Oral and Literate (R)evolutions

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Abstract

This thesis is an investigation into some of the effects upon 1) ancient Greece as it shifted from a preliterate to a literate society; and upon 2) North America as it shifts from a primarily literate culture to one which relies upon electronic media (a mixture of literacy and orality which incorporates both but in the final analysis is neither). Because of the breadth of the topic I have created three chapters which are meant to stand on their own (each with its own bibliography). Even though this is a progressive (nonlinear) investigation which spends little time attempting to draw conclusions, the theme of (r)evolutions in communications unite the tangents of inquiry which comprise this project. The twentieth century has produced epistemological, sociocultural, and, with the help of the evolution of electronic media, communications revolutions at least as jarring as those of fifth and sixth century BCE Greece. It is between these two (r)evolutionary periods that I draw parallels. The fundamental ideas behind the communication (r)evolution in ancient Greece, the shift from a preliterate to a literate society, is known to many. But what is of known of the epistemological, sociocultural, and cognitive changes coinciding with these shifts? It is these past transformations I hope illuminate so that we might better understand through comparison, the implications of the complex revolutions in communication we are in the midst of today.

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Acknowledgments

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Time Line of Ancient Greece

	BCE	Figures	
	1600-1200		Bronze Age
	1200-900		Dark Ages
	776		First Olympiad
Archaic	725	(2,3)	Homer
	550		
Pre-Classical	490	(1)	First Persian Invasion, Marathon
	480	(4,5)	Second Persian Invasion *Thermopylae, Salamis*
	479	(6)	Platai. Persians driven from Greece. *Zeus temple at Olympia*
	454		Athenian Empire
Classical	431		Peloponnesian War, Athens/Sparta. *Parthenon, Hephaisteion*
	404		Defeat of Athens
	330		

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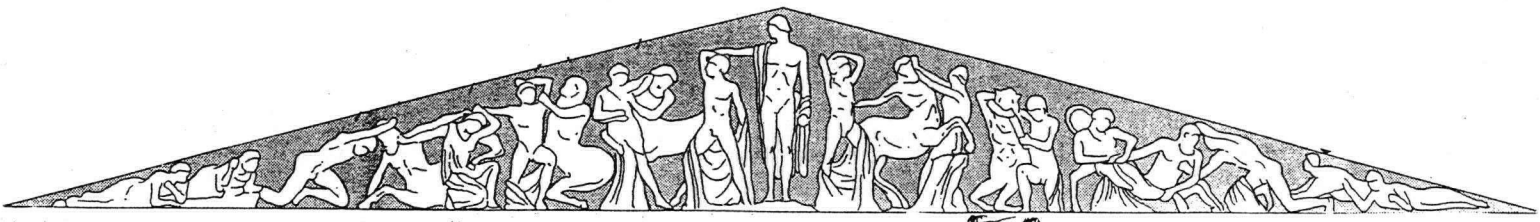

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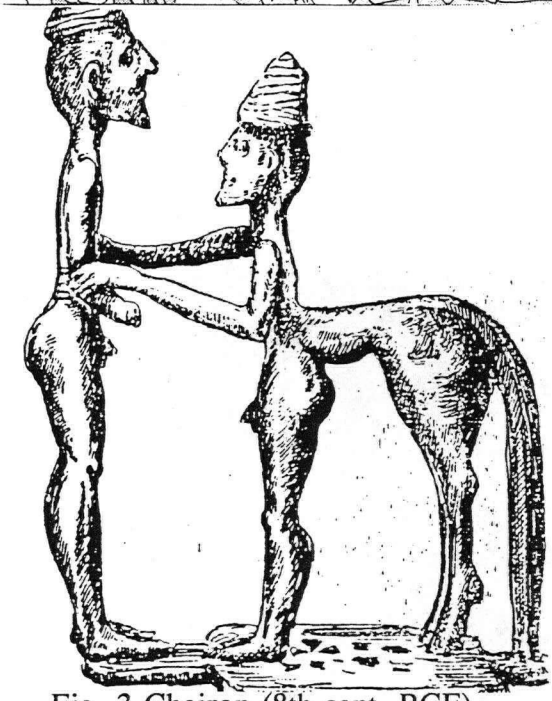

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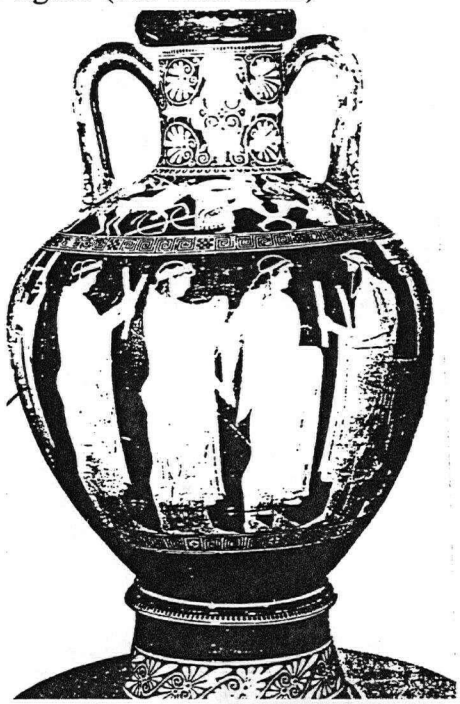

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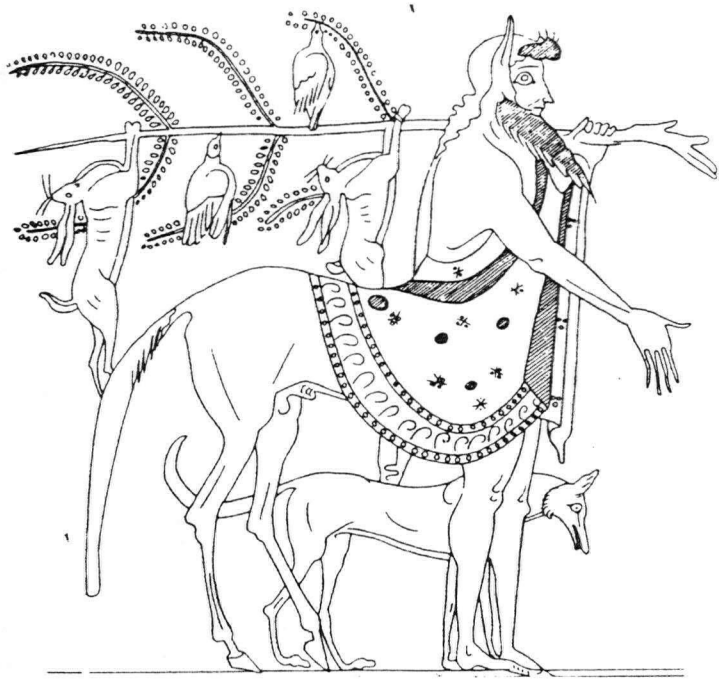

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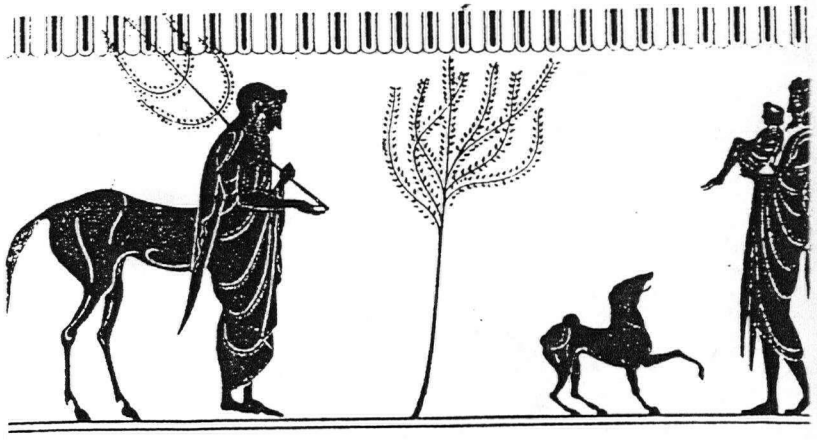

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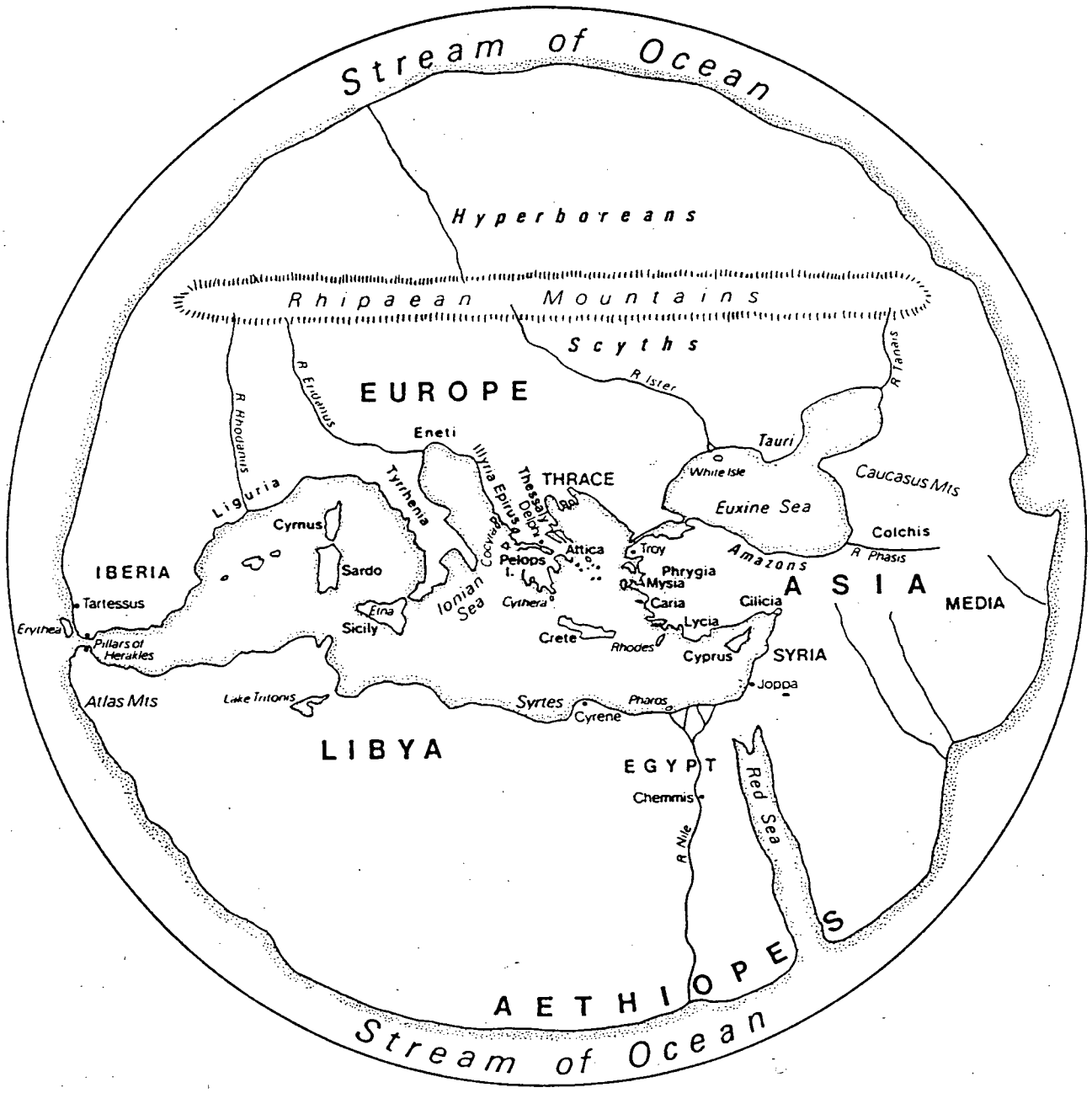

Introduction

> We dissect nature along lines laid down by our native language... Language is not simply a reporting device for experience but a defining framework for it.
>
> —Benjamin Whorf

> Words strain,
> Crack and sometimes break, under the burden,
> Under the tension, slip, slide, perish,
> Decay with imprecision, will not stay in place,
> Will not stay still.
>
> —T. S. Eliot

This thesis is an investigation into some of the effects upon 1) ancient Greece as it shifted from a preliterate to a literate society; and upon 2) North America as it shifts from a primarily literate culture to one which relies upon electronic media (a mixture of literacy and orality which incorporates both but in the final analysis is neither). I also hope to sketch in some background cognitive and sociocultural implications coinciding with these shifts in comunicative modes while drawing parallels between the two (r)evolutionary periods. Because of the breadth of the topic I have created three chapters which are meant to stand on their own (each with its own bibliography). Even though this is a progressive (nonlinear) investigation which spends little time attempting to draw conclusions, the theme of (r)evolutions in communications unite the tangents of inquiry which comprise this project.

Implicit in communication theory after Aristotle's Rhetoric was a concern for audiences and their social moorings. The effectiveness of a discourse was understood from the first to be related to people's values and idealizations. However, with the coming of the idea of "culture" (vis-à-vis "society") came a broadening the impact of thought on audience; German theories of sociology,

and British, American, and French work in anthropology have complicated our understanding of culture and forced a reconceptualization of public discourse. And thus it is that the twentieth century has produced epistemological, sociocultural, and, with the help of the evolution of electronic media, communications revolutions at least as jarring as those of fifth and sixth century BCE Greece. The fundamental ideas behind the communication (r)evolution in ancient Greece, the shift from a preliterate to a literate society, is known to many. But what is of known of the epistemological, sociocultural, and cognitive changes coinciding with these shifts? It is these past transformations I hope illuminate so that we might better understand through comparison, the implications of the complex revolutions in communication we are in the midst of today.

Chapter I: Pre-Literacy

Introduction

This chapter hopes to analyze two topics in order to shed light on some aspects of the shift from pre-literacy to literacy, using the Centaur myth as a springboard to the understanding of this shift. The first topic will question how symbols or emblems, such as the Centaur, are influenced by, and in turn act on, language, culture, and thought. Second, by researching the Centaur emblem's origins we can see the impact of an evolving sense of "self" and "other" in ancient Greece and its influence on the use of—analogical and polarized, paratactic and hypotactic, and preliterate and literate modes of perception, comprehension, and communication. It seems best to begin with a generalized description of the ways in which the cultural heritage of a preliterate society is transmitted, and then to see how these ways are changed by the widespread adoption of any easy and effective means of written communication.

In a simplified sense, when one generation hands on its cultural heritage to the next, three fairly separate items are involved. First, the society passes on its material foundations, including the natural resources available to its members. Secondly, it transmits standard ways of acting. These customary ways of behaving are only partly communicated by verbal means; ways of cooking food, of growing crops, of handling children may be transmitted by direct imitation. But the most significant elements of any human culture are undoubtedly channeled through words, and reside in the particular range of meanings and attitudes which members of any society attach

to their verbal symbols. These elements include not only what we habitually think of as customary behaviour but also such items as ideas of space and time, generalized goals and aspirations, in short the *Weltanschauung* of every social group. In Durkheim's words, these categories of understanding are "priceless instruments of thought which the human groups have labouriously forged through the centuries and where they have accumulated the best of their intellectual capital" (Durkheim 1915: 19). The relative continuity of these categories of understanding from one generation to another is primarily ensured by language, which is the most direct and comprehensive expression of the social experience of the group. The transmission of the verbal elements of culture by oral means can be visualized as a long chain of interlocking conversations between members of the group. Thus all beliefs and values, all forms of knowledge, are communicated between individuals in face-to-face contact; and, as distinct from the material content of the cultural tradition, whether it be cave paintings or hand-axes, they are stored only in human memory.

The intrinsic nature of oral communication has a considerable effect upon both the content and the transmission of the cultural repertoire. In the first place it makes for a directness of relationship between symbol and referent. There can be no reference to "dictionary definitions". Nor can words accumulate the successive layers of historically validated meanings which they acquire in a literate culture. Instead, the meaning of each word is ratified in a succession of concrete situations, accompanied by vocal inflections and physical gestures, all of which combine to particularize both its specific denotation and its accepted connotative usages. This process of direct semantic ratification, of course, operates cumulatively; and as a result the

totality of symbol-referent relationships is more immediately experienced by the individual in an exclusively oral culture, and is thus more deeply socialized.

One way of illustrating this is to consider how the range of vocabulary in a non-literate society reflects this mode of semantic ratification. It has often been observed how the elaboration of the vocabulary of such a society reflects the particular interests of the people concerned. To use a commonly known example, the Inuit have not one, but seven or more, words for snow according to texture and density—a prolixity which mirrors the importance of snow in a region where the terrain often consists of that weeks precipitation. The corollary of this prolixity is that where common emphases and interests, whether material or otherwise, are not specifically involved, there is little verbal development. Malinowski reported (1936; 296-336) that in the Trobriands the outer world is only named in so far as it yielded useful things; and there is much other testimony to support the view that there is an intimate functional adaptation of language in non-literate societies, which obtains not only for the relatively simple and concrete symbol-referents involved above, but also for the more generalized "categories of understanding" and for the cultural tradition as a whole. Just as the more concrete part of a vocabulary reflects the dominant interests of the society, so the more abstract categories are often closely linked to the accepted terminology for pragmatic pursuits.

The way in which these various institutions in an oral culture are kept in relatively close accommodation to one another surely bears directly on the question of the central difference between literate and non-literate societies. As we have remarked, the whole content of the social tradition, apart from the material inheritances, is held in memory. What the individual remembers tends to be what is of critical importance in that persons experience of the main social

relationships. In each generation, therefore, the individual memory will adjust to the old by the process of interpretation that Bartlett calls "rationalizing" or the "effort after meaning"; and whatever parts of it have ceased to be of contemporary relevance are likely to be eliminated by the process of forgetting (Bartlett 1932: 34).

The social function of memory—and of forgetting—can thus be seen as the final stage of what may be called the homeostatic organization of the cultural tradition in non-literate society. The language is developed in intimate association with the experience of the community, and it is learned by the individual in face-to-face contact with the other members. What continues to be of social relevance is stored in the memory while the rest is usually forgotten: and language—primarily vocabulary—is the effective medium of this crucial process of social digestion and elimination which may be regarded as analogous to the homeostatic organization of the human body by means of which it attempts to maintain its present condition of life. Some theorists have proposed the idea that myth as an oral tradition is actually rather static, and that later myths built upon the earliest extant versions of the same myths vary relatively little (Vernant 1974: 201-11). This does not suggest that an author's emphasis, based on contemporary culture and thought, does not come into play; for it is the need to be contemporaneous which seems most often to be the modifier of myth (Detienne 1978:49, Kirk 1970: 73-7). The archetypes remain unchanged, but the contexts or peripheral details will always be manipulated so as to be (or seem) more applicable to the contemporary context.

