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Walter J. Ong, S.J. A Retrospective

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Communication Research Trends usually charts current communication research, introducing its readers to recent developments across the range of inquiry into communication. This issue, however, takes a different tack, looking back on the writings of Walter J. Ong, S.J., who died at the age of 90 in August 2003. Ong spent his scholarly career at Saint Louis University, where he served as University Professor of Humanities, the William E. Haren Professor of English, and Professor of Humanities in Psychiatry at the Saint Louis University School of Medicine. In a career that spanned 60 years, Ong published 16 books, 245 articles, and 108 reviews. In addition, he edited a number of works and gave interviews that further explored his wide-ranging interests. Readers interested in a full bibliography of Ong's works should refer to the web site prepared by Professor Betty Youngkin at the University of Dayton, at *http://homepages.udayton.edu/~youngkin/biblio.htm*.

From the perspective of an interest in connections among many areas of human knowledge over such a long career, he explored a whole gamut of activities by careful observations of the threads that run through western culture and by insightful analysis of what he observed. Communication forms one of those many threads in the West—perhaps the dominant one—and so it occupies a similar place in Ong's work. The tapestry Ong weaves has, bit by bit, influenced thinking about communication as well as research. And so, *Communication Research Trends* looks back on the writings of Walter Ong, S.J.

Walter J. Ong, S.J.

Perhaps surprisingly for someone with academic preparation in Classics (B.A, Rockhurst College, 1933), Philosophy (Licentiate, Saint Louis University, 1941), Theology, (Licentiate, Saint Louis University, 1948), and English (M.A., Saint Louis University, 1941; Ph.D., Harvard, 1954), Walter Ong showed an early understanding of the power of mass communication. One of the few to review Marshall McLuhan's 1951 work, The Mechanical Bride: The Folklore of Industrial Man, Ong (1952) recognized, with McLuhan (his M.A. thesis adviser), that advertising and popular communication provide an insight into contemporary culture. He also recognized the ways that communication technologies had linked the entire world. This early sensitivity to topics related to communication runs through his entire career.

Farrell (2000) has already provided a detailed introduction to Ong's work, paying particular attention to his literary criticism, media studies, and psychological explorations. Interested readers may consult that work for biographical details as well as for information regarding other key themes in Ong's writings: literary, psychological, pedagogical, and so on.

Though difficult to isolate completely, Ong's contributions to communication studies fall into five general groupings: historical studies of rhetoric; visual images and habits of thought—what Ong terms, "visualism"; the word; stages of communication media (oral, literate, and electronic); and digital media and hermeneutics. Though one might argue that his pedagogical and psychological themes also touch on communication, this retrospective will examine them only in terms of the former topics.

1. Historical Studies of Rhetoric

Ong's Harvard graduate work (1948-1954) focused on the 16th century Paris arts professor and educational reformer Peter Ramus (1515-1572). In Ong's hands, Ramus and Ramism open windows first onto the system of western education, then onto intellectual history, and finally onto human development. A significant part of those histories is the history of rhetoric. Ong's work fills in part of the gap between the classical rhetoric of Aristotle, Cicero and Quintilian, for example, and the 18th century efforts of Hugh Blair and others. The story appears embedded within the history of western pedagogy, since rhetoric fairly defined educational preparation in the Middle Ages and Renaissance (Ong, 1971c).

The study of Ramus plays a central role in Ong's thinking about communication, one that extends far beyond the history of rhetoric. From classical times through the Renaissance, rhetoric defined not only how people spoke, but how people analyzed and solved problems. In many ways, because rhetoric more or less defined education, it defined, through education, the dominant ways of thinking. Several changes occurred shortly before or during Ramus's lifetime. Ong noticed two key changes in western thought, manifest in Ramus's writing: a shift away from rhetoric (with its emphasis on probable knowledge) to logic (with its emphasis on proofs and truth); and a shift from hearing spoken argumentation to seeing a written demonstration. And Ong also noticed how printing changed the school environment. It was here that Ong first made the connection between communication form (hearing, seeing), communication media, and thought processes. Much of his later work bearing on communication explicates this initial insight.

In Ong's study, Ramus plays a three-fold role in the history of rhetoric. First, he more or less makes permanent the dismantling of rhetoric and the transfer of key elements of classical rhetoric to the province of dialectic. Second, he reinforces an emphasis on method that will continue the impoverishment of rhetoric in favor of dialectic. Third, he influences the teaching of rhetoric and dialectic throughout western Europe through the widespread popularity of his books. To understand Ong's later work, we must explore something of its origins in the history of rhetoric and the career of Peter Ramus.

A. Ramus and rhetoric

Rhetoric refers to oral expression and a preparatory analysis of issues for discussion or debate. But systematic teaching about rhetoric did not begin until people could write texts about it. And so, though the study and teaching of rhetoric depends in some ways on writing, writing itself appeared subordinate to oral expression in the educational experience of the Middle Ages and the Renaissance. "From antiquity through the Renaissance and to the beginnings of romanticism, under all teaching about the art of verbal expression there lies the more or less dominant supposition that the paradigm of all expression is the oration" (Ong. 1971c, p. 3). This pre-eminence of the spoken word found reinforcement both from the goals of the educational establishment (to train political and ecclesiastical leaders and teachers) and from the method of instruction (lecture and debate). But, as in all human enterprises, education itself redefined its subject. In the case of rhetoric, much of this redefinition had to do with the relation of rhetoric to logic or dialectic-methods of proof (Ong, 1971b, p. 81).

Ong offers an overview of the educational milieu that saw the development of Ramism and its transformation of rhetoric.

The more or less traditional five parts of rhetoric commonly adhered to by non-Ramist Renaissance textbook writers-invention, disposition, memory, striking expression (elocutio), and delivery-date from ancient Greek times. They were not five abstract parts of an abstract art then, but five activities in which an aspirant was disciplined so that he might become an orator or public lecturer-the common ideal of all ancient liberal education. In antiquity a boy was given a foundation of general information on all possible subjects (inventio). He was taught to use this material in composition (dispositio), his mnemonic skill was developed (memoria), together with his literary style (elocutio) and his oral delivery (pronuntiatio). These five activities added up to a rather complete educational program extending over a good number of years. As a training which the normal educated man received, these activities today would be called simply education, or perhaps general education.

... it was quite different in medieval and Renaissance Europe. Rhetoric, which in ancient times had been general culture purveyed in the vernacular, was now culture set within a foreign tongue; ... Rhetoric thus became chiefly a course in Latin. (Ong, 1958a, p. 275)

The education system, with its need to teach Latin grammar as well as subject matter, offered an opportunity for Ramus to combine and simplify the curriculum. Part of this took place in a changed understanding of dialectic or logic.

In tracing the run-up to Ramism, Ong notes how medieval Scholasticism had begun to develop logic in a more formal way, splitting it off from any relationship with rhetoric (1958a, p. 53). In some ways, this marked a kind of swing of the pendulum:

The relationship between rhetoric and logic over the ages has been partly reinforcing and partly competitive. Rhetoric overshadowed logic in the patristic age, yielded to it more or less in the Middle Ages (though rather less than even scholarly mythology today commonly assumes), and overshadowed it again in a different way in the Renaissance. (1971c, p. 7).

Throughout this history rhetoric referred to oral composition (from finding arguments to presenting them), while Cicero's companion art of dialectic (termed *ars disserendi* in the West) became more identified with logic (Ong, 1971d, p. 67). Gradually, people came to regard rhetoric as a kind of lesser art, good for reasoning with probabilities; logic, as scientific or mathematical reason, grew in relative importance.

In Ramus's day, Peter of Spain's Summulae logicales formed the standard text. Since medieval students consisted of teenaged boys, the treatment simplified and introduced dialectic/logic, covering "propositions, the predicables, the predicaments, syllogisms, the topics or places, and fallacies." Other tracts addressed "supposition..., relative terms..., extension..., appellation..., restriction..., distribution..., and perhaps exponibles" (1958a, pp. 56-57). What the boys received, then, was a quick introduction to a kind of grammatical logic. Though Peter of Spain at first "seems to be in the Aristotelian tradition of dialectical or rhetorical argumentation" (dealing with probable argument and probable conclusion), he quickly moves to conviction, addressing the truth claims of questions (p. 61). In his manual for logic, Peter of Spain leaves behind Aristotle's understanding "of dialectic as a rational structure, more or less involved in dialogue between

persons, made up of probabilities only" (p. 61) for an insistence on proof. Eventually he ends with a formalistic logic, applied with almost mathematical precision.

