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WRITING RESTRUCTURES CONSCIOUSNESS

THE NEW WORLD OF AUTONOMOUS DISCOURSE

A deeper understanding of pristine or primary orality enables us better to understand the new world of writing, what it truly is, and what functionally literate human beings really are: beings whose thought processes do not grow out of simply natural powers but out of these powers as structured, directly or indirectly, by the technology of writing. Without writing, the literate mind would not and could not think as it does, not only when engaged in writing but normally even when it is composing its thoughts in oral form. More than any other single invention, writing has transformed human consciousness.

Writing establishes what has been called 'context-free' language (Hirsch 1977, pp. 21–3, 26) or 'autonomous' discourse (Olson 1980a), discourse which cannot be directly questioned or contested as oral speech can be because written discourse has been detached from its author.

Oral cultures know a kind of autonomous discourse in fixed ritual formulas (Olson 1980a, pp. 187–94; Chafe 1982), as well as in vatic sayings or prophesies, for which the utterer himself or herself is considered only the channel, not the source. The Delphic oracle was not responsible for her oracular utterances, for they were held to be the voice of the god. Writing, and even more print, has some of this vatic quality. Like the oracle or the prophet, the book relays an utterance from a source, the one who really 'said' or wrote the book. The author might be challenged if only he or she could be reached, but the author cannot be reached in any

book. There is no way directly to refute a text. After absolutely total and devastating refutation, it says exactly the same thing as before. This is one reason why 'the book says' is popularly tantamount to 'it is true'. It is also one reason why books have been burnt. A text stating what the whole world knows is false will state falsehood forever, so long as the text exists. Texts are inherently contumacious.

PLATO, WRITING AND COMPUTERS

Most persons are surprised, and many distressed, to learn that essentially the same objections commonly urged today against computers were urged by Plato in the *Phaedrus* (274–7) and in the *Seventh Letter* against writing. Writing, Plato has Socrates say in the *Phaedrus,* is inhuman, pretending to establish outside the mind what in reality can be only in the mind. It is a thing, a manufactured product. The same of course is said of computers. Secondly, Plato's Socrates urges, writing destroys memory. Those who use writing will become forgetful, relying on an external resource for what they lack in internal resources. Writing weakens the mind. Today, parents and others fear that pocket calculators provide an external resource for what ought to be the internal resource of memorized multiplication tables. Calculators weaken the mind, relieve it of the work that keeps it strong. Thirdly, a written text is basically unresponsive. If you ask a person to explain his or her statement, you can get an explanation; if you ask a text, you get back nothing except the same, often stupid, words which called for your question in the first place. In the modern critique of the computer, the same objection is put, 'Garbage in, garbage out'. Fourthly, in keeping with the agonistic mentality of oral cultures, Plato's Socrates also holds it against writing that the written word cannot defend itself as the natural spoken word can: real speech and thought always exist essentially in a context of give-and-take between real persons.Writing is passive, out of it, in an unreal, unnatural world. So are computers.

A fortiori, print is vulnerable to these same charges. Those who are disturbed by Plato's misgivings about writing will be even more disturbed to find that print created similar misgivings when it was first introduced. Hieronimo Squarciafico, who in fact promoted the printing of the Latin classics, also argued in 1477 that already 'abundance of books makes men less studious' (quoted in Lowry

1979, pp. 29–31): it destroys memory and enfeebles the mind by relieving it of too much work (the pocket-computer complaint once more), downgrading the wise man and wise woman in favor of the pocket compendium. Of course, others saw print as a welcome leveler: everyone becomes a wise man or woman (Lowry 1979, pp. 31–2).

One weakness in Plato's position was that, to make his objections effective, he put them into writing, just as one weakness in anti-print positions is that their proponents, to make their objections more effective, put the objections into print. The same weakness in anti-computer positions is that, to make them effective, their proponents articulate them in articles or books printed from tapes composed on computer terminals. Writing and print and the computer are all ways of technologizing the word. Once the word is technologized, there is no effective way to criticize what technology has done with it without the aid of the highest technology available. Moreover, the new technology is not merely used to convey the critique: in fact, it brought the critique into existence. Plato's philosophically analytic thought, as has been seen (Havelock 1963), including his critique of writing, was possible only because of the effects that writing was beginning to have on mental processes.