In drawing attention to the importance of these assimilating mechanisms in non-literate societies, I am denying neither the occurrence of social change nor yet the "survivals" which it leaves in its wake. Nor do we overlook the existence of mnemonic devices in oral cultures which

offer some resistance to the interpretive process. Formalized patterns of speech, recital under ritual conditions, the use of drums and other musical instruments, the employment of professional memorizers/orators/performers—all such factors may shield at least part of the content of memory from the transmuting influence of the immediate pressures of the present. The Homeric epics, for instance, seem to have been written down during the first century of Greek literature (between 750 and 650 BCE), looking to a departed era with incredible contemporary relevance.

With these qualifications, however, it seems correct not to characterize the transmission of the cultural tradition in oral societies as homeostatic in view of the way in which its emphasis differs from that in literate societies. My encapsulation has, of course, been extremely abstract; but using the illustrative example of the shifting concept of the Centaur in ancient Greece (1200-330 BCE, see p.v)and in turn in Greek mythology; I hope to fill in a number of gaps in our understanding of the effects of the shift from preliteracy to literacy.

The prominence and prevalence of the Centaur tribe[1] upon the metopes of the Parthenon, the frieze of the temple of Poseidon, the western pediment of the Temple of Zeus at Olympia (see fig.1), and the frieze on the temple of Apollo at Bassai, indicates the great importance and centrality of the creature's symbolic function in Greek culture. It is essential to note that these sculptures were created within some decades after the Persian Wars (490-430 BCE) on what are

[1]A tribe of half-horse half-man composites probably bred out of Magnesian mares by Centaurus (Diod. 4.69.1). Although the Centaur tribe came to be thought of as monsters, they seem originally to have been an uncivilized tribe living in the mountains of Magnesia.

arguably the most important cultural monuments in Greece, indicating the value of what the Greeks understood to be at stake in the Centauromachy[2].

1: From Unknown (Monster) to Known (Barbarian)—The Evolution of Analogy and Polarity in Ancient Greece

"Foreigner: Barbarian, Enemy, Uncivilized..."

-Liddell, Scott Greek/English Dictionary

In ancient Greece the creation and subsequent metamorphosis of a mythological creature reflected prevalent analogies and polarities within Greek culture itself. Thus the Greek myth-making process took the characteristics of a mythical creature and what they symbolized within Greek culture and exaggerated them, thereby foregrounding its symbolic nature. In this way early Greek society both defined itself and attempted to assure its own continuity. Greek society, in conformity to its mythological traditions, tied itself to the notion of a Golden Age[3]. Such interaction between myth and society of which it is a reflection augmented certain polarities in Greek culture. The analysis of these polarities brings into relief the possible structures of the Greek psyche and culture.

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[2]Centauromachy: The infamous battle (further described in this chapter) between the savage Centaur tribe and the heroic Lapiths (who had help from heroes such as Heracles and Theseus) is first found in literature and art in the fifth century after which it quickly became one of the most common motifs in Greek culture.

[3]Golden Age: The first age of mankind and an age of innocence. There were no bodily infirmities, and nobody had to work. Perfect happiness, truth, and right prevailed. There was perpetual spring. There were no arts, no crafts; the earth brought forth all that was needed.

The conflict between the Greeks and foreigners or "barbarians" is characterized, in myths of the early archaic or pre-Homeric period (see time line p.v), by a series of binary oppositions such as civility/barbarity; order/chaos; law/transgression and nature/culture. These are binaries that the Centaur came to represent as its evolution from a creature of civility to a barbaric monster coincided with the Greeks' evolving definition of civilization. In her study of ancient Greek identity Hall concludes that these same oppositions

> lay at the heart of the Archaic thought world, for the struggle to conceptualize the nature of civilization is as old as civilization itself....and the search for this past becomes an essential component of a culture's quest for an identity (51).

2: Composite and Corporate Creatures of Ancient Greece

The Centaur is a mythical composite creature, part-man part-horse, not unlike others found in Greek mythology such as the Chimaera (lion, goat, snake), the Sphinx (lioness, woman), the Minotaur (man, bull), and the Satyr (goat, man). Most early visual depictions of the Centaur (ceramic or metal statuettes; painted pottery) display a stallion whose head and forelegs are replaced by a full-bodied human male whose buttocks are attached to the horse's chest. Thus the front legs of this composite are human, the back, equine. The creature ancient Greeks saw as symbolically analogous to the Centaur was the Amazon, a less graphic but more conceptual composite of male and female: the Amazon is female in *form* and masculine in *character* (function). Most such hybrids, whether of animal and animal, animal and human, or even of gender attributes, use a composite *form* to depict a creature's varying and separate *function*

(character), as well as to indicate a separate habitat outside of the "civilized" Greek space. A composite creature then is suggestive of the liminality of its form, function, and habitat; more specifically, these liminal creatures are often representative of the Greeks' conception of sexual, cultural, and species boundaries.

The ancient Greeks tended to separate the character, function, and/or form of corporate creatures, such as groups, tribes, or packs, by individuating one or a few of the mythic species in order to augment the binary nature of that group by showing an opposite, e.g., Cheiron[4] and Pholus (Centaurs) (see fig. 1a,b&c), Polyphemus (Cyclopes), Penthesileia and Antiope (Amazons), Silenus (Satyrs), etc.

This individuation is achieved in one or more of the following ways:

-The individual most importantly has a name, while the pack all remain anonymous. To the ancient Greeks naming was a socializing gesture of great power.

-The creature(s) live separated from the group.

-The creature's nature can be quite different (if not opposite) from the others though similar in form.

-The creature has transhuman capabilities (prophecy, strength, cunning, etc.); one or more of these may set them apart from their group as well as exemplify the powers heroes are seeking to attain.

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[4]Cheiron: Differing from the Centaur tribe in his nature because, whereas they were barbaric and unrestrained in their habits, Cheiron was one of the wisest and most learned of living beings. Famous for his knowledge of medicine, music, and hunting: he taught mankind the use of plants and medicinal herbs and instructed the greatest heroes of the age in many polite arts—Achilles, Aeneas, Asclepius, Heracles, Jason, and Peleus. Cheiron was accidentally shot by one of Heracles' poison arrows but could not die, but the pain of the wound made him regret his immortality. Prometheus agreed to take on Cheiron's immortality. He achieved another kind of immortality by being placed among the stars as the constellation Centaurus (the myths details and references will be examined further).

The function of individuation is to expand the emblem[5] (myth) in order to embody, graphically or conceptually, analogies (Centaurs = Foreigners) and polarities (Greeks vs. Foreigners).[6]

3: Greek Sense of Space

The "liminality" of Centaurs' is also represented by their habitat, which was outside of what ancient Greeks considered their "civilized world". Their conception of the world placed Delphi (the shrine of Apollo), at the centre or "the navel" (see map on p.vii), representing all that is essentially Greek—a society which is rational, male, socialized, lawful, and civilized. The further one moved from that centre the further one was from Greek notions of civility and civilization. Generally speaking, one culture's view of another is very often ethnocentric: ancient Greece was no exception. The ancient Greek means of rationalizing what they viewed as their own "uncivilized" past was often to compare it with other "less civilized" contemporary cultures in order to obscure its own historical shortcomings. Importantly, this was not the only step taken in the Greeks' attempt to distance themselves from what they considered to be uncivilized. In archaic Greek thought, the abstractions later to be conceptualized as ethnically "other" (barbarian) were often embodied in the monstrous, supernatural, or hostile (inhuman). For this reason, in the *Iliad* it is not the Trojans but the fabled Centaurs and Amazons who live on the spacial margins of the world and are routed by the Greek heroes. Ironically, and in support of this

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[5]Because of the numerous connotations of the word "myth" I will be using the word "emblem" when describing a single element in Greek myth such as the Centaur.

[6]An analogy is the assimilation or likening of one unknown or lesser known thing to another that is well known. A polarity is the relating or reducing of an idea to a pair of opposite principles.

idea, the parallel anecdotes describing the Centaurs and the Amazons are recorded in the *Iliad* by the Greek Nestor and the Trojan Priam, enemies but not barbarians (I.266-72; III.184-9).

For the Greeks then, the conceptual bridge between the "mythical" and the "historical" barbarian was drawn some time between the Trojan (12th or 13th century BC) and the Persian (5th century BC) wars. Not unlike early attempts at conceiving the world spatially which created monsters and treachery at its limits, the Archaic Greeks, too, made use of monstrous emblems of the unknown—but as the unknown became known, rather than change the emblems they made them symbolic of foreigners. In time the expansion of what the emblem symbolized was made necessary to keep up with its contemporary context (especially during the Persian wars) and shifted from representing the unknown to representing the Greeks' radically ethnocentric view of "others" or non-Greeks.

The distinction between *character* and *form* is an important one because a foreigner's *character* may have seemed radically different from the Greeks' own, but in human or bodily *form* the two were relatively the same. The notion of an equality of form seems to have been an uncomfortable one to the ancient Greeks and is a fundamental reason behind the Greek propensity for symbolically trans*forming* foreigners into monsters— so that their form and character could unite. The archaic period saw the beginnings of this transformation within Greek myth, with the identification of supernatural creatures alongside actual communities living on the margins of Greek civilization; at the ends of the world lived the Amazons and Cyclopes as well as Mysians and Ethiopians (*Il* 13.5; 1.423). The Centauromachy, a mythical archetype, was made analogous to the battles against Persia waged by the Greeks and it appeared in the art of the fifth century as a symbol of the victory of Greek culture, reason, and democracy, over tyranny,

irrationality, and barbarism. The force with which this ethnocentricity progressed led the Greeks to reflect upon their own past with contradictory logic; As Edith Hall explains: "To the Archaic Greek Priam was a king, Hector a hero, Medea a sorceress,[all foreigners],... to the fifth-century [Greek] an essential aspect of such figures' identities was that they were barbarians" (p.54).

The Centaur *tribe* then, to the classical Greek mind, represented the non-Greek, the unknown, and thus the barbarian. In fact by the classical Greek period (refer to date line, p.v) the Centaur came to represent, among other things, a defilement of some of the most prized and certainly the most central tenets on which ancient Greek society was founded. What the Centaur implied to the Greeks is augmented by strong evidence that, unlike most elements within Greek mythology, the origin of the Centaur's characteristics, if not the form, is very likely Greek. Thus, this study will allow for a better understanding of the interaction between the symbol and the society from which it stems and evolves.

4: Centaur as Metaphor: The Amalgamation of Analogies

> "doubts have been expressed about the dichotomous approach to the study of cognitive developments in human culture, to the characterization of modes of thought, to the growth of knowledge, that runs through so much discussion in the field of comparative sociology and philosophy, largely because the we/they division penetrates so deeply our everyday speech. From where does this ethnocentricity come?" (Goody 1978: 146)

More than 300 years before the Iliad and Odyssey were composed there had been a series of invasions of Central Greece and the Peloponnesos. The invading tribes over the centuries were the Achaeans, Arcadians, Aeolians, Ionians, and by 1100 BCE the Dorians. The period of Achaean supremacy is known as the Heroic or Homeric age, and is the context for Homer's Iliad, which likely reflected an amalgam of several wars fought during this period. The essence of "otherness" to the archaic Greeks was often based on whether or not the languages between warring tribes was mutually intelligible[7]. The less a Greek understood the language of his enemy the more barbaric that enemy became. According to Haarmann no other ancient people privileged language to such an extent in defining its own ethnicity.[8] The Archaic period (1000-499 BCE) saw the formation of Greek city-states and the development of a strong cultural and even racial identity or consciousness. As Hellenes the Greeks thought of themselves as descendants of Hellen (Panhellenic) and thus as a living continuation of their myths (not unlike a Catholic's view of his or her relation to Jesus). For this reason they thought of themselves as the chosen ones while all others were seen as heathens, and should only have a subordinate place in society.

Although one finds evidence in the Archaic period of a certain unity or shared ethnicity between Hellenes, it was the Persian Wars which engendered and solidified the polarization of Greek and barbarian.[9] This does not mean that the Greek/Hellene/civilized vs. foreign/non Greek-speaking/ barbarian polarity emerged simultaneously; the notion of "Hellene" certainly came before that of the barbarian. A people's sense of ethnicity does not necessitate the uniform

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[7]Hall examines this linguistic phenomena throughout Inventing the Barbarian.

[8]Language's importance to the Greek collective identity are the focus in H. Haarmann's Language in Ethnicity (Berlin 1986).

[9]Oliver, p. 142; Hall, pp. 60-69.

sense of hostility towards all "others" as implied by the concept of barbarian. The Hellenic consciousness seems to have gained a great deal of strength in the eighth to sixth-centuries BCE while the idea of the barbarian gained most of its force in the fifth. The idea that barbarians were anti-Greek did not have its genesis within a cultural vacuum in the early fifth century BCE; the artists and writers of fifth century Athens had access to a variety of traditional materials, of mythical definitions of civilization, of divine, supernatural and heroic agents of order and chaos, each one having a plethora of malleable applications. The creation of the barbarian and/or the Hellene proved to be an evolutionary process which independently waxed and waned in strength depending on contextual and historical circumstances. Once the polarity had been created/realized these notions became fixed as the defining features of the outside world and the Greeks' understanding of themselves. The image of the Centaur became one of the most commonly repeated emblems in fourth and fifth century BCE art. This is especially remarkable when one considers the fact that, unlike ancient Rome, monumental sculpture in ancient Greece did not make use of literal historic material. For example, none of the monumental sculptures in ancient Greece depict the Greeks fighting their actual enemies, instead they make use of a symbolic form of that enemy, such as the Centaur. Thus, using the Centaur as symbol the classical Greeks spoke, repeatedly and loudly, through visual representations, of their views on the Nature/Culture and civility/barbarity polarities, and thus of their growing ethnocentricity.

5: Visual Representations

> The primary conception of Greek as opposed to barbarian... --Hellas against the non-Hellenic—formed the fundamental theme of Greek monumental art (Brown,83).

The form of the Centaur is most often described in literature simply as half-human, half-horse. To get a more detailed picture of the Greek conception of the Centaur one must look at its visual representations. Any analysis of art as a phenomenon within any culture must not only provide an iconological interpretation, but must also consider formal changes in their precise historical context. Though dated, Baur's The History of the Centaur in the Visual Arts is still a useful collection of material[10]. Baur presents the Centaur images chronologically from earliest to latest in two separate chapters: 1) those depictions with human forelegs and 2) those with equine forelegs. Baur concludes that in the archaic period almost every figure with *human* forelegs is meant to represent Cheiron, while those with equine legs illustrate the Centaur tribe (fig.2). The earliest image of a Centaur with forelegs (an eighth-century BCE depiction, likely of Cheiron) looks awkwardly constructed, naked, and bearded (fig.3). Later versions of Cheiron (especially after the sixth century BCE) make him look more human (civilized): he is dressed, concealing the area where horse and human anatomy connect, rarely has equine ears, and is usually clean-shaven or sporting a well groomed beard. After the Persian war, illustrations of Cheiron with *equine* forelegs becomes the norm. Cheiron is often depicted carrying a lyre, herbs (medicinal presumably), Delphic laurel (the same that Apollo carries), a pine or ash branch; he is often

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[10]The L.I.M.C.'s publication on the Centaur is pending and will no doubt surpass Baur's detailed work.

shown with trophies of a recent hunt, and/or weapons (bow and arrow, spear), while teaching his famous students Achilles, Jason, and Heracles to hunt (fig. 1b).

The eighth-century BCE depiction (earliest extant) of one member of the Centaur tribe shows him to have equine legs, it is typical of later representations—more "monster" and less "human". While members of the tribe have human heads, they almost always have equine ears, are coarse-featured, and, in the Archaic period, are always bearded. They very rarely are seen wearing clothes, and in the Archaic period (though even then quite infrequently) may have both human *and* equine genitals. There may, of course, be variations due to local customs in depicting Centaurs; for example, "Those found in continental Greece... are typically shaggy-haired, while in Ionia and Etruria...[they] are short-haired" (Baur 137). The Centaur tribe do not, as a rule, carry sophisticated weapons such as bows, but appear to prefer nature's resources: pine trunks, branches, or boulders. It is important to note that in neither these sculptures nor any other visual representations are the Centaur tribe and Cheiron illustrated *together* in *any* mythical context. This can be seen as evidence that to the ancient Greeks the similarities in these Centaurs' *form* were irreconcilable with their differing *functions* and that these inconsistencies were indicative of fundamental contradictions in Greek myths and beliefs.

Perhaps the most emblematically fecund use of both types of Centaurs occurs on separate bands of the Copenhagen amphora (François vase) of 470 BCE. It depicts the human-legged Cheiron,[11] leading a procession of gods (all mothers and their sons) to honour the newly wedded pair, Peleus and Thetis (fig.4). The scene represents the sanctity of marriage, the importance of social ceremony and, through this, the formal law-abiding unity created through the wedding

[11]According to Oakley it is rare to see Cheiron with human legs after 480 BCE (p. 36).

ritual, and it in turn prefigures the genesis of Cheiron's student Achilles, who, along with his other students Heracles and Jason, become the best known representational vehicles for civility in the Greek world.

Looming overhead of this calm almost domestic scene, in another band on the same vase, we see seven scenes from the Centauromachy with equine-legged Centaurs struggling against a variety of Lapiths and well known heroes. Thus, the vase juxtaposes the opposing roles of the Centaurs: on the one hand there is Cheiron, who upholds the human social structure by blessing a marriage; on the other there are the Centaurs who threaten to destroy society by their feral impulses. Notopoulos comments directly on this mode of expression:

> The François vase is the *locus classicus* for parataxis in vase painting and reflects in its storied bands, paratactically[12] arranged, the same features as appear in Homeric parataxis[13] [to be discussed later]. As we watch the development of vase painting in Attica we observe that the design of the vase suggests to the painter a hypotaxis[14] far earlier than it is observed in literature. For with the sixth century parataxis gives way to hypotaxis by reason of the fact that the main panel becomes the central scene and the ornamentation is subordinated to it in the rest of the vase. Thus vases are among the first manifestations of the concept of organic unity in Athens' intellectual development. (1949, 12)

Irwin Panofsky (1962: 24) in his "Iconography and Iconology" distinguishes three separate phases of cultural history: the "pre-iconographical description" (style), the

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[12]Construction in which ideas are presented without conjunction or subordination to one another and are independent in relation and construction.

