarnas 1991: 403).

The same author goes on to say that to these have been added not only other Western elements but also contents from non-Western traditions around the globe and dating back as far as the Neolithic, "all gathering now on the intellectual stage as if for some kind of climactic synthesis" (pg. 403).

**The Accumulation of Technologies and Information**

This reflects two facts about communication revolutions which Walter Ong has described elsewhere
(1982, *passim*, but especially pp. 78ff.). First, new communication technologies supplement and alter older technologies rather than replacing them. Second, the invention of writing and subsequent technologies have made possible an accumulation of information unimaginable in primary oral cultures which were entirely dependent on memory.

This accumulation of information and the orderly manipulation of it that writing made possible in turn brought about drastic changes in human thought and gave birth to civilization and intellectual life as we know it. Furthermore, the written text acquired a level of authority which was unchallenging and could be appealed to in a way unparalleled by any authority in a primary oral culture (*ibid.* 78-79). "It is written..." became the prefix to appeals to written authority in literate cultures, and only recently, with the rise of electronic cultures, has it come to be seriously challenged.

**Divergence and Integration**

Tarnas' description of the postmodern mind suggests the increasing difficulty of dealing with our brimming reservoir of information. Competition for attention among all these perspectives has led inexorably towards a relativistic mentality unable or unwilling to choose among their many irreconcilable claims. But the human need to create order out of intellectual chaos has brought about still another dialectical movement.

Two antithetical impulses can be discerned in the contemporary intellectual situation, one pressing for a radical deconstruction and unmasking — of knowledge, beliefs, world views — and the other for a radical inte-gration and reconciliation. In obvious ways the two impulses work against each other, yet more subtly they can also be seen as working together as polarized, but complementary, tendencies" (*Tarnas 1991: 407*).

It is this same sense of a newly evolving synthesis which has given Ong his positive perception of the new "secondary oral culture," as described by Thomas J. Farrell (*Gronbeck, et al., 1991: 25-43*). Farrell argues that secondary oral culture provides unparalleled opportunities for self-awareness, magnanimity, responsibility, reasonability, and the development of a "world-cultural consciousness" (*ibid.*, pp. 207-209). Properly used, then, the resources offered by the secondary oral culture can give us the capability to live and thrive in the globalized "world system" which the electronic revolution has created.

**VI. The Tradition Continues**

Dennis L. Weeks and Jane Hoogestraat (eds.). *Time, Memory and the Verbal Arts: Essays on the Thought of Walter Ong.* Susquehanna, PA/Cranbury, NJ: Susquehanna University Press/Associated University Presses, forthcoming (with permission of the publisher).

**Not a "Theory"**

In his introduction to this latest book discussing the work of Walter J. Ong, Dennis L. Weeks notes Ong's explicit denial that he is trying to develop any kind of "theory":

His own work on orality-literacy issues... he regards as reportorial and interpretive and necessarily incomplete, not as an attempt to develop a comprehensive theory. (*ms.* pg. v).

**A Useful Model**

Nevertheless, the model of an evolution of communication and information technologies and their cultural ramifications through four stages — from orality, to writing, to printing, and finally to the secondary orality of the "information age" — which Ong developed has proven of value to many scholars in their efforts to describe how human consciousness has changed through time and to speculate about how it continues to change.

For example, John Miles Foley, Director of the Center for Studies in Oral Tradition at the University of Missouri-Columbia, has been especially interested in applying Ong's insights to his continuing exploration of dimensions of orality/literacy studies, as editor of a festschrift for Walter Ong, published as a special edition of *Oral Tradition* (*Foley 1987*), and in his contribution to Weeks' volume (forthcoming: *ms.* pp. 122ff.).

**The "Fictional" Audience**

In the latter, Foley develops Ong's seminal observation that a writer's audience must "fictionalize itself" to play a "role" assigned by the author (citing Ong 1975). Drawing on his own field studies of the epic tradition of the Eastern Slavs, Foley shows how
this "fictionalization" in the oral performance of an oral "singer of tales" is more than a pure fiction, but rather a process of accommodation between the bard and his audience in which they establish a presence or immanence to each other within their own context, which a later audience, depending entirely on a transcription — and itself not "fictional", but real in its own context — may find difficult or impossible to interpret with the presentation's original meanings. Nevertheless, "each stage subsumes what went before," so that the "enabling event of performance and the enabling referent of tradition" persist into textualization by preserving something of the "precious context" of the original. If that context is lost, the text then becomes only a text, without oral roots, and therefore something entirely different (in Weeks, forthcoming, ms., ca., pp. 131-133).

The Emergence of Literacy
Two of the contributors juxtapose the views of Ong, Claude Levi-Strauss, and Jacques Derrida. Derrida has attacked Levi-Strauss' drawing of a sharp distinction between people without writing and those with it, describing such a distinction as an "ethnocentrism thinking itself as anti-ethnocentrism," according to Julie Stone Peters (in Weeks, forthcoming, ms., ca., pp. 1-2).

Levi-Strauss is portrayed by some as "phonocentrist" and "chirophobic," allegedly having regarded writing as chiefly a social and cultural control mechanism.

Derrida, on the other hand, tends to deny the distinction between oral and literate cultures, broadening the meaning of "writing" to include almost any inscription or other means of cultural expression (ibid.).

Jane Hoogestraat says that Derrida sees writing as originating in notations dating back to the very origins of language itself, and indistinguishable from oral language (in Weeks, forthcoming, ms., pg. 48ff.). Hoogestraat holds that the seemingly sharp difference between Ong and Derrida on this point is more apparent than real. Writing from the perspective of feminist and post-colonial theory, she praises Ong for emphasizing orality as a distinct cultural state.

Ong's work holds so much promise precisely because it acknowledges the category of orality as a category for imagining the language and culture of others whose language is either very different than our own or whose language has not survived. (ibid.)

Of course, Ong admits elsewhere that such reconstructions cannot be perfect, noting that describing a purely oral mentality to a literate person purely in terms of writing would be like describing a horse to a person who had never seen one by likening it to an automobile without wheels (1982: 12-13) — a very problematic approach, indeed.