In fact, as Havelock has beautifully shown (1963), Plato's entire epistemology was unwittingly a programmed rejection of the old oral, mobile, warm, personally interactive lifeworld of oral culture (represented by the poets, whom he would not allow in his Republic). The term idea, form, is visually based, coming from the same root as the Latin video, to see, and such English derivatives as vision, visible, or videotape. Platonic form was form conceived of by analogy with visible form. The Platonic ideas are voiceless, immobile, devoid of all warmth, not interactive but isolated, not part of the human lifeworld at all but utterly above and beyond it. Plato of course was not at all fully aware of the unconscious forces at work in his psyche to produce this reaction, or overreaction, of the literate person to lingering, retardant orality.

Such considerations alert us to the paradoxes that beset the relationships between the original spoken word and all its technological transformations. The reason for the tantalizing involutions here is obviously that intelligence is relentlessly reflexive, so that even the external tools that it uses to implement

its workings become 'internalized', that is, part of its own reflexive process.

One of the most startling paradoxes inherent in writing is its close association with death. This association is suggested in Plato's charge that writing is inhuman, thing-like, and that it destroys memory. It is also abundantly evident in countless references to writing (and/or print) traceable in printed dictionaries of quotations, from 2 Corinthians 3:6, 'The letter kills but the spirit gives life' and Horace's reference to his three books of *Odes* as a 'monument' (*Odes* iii.30.1), presaging his own death, on to and beyond Henry Vaughan's assurance to Sir Thomas Bodley that in the Bodleian Library at Oxford 'every book is thy epitaph'. In *Pippa Passes,* Robert Browning calls attention to the still widespread practice of pressing living flowers to death between the pages of printed books, 'faded yellow blossoms/twixt page and page'. The dead flower, once alive, is the psychic equivalent of the verbal text. The paradox lies in the fact that the deadness of the text, its removal from the living human lifeworld, its rigid visual fixity, assures its endurance and its potential for being resurrected into limitless living contexts by a potentially infinite number of living readers (Ong 1977, pp. 230–71).

WRITING IS A TECHNOLOGY

Plato was thinking of writing as an external, alien technology, as many people today think of the computer. Because we have by today so deeply interiorized writing, made it so much a part of ourselves, as Plato's age had not yet made it fully a part of itself (Havelock 1963), we find it difficult to consider writing to be a technology as we commonly assume printing and the computer to be. Yet writing (and especially alphabetic writing) is a technology, calling for the use of tools and other equipment: styli or brushes or pens, carefully prepared surfaces such as paper, animal skins, strips of wood, as well as inks or paints, and much more. Clanchy (1979, pp. 88–115) discusses the matter circumstantially, in its western medieval context, in his chapter entitled 'The technology of writing'. Writing is in a way the most drastic of the three technologies. It initiated what print and computers only continue, the reduction of dynamic sound to quiescent space, the separation of the word from the living present, where alone spoken words can exist.

By contrast with natural, oral speech, writing is completely artificial. There is no way to write 'naturally'. Oral speech is fully natural to human beings in the sense that every human being in every culture who is not physiologically or psychologically impaired learns to talk. Talk implements conscious life but it wells up into consciousness out of unconscious depths, though of course with the conscious as well as unconscious co-operation of society. Grammar rules live in the unconscious in the sense that you can know how to use the rules and even how to set up new rules without being able to state what they are.

Writing or script differs as such from speech in that it does not inevitably well up out of the unconscious. The process of putting spoken language into writing is governed by consciously contrived, articulable rules: for example, a certain pictogram will stand for a certain specific word, or *a* will represent a certain phoneme, *b* another, and so on. (This is not to deny that the writer-reader situation created by writing deeply affects unconscious processes involved in composing in writing, once one has learned the explicit, conscious rules. More about this later.)

To say writing is artificial is not to condemn it but to praise it. Like other artificial creations and indeed more than any other, it is utterly invaluable and indeed essential for the realization of fuller, interior, human potentials. Technologies are not mere exterior aids but also interior transformations of consciousness, and never more than when they affect the word. Such transformations can be uplifting. Writing heightens consciousness. Alienation from a natural milieu can be good for us and indeed is in many ways essential for full human life. To live and to understand fully, we need not only proximity but also distance. This writing provides for consciousness as nothing else does.