[13]The term "parataxis" is most often used in classical (Havelock 1963), Old English (Mitchell 1992), and Contemporary literary research (Adorno 1989; Hayman 1985). Because the term has also been used to describe the way in which "primitive" or oral communities communicate, it has also been linked (wrongly), to cognitive limitations (Jaynes 1983) rather than conceptual habits. The resilience and expressiveness of the term though has, as Notopoulos shows, a variety of interdisciplinary applications relating to "paratactic qualities" such as "compression, terseness, and inclusivity" (Donoghue 1992:165).

[14]Construction in which ideas are presented in subordination and have a dependant relation of construction. In literary studies, the term implies the use of one or more relative pronouns or subordinating conjunctions in a sentence or clause.

"iconographical analysis" (types), and "iconographical interpretation" or the "history of cultural symptoms of 'symbols' in general" which offer insight into the manner in which, under varying historical conditions, essential tendencies of the human mind were expressed by specific themes and concepts. It is this final phase which poses the dilemma of understanding the "varying historical conditions" surrounding a myth or emblem's creation and its subsequent use. Myths re-address and manipulate not only a visual repertoire but also sets of ideas, associations, and images. The question of reading images can be approached by the student of myth from several angles. In each case, however, it will be clear that there is an attempt to view images and the process of viewing images within a particular context. The question which must be asked is: how are we to read images within a social context? Many factors in the control and dispersal of images bespeak the power of images within society, but it is a power hard to analyze with clarity and precision. Goldhill and Osborne (1994) regard images as sites of engagement and negotiation. They explore from different perspectives,

> the possibilities of the relations between viewers/ producers and the interlocking nexus of stereotypes, ideological constructions, fantasies and projections, conventions and manipulations that make up representation within a cultural context (9).

The literary and artistic distinction between the two types of Centaurs (tribe and Cheiron) suggests that there must be some contextual reason behind the creation and evolution of this difference.

6: Symbol and Analogy Unite in Persians/Centaur Tribe

When interpreting the literary and artistic forms, we must be reminded that these symbols represent amalgams whose unique (new) features, often reveal cultural changes that influence the interpreter. This having been said, I shall use the Persians as an example (with the help of Herodotus, the best documented) of the Greeks' attitude towards foreigners after the fifth century and in doing so will likely shed some light on their view of their own culture, as well as their need to document their fight against barbarity in symbolic or mythological form using, among others, the Centaur.

Persian culture and civilization was seen by the ancient Greeks as imbalanced, defective, unrestrained, a threat to the Greek institutions of exchange and endogamy, and thus an affront to Greek culture in general. It was for these reasons that the Persians were seen as analogous to that which is represented by the Centaur tribe. The conflict between Greece and Persia produced a unity within Greece against a common enemy which strengthened the stigmatization of all that was Persian. The Persians' fabled excesses with wine, women, and food are comparable to the mythical characterizations of the Centaur tribe.

Symbols of Greek civility such as the socialized and regulated drinking of wine in the symposium and the eating of cooked meat, both of which are reinforced emblematically throughout the Centaur myth, strengthen the social context of the Civility/Barbarity polarity. The Centaur tribe's inability to suppress their animalistic nature after smelling or drinking wine prompts their attack in several episodes, including the Lapith wedding. To the Greeks, wine was one of the fruits which culture and civility bore them. Wine, like fire, was a gift from the gods

and had a power which could easily be abused, especially when drunk neat, a sign to the Greeks of "boorishness, imprudence, or greed" (Kirk, 167).[15] The detail, mentioned by Apollodorus[16], that the Centaur Pholus ate raw meat while Heracles, his guest, ate cooked (115), reflects the pejorative slant placed upon the Centaur.[17] What, other than slanderous, could be the reason for representing a horse/man as a raw meat eater? Homer's Iliad speaks of Diomedes' meat-eating mares and is clearly symbolic of the Greek view of beasts as being uncivilized and a threat to their well-being. These examples of "uncivilized" uses of food and drink are only two of many possible transgressions against Greek cultural mores.

Perhaps the worst of the Centaurs' contraventions are those defiling the guest/host relationship and most importantly against the institution of marriage. The importance of *Xenia* (the guest/host or friendship relation) was deemed so important within Greek mythology that Zeus himself was its overseer; the judge of treatment awarded to strangers or guests and its reciprocation. Within the mythical representations of the Centaur there are a number of instances in which they violate *Xenia* by disrupting occasions of hospitality (Apollod *bibl.* 2, 5.4). Sophocles in his Trachiniai makes specific note of the Centaurs "inhospitable" or "lawless" nature (716-18).

The institution of marriage held a special status in ancient Greece, one which is summarized in The Odyssey: "Nothing is greater or better than this, when a man and wife dwell

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[15]The habit of mixing wine with water is still a common practice in rural Greece.

[16] Apollodorus is said by Edward Tripp to be a "scrupulously faithful" recorder of texts, most of which are now lost, dating as far back as the fifth-century BCE.

[17]Eaters of raw meat lived in the remotest areas of Greece and "speak a completely unintelligible language" (Thucydides 3.94).

in a home in one accord, it is without parallel" (VI.182-4). This view of sacred unions was just as strong by the time Aristotle's Politics was written, for in it he says that, of the unifying features of the Greek *Polis,* (the touchstone of Greek civility from Archaic Greece onward), "partnership" was of primary importance to the *Polis'* cohesive essence.[18] The metaphor of marriage, as a founding and sustaining act of culture, was often set against that of war. Whether it was in the partnership of man and wife or the partnership of fellow citizens within a self-governing community, "partnership" was the main element of their culture which the ancient Greeks felt separated them from barbarians: "The barbarians have no ruling element; with them, the partnership is that of slave with slave, man and beast" (*Pol* 9).[19]

In art and literature the most common depictions of the Centaur tribe are ones which involve the defilement of unity in one form or another and which might be seen as expressing a civility/barbarity or unity/chaos polarity. Even in their mythological origin the Centaur tribe represents one violation after another: Ixion was invited to Olympus by Zeus in order to receive purification from Zeus for having murdered his Father-in-law, which he did instead of paying the debt owed for his marriage, (a rather serious marital transgression in itself). Ixion repays Zeus' hospitality and generosity by attempting to seduce his wife, but all-knowing Zeus foils his plan by creating a cloud in the shape of his wife. The cloud or the earth onto which Ixion's seed falls gives birth to Centaurus. Ixion, in retribution for his numerous transgressions, is chained to a winged and fiery wheel which revolves forever (Dio. Sic. 4.69.3-5; Pind, *Pythian.* 2.21-48). Ixion's attempt to seduce his host Zeus' wife Hera is exemplary of the fact that monsters are very

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[18]Levi-Strauss also believed marriage to be the foundation of human culture.

[19]Detienne goes so far as to say that Centaurs operate within a mythological code which defines reproduction and marriage in opposition to promiscuous sexuality (Detienne, 36). For an in-depth discussion, see Hall, pp. 201-10.

often the outcome of an abnormal union. Ixion's rashness is denotative of the breakdown between not only the unity/chaos polarity but of the guest/host relationship as well. Both Ixion and Centaurus (his offspring who fathered the Centaur tribe by mating with Magnesian Mares) do not marry before spawning their rather unnatural progeny. Interestingly, according to Kirk these genealogies seem to have late origins (after 500 BCE) and seem "rationalistic" (155); perhaps direct evidence of the Greeks' manipulation of the myth in order to strengthen its polarity. The idea that myth changes solely through a temporal and contextual evolution seems insufficient, and as we shall see in Chapter Two, the advent of literacy hints at another means of change, one which better explains what seems to be the conscious attempt of mythologisers to revise or negate myths' inconsistencies.

The list of violations involving the Centaur tribe only multiplies with time as increasing numbers of writers utilize and expand upon the original tales[20]. Foregoing the plethora of representations proving the Centaurs to be the personification of marital and sexual transgressions and in opposition to any civilized treatment of women, one rather telling piece of evidence is seen in the mythological figure of Kaineus. Her symbolic highlights read in this manner:

A beautiful woman who refused to marry; was raped by Poseidon (the god of horses), and was afterwards granted a boon, wishes to change her gender and become invulnerable to weapons; she offends Zeus and, during the Centauromachy, the Centaurs killed her/him by trampling and beating her/him into the ground (Verg. *Aeneid* vi; Ovid *Met.* xii). This story is emblematic of all the transgressions for which the Centaur tribe is renowned; the Kaineus tale is

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[20]Sources include Homer's *Il* II 743; Apollod II 54; Sophocles' *Trach* 130; Pindar's *Pyth* 2.31.

a warning to Greeks who think wrongly that only Centaurs are punished for partnership and sexual defilements. Kaineus, crushed by the Centaurs, is placed physically and symbolically beneath even the Centaur (fig. 5).

7: Origin Speculation

Although most of the evidence surrounding the origin of the Centaur myth points towards Greece, one might speculate that the half-human, half-horse originated among the Egyptians who were known for their theriomorphic deities. Yet, there is little artistic and no written evidence that the Centaur myth originated in Egypt. According to some scholarly opinion (Baur:2) the first representation of a Centaur-like creature comes from the Kassites who inhabited the Fertile Crescent region from 1750 BCE to 1150 BCE The creature found on Kassite boundary stones is double-faced (man and dragon), double-tailed (horse and scorpion) and wields a bow and arrow. T.B.L. Webster suggests that the Centaur figure had been imported to Mycenean Greece by the Hittites, with whom the Myceneans held excellent trade relations (175). Much of this speculation has little relevance without knowledge of the history of the horse within the area.

The evidence based on the dental wear of prehistoric horse remains found in the Ukraine gives proof of the existence of horseback riding 6000 years ago in this area of Northeastern Europe. Riding therefore "predates the wheel, making it the first significant innovation in human transport" (Anthony, Brown, and Telgin, 1991). The cult deposit in which the jaw bones were found "clearly indicates the horses domestic status" (101). Brown admits that dispersion eastward from the Ukraine would have had little resistance while movement West and South

would have been much more complex because of established and fortified agricultural societies. It is now clear that it took a very long time for the custom of riding to diffuse Southward into the Middle East. [Arriving] around 2200 to 2000 BCE horses were used in a role previously played by asses... as draft animals" (p 100).

Horses then are a relatively new phenomenon in the Eastern Mediterranean and Western Asia. A variety of sources attest to the animals' introduction to the area around 2000 BCE (Webster, 107; Azzarolu, 40). Since wild horses were known from the Ice Age on in the area between Spain and the Southeast Balkans[21] it seems unlikely that a Centaur figure would arise from Northern Europe. Although there is no artistic or literary evidence that the Northern Europeans had anthropomorphized the horse to create a monster or a beneficent god, the horse's form might have been mixed with man's for hunting rituals or at least empowering purposes because of the horse's obvious strength and sexual potency. This is evident in the earliest artifacts resembling Centaurs, regardless of origin. According to Azzarolu, raiding warrior Scythians in the ninth and eighth centuries BCE were likely the first to introduce the Northern Greeks to the horse and thus to the compound of horse and rider. With war and devastation coinciding with this introduction one can imagine the Greeks tainted view of the horse.

Azzarolu concludes that these horseback riding archers were likely the inspiration behind the Centaur myth (104). The early archaic Greeks, ignorant of horses, could easily have assumed that these barbaric foreigners were monsters after having heard the tales of Scythian pillaging, just as the Amerindians of Central America at first interpreted Spanish conquistador and steed as

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[21] As evidenced from the cave paintings at Alta Mira (Sp) and Lascaux (Fr), and Azzarolu's conclusion that wild horses rarely moved further South than the Balkans during their migration within Europe (53).

being one (Thomas 1993:169). Yet, as Robin Ridington will attest, there is no physical evidence of a meso-American horse/human composite[22]; but this at best implies the importance of domesticated animals in Europe.

The period of the horse's introduction to Greece then has been narrowed from 2000 BCE to 1200 BCE. The evidence of horses in the areas North and East of Greece would have suggested to the Greeks that this animal, which was not a part of their "superior" civilized culture, was uncivilized because it was mastered only by barbarians (possible origins of the Centaur tribe?). On the other hand, if the horse was introduced (sold/traded) by boat to the south of Greece for labouring purposes it would likely have been seen as a boon to mankind, a kind of divine gift, one which would minimize certain types of work (Golden Age-like) and open Greek civilizing possibilities (introducing Greek culture through their empirical conquests) to faraway lands which were difficult to reach (possible origins of Cheiron?). Just as Cheiron's constitution consists of a curious mixture of regal passivity and intelligent stature, unusual in most animals, so too is the horse.

The Centaur seems a likely creation of the ancient Greeks' wish-fulfilment tendencies inherent in their mythical creations; one may envy the horse's phallus along with its endurance and strength, mixing the best of the horse with the use of man's arms, digits, and mental capabilities, one intuitively envisions the Centaur. Since the horse was by far the fastest mode of land transportation that ancient Greeks had known, they were most likely attracted by the horse's speed[23]. Implicit evidence supporting the possibility that the Centaur myth is Greek-made is

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[22]Cited in conversation(Feb. 1995)

[23]This idea of speed is denoted by the wings attatched to Pegasus.

provided by the Centaur's unusual place in the hierarchy of mythical characters. It is the only mythical character which represents such a wide variety of polarities in both *character* and *form.* Kirk admits only that the Centaurs in their developed mythical form look like a peculiarly Greek phenomenon (p. 157). One could stand to be a little more firm in the proposal that the Centaur's polarized form and function, as it is represented in both art and literature, is a product of the Greek imagination and closely evolved along with the changes within ancient Greek society.

Although any search for the true "origins" of the Centaur can only be speculative, it is an appropriate introduction to the understanding of the emblematic nature of myth because in our quest for *meaning* our research on the contexts which surround the representations of the Centaur are instead rewarded though a wider base of knowledge from which to draw more pertinent contextual questions.

8: The Centaurs' Origins Within Myth

To reiterate and expand: Cheiron is only a Centaur in *form.* In *character* he is the antithesis of the tribe of Centaurs created by Centaurus. As a child of Cronus, Cheiron, the only immortal Centaur, sometimes described as a god[24], was born in the Golden Age. He thus represents this idyllic age to the Greeks (Pindar, P. 4.119). Cheiron was one of the wisest and most learned of all living beings. He was a cultural touchstone for the Greeks, for he had not only learned but also refined such arts as music, prophecy, hunting, philosophy, and perhaps most

[24]Cheiron is often called a god by the mythmakers such as Pindar (*P* 4.119) and Sophocles (*Trach* 714-15), and it may be important to note that many of the gods worshiped by Eastern civilizations were often mounted on animals. Animals may also represent the origin of these gods: Elephant (Indra), Bull (Shiva), and Ass (Sitela).

importantly, medicine and healing. Cheiron was married to the wood nymph Charilco and was the only Centaur to be married; an important distinction considering the Centaur tribe's association with the disintegration of marriage. Living with his wife[25] in a cave on Mount Pelion Cheiron raised and taught pupils such as Achilles, Heracles, Aesculapius (founder of ancient medicines), and Jason.[26] His contrasting role to the other Centaurs is exemplified by his having saved the life of Peleus from the other hostile Centaurs (Pindar, N. 3.43-58). An innocent bystander during Heracles' battle with the Centaurs at Mount Malea, Cheiron was shot with one of Heracles' poisoned arrows. The wound was so painful that Cheiron traded his immortality for death in order that Prometheus might be set free from punishment by Zeus (Apollod. bibl. 2.54). H.A. Shapiro states that "the differing representations [of Cheiron]..., each reach their peak of popularity at a different period" (101). This, along with the likelihood that although Cheiron is by several generations the oldest Centaur in "mythical chronology",[27] indicates his character's late addition to the corpus of myth and reflects the Greeks' need for the process of myth-making to have more clearly defined and self-defining capabilities[28]. Shapiro also speaks of the influence of writers' interpretations of myth on artists and society in general with explicit reference to Cheiron's emblematic evolution (101-2).

Cheiron's mythical origin goes back to the Golden Age representing a time when there was no separation between man and gods; in fact, it was a time when there were no mortal

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[25]Depicted in L.I.M.C. in *human* form. Vol.III.2.p.152.

[26]Euripides, *Iphigenia*, 710; Pind P. 4.135; Homer, *Iliad*, XI, 832.

[27]Apollodorus mentions Cheiron's birth before the wind and the stars (bibl. 3, 5.4).

[28]For perhaps the same reasons that Heracles, before his own birth, was said to be involved in the battle between the gods and the Giants.

women, no work, strife, or death, nor any of the negative aspects of culture's impositions and excesses upon nature (no arts or crafts). This idyllic view of the Golden Age, as described by Hesiod in his Theogony, is one which due to its relative foreignness to civilized Greeks resulted in ambivalence. As Greek culture, language, and thought confronted the importance of the *Polis* to their self-identity, it became increasingly difficult to envy a life based simply on nature. Dubois states the internal contradiction in this way: "The world before culture was viewed with nostalgia as well as loathing" (p. 30).

As a representative of the Golden Age during Zeus' reign, Cheiron was a "culture"-hero; the purveyor of the techniques of nature-based civility and culture. Born in a time when there were no arts and crafts, he became the creator and master of many of them. In a Jesus-like manner Cheiron taught disciples who could best spread his nature-based teachings to humankind. Some of his pupils (Jason, Achilles, and Heracles to name a few), went on what may be called "civilizing" expeditions analogous to the ancient Greeks' own "civilizing"/land acquisition expeditions.

Cheiron was renowned as a luminary as well as a sportsman; in fact he was a master of all cultural and artistic endeavors: archery, spearmanship, tracking, music, prophecy, and especially natural medicines and healing (Homer, *Od.* 10.492; Homer, *Il.* 4.217-19; Pindar, *N.* 3.35; Xen *Kyn.* 1.1). All of these traits tie Cheiron both to their origins within nature as well as their perfected forms which the Greeks viewed as cultural or civilized refinements unique to them.