PERSPECTIVE

Today, the information available for human use is, if not infinite, at least in the practical order unlimited. We have more than we know what to do with. On the other hand, communication is finite. New technologies have made communication much faster and more convenient than in the past, but it remains limited by time, available media, and probably most of all by the difficulty of interpreting, evaluating, prioritizing and otherwise processing the vast quantity of information to which we now have access. Inability to process information — to reduce it to terms which can be used in meaningful human communication — creates a chaotic surplus of unused information, which remains an unknown factor and potentially a worry and a threat.

Walter Ong suggests that the increased technical ability to communicate may, in fact, have a numbing effect on genuine human communicative interaction. He adds that despite our vast array of technical means for managing information the only means for doing so which offer any degree of satisfaction must involve the essentially human and non-technical "tools" of personal and group interaction and mutual help which have been used for thousands of years to grapple with the much smaller bodies of information available earlier.

One conclusion that seems to follow from this is that if the technologies and the information they supply cannot be reduced to human scope and organized in ways which can be interpreted in human terms they will be not only useless but damaging to the well-being of humanity. Inevitably much of the information potentially available to us will have to be systematically ignored, while the most usable and humanly constructive information is selected and attended to.

Need for Priorities

An initial need is for prioritization, to approach the daunting work of selecting out of the unexplored mass
of information those limited contents which will be of greatest value. Technical means for helping accomplish this are obviously necessary, given the vastness of the task. But the technologies of prioritization themselves must be prioritized, lest the whole process become meaninglessly mechanical. They can only, ultimately be prioritized by humanistic means, according to human judgements which take account of the whole human condition and its many needs—latent as well as overt; subtle as well as obvious; spiritual, aesthetic and psychological as well as material and physical.

The Humanistic Imperative

Ultimately, it seems, the whole process of information storage, retrieval and use must be controlled by human minds which have been broadly educated in the humanities and liberal arts in order to keep it meaningful and constructive. Otherwise, it can quickly degenerate into a digitized chaos, wherein the billions of open and shut switches carrying the information lose any human significance they may have promised to yield.

But all these warnings about the ways the new technologies should be used do not detract from the promise they offer for more effective realization of our human capabilities. The development of electronic communication media, like major technological advances in communication in earlier ages, has enforced cultural changes not only in communication but in every aspect of our lives. During the past century humanity has been going through the initial stages of a third great intellectual "revolution" or "paradigm shift"—a change in mentality and forms of thought and social organization equivalent to those occasioned first by the invention of writing and then of printing. The first made civilization possible. The second brought about the Industrial Revolution, the Enlightenment, and participatory democratic government, among other things. What changes the third will bring we can only guess, at this early stage, but their scale and comprehensiveness cannot be doubted.

References to the Review Article


Afterword
By W. E. Biernatzki, SJ, Editor

Walter Ong and many other contemporary observers of cultural change would agree that one of the great historical shifts in human intellectual history is now taking place. At its core are the technological changes in communication and in information storage and retrieval which have become so evident in the past few decades. Although these are technological changes, they affect the ways we think and live — just as similar changes have done in the past. The development of the ability to speak and the invention of writing and of printing each brought about drastic changes in the modes of thought and lifestyles of everyone who has lived since they occurred.

A sweeping historical change of such magnitude inevitably puts pressures on institutions which have been structured to meet the requirements of an earlier cultural-historical period. Some of these have been highlighted by the authors cited in this issue of Trends.

The problem of relativism has been central to the postmodernism and deconstructionism debates, and it appears to be exacerbated by the increasing availability and fragmentation of information sources. On the other hand, the contradictions inherent in extreme intellectual relativism and the social destructiveness of extreme moral relativism have caused the pendulum to swing in the other direction, for many. The quest for generally acceptable grounds on which to base a new moral consensus may be long and painful, but it seems to be demanded by the universal peace a globalized society will require to keep from destroying itself.

Although relativism must have its limits, traditional sources of authority and institutional structures are undeniably under intense pressures. Authority, as such, and institutions, as such, will always be present; but both the replacement of our vertical communication patterns by intensified horizontal communication and the almost unlimited availability of information to anyone who wants it will threaten existing hierarchical structures.

In addition, hypertext and information availability in general pose severe threats to the authority of the written and printed word. "Book religions", based on literal interpretations of sacred texts, must take special note of this pressure. Ziauddin Sardar (1993: 57) has noted how the power of Islamic scholars (ulama) is under threat from both printing and electronic media, as sacred texts which previously had depended on the scholars for interpretation now become available to all Muslims, and open to interpretation by all. A similar situation occurred in sixteenth-century Western Christianity, when printing made the Bible available for interpretation by all, thereby paving the way for the Protestant Reformation (Edwards 1994). In the present situation, all fundamentalisms may face this problem.

Community-based religious hierarchies, such as those of the Catholic and Orthodox churches, also face structural challenges in the present context, but changes — albeit possibly radical changes — in their structures could allow them to adapt more easily to new circumstances than could religious institutions which base all their authority on narrow interpretations of particular texts. The greatest danger to the more hierarchical institutions would arise from their failure to see the need for appropriate changes and to make them early enough to avoid disruptive reactions within their own communities.

A need that is more immediate and more amenable to practical action is for prioritization in our individual and communal communication and information-seeking behavior. As Walter Ong has pointed out above there is no substitute for a broadly-based liberal education as the starting point for establishing truly humanistic priorities in this area. Such an education having been achieved by as many of the population as possible, they can then use their powers of discrimination to sort out the kinds of information they need and the most efficient ways to acquire and use it. They also can determine which of the many available communication channels they should access and which they should ignore, in order to ensure a coherent communicative situation for themselves, their families, and their institutions and communities.

Reliance on humanistic criteria will help each individual, family and group choose those data bases and communication routes which will give them not only specialized information, wanted for their professions or other special purposes, but also the generalized information needed for background knowledge and for full social and political participation. Despite current imbalances in media contents and imbalances which can arise from personal inclinations, the humanistic perspective should enable one to choose the most constructive relationships to cultivate in both the cybernetic world and the face-to-face world.