Technologies are artificial, but—paradox again—artificiality is natural to human beings. Technology, properly interiorized, does not degrade human life but on the contrary enhances it. The modern orchestra, for example, is the result of high technology. A violin is an instrument, which is to say a tool. An organ is a huge machine, with sources of power—pumps, bellows, electric generators—totally outside its operator. Beethoven's score for his Fifth Symphony consists of very careful directions to highly trained technicians, specifying exactly how to use their tools. *Legato:* do not take your finger off one key until you have hit the next. *Staccato:* hit the key and take your finger off immediately. And so

on. As musicologists well know, it is pointless to object to electronic compositions such as Morton Subotnik's *The Wild Bull* on the grounds that the sounds come out of a mechanical contrivance. What do you think the sounds of an organ come out of? Or the sounds of a violin or even of a whistle? The fact is that by using a mechanical contrivance, a violinist or an organist can express something poignantly human that cannot be expressed without the mechanical contrivance. To achieve such expression of course the violinist or organist has to have interiorized the technology, made the tool or machine a second nature, a psychological part of himself or herself. This calls for years of 'practice', learning how to make the tool do what it can do. Such shaping of a tool to oneself, learning a technological skill, is hardly dehumanizing. The use of a technology can enrich the human psyche, enlarge the human spirit, intensify its interior life. Writing is an even more deeply interiorized technology than instrumental musical performance is. But to understand what it is, which means to understand it in relation to its past, to orality, the fact that it is a technology must be honestly faced.

WHAT IS 'WRITING' OR 'SCRIPT'?

Writing, in the strict sense of the word, the technology which has shaped and powered the intellectual activity of modern man, was a very late development in human history. *Homo sapiens* has been on earth perhaps some 50,000 years (Leakey and Lewin 1979, pp. 141 and 168). The first script, or true writing, that we know, was developed among the Sumerians in Mesopotamia only around the year 3500 BC (Diringer 1953; Gelb 1963).

Human beings had been drawing pictures for countless millennia before this. And various recording devices or *aides-mémoire* had been used by various societies: a notched stick, rows of pebbles, other tallying devices such as the quipu of the Incas (a stick with suspended cords onto which other cords were tied), the 'winter count' calendars of the Native American Plains Indians, and so on. But a script is more than a mere memory aid. Even when it is pictographic, a script is more than pictures. Pictures represent objects. A picture of a man and a house and a tree of itself *says* nothing. (If a proper code or set of conventions is supplied, it might: but a code is not picturable, unless with the help of another unpicturable code. Codes ultimately have to be explained by

something more than pictures; that is, either in words or in a total human context, humanly understood.) A script in the sense of true writing, as understood here, does not consist of mere pictures, of representations of things, but is a representation of an *utterance,* of words that someone says or is imagined to say.

It is of course possible to count as 'writing' any semiotic mark, that is, any visible or sensible mark which an individual makes and assigns a meaning to. Thus a simple scratch on a rock or a notch on a stick interpretable only by the one who makes it would be 'writing'. If this is what is meant by writing, the antiquity of writing is perhaps comparable to the antiquity of speech. However, investigations of writing which take 'writing' to mean any visible or sensible mark with an assigned meaning merge writing with purely biological behavior. When does a footprint or a deposit of feces or urine (used by many species of animals for communication—Wilson 1975, pp. 228–9) become 'writing'? Using the term 'writing' in this extended sense to include any semiotic marking trivializes its meaning. The critical and unique breakthrough into new worlds of knowledge was achieved within human consciousness not when simple semiotic marking was devised but when a coded system of visible marks was invented whereby a writer could determine the exact words that the reader would generate from the text. This is what we usually mean today by writing in its sharply focused sense.

With writing or script in this full sense, encoded visible markings engage words fully so that the exquisitely intricate structures and references evolved in sound can be visibly recorded exactly in their specific complexity and, because visibly recorded, can implement production of still more exquisite structures and references, far surpassing the potentials of oral utterance. Writing, in this ordinary sense, was and is the most momentous of all human technological inventions. It is not a mere appendage to speech. Because it moves speech from the oralaural to a new sensory world, that of vision, it transforms speech and thought as well. Notches on sticks and other *aides-mémoire* lead up to writing, but they do not restructure the human lifeworld as true writing does.