The next stage in the history of rhetoric and dialectic occurred with Rudolph Agricola's Dialectical Invention in Three Books. Agricola more or less defined dialectic for the Renaissance, presenting less an emphasis on the scientific reasoning demanded by teachers and more an emphasis on a "real-world" quality that would appeal to students and to the growing number of scholars associated with the humanist movement (p. 97). Agricola developed materials from Aristotle, Cicero, Quintilian, and other classical sources, but simplified terms. Dialectic works through speech, and so Agricola devotes his second book to the oration (p. 98). Book III continues with the effects and styles of speech. By now the art of discourse finds its home in textbooks of dialectic rather than rhetoric; rhetoric even loses its claims to invention and to a key part of invention, the "places" (loci) or topics that helped the speaker find out what to say (pp. 101-102).

This limitation of *loci* to dialectic is the critical Renaissance divorce in the chronologically uneasy union of rhetoric and dialectic. Agricola decrees this divorce, which will carry through Ramism. (1958a, p. 102)

The *loci* or places take on huge importance in Agricola and later in Ramus. They begin as headings or topics under which one can develop arguments. Here is Agricola's definition:

These things, common in that since they contain within themselves whatever can be said on any matter, they thus contain all arguments, were called by these men places (*loci*), because all the instruments for establishing conviction are located within them as in a receptacle or a treasure chest. A place (*locus*) is thus nothing other than a certain common distinctive note of a thing, by the help of which it is possible to discover what can be proven (or what is probable) with regard to any particular thing. (qtd. in Ong, 1958a, p. 118)

Ong points out that this concept of the *loci* does not address any kind of theory of cognition or epistemology; instead it relies on a visual analogy. The development of such thought ultimately established graphical representation of thought categories firmly in western civilization.

The transfer of the *loci* to dialectic also further weakened rhetoric, for no longer did those educated in

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this tradition—a tradition that had a huge impact on Ramus and, through him, on western Europe—look to rhetoric for invention. "This implied spread of dialectic to cover all discourse is made fully explicit by Agricola in his assertion that 'there are no places of invention proper to rhetoric' " (1958a, p. 101). Ramus eventually completed the move by calling these places (*loci*) "arguments" (p. 105).

Ramus also highlighted and developed Agricola's use of charts or visual aids to represent the places. While neither man was the first to do this, the printeror book-friendly nature of the charts made Ramus's use extraordinarily influential. But the use of visual representation for cognitive categories had a greater effect, which Ong describes as a conflict between visual and auditory means of knowing, a conflict manifest in the shift to logic/dialectic (and its visual places) from rhetoric with its emphasis on speaking. Dialectic, in Ramus's hands, emphasizes invention, removed as it was from rhetoric.

The reason for the difficulties which these two concepts [invention, judgment] present is that they are not traceable to two such clear-cut steps in cognition, but rather to two different ways of approaching the cognitive process. Invention sees it in terms of an analogy with a high visual and spatial component: one looks for things in order to find them; one comes upon them (invenio, 'ευρισκω). This notion is allied to the Greek (and Latin) concept of knowledge and understanding, based on some sort of analogy with vision (γιγνωσκω, *intelligere*). Judgment cannot be readily interpreted in terms of such an analogy; it is connected with judicial procedure (and thus with the categories or "accusations"), and suggests the Hebraic concept of knowledge (yadha'), which is analogous to hearing. The presence of these two items at the very center of the traditional account of the operations of the mind thus confirms . . . that any attempt to deal somewhat fully with the intellectual processes must rely on analogies between understanding and hearing as well as between understanding and seeing. (1958a, p. 114)

In many ways the history and relationship of these two ideas forms the central insight that grounds all of Ong's work. His later studies flesh out how humans define knowledge and how they develop tools to convey knowledge, particularly communication tools.

Aristotle's sense of human knowledge involves speaking. "Human knowledge for Aristotle exists in the

full sense only in the enunciation, either interior or exteriorized in language; the *saying* of something about something, the *uttering* of a statement, the expression of a *judgment*" (p. 108). Agricola and Ramus, in contrast, concentrated on visual maps. And this visualism reinforced the proof-oriented logic of Peter of Spain. Ramus himself developed this as a method, "which consists of trying to impose upon the whole axiomatic tradition of scholastic philosophy the pattern of a logic of topical invention" (p. 130). And that emphasis fit nicely with pedagogical practices, printed texts, and the need for a scientific method that would eventually serve to guarantee knowledge.

Ramus was above all a teacher and that shaped his approach to developing both his dialectic and his rhetoric in an age when printing changed the school environment. He lived at a time when science also changed the learning environment. His was a time that witnessed "a movement away from a concept of knowledge as it had been enveloped in disputation and teaching (both forms of dialogue belonging to a personalist, existentialist world of sound) toward a concept of knowledge which associated it with a silent object world, conceived in visualist, diagrammatic terms" (p. 151).

His dialectic, like that of Agricola, focused on finding terms (invention) and recasting judgment as "the doctrine of collocating (or assembling) what invention has found, and of judging by this collocation concerning the matter under consideration" (qtd. in Ong, 1958a, p. 184). The collocation (as the word implies) stresses arrangement, again a visual move.

B. Ramus and method

In tracing the history of "method" Ong reminds the modern reader that in its original Greek use, by the second century Hellenic rhetorician Hermogenes, method "means something more like mode of rhetorical organization or thought structure" or even "pattern" rather than Aristotle's "systematic investigation" (p. 231). The approach made its way through the humanists to the schools, where Ramus eventually found Johann Sturm and Philip Melanchthon using it in their logics. In these instances, method is associated with language rather than science. The part of method that underwent greatest development in Ramus is the logical process of invention through the division of definitions into their parts (p. 233).

Ramus proposed a whole series of methods things that have universal applicability. In general, his laws of method feature subsequent definitions and divisions, resulting in a nearly binary chart of breaking concepts down into smaller and smaller parts. With this almost mechanical technique of invention, and with the emphasis on visualization that such a technique supports, what is left for rhetoric?

Given his desire to sort things out clearly, Ramus removed anything from rhetoric that appeared elsewhere in his syllabus. Where Aristotle and Cicero had set up parallel structures for rhetoric and dialectic, depending on the nature of their objects, Ramus drew a strict division. Since invention and disposition (judgment) are already treated in dialectic, they cannot have a place in rhetoric. In Ramus's treatment, rhetoric can claim only elocution and pronunciation. "The fifth part, memory, is simply liquidated by being identified with judgment" (p. 270). Much of the Ramist reform of rhetoric, then, resulted from the demands of his teaching.

Ong recognizes the larger implications of Ramus's dual stress on visual organization and simplification.

In this economy where everything having to do with speech tends to be in one way or another metamorphosed in terms of structure and vision, the rhetorical approach to life . . . is sealed off into a cul-de-sac. The attitude toward speech has changed. Speech is no longer a medium in which the human mind and sensibility lives. It is resented, rather, as an accretion to thought, hereupon imagined as ranging noiseless concepts or "ideas" in a silent field of mental space. . . . Thought becomes a private, or even an antisocial enterprise. The sequels of Ramism—method and its epiphenomena, which identify Ramism as an important symptom of man's changing relationship to the universe—connect with Ramist dialectic directly but with rhetoric only negatively or not at all. (1958a, p. 291).

Ramus's rearrangement of dialectic and rhetoric both indicate what happened in the educational world of the 16th century and added force to those happenings.

C. Ramus and printing

The spread of Ramism forms the third pillar supporting Ramus's effect on the history of rhetoric. The impact of his work lies precisely in its popularity. In both the last part of his book on Ramus and in its companion volume (1958b), Ong traces "the diffusion of Ramism" through the humanist publishers. In a word, Ramus became a publishing phenomenon, the author of educational best sellers.

Because of its school-text approach, Ramus's method proved highly successful, not only in Paris, where Ramus led the Collège de Presles and also served as dean of the regius professors at Paris. His writings spread through continental Europe and England, where he influenced several generations of teachers from the Tudor period (1971d, pp. 81-89) through John Milton (1608-1674) (Ong, 1982a). His influence on the Puritans carried Ramism to New England where his educational method and approach to rhetoric appeared at Harvard University in the 17th and 18th centuries.

2. Habits of thought, representing knowledge, and visualism

In tracing the history of dialectic and rhetoric, Ong remarks more than once that rhetoric shaped the ways that people thought. Generation after generation of young boys learned from classical texts where to find ideas, and they imitated the models of expression and analysis they found in the classical texts. However, even as they thought they were doing the same thing as Cicero, they adapted to a world that had changed its mental symbols. Ong finds these "shifts in symbolization and conceptualization observable in the physical sciences"; they are related, he tells us, "to another series of shifts in the ways of representing the field of knowledge and intellectual activity itself" (Ong, 1962b, p. 69). He does not claim a causal connection but remarks on the growing emphasis on the visual, found in Renaissance astronomy, mechanics, and physics, as well as in the use of perspective in art and architecture. This same emphasis appears in "the three *artes sermocinales*, or arts of communication—grammar, rhetoric, and most particularly dialectic" (p. 69). It is a movement "from a pole where knowledge is conceived of in terms of discourse and hearing and persons to one where it is conceived of in terms of observation and sight and objects" (p. 70).