References to the Afterword

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**Acknowledgements**

Denis E. Daly, SJ (St. Louis)
John J. Pauly (St. Louis)
Julien Yoseloff (Cranbury, NJ)

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**Note: Gazette Changes Publisher, Editor, Board**

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**Upcoming Conference: The Second International Conference for Marketing and Corporate Communications**

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**Book Reviews**

Reviewers:

- W. E. Biernatzki, SJ (WEB)
- Paul J. Duffy, SJ (PJD)


This classic study of American "national character" first appeared in the mid-1980s. It has now been updated by the addition of a lengthy (pp. vii-xxxiv) new introduction, with the title, "A House Divided."

The decade since the first edition is typified as one of a growing malaise. In addition to the polarization suggested by the title, "everywhere we find uneasiness about the soundness of our society and concern about its future" (pg. viii). It affects Americans' perceptions of most of their institutions, officials, and even religious leaders.

An underlying factor in this development is the individualism discerned not only by *Habits*, in 1985, but also by Alexis de Tocqueville, in the 1830s.

"...we are united, as it turns out, in at least one core belief, even across lines of color, religion, region, and occupation: the belief that economic success or misfortune is the individual's responsibility, and his or hers alone. (pp. vii-viii)"

This individualism is a basic assumption, taken for granted as a root paradigm by Americans, but the authors suggest that it may be at the root of their problems (pg. viii). Many have regarded individualism as a "self-sufficient moral and political guide... Yet many of us have felt, in times both of prosperity and of adversity, that there is something missing in the individualist set of values..."

In both the biblical and civic republican traditions, which also have been strong since the foundation of the nation, there is a key point of connection which "sets them off from radical individualism." It "is their appreciation for the social dimension of the human person" (pg. ix). But now there is a "crisis of civic membership" which threatens to obscure the social dimension. This crisis means "that there are, at every level of American life and in every significant group, temptations and pressures to disengage from the larger society" (pg. xi).

This situation has led to a threat to personal identity, since "the confident sense of selfhood that comes from membership in a society in which we believe" has been threatened. It also has led to a depletion of "social capital... features of social organization, such as networks, norms, and trust, that facilitate coordination and cooperation for mutual benefits" (pg. xvi, quoting Robert Putnam).

These flaws already may have been present in the early 1980s, but the authors
are inclined to believe that tendencies that were not yet entirely clear in the early 1980s when Habits was written are now discernible and disconcerting.

We believe that the culture and language of individualism influence these trends but that there are also structural reasons for them, many of which stem from changes in the economy. (pp. xvii-xviii).

Whatever their causes, the dangers of losing self-discipline and a sense of community were spelled out by John Winthrop, in a sermon in 1630.

Winthrop warned that if we pursue 'our pleasures and profits' we will surely perish out of this good land. Under the conditions of today's America, we are tempted to ignore Winthrop's advice, to forget our obligations of solidarity and community, to harden our hearts and look out only for ourselves. (pg. xxxv)


According to one magazine historian, 22,000 magazine titles (including in-house, trade and PR journals) are published each year in the U.S.A. At one major sales outlet, over New York's Grand Central Station, 125,000 magazines are sold each day. There are 225 classifications of types of magazines, and the 165 leading magazines account for 85% of the industry's revenue. These figures, from the introductory overview in *The Magazine Publishing Industry*, give an idea of the variety and vitality of U.S. magazine publishing today. The three authors of this comprehensive study of the industry write from their extensive experience in the business, editorial, production, advertising and public relations areas of magazine publishing.

They trace the history of the magazine's development, noting especially those people whose innovative ideas and skilful adaptations successfully met the challenges to the magazine's existence posed first by radio and then by television. One chapter examines the business dimensions of the industry, with a profile of the business side of a typical publishing company. Other chapters deal with: publishers and their magazines; the editorial principles and practices needed for a publication's success; magazine circulation principles; and the advertising sales aspects of the business, with case studies to illustrate the operating principles. A 50-page history of magazine production technologies describes developments in printing from its earliest days up to the latest digital technologies, with a section on production economics today.

Two chapters, on the present and the future, round off the book. The first, "How Magazines Are Made", follows the magazine production workflow from the first stages of treating editorial, artwork and advertising copy through to the final stages of 'binding, stitching and distribution'.

The second is about the magazine of the future. It examines issues such as: the birth of the electronic page, CD-ROM, the online magazine, circulation and distribution, and what is needed to make a career in magazines. It also contains information on how to get started in the industry, and lists the main U.S. trade associations. There is a long glossary of magazine publishing terms, and a bibliography covering thirteen subdivisions of the subject, ranging from editorial, circulation, financial, and legal aspects of the business to employment and business forecasts, new media technology and environmental concerns.

---PJD


This recent addition to the Communication and Human Values series contains 18 papers discussing the role and influence of television in South, Southeast, and East Asia.

In the three chapters of Part I, the global context is described from the perspective of the rapidly changing international situation with its attendant debates about such current themes as globalization, culture, and the "information highway."

The second part discusses particular cases involving structures and themes in the television industries of eight countries: India, South Korea, Pakistan, Singapore, Malaysia, Thailand, Hong Kong and Sri Lanka.

Part III contains six papers that consider "national issues and experiences" — three focussed on India, one each on Hong Kong and Malaysia, and one, more theoretical paper on "cross-cultural intelligibility of the visual in television."

A concluding part (Part IV) consists of a single chapter by the two British editors on the future of television as it may be affected by the open market policies embodied in international agreements, especially GATT (the General Agreement on Tariffs and Trade). According to the authors, the Uruguay Round of GATT "sometimes appears to have ushered in an era in which television will become a commercial commodity, divorced from any special cultural significance." (pg. 343).

Describing an example which might serve to illustrate this concern, John V. Vilanilam describes the "socio-cultural dynamics" of Indian television as it moved from the public broadcasting concept of the much-researched Satellite Instructional Television Experiment (SITE), in 1975, towards an increasingly privatized reality today (pp. 62-90).