It is important to note that few of the Golden Age gods have a part to play in the myths of later Heroic Age. One might go so far as to suggest that Cheiron, like the Golden Age gods, was not so much phased out as he was consciously substituted by another "culture"-hero,

Prometheus, who was not only of human form but essentially represents civility within culture as opposed to Cheiron who represents civility within nature.[29]

Cheiron's mytho-morphic transition is not only evidenced in Pindar's elaborations on Homeric details, but the first mention of Cheiron's surrender of his immortality to Prometheus is in the second-century BCE by Apollodorus (*bibl* 2 5.4). His becoming astrologically immortal is again first noted in the second-century by Hyginus (*astr* 2).

Cheiron's death seems a manipulation of earlier myths, the goal of which, as Levi-Strauss so succinctly puts it in *The Structural Study of Myth,* is "to provide a logical model capable of overcoming a contradiction" (1963, 229). As time passed so did the Greek concept of *Nomos* (culture) which, during the Homeric era (in Havelock's view) had "an ambivalence in the Greek mind, and yet the shape of this ambivalence was incisive and powerful" (67). In a relatively short period of time, one can see evidence of the *Nomos/Physis* (nature) scale of Greek approval tipping in favour of culture in statements such as Hesiod's, which explains the importance of *Nomos* in bolder terms: "Custom-law is lord of all men" (*Theo*, 53). The growing force of culture necessitated within myth a new, more logical model (Prometheus) to overcome the contradictions within the older representation - Cheiron: immortal, wise, benevolent to mankind, purveyor of all that is naturally-cultural and civil yet takes the form of a man-beast composite. To allow an animal this stature became less acceptable to the Greeks through time. This is not to say that *only* Cheiron's character was influenced over time. The Centaur tribe's representation would also have been influenced and, as in a domino effect, so too would all the myths tangentially involved. The

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[29]Either Prometheus or his brother is given the distinction of having been responsible for the advent of womankind—another key to partnership and civility.

variety of pejorative incidents occurring outside the myth's Homeric foundation often prove to be both late additions to the myth as well as indications of changing or rationalized attitudes.

Unlike Cheiron, the Centaur tribe is associated in a variety of representations with drunkenness and physical, especially sexual, violence. Perhaps the dichotomy between wisdom and violence was already implicit in the figures on the Kassite boundary stones (the human face in contrast to the dragon's). But what is more likely is that the Greeks' attempt to understand contradictions based on the forces of Nature and Culture necessitated the creation of a creature upon which they could project their culture's most positive and negative aspects allowing them to distance themselves from any negative implications. In terms of the Centaur, the contradictions in character so strongly made in its earliest representations are partially reconciled by a unification in the Centaur's composite *form*. Seeing or envisioning a combination of the body of a horse with the torso and head of a man results in something visually unified, as if nature had intended it. This convincing image, of a powerful being transcending the power of an individual horse or man represents not only the two unique elements from a different perspective but that which is human in the beast and the beast in human's character as well. But the key to the interpretive evolution of the Centaur myth is based on the need for the *character* and *form* of the myth to coincide. The problem for the ancient Greeks seems to have been in the interpretation of the Centaurs form. Does it represent the beneficence of humanity, or beastly incivility? And to which of these characteristics are "Nature" and "Culture" attributable to? In any case the Greeks seem to have made the dichotomy explicit early on in the evolution of the Centaur eg.Iliad 1.261, Odyssey 21.295-304 and in the artistic representations throughout the Archaic period.

The Centaur's transformation is very similar to that which the Sileni and the Satyrs underwent; from the earliest descriptions in art and literature (when they were seen as frolicking woodland spirits) to the later graphic and iconic ceramic paintings which depict them as lecherous ithyphallic sex fiends constantly accosting women and nymphs. The Centaurs are often placed in the same categories as satyrs and the older Sileni (who are rarely sober) both of whom were constant companions with Dionysus whose nature god status also seems tainted with man's "id-based" hedonism.[30]

The dialectic emblematized within the polarity of the Centaur/Cheiron figures is perplexing, necessitating researchers to go beyond the basics of Levi-Strauss's structuralist analysis. G.S. Kirk, after implying several times that M.P. Nilsson's assumptions are over simplified due to his nature-based readings of myths, attempts to summarize the paradox by saying, "Aspects of the natural world can be seen either as friendly, or as violent and hostile, according to time and circumstance" (Greek Myth 160). The point seems indisputable but it is both vague and, considering the complexity of the myth, far too reductive. Exemplary of the myth's complexity is the interaction between Greek Heroes and the Centaur.

9: Interaction Between Heroes and Centaurs

As we have seen, the analogical process inherent in Greek mythopoetics allows for a distancing between the thing being represented and the emblem or symbol itself, e.g. Persian war = Centauromachy. For example, in the case of the representation of Cheiron after the Persian

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[30]Tripp 524.

war, one can see a trend towards a polarization between his form and his character; in form he was a contradictory mix of beast and human while his nature symbolizes the irreconcilable nature-culture opposition. As a result of the internal contradictions which Cheiron represented, Prometheus and the other heroes once under his tutelage (the most obvious example of which is Heracles), continue and surpass Cheiron's former role as a representative of culture and civility; over time they symbolically usurp his role and his immortality. Cheiron's use as a symbol of civility had reached the end of its usefulness—his character was irreconcilable with his form—the context called for the prominence and exultation of more unified and exemplary (human) emblems.

Heroes were always seen as civilizers, but only in their ability to conquer and control the proper context or environment conducive to cultural growth. It was the task of the hero to rid the land, near and far, of barbarity, often leaving others to sow the seeds of culture. Cheiron represented the fruition of culture by his aptitudes as seer, medicine man, artisan, and musician. These are the very aptitudes which heroes such as Heracles lack, yet without him to annihilate the barbarians, culture could not blossom. It was exactly this that the Greeks felt they were accomplishing by defeating foreign enemies and replacing "barbaric" culture with their own, more "civilized" culture. Thus it is significant that it is Heracles who brings about the death of Cheiron[31] as well as the one who brings about the exchange between Cheiron's immortality and Prometheus' freedom (Apollod *bibl* 2.5.4). In a sense, it is a nature-based Heracles who allows for the shift of cultural representatives from Cheiron to Prometheus. Prometheus, is best known

[31]The death of Cheiron seems a contradiction in itself not only because Cheiron is immortal but because Cheiron as a master of medicine and healing which had healed the once blind Phoenix (Apollod *bibl* 3. 13.8) and yet was found useless against his arrow wound.

not for nature-based culture but for the evolutionary and transformative aspect of culture represented by fire. Heracles offers to Zeus Cheiron who, though immortal, is willing to allow Prometheus' freedom from his punishment for stealing fire from the gods and giving it to humankind.

The connection Heracles has with the Centaurs is indisputably one which is based on the oppositions of nature/culture or barbarian/civilizer. It would seem obvious that, just as the depictions in art and literature were made over time to denigrate Cheiron, they tend to do the opposite with Heracles, moving him from the more nature-based hero, as he is depicted in Early Archaic Greece (wielding a club, wearing the skin of a lion, often described as hairy and brutish), towards the hero for whom, during the classical period, many culture-enhancing sites (altars, temples, springs, ritual games) were established. Kirk notes that early writers such as Homer drew from sources for Heracles which did "not disguise his destructive and anti-social side" (194).

Between the eighth and fifth century BCE, a second form of oral composition and performance began to gain influence and inevitably acquired state support. Drama became an extension and revisor of Homeric authority as a vehicle of preserved experience, historical memory, and contemporary moral teachings. This process would assure Havelock's assertion that "living memory preserves what is necessary for present life. It slowly discards what has become wholly irrelevant. Yet it prefers to remodel rather than discard. New information and new experience are continually grafted to inherited models" (122). The popularity of the Athenian stage play, in particular, began wide sweeping changes in the way culture influenced thought and language. The manipulation of myth would account for Levi-Strauss's assertion that the purpose

of myth is as a "provider of a logical model capable of overcoming contradictions" (1963, 229). Although myth is anything but logical, one can see some of the contradictions of earlier myths "ironed out" in later developments of myths. Is it coincidence that literacy was gaining prominence over this era? If not how is this logical "ironing out" dealt with through the structural polarities so common in myth and its analysis?

10: Nature and Culture

Thanks to the endeavors of Claude Levi-Strauss, perhaps the most common polarity now recognized within myth in general is that of *Nature* vs. C*ulture*[32]. In his structuralist approach, Levi-Strauss views the underlying structure behind the relationship between myth's individual narrative elements' as imparting its "meaning". This theory works especially well when considering that variant versions of a myth only reinforce and refine its structural foundations. According to Levi-Strauss, the significant structure of a myth is an unconscious one which doesn't prevent it from reflecting contradictions either within the structure (thought and language), the culture, or the relation between the two.[33] This "structure of myth" is exemplified by the contradictions in the Archaic representations of the figures Kaineus and Cheiron; yet their deaths point to a conscious restructuring of myth in classical Greece in order to reiterate the values of contemporary society. The growth of this unconscious, or habitual, structuring

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[32]In the case of the Centaur figure this polarity is at times paralleled by the civility/barbarity opposition.

[33]This is one of the many points of contention which G.S. Kirk finds faulty but between the two theoreticians' views lies a strong middle-(ground)-work which helps elucidate myth's function and meaning.

coincides with the conscious attempt to remove any implication which might have been viewed as pejorative to ancient Greek society or culture and points strongly to the influence of literacy.[34]

Felix Heinemann sees the Nature/Culture opposition as a particularly Greek phenomenon which "originally grew out of the Greek national consciousness" (153). As we have seen through researching the Centaur myth, the addition of a character to a pre-existing story or the manipulation of a myth so that it may be more meaningful to one's contemporary society is a common approach in mythopoetics.[35] As Kirk sees it, the reasoning behind the mythologizing of history (stories of human nature and conflict) is tied to humankind's inherent feelings of conflict between their environment's natural and cultural forces as well as the opposing strengths of civility (arguably learned) versus the passions (instinctive)[36]. As we have seen in the analysis of their origins it is within this polarity that the Centaur Cheiron plays his essential role in contrast with the emblematic basis of the Centaur tribe.

The polarities seen within and between Cheiron and the Centaur tribes' representations (form/nature, civilizer/barbarian, guest/host, hero/monster, etc), necessitates an explication of the ancient Greek composition of *Nomos* and *Physis* (Culture and Nature). The parochialism of the Early Archaic Greek city-states, fostered by their isolation, led the Greeks to conclude that the constitution of the human species was relatively similar everywhere. Thus they emphasized

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[34]Evidence to support this view will be the basis of chapter two.

[35]The question of whether authorial intention or the reader/listeners' interpretation are the origin of this manipulation is irrelevant to this proposal. I am looking at effects rather than causes.

[36]The contention between these seemingly diametrical opposites is not unique to the Greeks, since a similar Apollonian / Dionysian conflict can be seen both centuries later as evidenced in Nietzsche's writings, and centuries before the Homeric epics in the relation between Gilgamesh and Enkidu in the Gilgamesh epic (hinted at in Kirk, p. 157).

human nature (*physis*) as being a unifying factor. The word "physis" in Homer's Iliad is "attuned to the assumption of kinship, of a common ancestry (the *syngeneia*) of what now is" (xi. 432).[37] The term thus implies both a Gaia-like *Nature* from which everything originates as well as its connotation as the universal human nature (constitution) that we all share.

While watching a display of weaving and/or lyre playing,[38] ancient Greeks could feel both empowered and proud of the Greek mastery of these art forms, yet insignificant and at the mercy of Nature's forces from which such cultural art forms arise. The skill with which the Greeks utilized these arts represented and displayed the power of *Physis* and the superiority of their civilization over what they considered to be primitive, Nature-based civilizations; yet when reflecting on the origins of these arts (not only in myth) the Greeks could see Nature's hand in creating or exemplifying the perfect tools or source from which Culture arose. An excellent example of this is seen in the mythical character Mnemosyne (Memory), daughter of the first "mother nature," Gaia, and mother of the arts, as personified by the inspirational Muses; she was rarely given an anthropomorphized form, removing the origins of the arts even further from human corporealizing and conceptual abilities and thus the control of humankind. Culture's elevated position in Archaic Greek society was a tenuous one due to the simple fact that culture, as represented by art, music[39], crafts, and poetry, had its origins within nature; wherein lies the synthesis of the dialectic.

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[37]Havelock in Preface to Plato intriguingly explicates the transformation of *Nomos* from a concrete to an abstract term (pp.116-18).

[38]Weaving is said to have come from the imitation of spiders and the lyre from a tortoise shell.

[39]Democritus of Abdera, a fifth century philosopher, states that music was a "fairly recent art" since it had always been prevalent but never consciously *culturally* utilized (Hyland, 312).

The basis for the Nature-Culture dialectic is a reminder that when endeavouring to understand myth there are no clear-cut answers, but the questions concerning cognition and context become that much more important when considering all the evidence: How do the Centaurs reflect early Greek mythographers' views of nature and culture? The dilemma seems to be one carried on from the time of the Sumerians as evidenced in the Gilgamesh epic:[40] that only two polar forces (eg. Nature and Culture) which seem so opposite are actually integral to one another, not only as defining opposites but as a single circular entity whose extreme left joins the extreme right. Does not an excess of culture lead to bestial behaviour, and is not the essence and unique quality of myth perhaps linked to the complex conundrum produced by this paradox, driving story-tellers and poets to myth (oral traditions) in hopes of finding a malleable form of answer?

Even before the Persian Wars, the equality of Nature and Culture in Greek literature was tenuous at best. And as oral traditions and parataxis made room for literacy and hypotaxis the evolution of (placing value judgements upon) abstractions and metaphysical terms was becoming habitual. But by the sixth century trade and immigration led the ancient Greeks to the realization (belief) that Greek culture was unique and (egocentrically) superior, beginning the Greeks' swing towards the devaluation of *physis* (in both senses of the word) and exultation of *nomos* (Beye 209). What was confusing to the Greeks was both the repulsion and the attraction that *nomos* and *physis* had upon each other (as *thesis* and *antithesis*). The two forces were dependent upon their opposite for their existence. Yet at some point the hypotaxis (subordination and qualification), not only of Nature to Culture but of all language, gained prominence in ancient Greek thinking

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[40]As implied and elaborated upon in Kirk(pp.132-162).

and discourse, and in time it follows that this tendency would become habitual in thought and discourse as well, resulting in a paradigm shift of enormous proportions. Perhaps not so coincidentally, the evolution from preliteracy to literacy in Ancient Greece seems to have occurred over the same centuries.

11: Polarities and Structuralism: Hints of Literacy through Ancient Greek Sublimation

When sketching the outline or form of a myth, or attempting to gather information about the context in which it is understood, we often see the importance of "meaning" fade into the background. When categorizing myth in this cartographic fashion one must be aware of the fact that myth has innumerable variations and modes of operating. A structural or seemingly reductive method of dealing with this complex entity through its polar and analogical characteristics can seem limiting and false to the eclectic nature of myth. This is not to mention the limitations of structural methods for analyzing the conceptual systems of oral societies, which arise from the fact that it is itself a product of the written culture it has helped to shape.

We have seen how the understanding of cognitive processes and structures of knowledge in non-literate societies has suffered from the binary, ethnocentric categories that have been employed. Equally the explanation of such differences that appear to exist is affected by the failure to consider changes in the means by which they are communicated from one individual and from one generation to the next. But it is also the case that the nature of these processes and structures have been partially misrepresented because of an incomplete understanding of the

transformations involved in organizing verbal concepts in the ways required (or at least favoured) by graphic reductionism.

Structuralists have tended to arrange, categorise, and formalise these concepts in ways that seem more consistent with literate rather than with non-literate forms of communication and tradition. What has not yet been considered is how the use of literate procedures inhibits the study of pre-literate modes of thought. This requires examining the ways in which these procedures have influenced the cognitive structures and processes that have developed subsequent to the advent of writing.

Structural analysis is often based on a fixed matrix consisting of vertical columns (or lists) and horizontal rows. These lateral placements are often taken as indicating either identity (analogy or equation) or else opposition (polarity), though these possibilities only represent the extreme relationships of juxtaposed items. Once again, the formalization of writing restricts flexibility, and it does so in a manner that is both distorting and generative, let alone ethnocentric. Even in non-literate societies there is no evidence that individuals were prisoners of pre-ordained schemes, of primitive classifications, of the structures of myth. Constrained, yes; imprisoned, no. Certain, at least, among them could and did use language in a generative way, elaborating metaphor, inventing songs and "myths", creating gods, looking for new solutions to recurring puzzles and problems, changing the conceptual universe.

One is reminded here of the dispute between Popper and Kuhn over the role of paradigms in science. Popper argues against Kuhn's thesis, what he calls the "myth of framework":

> "I do admit that at any moment we are prisoners caught in the framework of our theories; our expectations; our past experiences; our language. But we are prisoners in a

> Pickwickian sense: if we try, we can break out of our framework at any time. Admittedly, we shall find ourselves again in a framework, but it will be a better and roomier one; and we can at any moment break out of it again" (1970:56).

But what have we to thank for this need to categorize if not the origins of literacy, the most prevalent means of communication today, which demands logical, structured thought.

What the dichotomies amount to in the simplest terms is a contrast between the domination of abstract science together with history as opposed to the more concrete forms of knowledge (e.g. of the "bricoleur" or handyman), combined with the mythical and magical thought and practices of "primitive" peoples. I take it that the contrast between using concepts and signs corresponds to the abstract/concrete dichotomy. The notion of a shift of emphasis from magic and myth to science and history has been the commonplace of anthropological discourse since its very beginning. Moreover, there has always been a tendency to interpret these terms as descriptions or indices of modes of thought and action that one could dichotomise with biased words like "primitive" and "advanced". However, another current of opinion has concentrated upon analyzing the technical achievements of simpler societies and calling attention to the mythical or magical elements of our own, though the former have tended to be regarded as precursors and the latter as survivals. The very existence of these two trends, both expressed in the work of Lévi-Strauss points to the inadequacy of the notion of two different modes of thought, approaches to knowledge, or forms of science, since both are present not only in the same societies but in the same individuals. Moreover, the very terms of the analysis, especially magic and myth, are slippery to handle, relics of some earlier folk contrast with religion on the one hand (as in sixteenth-century England) and history on the other (as in fifth-

century Athens). The emergence of what we call history was linked very closely with the advent of writing, as the implicit distinction with prehistory suggests. It was not the presence of documents in themselves, though preservation and storage were essential prerequisites. Lévi-Strauss claims that "there is no history without dates (1966:258), but it would be truer to say there is none without archives.