True writing systems can and usually do develop gradually from a cruder use of mere memory aides. Intermediate stages exist. In some coded systems the writer can predict only approximately what the reader will read off, as in the system developed by the

Vai in Liberia (Scribner and Cole 1978) or even in ancient Egyptian hieroglyphics. The tightest control of all is achieved by the alphabet, although even this is never quite perfect in all instances. If I mark a document 'read', this might be a past participle (pronounced to rhyme with 'red') indicating that the document has been gone over, or it might be an imperative (pronounced to rhyme with 'reed') indicating that it is to be gone over. Even with the alphabet, extra-textual context is sometimes needed, but only in exceptional cases—how exceptional will depend on how well the alphabet has been tailored to a given language.

MANY SCRIPTS BUT ONLY ONE ALPHABET

Many scripts across the world have been developed independently of one another (Diringer 1953; Diringer 1960; Gelb 1963): Mesopotamian cuneiform 3500 BC (approximate dates here from Diringer 1962), Egyptian hieroglyphics 3000 BC (with perhaps some influence from cuneiform), Minoan or Mycenean 'Linear B' 1200 BC, Indus Valley script 3000–2400 BC, Chinese script 1500 BC, Mayan script AD 50, Aztec script AD 1400.

Scripts have complex antecedents. Most if not all scripts trace back directly or indirectly to some sort of picture writing, or, sometimes perhaps, at an even more elemental level, to the use of tokens. It has been suggested that the cuneiform script of the Sumerians, the first of all known scripts (*c.* 3500 BC), grew at least in part out of a system of recording economic transactions by using clay tokens encased in small hollow but totally closed pod-like containers or bullae, with indentations on the outside representing the tokens inside (Schmandt-Besserat 1978). Thus the symbols on the outside of the bullae—say, seven indentations—carried with them, inside the bulla, evidence of what they represented—say, seven little clay artefacts distinctively shaped, to represent cows, or ewes or other things not yet decipherable—as though words were always proffered with their concrete significations attached. The economic setting of such prechirographic use of tokens could help associate them with writing, for the first cuneiform script, from the same region as the bullae, whatever its exact antecedents, served mostly workaday economic and administrative purposes in urban societies. Urbanization provided the incentive to develop record keeping. Using writing for imaginative creations, as spoken words have

precisely a text, puts his or her words together on paper. This gives thought different contours from those of orally sustained thought. More will be said (that is, written) here later about the effects of literacy on thought processes.

FROM MEMORY TO WRITTEN RECORDS

Long after a culture has begun to use writing, it may still not give writing high ratings. A present-day literate usually assumes that written records have more force than spoken words as evidence of a long-past state of affairs, especially in court. Earlier cultures that knew literacy but had not so fully interiorized it, have often assumed quite the opposite. The amount of credence accorded to written records undoubtedly varied from culture to culture, but Clanchy's careful case history of the use of literacy for practical administrative purposes in eleventh- and twelfth-century England (1979) gives an informative sample of how much orality could linger in the presence of writing, even in an administrative milieu.

In the period he studies, Clanchy finds that 'documents did not immediately inspire trust' (Clanchy 1979, p. 230). People had to be persuaded that writing improved the old oral methods sufficiently to warrant all the expense and troublesome techniques it involved. Before the use of documents, collective oral testimony was commonly used to establish, for example, the age of feudal heirs. To settle a dispute in 1127 as to whether the customs dues at the port of Sandwich went to St Augustine's Abbey at Canterbury or to Christ Church, a jury was chosen consisting of twelve men from Dover and twelve from Sandwich, 'mature, wise seniors of many years, having good testimony'. Each juror then swore that, as 'I have received from my ancestors, and I have seen and heard from my youth', the tolls belong to Christ Church (Clanchy 1979, pp. 232–3). They were publicly remembering what others before them had remembered.