Shin Dong Kim points in his paper to one of the new conditions created by globalization, as the "national" identity of multinational companies and their proxies becomes more and more obscured by both ownership and management structures which cross and criss-cross international
boundaries (pp. 94-99).

Harking back to a longstanding, but persistent problem, Keval J. Kumar presents a critical analysis of the international news transmitted by the Indian public network, Doordarshan, which "makes little effort in gathering and processing international news," and consequently is heavily dependent on western news sources (pg. 282). --WEB


In a century of nightmares the sinking of the Titanic, the night of April 14-15, 1912, after striking an iceberg in the North Atlantic, was, in Paul Heyer's words, "our century's first collective nightmare" (pg. ix). The almost archetypal character of the event has kept it as a recurrent topic of media interest throughout the century. It "endures as our century's most persistent reminder of the danger in underestimating nature and overestimating technology (ibid.).

Heyer notes that both the event and its subsequent mythological development have been closely linked to communication technology. The links range from the distress signals radioed by the ship in Morse code, and imperfectly responded to, down to televised reports of the hi-tech search for the wreck and various fictional accounts stemming from it — in novels, films and television — which continue to appear.

The book's first six chapters (Parts I and II, pp. 1-62) discuss the effect the tragedy had on the regulation and development of maritime communication. Wireless, whose value had been debated previously, became recognized as essential emergency equipment for ships. This increased attention to maritime radio led to comprehensive legislation about radio in general and to international agreements about its use. The sinking can be said to have given a considerable boost to the developing radio industry.

Part III (pp. 63-101) shifts to the story — the longest-enduring as front-page international news in the twentieth century (pg. 63). Cable and wireless spread the news with a rapidity unparalleled up to that time. "In terms of news dissemination, the Titanic disaster can be seen as the beginning of what the media guru Marshall McLuhan called the 'Global Village,' though he coined the term with 1960s satellite communication in mind" (pg. 64). New York press coverage of the sinking is discussed in detail.

The four chapters of Part IV discuss "disaster as metaphor," first mentioning some of the references to the Titanic in literature, then some films about it, then efforts to find, film and salvage the wreck. Finally, the author speculates on aspects of the Titanic as myth, asking especially why the story has developed into one of the dominant myths of our time, with parallels in Greek tragedy and Melville's Moby Dick. "Overweening pride, overconfidence in technology's ability to challenge nature, turns the Titanic myth into an inversion of the Biblical story of Noah's Ark:"

Placing his faith in God and avoiding the excesses of the antediluvian era, Noah, along with his extended family and their menagerie, were spared. In the story of the Titanic faith was placed in the conceits of the modern world — technology and inevitable progress. In yielding to their excesses, the ship perished. (pg. 158). --WEB


Karaoke, the Japanese-originated but now worldwide phenomenon of amateur singing before a group to recorded musical accompaniment, is used by first-generation Chinese-Americans to construct their own cultural identities in their challenging new environment.

The author reports on ethnographic research in three Chinese-American communities: a Hong Kong Cantonese community in New York's Chinatown (pp. 34-53), a Taiwanese community in an affluent New Jersey suburb (pp. 54-75), and a Malaysian Chinese community in Flushing, New York (pp. 76-97).

Karaoke is performance without a clear-cut separation between audience and performer (pg. 12). Consequently, the relationship between performer and audience is different from more sharply-defined performances, and, in the Chinese-American context, presents special opportunities for the enhancement of each group's identity.

The forms, contents and uses of karaoke differ among the three groups studied by Lum. Cantonese opera singing, to music recorded in Hong Kong, is popular among the Manhattan Cantonese, continuing the longstanding popularity of Cantonese opera in Chinatown, but it has tended to replace the live musicians who previously carried on the opera tradition in the area's Chinese restaurants (pp. 45-46).

The New Jersey Taiwanese do not have as defined a musical tradition as the Manhattan group. They tend to use karaoke as a status symbol. They are upper middle to upper class professionals, many with six-figure incomes. Private karaoke clubs and galas, some with social dancing as well as karaoke singing are special characteristics of this group, developed even to the point of karaoke ballrooms in affluent private homes (pp. 66-69).

The Malaysian Chinese of Flushing have come, for the most part, from economically deprived families in Malaysia — and even include some illegal immigrants. Life in the United States continues to be difficult, and often "humdrum" and socially isolated for them, and karaoke — on occasions such as the birthday parties held for a 55-year-old woman, which Lum describes — are, for them, an occasion for

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temporary escape into a more interesting and congenial "social and symbolic heaven" (pp. 76-97).

"This book is part of an ongoing research program on the cultural history of Chinese-language media in the United States" (pg. 114), which includes three earlier publications by Lum, an assistant professor at Adelphi University, Garden City, New York. --WEB


From a background of 42 years in journalism Davis Merritt argues the need for a fundamental change in journalism for it to serve democracy — or public life — in a constructive way. He begins with two assumptions: public life in the U.S. is not going well, and journalism is in trouble. He notes the recent steep decline in people's confidence in the news media, and the large number of people in various polls who believe the news media fail to advance solutions to society's problems and, in fact, obstruct attempts to solve them. He draws parallels between the troubled state of journalism and what he sees as the troubled state of democracy, and offers a solution: public life can be enhanced by a more widespread creative practice of 'public' journalism.

Working with the premise that journalism has "the power to cultivate or thwart a healthy public life", Merritt argues that journalism and public life "are inseparably bound in success or failure", and that "the way journalism operates fosters failure more often than success" (pg. xvii). In five chapters he traces the development of America's journalistic culture from the 1950's, when he started in journalism, through to the 1990's, and explains why he substantially changed his approach to his work as a newspaper editor (of the Wichita Eagle, in Kansas).

Merritt contends that the new journalistic culture has created a generation of journalists who, in their professional life, have little regard for the consequences of their actions. In this 'new age' of post-Watergate journalism, toughness — not being concerned with consequences — was hailed as the 'ultimate virtue'. It was an age, too, when the adversary axiom prevailed: journalists saw themselves in a watchdog, adversarial role in their relationship with government. Many failed to see how the adversarial posture can foreclose critical thinking and become an ideology. He wants to see journalists adopt a vocabulary of values, something that will not come easily to them: "journalists are professionally uncomfortable in the world of values, where most ordinary people live" (pg. 102).