As an emblem, the Centaur figure is primarily indicative of the cultural norms, mores, changes, strengths, and weaknesses of the context from which it originates. Because of the variety of details, differing interpretations/representations and thus meanings of myth, one is naturally drawn to abbreviate and categorize in a simple "short-hand" fashion, which seems to coincide with the emblematic nature of the mythical element itself. As many would agree, the analogies and polarities so often found in myth would logically be the appropriate method of encapsulating an emblem's complexities while simultaneously allowing some light to be shed on the cognitive and linguistic processes relative to mythopoetics and in turn upon the culture from which they arose and were later applied. But the trouble with these categories is that they are rooted in a we/they division which is both binary and ethnocentric, each of these features being limited in their own way. At times we still employ the simplistic categories of our folk taxonomy; where these have been abandoned, we substitute some polysyllabic synonym. We speak in terms of primitive and advanced, and that it is only due to the genius of the Greeks or Western Europeans that modern man has emerged, almost as if human minds themselves differed in their structure like machines of an earlier and later design. But "modern man" is emerging daily in contemporary Africa, without, I suggest, the total transformation of processes of "thought" that existing theories imply.

The emergence of science, whether seen as occurring at the time of the Renaissance in Europe, in Ancient Greece, or earlier still in Babylonia, is held to follow a pre-scientific period, where magical thought predominated. Philosophers describe this process as the emergence of rationality from irrationality (Wilson 1970), or of logico-empirical from mythopoeic thinking (Cassirer 1944), or of logical from pre-logical procedures (Lévy-Bruhl 1910). More recently, others have attempted to get over the difficulties raised by a purely negative definition of the situation (e.g., rational-irrational) by means of more positively phrased dichotomies, the wild and domesticated (or cold and hot) thinking of Lévi-Strauss (1962).

The trouble with this framework is that it is either largely non-developmental or else simplistically so. It has been non-developmental in the past because the anthropologists and sociologists interested in these questions have tended to set aside evolutionary or even historical perspectives, preferring to adopt a kind of cultural relativism that looks upon discussions of development as necessarily entailing a value judgment on the one hand, and as over-emphasising or misunderstanding the differences on the other. Such objections are founded not only on the appealing premise that all "men" are equal. They also stem from the difficulties that speculations upon developmental sequences often create for the analysis of a particular set of data. Such problems arise whether the data is derived from a field study or from a historical society, from the present or from the past.

I certainly do not wish to deny that there are differences in the "thought" or "mind" of "we" and "they", nor that the problems which may have concerned many observers, among them Durkheim, Lévi-Bruhl and Lévi-Strauss, are of no significance. But the way they have been tackled seems to be open to a whole range of queries. Perhaps I may put the central difficulty I

find in terms of personal experience. In the course of several years traveling and living among people of "other cultures", I have never experienced the kinds of chasms in communication that would be the case if I and they were approaching the physical world from opposite ends.[41] That this experience is not unique seems apparent from the contemporary changes occurring in developing countries where the shift from Neolithic to modern science is encapsulated in the space of a man's lifetime. The boy brought up as a bricoleur becomes an engineer. He has difficulties, but they do not lie at the level of an overall opposition between wild and domesticated minds, thoughts or approaches, but on a much more particularistic level such as whether or not he is literate.

Kirk makes clear an important exclusion natural to the structuralist method which points to the relevancy of contextual awareness necessary to symbolism: "Realistic details drawn from the [culture from] which the myth belongs" are often ignored in structural polarities (p. 76). In the study of myth, just as in the study of its foundations, thought, and language, one must be cautious about relying solely upon one method of explication. As we have seen in the Centaur myth a large part of its function was to introduce specific details drawn from Greek culture. In this same way, anthropologists and historians such as Basso and Darnton have found that to structurally analyze a culture's methods of communicating without understanding the context from which the modes of expression have come creates a great disservice to that culture. This view introduces us to reflexive approaches of communication analysis which help curtail reductive concepts. Reflexive approaches allow one to inquire into the nature of conceptual categories of those who tell the narratives (structuralist-like) while still making explicit their

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[41]I am talking about traveling and living in a number of countries in Central America and Africa.

interpretive function highlighting the differences in thought, language, and culture between the *observed* and the *observer*. The relevance of understanding the context or situation of a communicative act/event will be further discussed in the following chapter.

12: The Shift from the Habitual Use of Paratactic to Hypotactic Thought Structuring

Just as the ancient Greeks moved away from a primarily oral society based on *Physis* and the understanding of Nature towards one which was gaining reliance on literacy—centred around the *Polis* and the understanding of Culture—they entrenched themselves in a vocabulary and a way of life (culture) which was hypotactic rather than paratactic and thus became progressively more subordinative and hierarchical in their conceptual habits. When describing the characteristics of paratactic and hypotactic thought I must stress that I am not distinguishing between how different people(s) are *able* to think, I am distinguishing between two types of structuring ideas, greatly influenced by our use of language, which become prevalent through habitual use (Hoijer 1953, Hymes 1964). The term "paratactic" thought structuring is used here to describe the horizontal or equal nature of ideas expressed without subordination (paratactically). "Hierarchical" thought structuring refers to the vertical or ladder-like subordination of ideas common to hypotaxis. Parallel readings of these terms are found in cognitive research (Hatin 1991; Silverstein 1987). To a mind well acquainted with the hypotactic structures which often coincide with structural logic, and thus, literacy, paratactic discourse is often marked by its disjunctive style while the hypotactic is fluid and logically progressive. Paratactic structuring is by and large linear and non subordinative. It is analogically less

qualitative (to judge one thing as being "different" from another rather than being better or worse), and exclusive rather than differentiating and inclusive.

One of the faults of Structuralism is that by setting up polar extremes in contemporary discourse we tend to produce a hierarchy or privileged position for one of the extremes. Whether this is due to ethnocentrism or cultural or contextual biases is, for the moment, unimportant. What *is* known is that the structure of language most prevalent in oral or non literate societies is one which tends to place clauses one after another without coordinate or subordinate connectives, thus diminishing those privileged positions. This might lead one to wrongly assume that in paratactic structuring judgement values are impossible—but as Mitchell (1993) concludes, this is not the case. The judgmental task is relegated to the reader/viewer/listener in whatever way they see fit.

The ability to categorize through a qualitative hierarchy, based on analogy and polarity, seems to have been a dominant habit in Greek writing after the Fifth Century (Bochenski 1961;Lloyd 1966). In contrast, it is known that one of the dominant features in Homeric writing is its paratactic style (Havelock 1963; Notopoulos,1949). Notopoulos asserts that,

> The principles of literary criticism which [Plato and Aristotle] set forth applied essentially to literature of the fifth and fourth centuries which had evolved from a paratactic to a hypotactic type.... Parataxis in Homer extends beyond the style and characterizes the structure and thought of the poems. At this point there remains to be shown that a paratactic type of composition is not unique to Homer. A survey of the oral literatures in Chadwick's The Growth of Literature shows that oral literatures both past and those surviving are characterized by episodic parataxis. (6-7)

One would be wrong to assume that because of their use of parataxis the ancient Greeks were limited in their modes of thinking, communicating, and being, for as human beings living within a culture we too are a product of nature's complexities and thus defy reductive structuralization.

Yet, the prevalence of hypotactic, polarized, and structural logic in our language and thinking today can be seen as testament to its pre-Aristotelian origins rather than a post-Aristotelian phenomena.

If we are to understand the particular contributions of hypotaxis to the development of human thought, then we must be a good deal more precise about the matrix from which it was emerging, about the pre-existing conditions and the nature of "paratactic thought". Thus the attempt to gain precision leads us inevitably into an examination of the ways of thinking of earlier times and of other cultures, as well as of the manner in which these ways of thinking were related to particular modes of communication between man and man, man and God, man and nature. All of these were influenced by major changes in the means, such as the development of scripts, the shift to alphabetic literacy, and the invention of the printing press. I repeat that I am not proposing a single-factor theory; the social structure behind the communicative act is often of prime importance. Nevertheless, it is not accidental that major steps in the development of what we now call hypotaxis followed the introduction of major changes in the channels of communication in Babylonia (writing), in Ancient Greece (the alphabet), and in Western Europe (printing).

13: The Power of Parataxis

One of the fundamental difficulties of understanding the nature and function of Greek myth is our difficulty in conceiving the context in which they were understood. One example would be our difficulty in conceiving a world in which primarily linear and polarized language

and thinking is used. Donoghue and Mitchell (1993) struggle with the idea that even when reading a clause which is paratactic in form we have a tendency to "subordinate it in thought" (165). It is the lack of a "relating element" (conjunctions or relative pronouns) in parataxis which pressures the habitually hierarchical thinker to subordinate. As Robinson (1979) and others have shown parataxis can be an impressively subtle stylistic device precisely because it shifts more interpretive responsibility to the reader or audience.

Placing the two ideas together—the structuralist polarities and the equalizing nature of paratactic thought and language—we move our understanding of the function of myth towards a process of abstraction much more inherent to myth than it is to the conscious attempts at finding meaning by the mythologizer. Levi-Strauss states it in this manner:

> Mythological thought surpasses itself and contemplates, beyond images still clinging to concrete experience, a world of concepts... [understood] no longer by reference to an external reality, but according to their own mutual affinities or incompatibilities manifested in the architecture of the spirit. (1973, 407)

One might suppose that the habitual use of hierarchical thought with its call for qualitative differentiation must have come to the fore as parataxis was found wanting to structure concepts and communicate with. According to Dubois such questions arose with greater urgency during the Peloponnesian War of 431-404, from which came the need to question the *Polis* as a model (129-30). Although it seems obvious that this era was one of profound transition, one would be hard pressed to believe that such vast cognitive, linguistic, and cultural changes could have originated from such a late event or have occurred in such a brief time.[42] For example, there was enough hierarchizing evident in the variety of representations of the Nature/Culture opposition

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[42]A methodical expansion of this topic can be found in I.M. Bochenski's A History of Formal Logic.

before the fifth century to imply that parataxis was insufficient by itself to contend with the contradictions which seemed inherent in myth as well as in human nature. Yet what was habitually squelched, over a long period of time, was the power of paratactic language which in many ways, as we shall see in Chapter III, parallels our postmodern pastiche of communicative form(s) and the nature of the information they transmit.

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Chapter II: Literacy and Context

Tenet insanabile multos
Scribendi cacoethes et aegro in corde senescit.
Many suffer from the incurable disease of writing, and
it becomes chronic in their sick minds.

—Juvenal

This chapter endeavors to illuminate the role of changes in the modes of communication in the development of cognitive structures and processes. This thesis will be illustrated by references to developments in the growth of human knowledge and in the growth of the human capacity to store and augment that knowledge both in the past when shifting from a preliterate to a literate stage of communication and in continuation in the next chapter through the study of present transformations in communications, from which a second orality is evolving.

Considering the importance of writing over the past 5,000 years, and the profound effects it has had on the lives of each and all, surprisingly little attention has been given to the way in which it has influenced the social life of mankind. Studies of writing tend to be histories of the development of scripts (Dow 1973; Gardener 1993), while literary scholars concentrate upon the content rather than the implications of communicative acts. The evolution from preliteracy to literacy is a paradigm shift which seems essential to understand given the heightened interest in the impact of changing modes of communication on society; most writers, however, have been concerned with later developments such as printing, radio, television, telephones, and computers (Chomsky 1968; Eisenstein 1979; Godzich 1994; Postman 1995).

It is especially surprising that so little interest in literacy and the means of communication generally has been shown by social scientists (Bonvillain 1993; Gardener 1985). Those working in "advanced" societies have taken the existence of writing for granted and have therefore tended to overlook its enabling effects on, for example, the organization of dispersed parties, sects, and kin. On the other hand, social anthropologists have thought of their discipline as being primarily concerned with "preliterate,""primitive," or "tribal" societies and have generally looked upon writing (where it existed) simply as an "intrusive" element (Lord 1960; Malinowski 1948; Whorf 1956). But even where writers are specifically investigating the differences between "simple" and "advanced" societies, peoples, mentalities, etc., they have neglected to examine the implications of the very feature which is so often used to define the range of societies with which they claim to be dealing, namely, the presence or absence of writing (Levi Strauss 1969; Malinowski 1948).

The importance of writing lies in its creating a new medium of communication between people. Its essential service is to objectify speech, to provide language with a material correlative, a set of visible signs. In this material form speech can be transmitted over space and preserved over time; what people say and think can be rescued from the transitoriness of oral communication.

From Myth to History: A Matter of Literacy

The accepted division of the formal study of our past and present are to a considerable extent based on our development first of language and later of writing. Looked at in the

perspective of time, man's biological evolution shades into prehistory when he becomes a language using animal; add writing, and history proper begins. Before that, all is prehistory, the prehistory of societies dominated by myth. A common theme in differentiating between societies, one that is discussed by Lévi-Strauss as well as by Cassirer before him, has to do with the contrast between myth and history (Goody and Watt 1963:321-6).

With the many ambiguities involved in the definition of the Centaur myth in mind, we can understand how prehistory, as represented by myth, often involves a backward look at what is either untrue or unverifiable. And in the most literal sense the distinction between *mythos* and *historia* comes into being at the time when alphabetic writing encouraged mankind to set one account of the universe or the pantheon beside another and hence perceive the contradictions that lie between them.

There is no agreement about what the actual boundary lines between non-literate and literate societies are. At what point in the formalization of pictographs or other graphic signs can we talk of "letters," of literacy? And what proportions of the society has to write and read before the culture as a whole can be described as literate? Even by the turn of this century only 20% of the population in North America was literate (Kay 1977:19). Although literacy in ancient Greece was unlikely to have been acquired by more than 15% of the population (Edinger in conversation 9/ 1995), it is this relatively small number of literate people on which we rely for our understanding of ancient Greek history. For this reason it is clear to historians that in the sixth and fifth centuries BCE in the city states of Greece and Ionia there arose a society which as a whole could justly be characterized as literate (Turner 1967:346-91).

From the sixth century onwards literacy seems to be increasingly presumed in the public life of Greece and Ionia. In Athens, for example, the first laws for the general public to read were set up by Solon in 543 BCE; the institution of ostracism early in the fifth century assumes a literate citizen body. 6,000 citizens had to write the name of the person on their potsherds before he could be banished. There is abundant evidence in the fifth century of a system of schools teaching reading and writing (Protagoras, 325d) and of a book-reading publicly satirized already by Aristophanes in *The Frogs*; while the final form of the Greek alphabet, which was established fairly late in the fifth century, was finally adopted for use in the official records of Athens by decrees of the Archon Eucleides in 403 BCE (Havelock 1982: 16). The rise of Greek civilization, then is the prime historical example of the transition to a really literate society. Havelock has put forward the idea that in all subsequent cases where the widespread introduction of an alphabetic script occurred, as in Rome for example, other cultural features were inevitably imported from the loan country along with the writing system; Greece thus offers not only the first instance of this change, but also the essential one for any attempt to isolate the cultural consequences of alphabetic literacy (1963:61-9).

Scrutiny of Language through Literacy

I am interested here in certain general dimensions of systems that are related to what historians of culture perceive as "the growth of knowledge". While this has to do with "content", it also presupposes certain processes which are related to the modes of communication by which

people interact with one another and, more especially, transmit their culture, their learned behavior, from generation to generation.

Culture, after all, is a series of communicative acts, and differences in the mode of communication are often as important as differences in the mode of production, for they often involve developments in the storing, analysis, and creation of human knowledge, as well as the relationships between the individuals involved. Writing, and more especially alphabetic literacy, made it possible to scrutinize discourse in a different kind of way by giving oral communication a semi-permanent form; this scrutiny favored the increase in the scope of critical activity (Lloyd 1979), and hence of rationality, scepticism, and certain types of logic to resurrect memories of questionable dichotomies such as that between Nature and Culture. It increased the potential for criticism because writing laid out discourse before one's eyes rather than in ones ears; and at the same time it increased the potentiality for cumulative knowledge of an abstract kind, because it changed the nature of communication from that of face-to face contact towards a system created for the storage of information. In this way a wider range of "data" was made available to the reading public (Baines 1983: 590-4). No longer did the problem of memory storage dominate our intellectual life; the human mind was freed to study static "text" (rather than be limited by participation in the dynamic "utterance"), a process that enabled humans to stand back from their creations and "examine them in a more abstract, generalized, and "rational" way" (Ong 1982: 127). Literacy encouraged the possibility for humans to scan the communications of humankind over a wide span of time while allowing for criticism and commentary on the one hand and the orthodoxy of the book on the other.

In contrast, traditional or oral cultures often see ideas as bound to occasions—if, for example, general statements arise in the context of healing rather than as abstract programmes about what we believe—then, when the contexts change (because of famine, invasion, or disease) or when individual attitudes change (because of the recognition that the remedy has not worked), the ideas and practices will themselves change. This is not true in societies where ideas, religious or scientific, are written down in Holy Writ or scholarly treatises. This brings up a common societal misconception about the difference between oral and literate societies; one would imagine the mythographers of ancient Greece to have a memory the likes of which could not be equaled in today's subservience to print. Recent thinking however has made some of these notions more controversial. The branch of memory theory arising from Bartlett's work on "remembering" (1932) stimulate attention to memory as a *social* process and to related cultural conventions. This may involve the visual aspects of memorizing (Carrier 1990), or in Yates' case may explain the classical and medieval devices which enabled speakers to deliver long speeches from memory through highly developed techniques for training and enhancing memorizing (1966).[1] But as Goody points out in his study of preliterate societies (1987), there were very few occasions when deliberately learnt, taught, or verbatim methods were utilized for the storage and recall of utterance: "I suggest this is generally true of oral cultures which had neither the developed techniques nor the developed requirements for rote learning" (1987: 167).[2] Since there is not one original that could be studied as a text, nor a single keeper of the oral tradition, it

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[1]Parry argues the importance of the catalogue style as an informing principle in the *Iliad* and *Odyssey* (1966: 208).