The shift appears in different guises. In his history of Ramism, Ong had already identified one: the changing understanding of the commonplaces. In the older rhetorical tradition, the commonplaces have two primary senses. First, they are the "headings" under which one sought knowledge about various topics. "These headings implemented analysis of one's subject: for a person, one might, by a kind of analytic process, consider his family, descent, sex, age, education, and the like; or more generally, for all sorts of things, one could look to definition, opposites, causes, effects, related matters, and so on" (Ong, 1977f, p. 149). But commonplaces also referred to "a standard brief disquisition or purple patch on any of hundreds or thousands of given subjects-loyalty, treachery, brotherhood, theft, decadence . . . and so on; these prefabricated disquisitions were excerpted from one's reading or listening or worked up by oneself" (p. 150). Though such passages were commonly written down in medieval florilegia, Ong follows Havelock (1963) in attributing them to a much more ancient oral tradition that valued the flow of words and constantly recycled sayings lest they be lost by forgetting.

By the Renaissance these collections had multiplied. They served a purpose in schools, where they became handy compendia of Latin for schoolboys. The Renaissance ambition to return to the classics also meant that such collections increased their value. The big change, though, is that such collections appeared in texts and their pattern of recall no longer depended on memory but on their visual arrangement on a page (1977f, pp. 161-163). The rise of the printing press transformed such collections by adding an index, by arranging things artificially (for example, in alphabetical order), by laying things out on a page. Ong terms this "visual retrieval" (p. 166) and shows how Theodore Zwinger in his 1586 Theatrum humanae vitae [Theater of Human Life] literally envisioned his commonplace collection as "scenes."

Zwinger thinks of the printed page as a map on which knowledge itself is laid out. Over and over again he compares his work to that of geographers and cartographers. (1977f, p. 174)

Ong judges Zwinger's compilation of charts, whose ideas are linked by typographic symbols "visually neat" but "the result is so complicated as to be psychologically quite unmanageable" (p. 176). Even if it were a failed attempt, it demonstrates how thoroughly western thought had shifted from oral arrangements to visual ones.

The rise of such visual organization occurs along with other changes in the history of ideas. Among them

Ong places the rise of a "system" as opposed to a "method" of thought. After tracing the history of these epistemological approaches through the medieval period and through the thickets of dialectic, he concludes:

With the method discussion at this point and the visualist tide running strong, an important shift took place in the whole notion of space, signalized if not caused by the publication of Copernicus's *De revolutionibus* in 1543. . . Copernicus's astronomy approaches the universe from the point of view of purely geometrical space, in which no direction was more favored than any other, since neither up-and-down motion nor any other directional motion had priority over other kinds, any more than it does in a geometrical abstraction. (Ong, 1962b, p. 80)

Copernicus's understanding of the cosmos opened the door for others to set aside notions of method, which involved direction (literally, in Greek, "method" is seeking a "way through" a problem, p. 82), and to embrace instead a more abstract arrangement. Such arrangements of "objects" in "space" almost presuppose the visual. Ong offers two comments:

Thinking of knowledge as governed by the diagrammatic, easily imagined, and only loosely applicable notion of system was more satisfying than thinking of it in terms of method and these conundrums [of direction, end, finding a way in unknown territory, etc.] . . .

The rise of the notion of system as applied to the possessions of the mind is only one in a whole kaleidoscope of phenomena which mark the shift from the more vocal ancient world truly an audile's world—to what has been called the silent, colorless, and depersonalized Newtonian universe. (1962b, p. 83)

The western habits of thought have become visual, disconnected from the voices and clamor of debate.

In a wonderful essay, "'I See What You Say': Sense Analogues for Intellect" (1977b), Ong summarizes the effects of visualism on thinking, going so far as to show its history in the vocabularies we use. As with rhetoric, the way we talk reveals, in some ways, the way we think. His list of visual words "used in thinking of intellect and its work" includes "insight, intuition, theory, idea, evidence, species, speculation, suspicion, clear, make out, observe, represent, show, explicate, analyze, discern, distinct, form, outline, plan, field of knowledge, object" and many others. Aurally based terms, though greatly reduced, still exist. They include "category, predicate, judgment, response" and so on (pp. 133-134). The attention to the visual marks a difference. "Because sight is thus keyed to surfaces, when knowledge is likened to sight it becomes pretty exclusively a matter of explanation or explication, a laying out on a surface, perhaps in chart-like form, or an unfolding, to present maximum exteriority" (p. 123). This, of course, stands in contrast to the interiority revealed by sound.

Ultimately, Ong tries to gather material from throughout the western tradition. "I have also attempted to show how intimately this aural-to-visual shift is tied in with educational procedures and with the transfer of verbalization from its initially oral-aural economy of sound to a more and more silent and spatialized economy of alphabetic writing and of printing from movable alphabetic type, which seems to assemble words out of pre-existent parts, like houses out of bricks" (p. 126).

Evidence for the increasingly visual quality of knowing appears throughout the literary and pedagogi-

3. The Persistence of the word

Throughout his histories of rhetoric and in the course of his sensitivity to visualism in intellectual history, Ong does not lose his ear for sound. Voice matters.

A. Voices and hearers

Ong refers to "the world of sound" and calls it "the I-thou world where, through the mysterious interior resonance which sound best of all provides, persons commune with persons, reaching one another's interiors in a way in which one can never read the interior of an 'object'" (1962a, pp. 27-28). In addition to opening up the interior, sound always signifies life. In a favorite example, Ong reminds his readers that we can see an elephant, touch an elephant, smell an elephant, or even taste an elephant without worry. But if we hear an elephant, we'd better watch out (Ong, 1967, p. 112)!

Voice is not just any sound, though. While even an animal cry signifies an interior condition, the human voice is "an invasion of all the atmosphere which surrounds a being by that being's interior state, and in the case of man, it is an invasion by his own interior selfconsciousness" (1962a, p. 28). The interior cannot be completely exteriorized, but verbal expression concal tradition of the West. Ong finds support in his study of poetry, examining what happens to poems as writers and readers adjust to texts. Where the oral and rhetorical tradition addressed an audience (literally, hearers), "the reader, using his eyes to assimilate a text, is essentially a spectator, outside the action, however interested" (Ong, 1977c, p. 222). Where the live audience "knows" through interaction in an open arena of discourse, the reader experiences a kind of insulation. This fosters a different kind of knowledge—more solitary, more reflective, a "romantic feeling for isolation" (p. 223).

Ong hints here at a much larger project, one that connects habits of thought not only with rhetoric but with the technologies of communication. From the perspective of communication, Ong repeatedly calls attention to the difference between communicating orally/aurally and visually. Though he highlights the habits of thought aligned with each, we could equally well read him as highlighting the media, something that he does increasingly later on in his writings, and something to which we will return in Part 4.

nects to a person's interiority. "Language retains this interiority because it, and the concepts which are born with it, remain always the medium wherein persons discover and renew their discovery that they are persons, that is, discover and renew their own proper interiority and selves" (p. 29). The voice giving voice to words makes a claim on us.

Whether that voice occurs in first-person speaking or whether it appears as an authorial voice, a claim occurs. The voice utters words, which both manifest the interior and connect us to one another. "Every human word implies not only the existence—at least in the imagination—of another to whom the word is uttered, but it also implies that the speaker has a kind of otherness within himself" (Ong, 1962c, p. 52). Because such words connect, they claim a relationship, the I-thou which Ong mentioned earlier. Ong ponders how this relationship can occur with literature and he traces human relationships from the face-to-face, through role playing in drama, to the voice that a reader hears. All exist within "a context of belief "—a connecting of one with another. Here, to specify that con-

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text of belief, Ong distinguishes "belief that" from "belief in," noting that voice promotes the latter. To put this in more recognizable communication terms, "belief that" refers to content, while "belief in" refers to a relationship. Speaking and literature—indeed all communication—occur within this context of "belief in," of making claims one upon another (pp. 55-57).

Without such an imitatively oral or face-to-face context to connect interlocutors, written communication cannot succeed. Voice does summon belief. But the process works both ways. Writers, too, must reach out to readers, if only in imagination. The interactivelive, interiority manifesting-nature of communication is so central that the writer must create a voice and in so doing, create an audience. Before one can write, one must imagine an audience-hearers; that is, one must re-create the role playing of voice calling on voice. In fact, readers pick up the roles defined for them by writers, often "the role of a close companion of the writer" (p. 63). Ong finds the roots of this technique in journalism. "With the help of print and the near instantaneousness implemented by electronic media (the telegraph first, later radio teletype and electronic transmission of photography), the newspaper writer could bring his reader into his own on-the-spot experience, availing himself in both sports and war of the male's strong sense of camaraderie based on shared hardships" (p. 67). Though Ong admits that "readers have had to be trained gradually to play the game" (p. 67), he insists that voice remains a part of all communication.