Merritt was struck by the 1980's decline in voter interest in both presidential and local elections, a decline due in large part to the candidates' failure to address the issues that most concerned ordinary citizens. He set up a system for gathering people's responses to questions about what they considered most important, and directed those questions to the candidates. He wants a public journalism that takes its readers/viewers seriously, that regularly consults their opinions and interests, that informs them about key issues and encourages them to participate actively in public life, and sees them as more than just consumers but rather as "potential actors in arriving at democratic solutions to public problems" (pg.114). All this will require substantial mental shifts for journalists, but these changes are essential if democracy is to be sustained, renewed and be the genuine thing. --PJD


Moores' aim was to examine how a new media technology — satellite television — becomes embedded in "the activities and structures of households, neighbourhoods and broader cultural communities" (pg 1). He studied three different sets of households in South Wales to discover (1) the meanings of satellite television for its audiences; (2) how a technology is used and made sense of in household and neighbourhood contexts; and (3) the consequences of its arrival for personal and collective identity. His study is also an attempt "to articulate an empirical investigation of particular social settings with a series of more general theoretical issues in media and cultural studies" (pg 1).

He surveys the literature on media reception, and relates that to the manner in which home and community are 'constructed' in modern society. He discusses methodology and explains why he adopts ethnography as his social research method. His empirical study gathers the observations of people in eighteen households in three different social settings — mainly families of middle-class professionals and skilled blue-collar workers.

His study yielded evidence of complex relationships between meaning, social difference and power. Attitudes to the new technology and its uses within households are affected by divisions of class, gender, generation and ethnicity. He concludes that satellite television, "as a technology and as a series of audio-visual texts... enters into the 'flow' of domestic existence and acquires a particular significance there" (p.72). --PJD


The present day Olympic Games have become truly a world event, not only in terms of participation by athletic teams but also because they are viewed by billions of people in practically all countries through television.
The authors view the Games and their worldwide broadcasts as "two phenomena which we consider to be of great interest for the interpretation of cultural forms in modern society. With the cooperation of other researchers from 25 countries, the authors say they have "been able to undertake a project of a breadth and dimension without precedent in Olympics research and even rare for its level of international participation in the social sciences more broadly" (pp. xv-xvi).

The three parts of the book deal with, (1) economic, organization and technological infrastructure for Olympic television, (2) "Olympism" and politics in the opening ceremony of the Games, and (3) the viewing experience of the worldwide audience. Although the focus is on the 1992 Barcelona Olympics, extensive reference to other years' Games combine to give a broad picture of the evolution of the modern Olympic phenomenon.

Topics covered include the economics of both organizing the Games and of televising them. The Olympics are a showcase for both the sponsoring city/country and the media which carry them; so the Games are preceded by massive preparations over a long period. Technological requirements must be state-of-the-art. "In fact, organizing the Games puts the entire technological capacity of a host country to the test" (pg. 46). Scheduling for a worldwide viewing audience, in 24 time zones, is be a nightmare. Furthermore, the "international television signal" fed by the host broadcaster to all the rights holding broadcasters in other countries must be neutral, avoiding "any distinctive treatment of athletes or countries" (pg. 62).

Opening ceremonies provide an especially interesting topic for cross-cultural analysis. Conditions, and the availability of particular kinds of talent delimit what can be done, but all opening ceremonies inevitably are "conceived from the outset as major televised and musical super productions" (pg. 85). Certain elements in the ceremonies, such as carrying the flame from Olympia, Greece, are essential. Baron Pierre de Coubertin, organiser of the first modern Olympics, is quoted as saying that "without such rituals the Games would cease to be 'Olympic', and would become merely large multi-sport world championships" (pg. 89).

One of the most important functions of the Games is world community-building, emphasizing the common, if broadly-stated "values and goals of modern Olympism," such as friendship, solidarity, peace, equality, human dignity, etc. However, simply showing up — participating — was the value most frequently cited by international broadcasters.

Advertising for the host country is, of course, a major motive. Koreans saw the Games as an opportunity to overcome stereotypes of their country remaining from the period of the Korean War. Spain, too, used the Games to try to erase some stereotypes. Catalonia wanted "to be understood as having a distinct political, cultural and linguistic identity relative to Spain" (pg. 167).

The relationship of the Games to commercial advertising has been an uneasy one. Sponsors, allowed to use Olympic symbols in their ads because they have made substantial contributions to the support of the games, can help the Games by giving them advance, worldwide publicity. Association with the Games is an asset for most advertisers, but advertising breaks in programming can be a disruption, and strict controls are placed on signs and other visual ads in the venue, even on contestants uniforms. These limitations may actually increase the desirability of buying advertising time on television (pp. 188-189).

Part III of the book discusses the viewing experience of the audience for the Games. Although there are other examples of "global television," the Olympics are probably the most important example, as well as one which recurs regularly every four years.

Estimates of actual viewer numbers are problematic. Although the 172 countries participating in the Barcelona Games, in 1992, had a total population of 5,342,306,000, and the few nonparticipating countries totalled only 16,038,000 population, many factors limited viewing, even among the vast majority who might be expected to be interested. For example, 71 percent of television sets are estimated to belong to only 23 percent of the world's population (pp. 211-212). Sports events of usual (non-Olympic) national or local interest also tended to be the ones most watched in the Olympics in those nations or regions (pp. 215-218). Some audiences viewed the extravagant Olympic ceremonies as indicative of the "advanced" state of the host country; while others saw them as a wasteful "celebration of conspicuous wealth" (pg. 225). Newly independent countries, such as Slovenia, found special meaning in the display of their national flag as their athletes entered the stadium (pg. 233). In Latin America, the event "adapts perfectly to the telenovela structure," with intense viewer involvement in its festivity, drama, suspense, joy and heartbreak (pg. 237).