[2]Exceptions include the Somali and Maori who emphasize word-for-word memorizing for specific genres (Finnegan 1988: 103).

expands, develops and contracts with each telling, in a generative and creative way that characterizes much oral activity of a literary kind.

It is rather in literate societies that verbatim memory flourishes. Partly because the existence of a fixed original makes it much easier (Lord 1967); partly because of the school situation which has to encourage decontextualized memory tasks since it has removed learning from doing and has redefined the corpus of knowledge. Verbatim memorizing is the equivalent of exact copying, which is intrinsic to the transmission of scribal culture, indeed of manuscript cultures generally (Yates 1966). After the advent of printing, with its mechanization of reproduction, and its elimination of the necessity of copying that existed when every student had to make their own textbook, verbatim memory became less imperative for storage, though valuable for rapid retrieval. The technique has obvious limitations of scale. Nevertheless the bounded separateness of school, its specialization for literate instruction, the type of information it imparts, still places great emphasis on memory tasks; for mental storage is still seen as bringing disparate knowledge into meaningful relations. On the other hand narrators in an oral culture are in the position of being both the reciter and creator; they fill the roles that we (or rather writing) have divided into composer and performer, dramatist and player, author and publisher. One of these roles requires a faithful adherence to the text; the other is therefore freer to invent.

Shift from Preliteracy to Literacy: Too Reductive?

As I have stated at the onset I will try to analyze in a more particular way the relation between means of communication and modes of "thought". In this endeavour I want to maintain,

as I have previously done in the section concerning hypotaxis and parataxis, a balance between the refusal to admit differences in cognitive processes or cultural developments on the one hand and extreme dualism or distinction on the other. The cognitive patterns of human societies resemble each other in many respects; individual intellectual activity is a feature of the social life of the Masai, for example, as it is of Western cultures. On the other hand, the tendency towards relativism implicit in much contemporary writing neglects the fact that the cognitive habits of individuals differ from society to society in many ways. Some of the general differences that mark binary approaches can be attributed to the new potentialities for human cognition that are created by changes in the means of communication. Social scientists readily acknowledge this point for language itself, but tend to ignore the influences of subsequent events in the development of human interaction.

It is clear from the historical picture that one cannot regard the impact of writing as a single phenomenon. The so-called "literacy thesis" covers a range of possible variables, a series of changes in the way human beings communicate with one another, and the effect these have upon the content and style of communication, and upon social life in general. And it includes the cumulative historical consequences of such changes; changes on which segments, from clay to papyrus for example, whole books have been written (Powell 1981). Thus when using the terms "preliterate" and "literate" I do not mean to imply that there was a simple binary shift between orality and literacy, but a whole sequence of changes that have to be defined in terms of the means of communication and the mode of communication. These in turn indicate elements of social organization and ideology that may inhibit or favour the adoption of a specific technology, the realization of its full potential, and the opportunity for its further development.

There is no single "opposition" but rather a succession of changes over time, each influencing the system of thought in specific ways. I do not maintain that this process is unidirectional let alone monocausal; thought feeds back on communication; creed and class influence the kind and extent of literacy that prevails; only to a limited extent can the means of communication, to use Marx's terminology from a different context, be separated from the relations of communication, which together form the modes of communication. In drawing attention to the significance of this complicated relation, I attempt to avoid the conceptual morass in which one flounders when such differences are attributed to "culture".

Growth of Logic through Literacy

In many cases it is "oral" and "literate" that need to be opposed rather than "traditional" and "modern" or "magical" and "scientific". Awareness of alternatives is clearly more likely to characterise literate societies, where books and libraries give an individual access to information[3] from different cultures and from different ages, either in the form of descriptive accounts or of utopian schemes. But it is not simply the awareness of being exposed to a wider range of influences. Such openness would be largely mechanical and would be available to the literate and non-literate inhabitants of a city like Kano, with its variety of trans-Saharan travellers, as much as to the inhabitants of eighteenth-century Boston or Birmingham. It is instead the *form* in which the alternatives are presented which makes one aware of the differences, forces one to consider

[3]To say that one has access to "ideas" and "knowledge" simply by having access to books or libraries is an inaccuracy. The "information" or "data" held in books can help the reader produce ideas and knowledge but, as I explain in chapter three, ideas and knowledge are not things to be "stored" in books.

contradictions, makes one conscious of the "rules" of argument, and forces one to develop such hypotactic "logic". And the form is determined by the literary or written mode. Why? Because when an utterance is put in writing it can be inspected in much greater detail, in its parts as well as in its whole, backwards as well as forwards, and perhaps most importantly, out of context as well as in its setting; in other words, it can be subjected to a quite different type of scrutiny and critique than is possible with purely verbal communication. As Lloyd repeatedly insists, it is also a matter of proof, evidence, of recorded scepticism that builds upon the thoughts of more than one person, of more than one doubter, and creates a body of new knowledge based on a tradition of cumulative scepticism (1979: 24). Speech is no longer tied to an "occasion"; it becomes timeless. Nor is it attached to a person; on paper it becomes more abstract, more depersonalized.

Horton (1973) speaks of thought being tied to occasions (hence in a sense less abstract or less abstracted), an idea which can also be discussed more concretely in terms of systems for communicating signs and symbols. Writing makes speech "objective" by turning it into an object of visual as well as aural inspection; it is the shift of the receptor from ear to eye, of the producer from voice to hand.

Here, I suggest, lies the answer, in part at least, to the emergence of Logic and Philosophy. In the opening chapter it was noted that Logic, in its formal sense, is closely tied to writing: the formalisation of propositions, abstracted from the flow of speech and given letters (or numbers), leads to syllogism. Symbolic logic is inconceivable without the prior existence of writing (Finnegan 1990: 36). More generally, a concern with the rules of argument or the grounds for knowledge seems to arise, though less directly, out of the formalisation of communication (and hence of "statement" and "belief") which is intrinsic to writing. Philosophic discourse is a

formalisation of just the kind one would expect with literacy. Is it any wonder Heraclitus of Ephesus (fl. C. 500 BCE), the first great philosopher of the problems of knowledge, based his systems on the structured unity of binary opposites and although his words are oracular/myth-like in their vagueness (preliterate tendencies?), he quite clearly ridiculed the anthropomorphism and idolatry of the Olympian religion (Kirk and Raven 1983: 182). Lloyd makes note of the Presocratic philosophers' use of syllogism and their use of what has come to be known as "modus tollens". These "powerful techniques of refutation" were being utilized long before they were stated in general terms by Aristotle and formally analysed by the Stoics in the early Hellenistic period (1979:24). In bold support of this idea Goody asserts that these forms of logic could not have survived without writing (1987:73-4).

The invention of writing around 3000 BCE provides not only an admirable instrument of storage, of precision and of conceptual analysis, bringing revolutionary changes in culture, but also to the emergence of a class of "lettres", specialists in the difficult art and technique of writing and in the ways of looking at things; a categorical approach to reality. Moreover, the changes did not all occur at once: the struggle against "magic" did not only take place in Greece; it occurred in China, among the Romans (Christian and pagan), as well as at the time of the European Renaissance (Thomas 1971). It was a continuous struggle, for reasons to do with the God who failed ("magic" at times representing an alternative as well as a rejected belief) and the gradual adoption of more complex modes of discrimination among theories. But it was the Greeks, according to Bottero (and many others) who pushed this process a stage further, who took us further "towards the concept of the universal, the hard and fast formulation which

allowed the clear perception and definite statement of principles and Laws in all their abstraction" (1982: 437).

If we assume that writing affects conceptual relations, patterns of thought, then its influence is not simply restricted to written communication. The rhetoric of the Greeks, Romans and the late medieval educators can hardly be taken to represent the customs, conventions or consensus of pre-literate speech, even formal speech, though they may share certain features. While rhetoric has to do with the organisation of oral forms, it displays a consciousness of those forms that seems to depend upon the deliberate analysis (*analytika* was Aristotle's term for logic) that writing makes possible, or at least does a great deal to promote. Rhetoric displays the same relationship to public speaking (grammar *technē grammatikē*, "the art of letters of the alphabet", as Ong (1971:16) points out) as it does to utterance in a wider sense. Rhetoric, in essence makes the formalisation of oratory possible.

The Greek achievement of literacy has to be seen in the context of numerous other achievements such as those pointed to in Chapter I. In respect to certain of these achievements though, writing is the *sine qua non*. It made possible a special kind of debate, not I think based exclusively on a particular political system (*Polis*), nor upon the clash of cultures (Greeks vs. Persians), but upon the framed oppositions of myth/theories set down on paper which permitted a different form of scrutiny, the analysis of text. Writing also renders forms of contradiction and proof explicit — though the processes themselves are certainly present in oral societies. And it not only made more easily accessible a number of types of formalized proofs (e.g. modus tollens), it also accumulates and records these proofs (and what they prove) for future generations and for further operations.

Literacy, High Culture, and the Devaluation of Concrete Experience

Between the time of its inception to the mass literacy common only in a few countries in this century, the spread of literacy encouraged a radical differentiation within culture. The "high" culture was represented by the writers, copiers, and consumers of books while the "low" culture was confined to the oral register. The non literates could of course have the works of Chaucer or the books of the Bible read out to them. They could watch the plays of Shakespeare and listen to the sagas of Icelandic bards. But they had to do so through intermediaries, and were thus essentially receivers rather than transmitters or creators. They were unable to operate what had grown to be one of the major channels of communication, and hence were in that sense deprived, though it was perhaps a deprivation that did not make itself felt until the advent of printing vastly increased the availability of books and reading matter (e.g. the printed almanac).

The differentiation into high (derived from the written) and low (primarily oral) was not simply a division of the kind of cultural activity, it was also a matter of the division of labour. Some jobs (the scribal, bureaucratic, academic jobs) needed literacy; for many productive jobs, especially in the rural areas, it was far from essential. The kinds of knowledge involved in the first set of activities was increasingly valued more highly than the "practical" knowledge, knowledge by experience, the knowledge of the bricoleur, as well as of the craftsman, which was acquired by some form of participation, apprenticeship, family labour, servanthood. But with compulsory schooling there is an increased tendency at the popular urban level to see proper knowledge as coming from books alone; it is they that tell the truth, not the knowledge obtained

from our parents (i.e. the elders) or from our peers, nor yet directly from nature itself. Knowledge was in a book, or in the head of a bookish person like a teacher (who, as we did not know when learning from them, had consulted the book the night before) rather than in the actions and heads of parents, whose role in educating or "upbringing", does not involve the passing down of anything other than fringe subjects, often practical knowledge about cooking and cleaning, cycle repairs, and etiquette.

When the bulk of knowledge, true knowledge, is defined as coming from an outside, impersonal source (a book) and acquired largely in the context of some outside, bounded institution such as the school, there is certain to be a difference in intra- family roles, relations with the elders, compared to societies where the bulk of knowledge is passed down orally, in face to face contact, between members of the same household, kin-group or village. There the elders are the embodiment of wisdom; they have the largest memory stores and their own experiences reach back to the most distant points in time. With book cultures, particularly with mass cultures of the printed word, the elders' experiences are often by-passed as we reach towards the newest medium from which to access information.

Mass literate cultures are the product, even in the most developed of nations, of the last 100 years, with a few minor exceptions. This was the time when determined efforts were made to spread school education throughout the population. The result is to spread the devaluation of knowledge and tasks that are not gained through the book but by experience. It is not my intention to take this analysis into the realm of socio-political action, although the implications are obvious and the possible solutions limited in number and utopian in character. But intrinsic to any effort to change the situation is a revaluation of forms of knowledge that are not derived

from books, not a return to some "primitive" existence, but a modification of both one's concessions to the civilization of the book and the importance of knowledge received through experience.

Writing as Symbolic Reality: The Need for Contextual Understanding

For the vast majority of people reality is brought into existence, is produced, by communication—by, in short, the construction, apprehension, and utilization of symbolic forms. Reality, while not a mere function of symbolic forms, is produced by terministic systems—or by humans who produce such systems—that focus its existence on specific terms.

Under the sway of realism we ordinarily assume there is an order to existence that the human mind, through some faculty, may discover and describe. The constructivist or logical positivist position is that reality is not there to discover in any significant detail. The world is entropic—that is, not strictly ordered—though its variety is constrained enough that the mind can grasp its outline and implant an order over and within the broad and elastic confines of nature.

Ernst Cassirer has said it, and others have repeated it to the point of deadening its significance: humans live in a new dimension of reality, symbolic reality, and it is through the agency of this capacity that existence is produced. However, though it is often said, it is rarely investigated. More than repeating it, we have to seriously question it in order to assess its capacity to vivify our studies. What Cassirer is contending is that one must examine communication, even scientific communication, even mathematical expression, as the primary phenomenon of <u>experience</u> and not as something "softer" and derivative of a "realer" existent

nature. The particular miracle of producing reality and then living within and under the fact of our own productions is an act we perform daily and hourly. In doing so we rely upon a particular quality of symbol; their ability to be both representations "of" and "for" reality.

A blueprint of a house in one mode is a representation "for" reality: under its guidance and control a reality, a house, is produced that expresses the relations contained in reduced and simplified form in the blueprint. There is a second use of a blueprint, however. If someone asks for a description of a particular house, one can simply point to a blueprint and say, "That's the house." Here the blueprint stands as a representation or symbol of reality: it expresses or represents in an alternative medium a synoptic formulation of the nature of a particular reality. These two sides of the same coin point to the dual capacity of symbolic forms: as "symbols of" they present reality; as "symbols for" they create the very reality they represent. All human activity is such an exercise. We first produce the world by symbolic work, and then take up residence in the world we have produced.

To study communication is to examine the actual social (and as we shall see mechanical) process wherein significant symbolic forms are created, apprehended, and used. Since the advent of literacy and with the help of the printing press and electronic media our attempts to construct, maintain, repair, and transform reality are publicly observable activities that occur in historical time. We create, express, and convey our knowledge of and attitudes toward reality through the construction of a variety of patterns or sign/symbol systems in which we find meaning. But we have the mistaken view that with the creation of more signals, and the more signals we preserve, the more *ideas* we are made able to "transfer" and "store" (see Chapter III): "Preservation leads to accumulation, and accumulation to increased incremental knowledge" (Goody 1987: 54). This

process neglects the crucial human ability to reconstruct thought patterns from *experiential* understanding, relying instead on signals. The simplest means of highlighting the importance of experiential understanding is by better understanding the context of a situation in which a communicative act/event is taking place. This, in turn, requires a new perspective to explicitly relate patterns of behavior, all discourse included, to their immediate as well as broader socio-cultural context.

Context is essentially a neglected secondary and presumed element in the articulation of meaning. By realizing the importance of the context (the common ground of language) in which a discourse is understood, we can 1) better understand the relevance of signals/symbols and their relation to communication and literacy and 2) promote the value of experiential and concrete understanding in contrast to the transfer of information through signs. This proposal therefore, is an attempt to define a perspective shift which places the understanding of the *context* surrounding discourse[4] at a level to which the signals/symbols used to reflect the act/event communicated are subservient.

Context

Recent work on communication theory in a number of different fields has called into question the adequacy of earlier definitions of context, in favor of a more dynamic view of the

[4]The term "discourse" implies language understood as utterance and thus subjects who speak and write, which presupposes listeners and readers. Thus discourse might include any mode of utterance as a part of social practice.

relationship between the linguistic and non-linguistic dimensions of communicative events. Instead of viewing context as a set of variables that statistically surround a mode of communication, which for our purposes are primarily oral and literate modes of discourse, context and discourse are now argued to stand in a mutually reflexive relationship to one another, with discourse, and the interpretive work it generates, shaping context as much as context influences discourse. It is this relationship on which I hope to shed some light.

The traditional variables of ethnographic and sociological analysis have to be supplemented by study of participant attributes and patterns of social organization that are intrinsic to the activity of discourse itself. In addition, the characteristics of language as an interactive phenomenon have challenged traditional notions of linguistic structure and linguistic rules, suggesting a view of the relationship between language and context as a process that emerges and changes through time and space. To reconceptualize language often means to recontextualize it, to place discourse under a new set of relationships and expectations. The notion of a contextual analysis starts at the cutting edge of much contemporary research into the relationship between language, culture, and social organization, as well as into the study of how language is structured.

The notion of context within the studies of language and thought has been a key concept in the field of pragmatics (Ochs 1979; Bauman and Sherzer 1974; Finnegan 1984); and in sociolinguistics (Labov 1972; Romaine 1982). The term itself has a variety of meanings within alternative research paradigms. Although providing formal, or simply explicit definitions of concepts can lead to important analytical insights—such as the recognition of internal inconsistencies and contradictions—there are also serious hindrances. Since we are dealing with

the innumerable facets of communication, a definition which might explicate the range and variations of contexts in which any form of communication might occur seems futile and more importantly reductive (cf Lyons 1981: 46-92).

This rather daunting fact does not negate the possibility of investigating phenomena such as the cultural setting, speech situation, and shared background assumptions in which discourse is embedded. These phenomena complicate the enigma of context further when we realize that the analysis of context is tied to the indigenous activities that participants use to constitute the culturally and historically organized social worlds they inhabit. Participants are also situated within multiple contexts which themselves are capable of rapid and dynamic change as the discourse transmogrifies their understanding of the situation's context. Finally, each context is inhabited by individuals who perceive and interpret their environment from their own unique perspective. In its simplest, though perhaps most general, terms the context of a communicative situation, then, is the framework that conditions information transferal.

The context which frames discourse frequently takes place in specified or assumed settings, among expected participants, and concerns relatively fixed topics. These assumptions allow movement from one idea to another much more quickly and freely—yet what is being understood in many of these brief, generalized, and diminutive interactions? The plight of communication seems evident in so many ways. For example: the split of English departments into literature or writing programs in which the latter deals with students trained to use language for the reception and conveyance of information in only one sphere of human activity: his or her own prospective field of employment; the "crisis of literacy" in primary and secondary schools which governments are facing by going "back to the basics"; and the inability of language to be a

clear and politically sensitive representative of our present and evolving reality, etc. These may not be solvable problems, but one would be foolish not to agree that a close reexamination of the way we use language to communicate and the role of the context of situation during a communicative act or event is necessary.