These explorations of sound, voice, word, and interiority tease out more of the experience of communication. The spoken word of rhetoric differs from the visual object; knowledge developed in each of these cases differs one from the other. Ong has a sense that more is going on with the word than he can quite explain.

B. Word, sound, and the sensorium

By the early 1960s, Ong had come to know the work of Eric Havelock (1963), Milman Parry (1928), Albert Lord (1960), and Marshall McLuhan (1962). Havelock describes the period as one of intense intellectual ferment for those concerned with language, oral cultures, and thought (1986, p. 25). Not surprisingly, many things fell into place for Ong. Each of these writers provided additional evidence for what Ong had noticed abut the word. Havelock's work on Greek philosophy (1963) argued that writing—the move from oral forms to written ones—began a transformative process in Greek thought, one that ultimately leads to

Greek philosophy, to objective thought, and to the kinds of analysis that reach a peak in Aristotle.

Parry's and Lord's investigations of the Homeric question—how a bard could compose and recall works the length of the *Iliad* or *Odyssey* without writing—discovered still more about oral patterns of thought. What Ong had seen in rhetoric, Lord and Parry explored in poetics. Both described patterns of thought and remembering associated with speaking.

McLuhan's attempt to put the pieces together he drew on Ong's Ramus work—showed some of the ways in which the forms of communication shape its content. In a kind of creative leap, McLuhan understood that both context and medium matter, an insight he summed up in the now famous phrase, "the medium is the message" (1964, p. 7). McLuhan pointed Ong and others toward the recognition that our own forms of communication (writing, for example) affect our own thinking and perhaps in this way prevent us from attending to oral thought.

Ong's thinking about oral/aural communication received new energy. His Terry Lectures at Yale, published in 1967 under the title, *The Presence of the Word*, lay out a wide ranging meditation on the word, both spoken and written.

Ong introduces here the idea of "the sensorium," the patterned, patterning, and coordinated world of sense experience—the use of the human senses together to communicate (1967, p. 1). "By the sensorium we mean here the entire sensory apparatus as an operational complex" (p. 6). Despite the fact that people communicate by means of all the senses, the oral/aural takes on special importance. In commenting on Heidegger's claim that language is rooted in a "primordial attunement of one human existent to another ... in 'speaking silence'," Ong observes

All this is true, and in a certain sense commonplace, but it is noteworthy that when we thus think of silence as communicating, we are likely to think of it as a kind of speech rather than as a kind of touch or taste or smell or vision— "speaking silence," we say. The reason is plain: silence itself is conceived of by reference to sound; it is sound's polar opposite. Thus even when we conceive of communication as a transaction more fundamental than speech, we still conceive of it with reference to the world of sound. . . (1967, pp. 2-3).

Acknowledging that different cultures organize the sensorium differently, Ong reminds us that people must

attend selectively to sense perception and that sound has special properties (p. 6).

The spoken word has consequences that go beyond simple communication. As we have seen, rhetoric, the art of oral thinking, is tied to cultural forms, thought patterns, and human experience. But there is more. The world of sound is a world of passing time. "Sound is more real or existential than other sense objects, despite the fact that it is also more evanescent" (p. 111). A spoken word exists in time, passing out of existence even as it is spoken (Ong, 1973/2002, p. 377). Even with this, the spoken word seems more real to people, especially as a source of power (1967, p. 114), because sound and spoken word manifest interiors and interiority (p. 117). They manifest a presence. Sound unites us—it situates us in the middle of things (p. 128), in contrast to contemplation which, as a visual activity, removes us from the immediate world. Sound fosters particular structures of personality. Here, Ong makes a strong, though somewhat intuitive claim: "Personality structure varies in accordance with variations in communications media and consequent variations in the organization of the sensorium" (p. 131). He explains:

In a world dominated by sound impressions, the individual is enveloped in a certain unpredictability. As has been seen, sound itself signals that action is going on. Something is happening, so you had better be alert. Sounds, moreover, tend to assimilate themselves to voices....A world of sounds thus tends to grow into a world of voices and of persons, those most unpredictable of all creatures. Cultures given to auditory syntheses have this background for anxieties, and for their tendencies to animism. (1967, p. 131)

Sound not only characterizes a way of communicating but also forms humans in response to it.

By calling attention to the sensorium, Ong also reminds us that depending too much on vision impoverishes knowledge, leading people to discount what knowledge comes through senses other than sight (1977b, pp. 129-131). In fact, many mental processes depend on sound.

To learn to think and understand, it is far more necessary to be able to hear and talk than to be able to see. This is a counterindication apparently denying primacy to sight in favor of hearing. (1977b, p. 137).

Here, Ong argues that vision distances: we need separation in order to see. Intellectual knowledge follows the same dynamic: analysis is a taking apart. But we also need to put together, which is the movement of predication or judgment, both actions allied to speaking and to sound. Sound surrounds us, unites us, connects us to what we know (p. 138). Sound fosters the I-Thou knowledge typical of the knowledge of persons in relationships (pp. 140-141).

Sound has religious overtones as well. In addition to his reference to animism where things are alive with sound, Ong also considers the Word of God in the Judeo-Christian tradition. Though he does not undertake a full study, Ong suggests that attention to the verbal or sonic dimension of communication can aid theology. "An oral-aural theology of revelation through the Word of God would entail an oral-aural theology of the Trinity, which could explicate the 'intersubjectivity' of the three Persons in terms of communication conceived of as focused (analogously) in a world of sound rather than a world of space and light" (1967, p. 180). Or, again, "But because the human word is uttered at the juncture where interior awareness and external event meet and where, moreover, encounter between person and person occurs at its most human depths, the history of the word and thus of verbal media has rather more immediate religious relevance than the history of kingdoms and principalities" (p. 181). He also suggests that secularization (or "desacralization") has connections with the shift from oral communication to written. "The shift of focus from the spoken word and habits of auditory synthesis to the alphabeticized written word and visual synthesis (actuality is measured by picturability) devitalizes the universe, weakens the sense of presence in man's life-world, and in doing so tends to render this world profane, to make it an agglomeration of things" (p. 162).

C. Fighting words

Sound also brings a polemic element to the fore. Ong had noted this in his initial work on Renaissance pedagogy. Schools taught boys to fight—with words, but to fight nonetheless. From oratorical debates to disputations to contests of words, education harnessed the polemic spirit in students. For Ong, this shows yet another manifestation of sound. The speaker is bound up in a particular way with sound/speech. The simultaneity of it creates a kind of ego bond that the print word does not. Print distances, allows some psychological space, even a little self-criticism, that speech does not. And so, people fight over words. Many causes contribute to the polemic nature of human interaction, but that polemic shows up in styles of talk and thought and even in the content of that talk.

Superficially, preoccupation with virtue and vice can be interpreted as an index of the religiosity of a culture, and it is frequently so interpreted, particularly in studies of the European Middle Ages. But from what we have seen it should be apparent that the tendency to reduce all of human experience, including patently nonmoral areas such as the incidence of disease or of physical cataclysm to strongly outlined virtue-vice or praise-blame categories can be due in great part to the tendency in oral or residually oral cultures to cast up accounts of actuality in terms of contests between individuals. (1967, p. 201)

Spoken words, sounds, situate people in the world in combative ways.

But—and for Ong, this is a good thing—people also fight with words. Words substitute for arms and weapons. Talking means that physical fighting has not started. In oral cultures, including the more oral parts of contemporary culture, people compete with words in contests ranging from "playing the dozens," to swapping insults, to extemporizing a rap song.

In all of these things sounds/words matter. Sound belongs to human life and helps to establish the human life-world. Ong's historical studies also indicate that the human relation with words changes over time, as seen in the shifting relationship of rhetoric and dialectic. But what else changes?

D. Stages of communication, stages of consciousness

The historical evidence Ong follows in *The Presence of the Word* reinforces his conviction that human communication unfolds in stages. After an oral stage, human cultures gradually adopt writing systems (chirography or hand-writing first, then print). The history of the West shows a third stage—electronic communication (1967, p. 17). The stages build on one another in such a way that oral habits do not disappear as people learn to write (a phenomenon that Ong calls "residual orality"), nor does writing disappear with the advent of the radio or television.