The Olympics certainly have a special character, both among sporting events and in global communication. Little control can be exercised by the organizers over the ways television broadcasters use the international broadcast signal. The medium undoubtedly already has changed the games, and some suggest that the games be changed even more to better adapt to television. Careful study is needed to help ensure that the values of the Olympics can continue to be upheld (pp. 247-248).

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Originally published in French (Paris: Editions du Centre Pompidou, 1992), this work by a Brazilian editor is "the most complete study to date" ("Preface to the English Edition" by Ignacio Durán Loera, pg. ix) of one of the world's oldest and most vigorous national cinema industries. The French edition was originally published in connection with the "Retrospective of Mexican Cinema," held at the Pompidou Centre, in Paris, from October 1992 to February
great loss of life and loss of 200 negatives and 4,000 positives, in addition to books, scripts and other documentation. The fire was blamed on careless storage of highly flammable nitrate materials in the vaults under the theatres and offices of the library (pg. 108).

The Mexican Institute of Cinematography (IMCINE) was created in 1983, but quality continued to decline, and by the late 1980s, "the state wanted to liquidate its commitment to cinema" (pg. 109). At about the same time, however, independent production and financing began to increase, and some quality films emerged. By 1991, IMCINE had been brought under the National Council for Culture and the Arts, but its role has changed to co-production, in collaboration with private funding sources. This has reduced some of the bureaucratic inertia which hindered production under state financing.

The author of this section of the book, Tomás Pérez Turrent, feels optimistic that the current period of Mexican cinema is "stimulating," with promise of diversity, cinematographic quality, and new talent. But the precedent of erratic policies in the past, and a continuously poor distribution system, remain causes for concern (pp. 112-113).

The remainder of the book is devoted to the analysis of more particular aspects of the Mexican industry: "mythologies" which have dominated its various phases, the impact of various studios and directors, the importance of melodrama and comedy, the portrayal of history, and in-depth discussions of several major figures, including Luis Buñuel, who "liked to say that he learned how to make films in Mexico" (pg. 202). Major Mexican films are listed and described, in chronological order (pp. 225-270); and a substantial number of film-makers, with biographical notes and filmographies for each, are also listed (pp. 272-302). A chart of Mexican film production from 1906 to 1991, is supplied (pg. 303), as is a bibliography (pp. 305-311), and notes on the 18 contributing authors, 13 of them Mexican (pp. 313-315). The only index is of films cited. —WEB


The Institute for Theological Encounter with Science and Technology (ITEST), run by the Jesuits in St. Louis, Missouri, U.S.A., is designed to identify ongoing scientific developments, to analyze them from the viewpoint of Catholic theology, and, in collaboration with an international community of interested scientists, to promote dialog that
will express a vision of those developments consistent with a Catholic worldview.

Each year, ITEST sponsors workshops to explore selected topics. The two whose proceedings are reviewed here were the second and third in a series of three on closely-related global issues: food, population, and the environment. The proceedings of the first workshop, _The Science and Politics of Food_., were reviewed in _Trends_, vol. 15, no. 1 (1995).

As Robert Brungs — the Director of ITEST — points out in his foreword to _Population Issues_, the questions surrounding the topic, and many of the key words used to discuss them, represent "moving targets," subject to continual change as well as to differing interpretations. Scientific discussion of them can never be closed but must be given continuing attention and updating. Population issues provide such ambiguities in abundance; therefore careful definitions are seen as essential. "Otherwise, we end up talking at crosspurposes and can quickly begin to worry about things that do not belong to the world-as-it-is," according to Brungs (Postiglione and Brungs, _Population_, pg. 1).

Dr. David M. Byers, Executive Director of the American Board of Catholic Missions, described the kind of dialog which should prevail between faith and science in population issues. It should be a "critical interchange" conducted in a spirit of objectivity and truth-seeking, and aiming to reveal the complementarity between religion and science (_ibid_, pp. 1-14).

In her contribution to the volume, Dr. Alene Gelbard, Director of International Programs for the Population Reference Bureau, outlined the current world demographic situation and trends anticipated by demographers. Current growth rates are high, especially in developing countries, with nearly one billion being added to the world's population every eleven years (_ibid_, pg. 17). Although the growth rate peaked in the late 1960s, and has declined since then, actual numbers are projected to continue growing for the next 150 years, finally stabilizing at a world population of around 11 billion by the year 2150 (pg. 18).

Despite the highly-publicized moral objections of Catholic and Muslim delegations to some of its more extreme proposals, the International Conference on Population and Development (ICPD), in Cairo in 1994, arrived at a consensus statement with which both Catholics and Muslims could agree. Gelbard feels that this statement "represented new thinking about an old issue" (pg. 33).

The Cairo Conference "represented a new process, one much more open to non-governmental organization (NGO) participation" (pg. 34). It was followed by meetings in Copenhagen (the World Summit for Social Development) in March 1995, and Beijing (the Fourth World Conference on Women) in September 1995. Although disagreements about specific issues continued, the Copenhagen and Beijing meetings were able to build on the consensus statement developed in Cairo. They continued its focus on the definition of reproductive health, the family, and adolescent sexuality (pp. 34-36).

Despite long-term prospects for population stabilization the author recognizes that the world faces a serious problem of population growth, inevitably linked to development and environment (_ibid_).

In his presentation at the population workshop, Msgr. Diarmuid Martin, Irish-born Sub-Secretary of the Pontifical Council Justice and Peace, noted that the Catholic Church must respect the results of the science of demography. "Theology cannot substitute for demography" (_ibid_, pg. 41). On the other hand, he added, "This does not mean... that the Church cannot in any way challenge, from the point of view of its heritage and understanding of the human person, certain demographic conclusions" (_ibid_).

As an example, Martin recalled that the Vatican "objected in the Beijing documents to the unbalanced attention given to the sexual and reproductive aspects of women's health, as opposed to others which greatly affect morbidity and mortality among women" (pg. 50). He concluded that,

at a time in which many are tempted to suspect that population programs target the poorest precisely because they are poor, the Church must give a counter witness. Fundamentally, the Church must dedicate itself to the work of conversion of the minds and hearts of persons, to overcome the selfishness that is in individuals and in the structures of our societies. The comfortable life-style of the richer nations, and of the rich in the poorer nations, is one of the population problems about which we speak all too little" (pp. 51-52).