In the variety of approaches to the analysis of language and speech genres, it is striking that there are so many attempts to ignore or downplay the significance of context. Generally the message (form or content) is regarded as the focus of attention while features of the context are treated as background phenomena, if at all. Our insatiable need for an explicit and clear meaning behind communication (exemplified by psycholinguistics) inevitably marginalizes context into the realm of subconscious analysis. Even within contemporary studies of linguistics, content and context respectively represent the terms "foreground and background", subjugating context to a diminutive position (Cooreman 1987; Givón 1983). An attempt to place context in the "foreground" would likely produce a more holistic and universal means of communicating[5] and understanding communication by placing a premium upon concrete and experiential means of understanding.

Foregrounding Context: A New Take on the Ethnography of Discourse

This proposal recommends analysis of discourse from a context-centric viewpoint, similar to the ethnographer who views context as central to the interpretation of discourse,

[5]This was the goal of Analytical Cubism: to bring the background into the foreground, to remove subordination (not unlike parataxis).

primarily because its use and role is not officially recognized in formal models of linguistic competence. Some of the most vital movements in contemporary anthropological studies have evolved from ethnography, such as the ethnography of speech and ethnopoetics. Yet, although a fundamental tenet of ethnography claims a universality in the potential for human perception and thought, it often ignores the analysis of *written* discourse; instead it is structured around the analysis of speech and performance. This places ethnography, and in some senses the whole of anthropology, in a rather prejudicial position of limiting its research to non-literate cultures. This segregation seems inappropriate and easily correctable. The relevance of ethnography to the analysis of discourse as a whole, especially textual analysis, is not only enlightening from a context-centric perspective, but supports the cognitive universality that ethnography holds as its liberal banner.[6] For how can the textual form in which most ethnographers work to explicate speech and performance go without scrutiny.[7]

To analyze discourse from a contextual basis through a number of subjective, objective, and intersubjective methods (from intuitions to attempts to *experience* the life of the "subjects"), would open up perspectives which are more complex and multiform than those typically studied in other branches of linguistics. One of the goals would be to maintain the complexity of language as praxis, rather than reduce it to abstract independent principles. In other words, this kind of universality cannot be of the abstract kind as in generative grammar or in conversational maxims. In the latter cases (i.e. for Chomsky), many aspects of the context must be removed in

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[6]The effort that ethnopoetics has made towards textual research is simply focussed on their own transcriptions; thus, it is centered around the best means for a text to mimic speech and its performance.

[7]To be fair, I must admit it is a rarity to find an ethnographer today who does not comment on the irony of her/his position as a (literate) writer dealing with the intricacies of non-literate peoples.

order to "see" the principles at work. The researcher(s) must create a vacuum to show that certain structures or constraints are operating under or above the specific level of discourse being analyzed. Once this is achieved, the work of the researcher is over; the pieces are left on the ground. The whole is not put together again. Conversely a contextual analysis would struggle to capture and maintain the whole of the interaction at hand: the context from which the discourse came and, if different, that in which it is being understood.

Contextual analysis attempts to ground communication in a way which places discourse in time and space while attempting to explicate the origins, intentions, implications, and effects of a discourse or event. What discourse *is* is a system of signs, letters, and sounds combined to create what discourse *does*; it allows us to communicate and understand the context through which discourse creates meaning. A context-based understanding might imply that all that would be needed to communicate the context necessary to fill any ambiguities or vagueness a decontextualized discourse might have, would be a clear explicit and detailed explanation of the discourse's *meaning*. But if we agree that intentionality does play a part in communication, quite often the meaning behind discourse is unavailable because the event or discourse has been decontextualized and does not have an appropriate interpreter (one with first hand experience or knowledge of the intent of the discourse or event). Finally; inherent ambiguity and vagueness in discourse is an integral aspect of the limits of our ability (or inability as the case may be) to communicate our perceived realities, and, as we have seen in the analysis of the Centaur myth, is an integral part of "meaning".

Contextual Analysis: The Senses as the Key to Understanding

I would suggest that since our "being" is based on existence within a context, we cannot rise to our true potential without an understanding of that context. But there is much that is obscure in the world. The use of myth, religion, stories, or any interpretive art form is one means of symbolically expressing questions which seem inarticulatable or problematic. Stories today and the myths of yesterday are endowed with a basic ambiguity. They reflect our fallible human nature and the imprecision of "languaging" (the transferal of thought into language). The study of oral traditions and the cognitive implications of preliteracy play a critical role in the integration of information about direct experience. In the first place myth operates to organize experience around a society's core images or symbols. A society's core symbols are invariably oriented within a zone of uncertainty—that is, a set of events giving rise to significant effects for which there exists no readily perceivable causes for a large number of society's members. Through the mode of symbolic integration, myth thereby orders information relevant to those contextual events that remain problematic (unspecifiable) to individuals of a society. Before giving the impression that it is possible to systematically map out myth as though one were a symbolic cartographer one must realize that a crucial aspect of the classification of myth is incompleteness.

The symbolic basis of myth in general, provides a potent system of meaning in relation to the immediate context in which it is utilized. Myth manifests its two principle cognitive functions: as a system of *transformation* by which operations upon the myth effectively order (reorder) information both stored in memory and gleaned from immediate and direct experience; and as a system of *transposition* permitting the reduction of complexity and richness of direct

experience and the encoding of that reduced experience for storage as a reliably flexible "meaning" dependent upon the past, present, or future context.

Ambiguity and vagueness are rarely nullified in discourse even with a full contextual understanding; neither are they a pejorative pattern in comprehension but an inherent one that should not be discouraged through categorical reduction but rather acknowledged and praised for their ability to instill difference, change, and variety in language and thought. It is possible to minimize the kind of vagueness and ambiguity so often found in interpreting discourse by creating meaning through a context-focused mode of interpretation and understanding, which allows the open-ended nature of human communication to flourish without creating linguistic complexities (miscommunication). Granted it is a much more time consuming and laborious method of comprehending creative discourse, but the rewards go beyond the shortsighted expectations of our present conceptual realities.

The ability to reap these rewards is dependant upon the means by which we communicate and understand. Any form of communication which best enhances contextual understanding should be a primary goal. This includes using language which broadens cognitive codes on which comprehension is based, such as figurative language (metaphor) laden with imagery; narration and oral traditions do much the same, bringing a personal immediacy and auditory contact to comprehension. This is perhaps why some of the best writers are able to place us within a context on which meaning is completely dependent. Seducing the listener with aural narrative and visual imagery broadens the sensory utility of discourse. Of course the closer we come to a full sensory experience of that which will best enlighten the event or discourse, the closer we come to

contextual understanding. As Northrop Frye admits, "The world of discourse is a concrete human world of immediate experience" (Frye 1993:87).

Discourse is both an instigator of experience and vice versa: Tim Severin was fascinated by Odysseus' voyage as depicted in Homer's Ulysses. He attempted to recreate the voyage, sticking as close as possible to Homeric detail. The ensuing voyage created a new and fuller knowledge and experience of the original text than had been possible before. Severin in turn wrote a book based on his experience...and so it goes. Discourse (especially textual) allows for experience to be communicated to an increasingly greater number of people. But, as we shall see in Chapter III, without the experiential knowledge on which *elements* such as facts and data are founded, how can we comprehend *compounds* such as ideas and concepts? This dilemma becomes even more complex given the contemporary evolution of the media through which we communicate.

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Chapter III: Post-Literate Society

...words are images of thoughts refin'd

—Keats

Introduction

The shift from a modern to a postmodern culture has closely coincided with the advent, popularity, and growth of a variety of means of communicating on a mass scale. Although the radio and telephone have become remarkably important tools, expanding the potential for oral communication, it is the development of the visual image through new media that has been the most influential and predominant means of communicating in the 20th century. These media include film, television, and the computer; all tools which we think of as having the ability to relay information through images. Obscured by the ubiquity of visual imagery is the fact that a written text is often required in electronic media for an image's creation and its coinciding message. For example, film and television rely on words not images, created and critiqued on the bases of their plot and narrative just as any novel would be. Complicating this notion is the fact that like an image, the printed word, wether on a page, television, or computer, is visual or pictorial not aural. In this sense, words become images, and can even gain symbolic or iconic status (e.g. Coke or Mickey Mouse).The medium through which the image seems to be making the greatest advance is based upon the development of the computer, and although one can break

computer language down into its binary "signs", showing that even computer images are reliant upon language, this seems a rather narrow and unrewarding view,(we do not read bytes, we read the V.D.T.). However it is not unreasonable to argue that many of the computer's capabilities are purely image- or graphic-based. But one must also realize that rarely do we attempt to communicate in images unaccompanied by words. It is difficult to know where computer technology will lead us, but current trends show that it is away from the keyboard and towards the ability of the computer to recognize and process the spoken word (Kosko 1993:32-6). This means that rather than getting a simple typed out e-mail message on the computer we will soon be getting the picture and voice of the sender—as they are speaking—from anywhere in the world, all of which can be saved and retrieved. Along with the advent of the television this technology represents a shift from text or literacy to an orality which includes the visual (or performative) aspect on which the television and computer are based. This leads us to the first of two topics in this final segment of this thesis.

One means of better understanding the shift from text to orality in this century (what Ong calls "secondary orality") has been accomplished in Chapter II by analysing the earlier shift from orality to literacy. What seems likely is that the advances in communication we see today share many characteristics with the "primary orality" of preliterate societies and perhaps a not to dissimilar, modernized, version of its characteristics and cycle. This assertion may seem odd because of the visual nature of the television and computer but one must be aware that the image may have become the prevalent form through which television and computers rely, but a primary text and a performative orality (the act of speech) carry the message. This leads us to the second theme/topic of this final chapter: it is the computer's inability to communicate or transfer

wisdom, knowledge, or ideas rather than just data (often misconstrued as "information" gathered through experience) that assures us that construction on the "information superhighway" has only just begun.

Shift from Orality to Literacy: "Primary Orality"

> Works of literature, works composed in writing, can no longer be studied seriously simply in themselves without cognizance of the fact that literature has a vast prehistory in highly self-conscious oral verbalization, which works quite differently from composition in writing. (Ong 1977, 275)

A. D. Leeman characterizes ancient rhetoric as a "manifold notion" and oratory as "one of three major prose genres... the other two being historiography and philosophical writing" (1982, 41, 43). Walter J. Ong recognizes with Leeman the close relationship between oratory and literature, a relationship not without profound impact on antiquity. Hellenic oratory was irrevocably altered by the inscribing of a phonetic alphabet, and its subsequent integration into a sophisticated Greek culture, which resulted in what I. J. Gelb called "the last important step in the history of writing" (1974, 184). The alphabet not only gave written form to speech, but also inaugurated the shift from orality to literacy. Several scholars, seeing fifth-century BCE Greece as the origin of the Western literate revolution, reveal the linguistic dynamism of the period and its powerful influence on later cultures. Ong's Orality and Literacy provides dramatic illustrations of the reciprocal influences of oral and written discourse with his discussion of "primary and secondary orality" (1982), and Eric A. Havelock led a scholarly onslaught against what he termed

the "cultural arrogance which presumes to identify human intelligence with literacy" (1982, 44). George A. Kennedy's notion of *letteraturizzazione* (1980, 4-6) further reveals the relationship between orality and literacy by drawing clear distinctions between "primary" rhetoric, which is characterized as oral, persuasive, and pragmatic, and "secondary" rhetoric, which is written, artistic, and enduring. All three writers propose a specific psychodynamics of the growth of literacy upon primary orality, noting how writing restructures consciousness. But most important to this study, they also refer to a kind of *residual* orality and residual forms of primary oral thought and expression to account for the persistence of certain characteristics of primary orality even after literacy becomes widespread.

THE LITERATE EVOLUTION OF HELLENIC DISCOURSE[1]

I	II	III
1100-700 BCE	700-400 BCE	400 BCE
Primary Orality	Primary Rhetoric	Secondary Rhetoric
Nonliteracy	Preliteracy	Literacy
Oral	Oral	Literate

This "residue" of orality is still present in the third period in which "Secondary Rhetoric" represents the widespread integration of reading and writing into society. The systemization of literacy is often accomplished by applying relevant oratorical principles to writing systems. That is, principles of oral expression that are effective in learning literate skills are adapted to reading and writing. If the historians of rhetoric were to view the relationship between oral and literate communication in reverse chronological order, the literary artifact could be used as a route to

[1]Based on the terms and chronology of Eric Havelock, George Kennedy, and Walter Ong.

reconstruct the oral features of the discourse. That is, as Ong explains in his discussion of "exterior retrospectivity", a conscious "association of literature in the remote past" prompts an awareness of "the old oral culture of humankind" (1977, 243). Havelock's discussion of the "echo-principle", the artifacts of writing, viewed as the remnants of the culture's oral discourse, can provide valuable insights for reconstructing the most elemental features of primary orality (1982, 177-178). Yet efforts to understand thought processes shaping discourse are dependent on their context, and much of that context is developed from features that do not re-echo clearly in the fragments of discourse, artifacts, or theories. One means of reflecting upon the influence of orality upon literacy is to look at the contemporary influence of literacy upon visual media, which I would argue is much more closely tied to the performative orality found in preliterate society than is literacy. What role does language, wether oral or written, play in our primarily visual media such as television and film? How does this illuminate the growing trend towards computer literacy and the "gift" of unlimited "information" that is the pretence of computer literacy?[2]

Shift From Literacy to Visual Orality: "Secondary Orality"

> The most spectacular and intrusive of the recent technological transformations of the word, television, manifests perhaps most clearly, and certainly most massively and deeply, the breaking up of the closed systems associated with the verbal art forms generated by writing and print. (Ong, 1977 315)

[2]My use of the term pretence here is meant to point out a common misconception which blurs the distinction between data, facts, information, and knowledge obtained through mediated channels and that acquired by experience.

Television has become the source, site, and symbol of most of what is particular to contemporary culture.[3] Its importance is rarely denied; its influence, rarely questioned. As medium, as message, as the carrier of messages, as the articulator of custom and morality, and as intermediary between public and private, present and past, the familiar and the strange, it seems to dominate by its ubiquity, by its very presence. The majority of people in industrialized nations watch it, and there is little sign that with rapidly expanding communication technologies we are going to watch it any less. We believe television to be powerful: of itself, as technology, and as culture, and by virtue of its central role in the politics of the complex societies in which we live.

Television is something which, together with other electronic means of communication, particularly the telephone and radio, has substantially undermined the dominance of literate and print-based culture. Television at the same time is an "agent of return," creating through its forms and formulae a noetic world that recalls, without entirely reviving, the sonorous immediacy of preliterate societies. Ong uses the term "secondary oral culture" (1982) to distinguish contemporary Western culture from the primary culture out of which contemporary Western culture emerged after the spread of literacy. Ong styles contemporary electronic culture as "secondary orality," indicating his view that the electronic age revives many features of a primary oral culture. This is logical, since radio, film, and television revive the dominant role of oral expression, aural reception, and help portray physical, performative events. Ong defines secondary orality in the following terms:

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[3]I am simplifying my argument at the outset by focusing on the impact of television, rather than the computer, on the levels of literacy and orality in society. My viewpoints, though, apply to both the computer and television. In many ways the two media are merging by feeding off each other: there is a growing trend towards "computer enhanced imagery" in television while trends in computer software development, following the popularity of television, are moving away from text towards graphics (Mercer 1994:177-95).

> This new orality has striking resemblance to the old in its participatory mystique, its fostering of a communal sense, its concentration on the present moment, and even in its use of formulas. But it is essentially a more deliberate and self-conscious orality, based permanently on the use of writing and print, which are essential for the manufacture and operation of the equipment, and for its use as well. (1982: 136)

While the concept of secondary orality powerfully illuminates the character of our media-dominated world, it has not really radiated into the cracks and shadows of social and cultural processes. In other words, the orality characteristic of television is rather uncharacteristic of society as a whole, whose ability to articulate ideas through oral means has deteriorated.[4] Not surprisingly the decline of literacy over the last thirty years coincides with the popularity of television.

Technological changes of the kind that mark the transitions from writing to printing to electronic communication affect the social, cultural, and psychological fabric of our lives in the profoundest possible ways by influencing the way in which we think and the way in which we organize ourselves. Instead of print-based texts, the new media, infinitely recoverable and structurally complex, provide us with increasingly formulaic and fragmentary texts, recognizable and understandable in a single hearing or viewing. Their appeal is to the group—or in the case of broadcast television the mass viewing audience—rather than to an individual.[5] Like the preliterate or oral society, they offer a shared, not a private, communication experience. What distinguishes secondary orality from primary orality is its continuing dependence on the analytical, technical and narrative skills that in turn depend on print. Secondary orality is a

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[4]For statistics and a clear analysis of the plight of literacy in North America, see Godzich, (1994) The Crisis of Literacy.

[5]The same can be said of computer technology which can give the illusion of "user individuality." Like the printing press before it, the computer has a powerful bias towards amplifying personal autonomy and *individual* problem-solving.

displaced orality. This sense of displacement is exemplified by the planned spontaneity of the shared (but not group) experience T.V. offers us.

Secondary orality is a hybrid. Technological change brings with it social, cultural, and psychological change, though neither simply nor in an unqualified way. The forms of expression and experience, which have dominated our lives since writing and print, have now both compromised and supplemented those associated with, and created by, the newly emerging oral-aural communication technologies. Television, like the computer, is a hybrid; dependent technically on the competence that only literacy skills can provide[6] and supported culturally by a secondary popular literature of written schedules and commentary. But, because it requires viewers rather than readers, television is quite undemanding of those same literacy skills that have hitherto marked those who possess them as educated beings. Television will not survive without writing; it can only encompass writing. Yet writing is inseparable from television; together writing and television have combined the oral and performative aspects of communication from which writing arose. The positive side of the culture of secondary orality, which we are in the midst of, is its accessibility by a mass audience; its negative side is the lack of a common "ground": a unifying physical experience to connect the shared visual and aural experience, further removing the reciprocity once inherent in the communicative act during the period of primary orality.

There is no doubting that television requires little in the way of formal literacy from its viewers and that making sense of moving images and recorded sounds is a relatively easy skill to acquire, and, it would appear, almost instantly pleasurable. As writers from Aristotle to McLuhan

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[6]Scripts and teleprompters are essential to the production of any television program.

have pointed out: mimesis is a fundamental source of delight. Most television programming is a mix of exaggeration, fantasy, and mimesis—just as narrative has been for centuries. Narrative is a universal phenomenon, and television provides, even in its progressively more fragmented (myth-like) and postmodern texts, the creation of our contemporary folklore.[7] According to Neil Postman "it leaves open the questions that relate to context, to cultural difference, to social and political contradiction, and indeed to the nature of the mechanisms that link technology, text, culture, and personality"(1994: 43). As seen in Chapter I, these are similar questions left open in the analysis of ancient Greek myth, acting as a powerful adhesive between primary and secondary orality.