Ong noticed parallels between these developments in human communication and the development of consciousness. The modes of communication interact with the ways that culture shapes consciousness (or at least shapes the pedagogical tools by which it shapes consciousness). More than an acknowledgment that the styles or means of communication can influence thought categories or cultural predispositions, this claim indicates that communication itself develops along with human consciousness. Ong imaginatively plays with some parallels between this development in human communication and the development of the human psyche.

In a kind of McLuhanesque probing, he attempts an exploration into Freudian psychology: Do the three stages of media (oral, written, electronic) relate to Freud's psychosexual stages (oral, anal, genital)? He finds enough parallels to remark that oral verbalization and the flow of words matches "the oral psychosexual state if we think in terms of permissiveness and lack of constraint" (1967, p. 93). Writing, like anality, constrains. The electronic stage may be generative and socially oriented (pp. 101-102). However, Ong honestly admits that the parallelisms do not always work. The oral stage "fails in terms of assimilative activity" and the direction of interiority (pp. 97-98). The parallels also don't work in terms of ontogenetic and phylogenetic relationships (p. 103). Despite this, Ong still feels that there is something in common between psychological development and the development of communication capability.

He shifts to more solid ground as he explores the development of consciousness as outlined in the work of psychologist Erich Neumann (1949/1954). In Neumann's work, he found additional evidence of the ways the human psyche "feels its relationship to the surrounding world, to time, and to space" in different historical epochs. "The experience of being human has undergone a kind of sea-change" (Ong, 1977e, p. 44). Contemporary humans live in largely artificial worlds, not only cities and skyscrapers, but artificial worlds of communication. Writing, Ong reminds us over and over again, is a technology. As such, it separates us from the word and in some ways from ourselves. Speech is something natural and that "is why speech is so closely involved with our personal identity and with cultural identity, and why manipulation of the word entails various kinds of alienation" (p. 22).

As writing and other communication technologies emerge, consciousness changes. Ong observed this with the shifting fortunes of rhetoric and with the observations of Havelock regarding the Greeks. Revisiting medieval pedagogy in the light of Neumann's history of consciousness, Ong hypothesizes that "the modern state of consciousness could never have come into being without Learned Latin," that is the written Latin learned as second language in grammar schools down to the 19th century.

If writing initially helped thought to separate itself from the human life world so as to help establish and manipulate abstract constructs, Learned Latin would seemingly have helped at a crucial period with special efficiency, for its commitment to writing is in a way total, as has been seen: it does not merely use writing but is controlled by writing. Such a chirographically controlled language would appear to reduce to a new minimum connections with sound and thereby connections with the intimate human life world in its interiority and darkness. (1977e, pp. 36-37)

The artificial quality of written Latin forces humans to experience the world abstractly, in the more visual terms Ong had identified. Writing—indeed all communication technology—implicates consciousness, both the consciousness of individuals and the shared consciousness of cultures, as manifest in knowledge, science, and practices.

Technology is important in the history of the word not merely exteriorly, as a kind of circulator of pre-existing materials, but interiorly, for it transforms what can be said and what is said. Since writing came into existence, the evolution of the word and the evolution of consciousness have been intimately tied in with technologies and technological developments. Indeed, all major advances in consciousness depend on technological transformations and implementations of the word. (1977e, p. 42)

Contemporary communication media, Ong tells us, make "possible thought processes inconceivable before. The 'media' are more significantly within the mind than outside it" (p. 46). The various communication technologies—writing, the alphabet, visual images, even computers—produce new ways of thinking because they provide new tools to assist thinking and they allow thinking to be recorded and even to occur outside of the minds of individuals. We read the thoughts of others and further them; we share knowledge; we have machines do routine analysis (p. 47).

E. Religious consequences

In studying the word and its immediacy, Ong calls attention to the religious qualities of communication. As he came to understand the stages of communication, he applied that model to the religious realm as well.

Early and medieval Christianity had produced a theology (as a systematic reflection on belief) that presumed texts: the biblical text, the texts of Christian writers, and so on. Ong, however, points out the highly oral nature of this theology. The Bible itself features a many-layered orality and these oral structures have largely found their way into theology (Ong, 1969a, p. 469). Later, even medieval and Renaissance theology used oral forms, inherited in and from the original Latin forms in which they worked. Such forms also produced the polemic quality of theology—a quality much in evidence in the Reformation period (p. 477). As theology became more print-based, it developed new, less formulaic, and less agonistic formats. While these print-based structures characterize theology today, Ong predicts that more contemporary theology will feature both an orality based on electronic communication and a wider interaction among disciplines, led and expanded by the ease promoted by the same electronic communication (pp. 479-480).

The same forces at work in the stages of communication affect worship as well. Most liturgical activity arose in oral cultures and key characteristics of orality-formulas, mnemonic patterns, rhythmic movements-remain in worship (Ong, 1969b, pp. 480-481). Ong argues that many of the problems in the mid-20th century Roman Catholic liturgical reform stemmed from the clash between this orality and the orality of electronic media, a more intimate experience, in which the audience (or the community at worship) act more like readers than hearers (pp. 481-482). Sensitive to the role of sound, Ong also calls attention to the polemic and irenic alignments that enter into worship (p. 485). Finally, he notes that liturgy will change or at least adapt its oral inheritance as it touches on memory, community, participation, and thought processes.

(Ong wrote extensively on religious topics throughout his career. As in these essays, he applied to the religious his observations on communication, psychological development, media, and so on. He also acted as a particularly sensitive observer of the religious scene, much as he observed communication. A collection of his more explicitly religious essays appears in *Faith and Contexts*, Volumes 1 and 2, 1992.)

4. Communication media, orality, literacy, and secondary orality

Ong's work with Ramus and the history of rhetoric combined with his reading of Havelock, Parry, Lord, and McLuhan sensitized him to communication media, communication processes, and their effects on human life and thought. But even before his readings on oral cultures—as early as a 1960 *College English* essay—he discerned a line leading from ancient Greece to modern communications, traced through educational establishments.

From the time of ancient Greece, communication processes have always been at the center of western education. Early academic study focused on grammar, which gave birth to rhetoric. Rhetoric formed a matrix for dialectic and logic, and all these conjointly help shape physics and medicine, and ultimately modern science. Through the Middle Ages, the Renaissance, and into the 19th century, education began with grammar, rhetoric, and dialectic or logic, the *artes sermocinales* or communication arts. (Ong, 1962d, p. 220)

The printing revolution of early modern Europe (Eisenstein, 1979) definitively puts texts at the center of the educational enterprise and for the several centuries thereafter, up to our own, teachers and students wrestled with texts. Rhetoric, as we have seen, had moved from the spoken word to an attribute of written materials.

For Ong, the advent of new communication technologies will not remove communication from the curriculum but will have an effect.

Probably a great many things are stirring; but it is certain that many of them can be summed up by saying that we are leaving the Gutenberg era behind us. As we move further into a technological civilization, we meet with abundant signs that the relationship between the teacher and the printed word and hence those between the teacher and a large area of communication, which included practically all of what we generally mean by "literature," are no longer what they used to be. These relationships were set up in the Renaissance when a typographical civilization appeared, climaxing the intense development of a manuscript culture which had marked the preceding Middle Ages. The present swing is to oral forms in communication, with radio, television (oral in its commitments as compared to typography), public address and intercom systems, or voice recordings (to replace or supplement shorthand, longhand, typing, or print). As a result of this swing, older relationships are undergoing a profound, if not often perceptible, realignment. (1962d, p. 221).

Here we see Ong laying out the pieces for his later construction of the relationships of oral and literate cultures, even marking the emergence of what he eventually terms "secondary orality" (Ong, 1971a, p. 296). New forms of communication build on older forms but each one affects the relationships afforded to human interaction. Ong remarks on the move from the oral teaching of Socrates to Plato's written version, Cicero's later writing out his speeches to Augustine's reading aloud. The manuscript culture of the Middle Ages "retained massive oral-aural commitments" (p. 222), but print culture largely silenced the voice, though not the heritage of eloquence (p. 223).

The 20th century introduced a paradox: "that a society given so much to the use of diagrams and to the maneuvering of objects in space . . . should at the same time develop means of communication which specialize not in sight but in sound" (p. 224). Such an emphasis on sound acts to counterbalance the dominance of the visual reinforced by printed texts. Though printed texts will not disappear, the more human dimension of sound cannot be suppressed.

In their whole trend, modern developments in communications, while they have not slighted the visual, have given more play to the oralaural, which a purely typographical culture had reduced to a record minimum in human life. The sequence of development running from silent print through audiovisual telegraph to the completely aural radio is an obvious instance of increasing aural dominance. Even television belongs partially in this visual-to-aural series, being only equivocally a regression to visualism. For the visual element in television is severely limited. . . . Silent television is hardly an engaging prospect. (1962d, p. 225). The re-emergence of the oral-aural marks out the personalist element of contemporary culture. If sight beholds surfaces and promotes objectivity, then sound opens up the interior, both literally and figuratively (pp. 226-27). Ever the observer, Ong notes how such sensitivities emerge in philosophy, literature, advertising, and teaching.