Much of the book (pp. 53-182) relates the content of six discussion sessions, in which the 34 participants dialouged about the issues presented in the three initial "essays" or position papers.

_Catholicism and the Environmental Ethos_. posed the problem of sorting out scientific facts from poorly-founded emotional debates which often mar discussions about environmental issues. It then studied how those facts relate to Catholic theology.

Five "essays" were presented, followed by discussion divided into six sessions.

In the first essay, Dr. Paul E. Lutz, Professor of Biology, University of North Carolina at Greensboro, discusses the evidence for global warming, concluding that the evidence is convincing and that major, population-wide changes in lifestyles are essential to avoid disastrous results from this and other environmental threats (pp. 8-9).

John E. Kinney, an environmental engineering consultant, is less convinced. He cites studies of ozone depletion, acid rain, and global warming in which relevant data have been ignored and programs have been deprived of funding because they did not point to "politically correct" preconceptions (pp. 20-22). The preservation of a quality environment certainly needs attention, by religious groups among others, but Kinney cautions that "the potential of religious involvement for great benefit or harm depends on the factual and scientific orientation of those involved" (pg. 36).

Walter E. Grazer, Director of the Environmental Justice Committee...
Program for the U.S. Catholic Conference, insists that environmental problems need more attention from theologians than they have received in the past. The scientific questions are complex, and the theological principles are equally complex and subtle.

Albert Fritsch, SJ, PhD (Chemistry), founder of the Center for Science in the Public Interest, does believe that "our planet is experiencing an ecological apocalypse," and that a spirituality of prophetic witness must be part of the solution (pp. 61-67).

Dr. Gary Comstock, Associate Professor of Religious Studies at Iowa State University, discusses how evangelical Christians should approach problems of ecological ethics.

As in the other workshops' proceedings, the reports of the six workshop sessions which engaged the 35 participants in the environmental workshop occupy a substantial portion of the book (pp. 87-202).

Each book contains an index and a list of participants.

WEB


The author's "purpose in writing this book... was to clarify what the qualitative method is for those scholars who want to learn to use it to conduct research or how to become better consumers of that type of research" (pg. vii). He presumes that material reality exists, "apart from our interpretation of it," and that some interpretations "are better than others" (pp. vii-viii).

The book's four parts survey the fundamental issues underlying qualitative research, major issues involved in doing qualitative research illustrated by examples from qualitative research literature, decision making in both quantitative and qualitative analysis, and problems in the critical insights involved in qualitative research including the possibility of convergence between quantitative and qualitative research (pp. 303-332).

An appendix contains 95 abstracts of communication research writings used in interpretive analysis, including text-focused research, audience-focused research, and institution-focused research (pp. 333-370). Extensive references also are supplied (pp. 371-380).

WEB


The concentration of ownership of the new media technologies in a small number of media conglomerates threatens to exclude poorer nations and groups from a rightful share in communication resources and in the information needed for genuine participation in democratic life. These same new media technologies offer great opportunities for ordinary people to communicate with one another, to reach wider worlds with the message of their needs and aspirations, to build communities, and to participate in democratic decision-making. Today's well-funded attempts to monopolize media resources and information flow can be resisted by ordinary communities using the media technologies at their disposal to develop 'globalisation from below'. In this way they can create a solidarity in the common interests of ordinary people.

These are the themes Dafne Sabanes Plou examines in her search for ways in which the media might genuinely be used to advance the cause of human dignity. The controllers of the global media resources have geared everything to profits, converting information into a marketable commodity, and thus reducing its use as a social good. The media play a key role in creating needs which then become the spur to production for a consumption-oriented economy. The media are used mainly for the economic benefit of their owners and advertisers rather than for social development, and people are seen simply as consumers, to be delivered to the commercial interests of advertisers.

Sabanes Plou develops these themes by drawing on a wide range of conversations she had with several participants in the World Congress of the World Association for Christian Communication, held at Metepec, Mexico, in October 1995. There she interviewed some of the key figures from a great variety of countries, especially some leading communication people from the developing countries. Her book gives them a voice, enabling them to explain how their countries are often adversely affected by the western-style monopoly of media technologies and programs, and how a more just distribution of media and information resources would benefit their peoples. Her book is a plea for a return to the ideals of the New World Information and Communication Order (NWICO) of the 1980s, and for its implementation in the new world of late 20th-century media technology and globalisation.

PJD


The author begins by noting that very little serious work has been done on the psychology of film, despite the "first attempt to formulate a theory of film" having been made as early as 1916, by Harvard psychologist Hugo Münsterberg (pg. ix).

Tan, of the Vrije Universiteit Amsterdam and Utrecht University, offers this book as "a contribution to the psychology of film" (ibid.) by trying "to further our understanding of the emotional experience that films
constitute for the viewer, to describe what an emotion produced by film is, and to open strands for empirical research into its determinants" (pg. x). He conjectures that the psychological study of film awareness has been neglected because it is such a complex awareness. It involves questions such as, "How can enacted sorrow stimulate real emotions in viewers?" and "What are real emotions?" (ibid.).

Both the psychology of emotion and film theory have been significantly developed in recent years, and the author now wants to bring together insights from those two fields to provide answers to the question, "What is film emotion?" (pp. x-xi). By developing a theory of the "affect structure of the traditional film" he hopes to expose "traces of the operation of film as a machine, a technology for manufacturing emotion" (pg. xi).

Basing his approach on David Bordwell's work on film narrative, the author sees narration as "the process by which fictional events are presented in an ordered and temporally structured manner" which, with its syntax, vocabulary and figures of speech produces effects in the viewer (pg. 6).

Feeling that the traditional "Hollywood" feature film provides a definable "classical norm," Tan delimits the empirical domain to that body of cinema and its "natural viewers," leaving the exploration of other forms to future research.