Witnesses were *prima facie* more credible than texts because they could be challenged and made to defend their statements, whereas texts could not (this, it will be recalled, was exactly one of Plato's objections to writing). Notarial methods of authenticating documents undertake to build authenticating mechanisms into written texts, but notarial methods developed late in literate cultures, and much later in England than in Italy (Clanchy 1979,

pp. 235–6). Written documents themselves were often authenticated not in writing but by symbolic objects (such as a knife, attached to the document by a parchment thong—Clanchy 1979, p. 24). Indeed symbolic objects alone could serve as instruments transferring property. In c. 1130, Thomas de Muschamps conveyed his estate of Hetherslaw to the monks at Durham by offering his sword on an altar (Clanchy 1979, p. 25). Even after the Domesday Book (1085–6) and the accompanying increase in written documentation, the story of the Earle Warrenne shows how the old oral state of mind still persisted: before the judges in quo warranto procedures under Edward I (reigned 1272–1306), the Earle Warrenne exhibited not a charter but 'an ancient and rusty sword', protesting that his ancestors had come with William the Conqueror to take England by the sword and that he would defend his lands with the sword. Clanchy points out (1979, pp. 21–2) that the story is somewhat questionable because of certain inconsistencies, but notes also that its persistence attests to an earlier state of mind familiar with the witness value of symbolic gifts.

Early charters conveying land in England were originally not even dated (1979, pp. 231, 236–41), probably for a variety of reasons. Clanchy suggests that the most profound reason was probably that 'dating required the scribe to express an opinion about his place in time' (1979, p. 238), which demanded that he choose a point of reference. What point? Was he to locate this document by reference to the creation of the world? To the Crucifixion? To the birth of Christ? Popes dated documents this way, from Christ's birth, but was it presumptuous to date a secular document as popes dated theirs? In high technology cultures today, everyone lives each day in a frame of abstract computed time enforced by millions of printed calendars, clocks, and watches. In twelfth-century England there were no clocks or watches or wall or desk calendars.

Before writing was deeply interiorized by print, people did not feel themselves situated every moment of their lives in abstract computed time of any sort. It appears unlikely that most persons in medieval or even Renaissance western Europe would ordinarily have been aware of the number of the current calendar year—from the birth of Christ or any other point in the past. Why should they be? Indecision concerning what point to compute from attested the trivialities of the issue. In a culture with no newspapers or other

currently dated material to impinge on consciousness, what would be the point for most people in knowing the current calendar year? The abstract calendar number would relate to nothing in real life. Most persons did not know and never even tried to discover in what calendar year they had been born.

Moreover, charters were undoubtedly assimilated somewhat to symbolic gifts, such as knives or swords. These were identifiable by their looks. And indeed, charters were quite regularly forged to make them look like what a court (however erroneously) felt a charter should look like (Clanchy 1979, p. 249, citing P.H.Sawyer). 'Forgers', Clanchy points out, were not 'occasional deviants on the peripheries of legal practice' but 'experts entrenched at the centre of literary and intellectual culture in the twelfth century.' Of the 164 now extant charters of Edward the Confessor, 44 are certainly forged, only 64 certainly authentic, and the rest uncertainly one or the other.

The verifiable errors resulting from the still radically oral economic and juridical procedures that Clanchy reports were minimal because the fuller past was mostly inaccessible to consciousness. 'Remembered truth was…flexible and up to date' (Clanchy 1979, p. 233). As has been seen in instances from modern Nigeria and Ghana (Goody and Watt 1968, pp. 31–4), in an oral economy of thought, matters from the past without any sort of present relevance commonly dropped into oblivion. Customary law, trimmed of material no longer of use, was automatically always up to date and thus youthful—a fact which, paradoxically, makes customary law seem inevitable and thus very old (cf. Clanchy 1979, p. 233). Persons whose world view has been formed by high literacy need to remind themselves that in functionally oral cultures the past is not felt as an itemized terrain, peppered with verifiable and disputed 'facts' or bits of information. It is the domain of the ancestors, a resonant source for renewing awareness of present existence, which itself is not an itemized terrain either. Orality knows no lists or charts or figures.