A. Oral cultures, literate cultures

For Ong, it is never enough to remark the alignments of communication or the connections among its modalities. He tries to connect our awareness of communication to its academic study, to its uses, to its consequences. *Orality and Literacy* (1982b), perhaps his most widely reprinted and translated work, attempts precisely that kind of connection.

Orality and Literacy marks Ong's most systematic treatment of words—both spoken and written. His subtitle, "The technologizing of the word," specifies how humans use technology to preserve, extend, and modify their words. And—in a crucial step—Ong also shows how human thought patterns interact with the way they use words. Not as concerned with matching up the communication changes with psychological stages of growth, he summarizes several decades of research to more solidly connect thought patterns with communication. The stages of communication media appear clearly: oral communication in oral cultures; writing in chirographic cultures; print in print-based cultures; and various media in electronic cultures.

Returning to, and radically extending, some themes of *The Presence of the Word*, Ong describes oral cultures in terms of "Some psychodynamics of orality" (his chapter title). Oral cultures dwell in sound and in the power of sound. As members of writing cultures, we have trouble imagining this situation: to understand, for example, the power of a name.

Chirographic and typographic folk tend to think of names as labels, written or printed tags imaginatively affixed to an object named. Oral folk have no sense of a name as a tag, for they have no idea of a name as something that can be seen. (1982b, p. 33)

Instead object and name cannot be separated.

Oral cultures depend on memory and recall. "You know what you can recall" (p. 33). What people think about depends, too, on such recall. And so, oral cultures must not only remember but organize things through the patterns of recall. These include rhyme and rhythm, movement, formulas, and sayings (p. 35). "In an oral culture, to think through something in non-formulaic, non-patterned, non-mnemonic terms, even if it were possible, would be a waste of time, for such thought, once worked through, could never be recovered with any effectiveness, as it could be with the aid of writing" (p. 35).

The centrality of memory and recall shapes other dynamics of orality. Its thought is additive, stringing items together, and thus works with aggregates rather than with the taking of things apart through analysis. "Without a writing system, breaking up thought—that is, analysis—is a high-risk procedure" (p. 39). It is too easy to forget how things fit together. The necessity of remembering, and of remembering in particular ways, leads to a redundancy in oral expression: better to repeat than to forget. Thus, oral cultures tend to be conservative, whether in expression, narrative, government, or religion (pp. 41-42). Oral cultures emphasize participation or identification with narrative characters or the objects of knowledge (p. 46). Everything appears in its situation, since that is how memory works best (p. 49).

The need to remember leads to specifically oral techniques, rituals of behavior and language. Rhetoric is a way of knowing and a way of expressing and a way of acting. Interaction is expected. Oral folk expect people to engage each other, but in predictable ways.

Primary orality fosters personality structures that in certain ways are more communal and externalized, and less introspective than those common among literates. Oral communication unites people in groups. (1982b, p. 69)

Such group emphasis appears in the narratives and stories of oral cultures. Key figures unite the group but also help the recall of story. Much easier to remember the many adventures of a single Odysseus than the individual acts of 20 others (p. 70).

Writing and, later, print change this, though the change appears gradually. It triggers, in Raymond Williams' wonderful title, "the long revolution" of literacy (1961). Writing allows distance, both literally and figuratively. By processing thoughts through texts, writing spans miles and centuries. But writing also allows a psychological distance: one can see one's thoughts recorded and spread out, separate from one-self. Again, the chapter title gives the argument: "Writing restructures consciousness" (Ong, 1982b, p. 78). Memory gives way to written records, though this too occurs slowly. Neither Plato nor medieval English law trusted writing: "Witnesses were *prima facie* more credible than texts because they could be challenged

and made to defend their statements, whereas texts could not" (p. 96). But over time, people learned to work with texts, to provide contexts and external guarantees, cross-references, and visual methods that outweighed the textual silences (pp. 99-101).

Writing has its own dynamic. Its distancing leads to precision: one can polish sentences and one can be concise, without the need for repetition. Writing allows the writer to "eliminate inconsistencies . . ., to choose between words, . . . [to] erase" (p. 104). "By separating the knower from the known . . ., writing makes possible increasingly articulate introspectivity, opening the psyche as never before not only to the external objective world quite distinct from itself but also to the interior self against whom the objective world is set" (p. 105). Pedagogical practice amplifies writing's effect on consciousness by teaching people to work with texts, by fostering more analytic thought, and by holding out the possibility of objectivity.

Ong is careful enough to warn against any reductionism here, but he does urge us to see the web of relations connected to writing.

Once writing is introduced into a culture and grows to more than marginal status, it interacts with noetic and social structures and practices often in a bewildering variety of ways Sooner or later, and often very quickly, literacy affects marketing and manufacturing, agriculture and stock-raising and the whole of economic life, political structures and activities, religious life and thought, family structures, social mobility, modes of transportation (a literate communication system laid the straight Roman roads and made the ancient Roman Empire . . .) And so on ad infinitum. (Ong, 1986/1999, p. 155)

In "Writing Is a Technology That Restructures Thought" (1986/1999), Ong spells out 14 consequences of writing's separation or distancing. These include, as we have seen, the separation of the knower from the known, as well as data from interpretation, word from sound, word from existence, past from present, administration from other social activities, academic learning from wisdom, logic from rhetoric, social classes one from another, sound from sight, and being from time (pp. 156-162).

Printing speeds the process along, both by increasing literacy (as more people have access to texts) and by fostering greater visualism. "Writing moves words from the sound world to a world of visual space, but print locks words into position in this space" (1982b, p. 121). Printing leads to any number of changes in how people deal with information—changes we largely take for granted, but which appear revolutionary when compared to the information economy of oral cultures. Printed texts foster the use of lists, material "abstracted from the social situation in which it had been embedded ... and also from linguistic context" (p. 123). Such listings seem even stranger when they have no oral organization, but only one based on alphabetical order. The fixity of print also promotes a particular kind of list—the index—to guide readers to the fixed location of information within a book.

The visualism of printed books promotes seeing the book and its pages as labels, as illustrations of knowledge (p. 126), something Ong had seen in the books of Ramus with their graphically arrayed binary arrangements of logic. Ong also connects this visualism to modern science. While observation was not new, "what is distinctive of modern science is the conjuncture of exact observation and exact verbalization: exactly worded descriptions of carefully observed complex objects and processes" (p. 127). Where oral cultures attend to action, visual ones focus on appearance. This bias of print supports science's need to provide precise descriptions in ways that other scientists could confirm. As a way of seeing, visualism leads to more precise seeing. Ong finds additional evidence of this visualism in post-print literature's elaborate descriptions and use of typography (pp. 127-128).

Other marks of modern society connect to print as well. Print fostered a sense of language as something written—dictionaries, grammars, "correct" expression (p. 130). By supplying more books to readers, print changed the relationship between readers and books. First, it supported a sense of privacy (being alone with a book, with no need to interact with others). Second, it fostered a sense of ownership of words (copyrights, for example). And print also changed the relationship of readers with themselves. By treating words as things on a visual surface, print led humans to think of the their own consciousness as a kind of thing or mental space (pp. 130-132).

B. Traces of older media

But it all happened slowly. While print changed the information dynamics of human society, it did not erase the oral. The same thing occurred with the advent of writing. Comparing the oral Homeric epics to Virgil's written work, Ong notes, "But oral traits did not by any means vanish in narrative immediately with the coming of writing. They tapered off gradually and unevenly" (Ong, 1977a, p. 195). What evidence suggests oral habits lingering in western print culture, print habits remaining in electronic culture? Ong highlights two things. First, he comments on what he terms "oral residue," the oral modes of thought and expression that appear in the writings of the generations new to print. Second, he claims that electronic communication has created a "literate orality," an oral culture based on print, what he terms a secondary orality. Both assertions seem almost self-evident, but Ong provides some supporting evidence.

Oral residue occurs because people educated for oral expression will use those expressions in their writing.

Manuscript and even typographic cultures . . . sustain traces of oral culture, but they do so to varying degrees. Generally speaking, literature becomes itself slowly, and the closer in time a literature is to an antecedent oral culture, the less literary or "lettered" and the more oral-aural it will be. (1971b, p. 25)

To demonstrate his point, Ong searches Tudor literature for oral residue. He find it in particular in "the cult of *copia* and of the commonplaces" (p. 27). Both come to English literature from the rhetorical tradition. The former refers to an eloquence never at a loss for words, the "rich flow, as well as ability, power, resources, or means of doing things" by which speakers (and later writers) manage language. It is the ability of an epic poet to assemble volumes of material (pp. 33-35). Of course, a writer need not marshal words in the same way that an orator or bard does. In fact, highly developed writing avoids this kind of repetition, since writers know that readers can turn back and re-read material as necessary.