Chapter 2 discusses "the psychological functions of film viewing" (pp. 15-39). Primary motives are related both to the viewer's involvement in the film's fiction and to his or her appreciation of it as an artifact, which come together in an experience of both the creation and the reduction of tension. He warns, however, against drawing too general conclusions about psychological functions for several reasons, including the complexity of the relationship between motives and media use (pg. 36).

Subsequent chapters outline the theoretical background of both film and emotion (chapter 3); "the structure of interest," which is seen as a basic emotion in various theories of emotion, although it is somewhat controversial (chapter 4, especially pp. 85-87); the ways "thematic structures" (chapter 5) and "character structures" (chapter 6) contribute to interest; and "the psychological affect structure of the feature film" (chapter 7).

Rather than concluding (in chapter 8) by formulating a definitive theory — which Tan feels would be naive in an exploratory study of such a complex subject — the author limits himself to presenting "certain cohesive conclusions" (pg. 225). Foucusing on the real or unreal character of viewer emotions, he concludes that, through the creation of illusions operating in various ways and at various levels — and depending on the viewers "doing their part" — the film produces feelings which "possess the most important functional characteristic of what we regard as genuine emotion, namely, the realization of concerns despite the pressure of reason, and, above all, gaining and retaining control precedence" (pg. 250).

Extensive references and indexes are appended.

For another book on a closely-related theme see the review of Horror Films: Current Research on Audience Preference and Reactions, edited by Weaver and Tamborini, below.


"The telling of horrifying tales is as old as the human capacity to tell tales. The modern horror film is merely the latest form of such story telling," according to Dolf Zillmann and Rhonda Gibson in their contribution to this book (Ch. 2, pg. 15).

Nevertheless, and despite its venerable history, many mysteries surround the horror genre: What makes a story or film "horrifying"? Why do people want to be horrified? What are the short term and long term effects of viewing horror films on children and adults? How and why do people react differently to horror films? Are their effects damaging or beneficial to society as a whole? etc. Many more questions could be asked about the genre. The thirteen USA-based contributors to this volume try to give some answers in eleven research papers.

Chapters one and two sketch the historical and ethnographic occurrence of horror-inducing behavior. In chapter three, Barry Sapolsky and Fred Molitor describe content trends in contemporary horror films, concentrating on "slasher films," in which typically psychotic killers tend to dismember or eviscerate their victims in graphic ways. These authors note that content analyses solidly disprove several common assumptions about slasher films. For example, "females have not been found to be the primary victims... males were more often singled out for injury and death" (pg. 46). Similarly, "content analyses also indicated that sex and violence are not frequently connected in slasher films" (ibid.). The impression that women are more frequently the victims may arise from the substantially longer times devoted to showing women's anxiety and terror in the films, and less screen time to men being terrorized.

Douglas Gomery examines the economics of horror films in chapter 4, and concludes that they will continue to be substantial money makers. Increasing Japanese investment in Hollywood studios may, in fact, result in greater emphasis on horror films, since the genre has long been popular in Japan (pp. 61-62).

Joanne Cantor and Mary Beth Oliver discuss why films horrify and how different age groups are affected differently. For example, younger children are more responsive to the grotesque and fantastic, while older children and adults are more influenced by threats of global disasters and by the terrorized reactions of protagonists (pp. 69-75). The long-term effects of horror film viewing are difficult to estimate because of the ethical restraints on exposing children to such stimuli, although some self-reports suggest the long-term
survival of some fears derived from them (pp. 75-78).

Zillmann and Weaver hypothesize many differences in gender socialization of reactions to horror films. Female teenagers have been found, at a higher rate than males, to say they like horror films because they are "more stimulating than 'normal' movies," even though after watching them they "feel markedly less well, more afraid, more disgusted and they eventually had more nightmares" (pg. 89). Boys without much experience of horror movies describe attending them as "proof of courage" (pg. 90). Both males and females are attracted to the suspense they experience in the films, and "companionship in confrontation with cinematic horror" is a factor for both (pg. 91). The authors conclude that "gender-display dichotomization can be considered statistically justified" (pg. 98).

In subsequent chapters, Ron Tamborini develops "a model of empathy and emotional reactions to horror" (Ch. 7, pp. 103-123); Glenn G. Sparks analyzes reactions to horror using an "activation-arousal analysis" approach (Ch. 8, pp. 125-145); Marvin Zuckerman discusses "sensation seeking and the taste for vicarious horror" (Ch. 9, pp. 147-160); and Patricia A. Lawrence and Philip C. Palmgreen do a "uses and gratifications analysis of horror film preference" (Ch. 10, pp. 161-178).

Finally, Tamborini and Kristen Salomonson study "horror's effect on social perceptions and behaviors" (Ch. 11, pp. 179-197). This aspect has been heavily researched in many studies of the effects of mass media violence. One of the many research findings the authors report is that, given certain conditions — e.g., "perception of the scene as aggressive, perception of the aggressive behavior as justified and rewarded, identification with the aggressor, and perceived reality of the media event" — "the content of fictional horror can be expected to increase the chances that hostile actions will follow from exposure to this genre" (pp. 187-188). Extensive references follow each paper.

The related theme of the book, Emotion and the Structure of Narrative Film: Film as an Emotion Machine, by Ed S. Tan, reviewed above, should be noted.

WEB

Stefan Bamberger, SJ

Father Stefan Bamberger, SJ, the founding director of the Centre for the Study of Communication and Culture, the publishers of Communication Research Trends, passed away at the Jesuit Retreat House, Bad Schönbrunn, Edlibach/Zug, Switzerland, on the morning of January 29, 1997, at the age of 73.

As Secretary for Communication to the Jesuit Superior General, Father Pedro Arrupe, SJ, Father Bamberger developed the idea for the CSWC in a series of meetings, in different parts of the world, beginning about 1971. In 1977, he left Rome and went to London to begin the work of founding the Centre. Later, he was called back to his native Switzerland to become Provincial Superior of the Jesuits in that country.

Please pray for the repose of his soul and for the continued success of the work he so ably began.

R. I. P.