Goody (1977, pp. 52–111) has examined in detail the poetic significance of tables and lists, of which the calendar is one example. Writing makes such apparatus possible. Indeed, writing was in a sense invented largely to make something like lists: by far most of the earliest writing we know, that in the cuneiform script of the Sumerians beginning around 3500 BC, is account-keeping. Primary oral cultures commonly situate their equivalent of lists in

narrative, as in the catalogue of the ships and captains in the *Iliad* (ii. 461–879)—not an objective tally but an operational display in a story about a war. In the text of the Torah, which set down in writing thought forms still basically oral, the equivalent of geography (establishing the relationship of one place to another) is put into a formulary action narrative (Numbers 33:16 ff): 'Setting out from the desert of Sinai, they camped at Kibroth-hattaavah. Setting out from Kibroth-hattaavah, they camped at Hazeroth. Setting out from Hazeroth, they camped at Rithmah…', and so on for many more verses. Even genealogies out of such orally framed tradition are in effect commonly narrative. Instead of a recitation of names, we find a sequence of 'begats', of statements of what someone did: 'Irad begat Mehajael, Mehajael begat Methusael, Methusael begat Lamech' (Genesis 4:18). This sort of aggregation derives partly from the oral drive to use formulas, partly from the oral mnemonic drive to exploit balance (recurrence of subject-predicate-object produces a swing which aids recall and which a mere sequence of names would lack), partly from the oral drive to redundancy (each person is mentioned twice, as begetter and begotten), and partly from the oral drive to narrate rather than simply to juxtapose (the persons are not immobilized as in a police line-up, but are doing something—namely, begetting).

These biblical passages obviously are written records, but they come from an orally constituted sensibility and tradition. They are not felt as thing-like, but as reconstitutions of events in time. Orally presented sequences are always occurrences in time, impossible to 'examine', because they are not presented visually but rather are utterances which are heard. In a primary oral culture or a culture with heavy oral residue, even genealogies are not 'lists' of data but rather 'memory of songs sung'. Texts are thing-like, immobilized in visual space, subject to what Goody calls 'backward scanning' (1977, pp. 49–50). Goody shows in detail how, when anthropologists display on a written or printed surface lists of various items found in oral myths (clans, regions of the earth, kinds of winds, and so on), they actually deform the mental world in which the myths have their own existence. The satisfaction that myths provide is essentially not 'coherent' in a tabular way.

Lists of the sort Goody discusses are of course useful if we are reflectively aware of the distortion they inevitably introduce. Visual presentation of verbalized material in space has its own particular

economy, its own laws of motion and structure. Texts in various scripts around the world are read variously from right to left, or left to right, or top to bottom, or all these ways at once as in boustrophedon writing, but never anywhere, so far as is known, from bottom to top. Texts assimilate utterance to the human body. They introduce a feeling for 'headings' in accumulations of knowledge: 'chapter' derives from the Latin *caput,* meaning head (as of the human body). Pages have not only 'heads' but also 'feet', for footnotes. References are given to what is 'above' and 'below' in a text when what is meant is several pages back or farther on. The significance of the vertical and the horizontal in texts deserves serious study. Kerckhove (1981) suggests that growth in left-hemisphere dominance governed the drift in early Greek writing from right-to-left movement, to boustrophedon movement ('ox-plowing' pattern, one line going right, then a turn around a corner into the next line going left, the letters inverted according to the direction of the line), to *stoichedon* style (vertical lines), and finally to definitive left-to-right movement on a horizontal line. All this is quite a different world of order from anything in the oral sensibility, which has no way of operating with 'headings' or verbal linearity. Across the world the alphabet, the ruthlessly efficient reducer of sound to space, is pressed into direct service for setting up the new space-defined sequences: items are marked *a, b, c,* and so on to indicate their sequences, and even poems in the early days of literacy are composed with the first letter of the first word of successive lines following the order of the alphabet. The alphabet as a simple sequence of letters is a major bridge between oral mnemonic and literate mnemonics: generally the sequence of the letters of the alphabet is memorized orally and then used for largely visual retrieval of materials, as in indexes.

Charts, which range elements of thought not simply in one line of rank but simultaneously in horizontal and various cross-cross orders, represent a frame of thought even farther removed than lists are from the oral noetic processes which such charts are supposed to represent. The extensive use of lists and particularly of charts so commonplace in our high-technology cultures is a result not simply of writing, but of the deep interiorization of print (Ong 1958b, pp. 307–18, and *passim*), which implements the use of fixed diagrammatic word-charts and other informational uses of neutral space far beyond anything feasible in any writing culture.