We have already seen the second oral residue, the commonplaces, those ways of organizing material that seem strange to us today, but which fairly well defined the information handling of oral cultures. In another essay, Ong suggests a third lingering oralism: the use of epithets in the English epic poetry of Spenser and Milton (1977a).

In addition to the oral residue marking print culture, orality also returns as secondary orality in postprint culture. Ong's knowledge of the history of rhetoric attuned his ear to the similarities and differences between contemporary speaking and the recorded speech of earlier eras. Such secondary orality appears not just in a more writerly speaking—the television dialogue or speaking that depends on a script, for example—but also in a speaking that unveils a changed psyche.

If I may use terms which I fondly believe I have originated, I would suggest that we speak of the orality of preliterate man as primary orality and of the orality of our electronic technologized culture as secondary orality. Secondary orality is founded on—though it departs from—the individualized introversion of the age of writing, print, and rationalism which intervened between it and primary orality and which remains as part of us. History is deposited permanently, but not inalterably, as personality structure. (1971a, p. 285)

The strands and habits of these oralities do not disentangle easily. Following his usual approach, Ong examines them carefully, looking to one characteristic, in this instance "the use of formulary devices" (p. 285). The use of formulas appears constantly in primary orality—to describe, to store knowledge, to compose utterances, and so on. In fact, the works of Havelock, Parry, and Lord spell out how ancient Greek culture depended on the use of formulas, especially in the *Illiad* and *Odyssey* and how the formulas influenced Greek thought.

Today's electronic culture of radio and television still uses formulas but in different ways. "The formulary device is no longer deeply grounded in practical living since it has now relatively limited use for knowledge storage and retrieval" (p. 296). Instead we use formulas as cliches or as starting points for analysis (p. 297). The formula appears as an advertising or political slogan, as a catch phrase, as a jingle, almost as a label (p. 299). And each of these in some ways resembles the visual form, a connection with literacy, that belies the oral and reminds us that secondary orality rests on the psychological foundations, organizations, and habits of writing.

Ong arrives at a similar conclusion from a different angle when he asks whether new media destroy older media. Once again taking up an historical approach, he remarks "some paradoxical laws":

A new medium of verbal communication not only does not wipe out the old, but actually reinforces the older medium or media. However, in doing so it transforms the old, so that the old is no longer what it used to be. Applied to books, this means that in the foreseeable future there will be more books than ever before but that books will no longer be what books used to be. (Ong, 1977d, pp. 82-83) People do not abandon communication media that have successfully served them. But they often discover new ways to use the old. If Ong is correct that media forms restructure (or at least influence) consciousness, then new forms change people and how people think to the extent that they can never pretend that the new had not touched them. We have a complex cycle of interaction, evolution, and transformation of communication media.

... part of the transformation is effected because the new medium feeds back into the old medium or media and makes them redolent of the new. The conventionally produced book can now sound to some degree like the orally programmed book [the transcription of a recorded interview, for example].

Patterns of reinforcement and transformation have existed from the very beginning in the verbal media. . . . When writing began, it certainly did not wipe out talk. Writing is the product of urbanization. It was produced by those in compact settlements who certainly talked more than scattered folk in the countryside did. Once they had writing they were encouraged to talk more, if only because they had more to talk about. But writing not only encouraged talk, it also remade talk. Once writing had established itself, talk was no longer what it used to be. (1977d, p. 86)

Talk changes, not only because one could talk about what was written—people no doubt talked about Plato's Dialogues just as we talk about the books on best seller lists. Talk changed, too, by becoming more literary. Orators could write out speeches to practice them before delivering them. People could study textbooks on speaking, much as we do today.

New communication media change old media and old media remain a part of newer media. The same interaction, evolution, and transformation happens with radio, television, and computers today. "A new medium, finally, transforms not only the one which immediately precedes it but often all of those which preceded it all the way back to the beginning" (p. 90). Our use of computers for instant messaging, for example, affects how we watch television, how we write, and how we talk.

5. Digital communication, writing, and interpretation

A. Text

Digital or computer-based communication not only transforms what precedes it, but calls attention to specific aspects of textual communication. Digital communication depends upon a specific code: it is information—"a message transmitted by a code over a channel through a receiving (decoding) device to a particular destination." But this code is not itself communication, since communication requires "the exchange of meanings between individuals through a common system of symbols" (Ong, 1996, p. 3). The latter, however, makes use of the former. The awareness of this dependence of communication on information leads to a further awareness, that "all text is pretext" (Ong, 1990/2002, p. 497).

A text, Ong writes, "is not fully a text until someone reads it, that is, until someone produces from the writer's text something nontextual, a sequence of sounds" (p. 497). But in order to read a text, the reader must know the code used to write the text. This dependence on reading reminds us, who have most likely overlooked or forgotten the fact, that "text as text is part of discourse" (p. 497). Discourse, interaction between people, somehow gets suspended in a text "until a reader chances along" (p. 498).

And discourse requires the presence of the word, of a dialogue, of people. Ong defines "the basic sense of presence" as a "person-to-person relationship, not thought-to-word-to-thing relationship" (p. 498). Texts manage both to facilitate and to get in the way of these relationships. They interpose themselves and need decoding, but they also allow readers to enter into relationships with long-dead writers.

This absence calls for fictionalizing. Someone has to play a role: writer or reader or both. And since the reader has to be alive to read, his or her roles are more proximate to us... (1990/2002, p. 498)

And here modern, electronic communications help us in yet another way to understand what is going on with texts. The sense of immediacy of electronics gives readers a sense of proximity to events reported. That, too, occurs with texts. With a text that works well, readers enter into the text, "into the immediacy of the writer's experience" (p. 499). But electronic communication also reveals that this immediacy is highly mediated, and thus somewhat artificial.

A paradox is at work here, as always when we are dealing with the application of technologies to the word, from writing onward. Electricity means generators, machinery, and mechanical equipment. It interposed a great deal that is not directly human between the written verbalization of reporters . . . [and readers]. (p. 503)

Speeding up communication serves to decrease distance and to increase the immediacy and thus the person-to-person quality of communication. Understanding the digital codes and electronic speeds helps us to understand better what happens with texts (and what was happening all along, though we did not notice).

B. Writing

From the perspective of code, we also understand writing systems better. "Recent findings have made it possible to see an intriguing relationship between developments leading into writing in its very earliest form and our only recently devised writing with the digital computer" (Ong, 1998, p. 4). Reviewing the work of Denise Schmandt-Besserat (1992), Ong recognizes that the coding for numbers used in Sumerian pre-pictographic writing has affinities with the digital storage of information-that information storage underlies writing. Such an information storage system arises only in "the larger human context, social, economic, technological, and other" (Ong, 1998, p. 10). Human communication is decidedly oral and humans have developed technologies to preserve and sharpen that communication-from memory systems to artificial information storage systems. These grow out of the human life world.

Given that writing is a technological product storing knowledge outside the human individual and thus encouraging a sense of the known as separate from the knower, it appears to be no accident that the prehistory of writing begins with enumeration of visible, material commodities, object-things seen and/or felt as distinct from human thinkers and verbalizers, such as Schmandt-Besserat finds in the commodities with which the Near East tokens deal. (p. 19) The artificial means of storing information in turn began to affect the ways that people think and live (pp. 14-15). Having the tool available means using it.

The process took time, though. "Originally, writing was not so much a 'communication' device (involving interchange between two conscious persons)—although it was this to some extent—as it was a simple 'information' system (a coding system), although it was not entirely this either" (p. 19). Ong admits that the process from pre-writing to writing is a complex one; it involved not only the development of an efficient tool like alphabetic writing, but also the mindset to use the tool. Just as the history of rhetoric tells the story of evolving human thought, so too does the story of writing. For writing to work, humans needed to adjust psychologically.

The contemporary information processing model shows us more clearly that pre-writing storage systems work as information storage. They also illustrate how any text works—by deferring or interrupting dialogue.

C. Interpretation

The abundance of information resulting from all of our information storage systems does not become immediately intelligible. It requires interpretation. But, as with most things Ong explores, a study of the interpretation of stored information tells us about more than itself, tells us in this instance about an on-going need for interpretation in all communication.

"In a quite ordinary and straightforward sense, to interpret means for a human being to bring out for another human being or for other human beings (or for himself or herself) what is concealed in a given manifestation, that is, what is concealed in a verbal statement or a given phenomenon or state of affairs providing information" (Ong, 1995/1999, p. 183). No communication is complete because one can always say more: dialogue continues; texts require contexts; discourse needs commentary; and so on. Language itself allows this complexity and commentary in its very structures of syntax and referentiality (p. 185). It, like all communication is not a closed system.

To examine one communication form or medium, as we have seen, shows us how it has transformed what preceded it. And so the awareness of the need to interpret texts casts light on what happens in conversation.

Besides being complex and supple, verbal interpretation is curiously self-propagating. For if, as has been seen, more than other sorts of interpretation (gesticular, and so on), verbalized interpretation moves toward maximized interpretation, it is at the same time never totally maximized, never totally completed and thus by its very existence invites further asymptotic movement toward completion. (p. 187)

The need for interpretation stems from the nature of communication. The bringing of people together, the mutual revelation of the interiority of individuals, can never be perfect. But people try.

Texts complicate the situation because texts cannot explain what lies beyond the text. Ong traces the history of hermeneutics as a science of interpreting texts. Handwritten texts more urgently than face-toface communication required interpretation because here people first experienced the absence of the author, the absence of the kind of dialogue to which they had been accustomed. Centuries later, "with the deep interiorization of print . . . hermeneutics as a self-conscious, more or less systematized activity comes into its own" (p. 196). But digital communication, Ong argues, really makes us aware of the need for hermeneutics, since digitization radically separates information from communication. Asking why this happens now, Ong answers, "One reason that suggests itself is that electronic communication has made us into an information society, and information of itself says nothing unless it is interpreted or treated hermeneutically" (p. 197). But there is more than this. Information storage systems themselves call attention to the fact they depend on encoding and decoding outside of themselves. They rely as much on a social structure as

Conclusion

If these five areas—the history of rhetoric, the exploration of visualism, the understanding of the word, the delineation of the stages of communication, the situating of hermeneutics—were all that Ong had done, his work would have a significant impact on communication study. But there is more, more than we can review here. Ong also carefully observed culture, particularly in literature and education, but in other areas as well. Gronbeck (1991) argues that Ong represents an important strand in an American cultural studies tradition, a conclusion echoed by Farrell (2000). Gronbeck argues that this cultural studies tradition differs from others:

they do on a technological one. And that, Ong reminds us, fairly defines the hermeneutical circle (p. 197).

But, then, all communication depends on social structures. And therefore all communication requires interpretation. "Hermeneutic or explanation stops not when there is nothing left to be explained but when, for present purposes, in this given existential situation, nothing further is felt to be necessary" (p. 199). Such communication inevitably goes beyond propositions and logic; but the history of rhetoric and dialectic and the history of visualism and visual representations of knowledge in the West sometimes mislead us. Ong returns to sound: sound reveals the interior. The social structures of all human life presume those interiors.

The process of interpretation summarizes much of Ong's explorations and conclusions about communication.

Since each "I" must sense the "you" whom the "I" addresses before speech begins, dialogue demands, paradoxically enough, that the persons addressing one another be somehow aware of the interior of each other before they can begin to communicate verbally. . . . In verbal communication, the hearer must be aware that the speaker intends the utterance to be a word or words and not just noise; the speaker must know that the hearer knows this, and the hearer must know that the speaker knows that he or she (the hearer) knows it. The hermeneutical circle again. We are somehow inside one another's consciousness *before* we begin to speak to another or others. (p. 203)

Distinctively American with its unusual grounding in classics, religious hermeneutics, the philosophy of sociology, and anthropology, this school of communication studies stands counterpoised to its Continental and British sisters. It has affinities with French semiotics and structuralism, and the breadth of its generalizations gives it the feeling of writings from the Frankfurt school, yet cultural studies in America is its own creature. (Gronbeck, 1991, p. 9)

It is in this tradition that Ong provides communication studies more broadly conceived with both a stance towards culture and a methodology to explore it. Gronbeck identifies four key questions that characterize Ong's approach. "What are the distinguishing features of *media of communication*, broadly understood?" (p. 11). "What are the *psychodynamics* of selfhood? If British and European cultural studies turn outward to matters of social structure and political-economic power when contemplating communication processes . . . Americans often turn inward to trace the consequences of mediation processes for the individual self" (p. 12). The third area of Ong's questioning that Gronbeck identifies focuses on the relationship between culture and life world, while the fourth calls attention to "the *implications* of the interactions of mediation, consciousness, and culture for various facets of human existence" (p. 13).

Within all of his explorations of these interactions, the human interaction matters most for Ong: the personal, the interior. All the technological systems humans create—memory systems, rhetoric, dialectic, writing, printing, electronics—ultimately serve this interaction.

Ong's explorations remind us, too, that the technological systems of communication have their own effects. Humans adapt to them in ways that we do not often recognize. Each time he looked at communication he discovered more of these psychological adjustments as well as a resistance to change. Ramus's texts, with their visual aids, revealed something about rhetoric. Early printed texts showed an oral residue. Electronic communication absolutely depends on printed texts but also introduces a new orality into human life. Digital information systems reveal that all the prior communication media also function as information systems.

The need to interpret all this brings us back again to the human interactions—the manifestation of interiority—that began it all.

Though not formally a communication scholar, Ong has contributed mightily to communication studies in four ways. First, as a cultural historian exploring rhetoric, he has called attention to the link between mental processes and communication tools. Second, in his recognition of the visualism promoted by printed texts, he reminds us of the role of the sensorium in all communication. Third, through his proposal that we think of the modes of communication (primary oral, literate, secondary oral) as stages building on one another, he has helped to identify the extraordinary complexity of human communication and provided an hypothesis to guide further exploration. And, fourth, by his insistence on the living word, he has kept the human at the center of all communication, reinforcing the link between the interpersonal and any other kind of mediated communication.

If all of this seems natural to us today, we should credit Ong for introducing so much, in such detail and clarity, as to make it seem readily apparent and so much a matter of common sense.

Editor's Afterword

W. E. Biernatzki, S.J.

Father Walter Ong, S.J., was widely known and highly regarded in academic circles. Those who knew him personally saw a different, but related side of his personality: a seeker of knowledge at all levels, interested in the world, eager to know its many facets. In his youth, as an Eagle Scout, he had to earn many merit badges, an accomplishment that both appealed to his inquiring nature and introduced him to a wide range of diverse subjects, both practical and theoretical.

That thirst for knowledge of all sorts carried over into both his intellectual life and his day-to-day interests and recreations. He was quick to join conversations on whatever topics his companions might introduce, from fly fishing, to psychoanalysis, to linguistic philosophy, or space travel. Often, he knew the topic so well that other parties to the conversation could only sit back and absorb his contributions. At the same time, he was genuinely interested in others' work and their ideas, listening patiently, then injecting his own perspectives on the subject.

Ong, the polymath, was thus well-equipped from the start to explore the hidden nooks and crannies of western intellectual history, and not only to bring into the light unexpected treasures but also to relate them to the vast, complex and ever-evolving chart of reality being drawn by both modern sciences and humanistic studies.

Walter was interested in the work of the Centre for the Study of Communication and Culture and in this journal, *Communication Research Trends*, from their very inception, in the 1970s. He recognized that the focus of the Centre and the journal coincided closely with his own preoccupation with the nature of information and communication and their developing role in the modern world. He contributed the major contents of two issues of the journal, articles on "Information and/or Communication" (1996), and "Digitization Ancient and Modern: Beginnings of Writing and Today's Computers" (1998).

At the same time, he was a Jesuit, a vowed religious, deeply embedded in the matrix of Catholic Christianity. This embedding doubtless contributed greatly to his ability to draw out the meanings implicit in his insights and to relate them into a big picture. The unbroken current of Judeo-Christian history, running through the broader stream of Western intellectual history, was available to him not merely as a problematically abstract framework but as meaningful to every level of his life. He spent most of his life in a Jesuit university faculty community, with a variety of "men astutely trained," sharing a common set of religious and moral values, but often able to argue vigorously for a wide range of individual interpretations from many perspectives. The effects of that intellectual environment on Walter would be impossible to analyze with scientific precision, but it had to be significant.

Walter had a notable effect on all who knew him well, but probably on none more than his students. These are scattered far and wide, not only in America but in many countries around the world. Many were impressed not only by the "bare bones" of his theorizing but also by his interest in their own languages and cultures, bringing the theories alive to them through his questions about their own ways of knowing and communicating. That questioning was no mere pedagogical gimmick, either, but it was evident that he was continually learning from their answers. His willingness to learn while teaching was, in itself, a valuable lesson, an opening for the students into an ever-expandable universe ripe for their own future exploration.

His insights and ideas broke new pathways for understanding how we think and communicate. But there remains unexplored territory beyond the ends of those paths. The best imaginable tribute to his learning and his memory would be for those who knew him and learned from him to push on with the explorations.

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