Television then is a perfect illustration of the symbiosis of technology and text: a literary-oral product expressing in form and content much that is recognizable in the oral narratives of preliterate society: the predictability and redundancy of plot, the persistent stereotypicality of character, the constant tension of a disjunctive narrative,[8] and an invitation to the receiver to identify with, to remember, to compare, to accept a national and an internationally shared experience. Television is the prime symbol of postmodernity and its most subconsciously appealing characteristics are being encompassed and surpassed by its successor—the computer.[9]

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[7]A similar argument is made by Barthes(1977:79).

[8]A narrative marked by breaks or disunity. The colloquialisms common to television are similar to modern dramatic styles, with their fragmented narration and brief incomplete physical acts, only hinting at the author's intentions (e.g. Beckett, Eliot, Mamet).

[9]It is essential to remember that television programming is controlled by a minority of privileged persons, while the computer, through such options as the "world wide web", is revolutionizing privileged communication by moving it into a more democratic forum, although restricted to those with access.

Television programming is remarkably similar across the world, not just by virtue of the presence of identical products but through the influence of forms and genres. Television news, soap opera, and advertisements are bare respecters of cultural difference, generating a universal language, not for an educated elite this time, but for all of us. Television is becoming the source of a new global vernacular often at odds with national cultures: an agent, perhaps, of a kind of regressive progress. But its relationships to those cultures, particularly those that have recently had literacy introduced to them, can only be extremely complex. They have hardly begun to be studied. For once they are, of course, sweeping generalizations about television's influence (or lack of it) will have to be modified and developed.

The dilemma of shifting directly from an oral society to electronic media could produce disastrous effects upon preliterate cultures. With the onslaught of another society's culture, brought by electronic media, and without any way of storing the oral traditions of their own preliterate culture, cultural extinction on a massive scale may ensue. Problems such as these created by electronic media do not solely involve the relationship between medium and message, technology and text. They cannot be resolved by appeals, however substantively grounded, to interiorization or noetic difference. In fact, as Ong attests, the idea that "the medium is the message"(McLuhan) is more of an exception than a rule.

> The medium is not the message, for one medium will incarnate many messages. But medium and message interact. The medium is neither container nor vehicle. The message is neither content nor cargo nor projectile. Medium and message are interdependent in ways none of these carton and carrier metaphors can express. In the last analysis, the medium is not even a medium but something in between. There is no adequate analogue for verbalization. Verbalization is ultimately unique. (Ong, 1971, 290)

The problem with Ong's rather nostalgic sounding conclusion is that by differentiating between writing and verbalization he leaves unquestioned his faith in their foundation—language. What

Ong has difficulty seeing is the fact that the message, whether in primary orality, secondary orality, or even writing, is always based on language; it is in this sense that verbalization is not unique. As we have seen from the previous chapter, what *is* unique is that as we moved from parataxis to hypotaxis and from preliteracy to literacy the permanence of language set in print somehow gained a value akin to the words earliest and most often set to print—the Bible. The printed "word" in the Bible was given the esteem of being God's own words regardless of translation and time: "And [God] said unto me, Write: for these words are true and faithful" (Rev. 21:5). The faith and trust put into those words in print seem to have manifested themselves in other texts because, although humans may question the meaning of a sentence they rarely question the meaning of the individual words which comprise the sentence.

Both our common sense and scientific realism attest to the fact that there is, first, a real world of objects, events, and processes that we observe. Second, there is language or symbols that name these events in the real world and create more or less adequate descriptions of them. There is reality and then, after the fact, our accounts of it. We insist there is a distinction between reality and fantasy; we insist that our terms stand in relation to this world as shadow and substance. While language often distorts, obfuscates, and confuses our perception of this external world, we rarely dispute this matter-of-fact realism. We peel away semantic layers of terms and meanings to uncover this more substantial domain of existence. Language stands to reality as secondary stands to primary in the Galilean paradigm from which this view derives.

The nonconstructivists suggest that language may sometimes be a hindrance to clear, correct thinking. This distrust, a central issue in a number of fields by the early 20th century, is exemplified by Bertrand Russell:

> A word is applied at first to things which are more or less similar, without any reflection as to whether they have any point of identity. But once usage has fixed the objects to which the word is to be applied, common sense is influenced by the existence of the word, and tends to suppose that one word must stand for one object...(1956: 331).

Much of contemporary philosophy is in agreement with the obfuscating role of language in the attainment of knowledge. In fact much of contemporary philosophy is devoted to revealing the ways in which language misleads us. As Waisman puts it "our false philosophy is incorporated in the whole of language; we cannot reason without reasoning wrongly...philosophy begins with distrusting language" (1977: 2). The view that we are attempting to represent and understand reality by using symbols rather than inquiring into reality through physical experience is gaining attention across disciplines. Child psychologists, for example, seem to be the most desperately aware of the repercussions given children's attraction and susceptibility to the image accompanied messages found on electronic media (Berk 1994: 351-3). In a twist on the Platonic debate between *sophia* (wisdom through understanding) and *gnosis* (knowledge through acquisition) I will endeavour to bring the argument, with the help of some historical background, into the context of our contemporary electronic media revolution.

Communication: Transfer of Ideas

In the Middle Ages, most learning took place through apprenticeship, that is, by having the student actively learn from the teacher's experience and, over the course of many years, gaining his or her own experiences. Such an approach proved unworkable under conditions of expanding markets, and so, the textbook was invented. A textbook originally was a compilation of the very best tricks of the trade drawn from the *experience* of the best masters. The *idea* of the

textbook rests upon the assumption that the *experience* of one human being can be conveyed to another by means of *language*. This assumption further presupposes that human beings are similarly constituted and are substitutable for each other. These are the underlying assumptions of modernity, and they lead to notions such as universal education and the progress of learning and of humankind. Critiques of language, practised by Paul de Man, focus on the fact that the very social success of this approach had elevated language to the role of universal mediator and equivalent, that is, to a situation where there is universal reliance on language without any reflection on the price we pay for such a reliance. The same may be said of contemporary media through which language is transmitted. This is even more true of those forms of economic and sociopolitical activity that require knowledge of vastly different sectors of the market and the society.

Book learning thus came to replace direct acquisition of experience, and as Walter Benjamin observes in his essay "The Story Teller," it gave rise to a desire for a form of knowledge that would no longer be guaranteed by the life experience of its propounder—the master—but that would instead be "understandable in itself" and subject to "prompt verifiability" (1969: 89), namely information. At the same time, information is not so much stored in order to be reflected upon and to serve as a guide for one's future practice, as it is consumed. Instead of contributing to the growing awareness of the individual's continuity with others in space and time to what has been traditionally called wisdom, information in and of itself is redefining our notions of wisdom to one that can be gained individually and without physical experience. It isolates the individual even more from others, and indeed by its news-like obsolescence, its incompleteness and inherent recalcitrance to totalization, it unmoors the individual from such

values as he or she may have acquired, especially since the latter are no longer determined by the inherited wisdom of the collectivity, or the precepts of relation but by the momentary needs of the market. Although it was meant to supplement experience, and not supplant it, mediated knowledge (i.e, those things which are, perhaps wrongly, often known as "facts" or "data") destabilized it and, in the process, produced the condition characteristic of our modernity, in which we find ourselves caught in the gap between the lessons of acquired experience and values thrust upon us by the various apparatuses of electronic media. My admittedly loose use of the term "information" throughout this chapter is to be understood as representing the type of "facts" which one might learn from a text book; eg.: "In 1950, 1/3 of the world's population lived in industrialized countries." "A fact is a feature of a specific discourse" (Quartermain in conversation, April,1995), but as we have seen in Chapter II the boundaries of a discourse can become blurred. The imprecision with which we use technological terms that personify, for example, the computer's ability to store in its "memory" "facts, data, and information", has had an inverse effect: people often assume that "facts" and "data" are much the same thing, just as people wrongly assume "information", "ideas", "knowledge", "wisdom", and even "experience"are synonymous.

As we have noted of mythopoetics in Chapter I the storyteller not only recounted personal experience but, in the narrative in which he or she couched it, endowed that experience with meaningfulness. While the lived experience of the storyteller was, as Benjamin saw, the condition of his or her authority, the efficacy of the telling lay in the fact that it articulated learnable modes of endowing experience with meaning. Literature would increasingly rely upon this capacity of narrative. We may observe, for example, that the large-scale explosion of

narrative literature in the eighteenth and nineteenth centuries was preceded by the prevalence of travel and memoir writing in which the writer, like the storyteller earlier, appealed to the authority of lived experience in the recounting of his or her life. Similarly, the epistolary novel provides the means for reflecting upon experience and thus serves as a guide to it. Its future was to be the novel of manners. The aesthetic function of art, in other words, was, paradoxically, to become a mediator itself, but a mediator that would deliberately play the role of supplement to a fragmented and unmoored experience, and thus hold open the possibility of totalization. Narrative form was particularly well suited to such a task because of its special mode of articulating temporality: what was fragmented today could be completed tomorrow.

Today we are much less likely to be engaged in the process of intersubjective communication—that is, we no longer conceive of knowledge as consisting of the acquisition of personal experience and sharing of that experience with others. Instead we model our concept of knowledge upon the acquisition of *information about* an object so that our subjecthood is defined in the cognition of objects, be they things, ideas, or other human beings—the story, commodified as it has become, will take on the guise of an object rather than being a process of interaction between human beings.

The Acquisition of Knowledge: Ideas and Information

Where is the knowledge we have lost in information?

—T. S. Eliot

In the Middle Ages, the realm of knowledge in the Western world was balanced between the "mind of God" reached only by acts of faith and scriptures, and a relatively small number of

texts by Greek, Latin, Jewish, or Arab writers. As we have noted before, over several centuries of the medieval period these sources had been worked, often by way of brilliant elaborations, into an august repertory of knowledge that was held to answer all the questions for which the human mind could expect answers. In pre-industrial culture, there is no such category as "information";[10] facts count for very little when whatever can be known is already known and has been assimilated to well-known truths. Instead of information there is confabulation: constant, sometimes inspired, play with familiar ideas that are extended, combined, reshaped. By the latter part of the sixteenth century, this intellectual style was becoming more and more incompatible with the social and economic dynamism of Western society. For one thing—a dramatic thing—new worlds were being discovered, whole continents and cultures that were unaccounted for by any existing authority. These were *discoveries.* And if there could be geographical discoveries, then why not new worlds of the mind as well?

Francis Bacon used just that comparison to justify his restless quest for a "New Philosophy."[11] He, Descartes, and Galileo were among the first to match their culture's expansive passion for physical discovery with a corresponding intellectual daring. These seminal minds of the seventeenth century hit upon an exciting cultural project. Their proposition was this: let us devise a kind of inquiry which will have the power to discover *new things* about the world—about its forces, and structures, and phenomena. This "scientific method" was the beginning of the modern scientific world view.

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[10]In fact, the notion of information doesn't come about until the 18th century (Ayto, J. 1990).

[11]Thus the birth of the *novum organum.*

No one can fail to appreciate its historical contribution; but we also have enough historical perspective to know how misconceived that method was. In its narrow focus on facts, its account diminished the crucial importance of theoretical imagination, hypothesis, speculation, and inspired guesswork—without which science would not have had its revolutionary impact. Science is structured inquiry, and the structures that guide its progress are *ideas*.

Baconian thinkers recommended a new point of departure, one which seemed innocuously neutral and therefore strategically inoffensive to the cultural authorities of the day: they would concentrate their attention on the clear cut indisputable facts of common experience—the weights and sizes and temperatures of things. Facts first, they insisted. Ideas later. The trouble is, the very success of the empiricists has helped to embed a certain fiercely reductionist concept of knowledge in our culture, one that drastically undervalues the role of the imagination in the creation of ideas, and of ideas in the creation of knowledge, even in the sciences.

What we learn at a young age is that the accumulation of facts takes shape in the form of knowledge. But how do we recognize a fact when we see one? Presumably, a fact is not a mental figment or an illusion; it is some small, compact particle of what we assume is "true." But to collect such particles in the first place, we have to know what to look for. There has to be the idea of a fact. The empiricists were right to believe that facts and ideas are significantly connected, but the relationship is not fixed—it can also be inverted. *Ideas can also create information,* not just the other way around. Every fact grows from an idea; it is the answer to a question we could not ask in the first place if an idea had not been invented which isolated some portion of the world, made it important, focused our attention, and stimulated inquiry.

Facts are nonetheless human creations, each capable of being questioned, doubted, altered. The dramatic turning points in culture happen at just the point where new ideas rise up against old ones and judgments must be made. What happens, then, when we blur the distinction between ideas and information and teach children that information processing is the basis of thought? Where does critical reflection fit into this process? The "information superhighway" is awash in a flood of statistical figments that serve to obfuscate basic questions of value, purpose, and justice. What contribution has the computer made to this situation?

Ideas vs. Information

By raising the importance of experiential knowledge I am also raising a small protest on behalf of the human mind, its creative powers, its animal resiliency, its undiscovered evolutionary potentiality, its deep enigmas of aspiration and self-transcendence. I seek to remind readers of the obvious that so often goes unobserved. There have been works of genius, indeed golden ages of culture—many of them the creation of what some call "primitive" peoples—based upon nothing more than human speech, imagination, and memory. The heights of intellect and vision have been scaled by people gathered around campfires to tell stories, by poets scratching away with a quill by candlelight, by scribes bending over a sheet of parchment, by inspired painters working on the walls of a cave. There is, of course, no reason why we should not, in our time, look for another, more expressive medium of communication, but I find it important to recall that although the mind has not been debilitated by technology, neither has it been

dependant on technology to reach its peaks of achievement.[12] Though that reminder is not meant as a rejection of technology, which shows powerful evidence of ideas at work, I am sure some will see my viewpoint as a typical humanist response to the overwhelming claims of the technician.

For better or worse, our technological civilization needs its data the way Romans needed their roads and the Egyptians of the Old Kingdom needed The Nile flood. It would be difficult to deny that the computer is a more easily accessible means of storing and retrieving information than is a library. There is nothing sacred about the printed page when it comes to keeping records; if there is a faster way to find facts and manipulate them we are lucky to have it. Just as the computer displaced the slide rule as a calculating device, it will also oust the card catalogue system, the filing cabinet, the reference book, if it can prove itself cheaper and more efficient. But information, even when it moves at the speed of light, is no more than it has ever been: discrete little bundles of fact, sometimes useful, sometimes trivial, but radically different from thought and ideas.

The great mischief done by the data merchants, the futurologists, and those in the schools who believe that the television and the computer are the educational wave of the future, is that they lose sight of the paramount truth that *the mind thinks with ideas, not with information.* As was previously noted, these terms are slippery, but one can assume that "ideas" are a product of formulated thought which is reliant on information. Information, in turn, is usually based on what we assume to be true; ie. within a given discourse. Information may helpfully illustrate or

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[12]Though it would be folly to deny the importance of machinery in making available the achievements of humankind more accessible to the masses.

decorate an idea; it may, where it works under the guidance of a contrasting idea, help to call other ideas into question; it may even be the spark that ignites an idea. But information does not *create* ideas and, by itself, it does not validate or invalidate them. A culture survives by the power, plasticity, and fertility of its ideas.[13] Just as ideas order information, they also order the wild flux of experience as it streams through us in the course of life. This is the point Fritz Machlup makes when he observes a striking difference between "information" and "knowledge"(1983).[14] (He is using "knowledge" here in exactly the same way I am using "idea"—as an integrating pattern.) "Information" he tells us, "is acquired by being told, whereas knowledge can be acquired by thinking(36)."

One of the major liabilities of the "information retrieval" or "data processing" analogy for a model of thought is the way in which it coarsens subtle distinctions in the anatomy of the mind. The model may do this legitimately in order to simplify for analytical purposes; all scientific models do that. But there is always the danger that the model will become reified and be taken seriously. When that happens, especially on the part of authors, experts, or teachers who should know better, it can actually falsify the way we perceive information and create ideas.

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[13]For a similar argument see also Joseph Vining's (1994) From Newton's Sleep, Princeton: University Press.

[14]Machlup's prologue to his anthology is an incisive survey of the many strange meanings of the word *information*.

The Computer vs. Experience

I have been using the term "Experience" here to signify a knowledge, skill, or practice derived from direct observation of, or participation in, event; the raw material from which moral, metaphysical, and religious ideas are fashioned by the mind in search of meaning. This may seem like an imprecise definition, especially to those of an empiricist inclination. In the empiricist tradition, "experience" has come to be the equivalent of information. It is the sensory data we collect in neat, well-packaged portions to test propositions about the world in a strictly logical way. When the empiricist philosophers of the seventeenth and eighteenth centuries defined experience in this way, they were in search of a form of knowledge that would serve as an alternative to statements that were meant to be accepted on the basis of authority, hearsay, tradition, revelation, or pure retrospective reasoning. To these "logical positivists" experience was intended to be that kind of knowledge which was firsthand and personally tested. It was also meant to be available for inspection by others through *their* experience. Hence, it was *public* knowledge exemplified by the "text book" and, as such, free of obfuscation or manipulation. This, so the empiricists argued, was really the only kind of knowledge worth having. Unless, they claimed, all the rest could be verified by experience, it probably did not deserve to be regarded as knowledge at all.

But experience of the kind many empiricists were after is actually of a very special, highly contrived variety. Modelled upon laboratory experimentation or well-documented, professional research, it exists almost nowhere except in the world of science—or possibly as evidence in a court of law. We do not normally collect much experience of this sort. Rather, we

ordinarily take in the flow of events as life presents it—unplanned, unstructured, fragmentary, and at times dissonant. These are passed into memory where they settle into things vividly remembered, half remembered, mixed, mingled, compounded, amalgams. From this compost of remembered events, we somehow cultivate our private garden of certainties and convictions, our rough rules-of-thumb, our likes and dislikes, our tastes and intuitions, articles of faith and myths.

Memory is the key factor here; it is the register of experience where the flux of daily life is shaped into the signposts and standards of conduct. Computers, we have come to understand, also have "memories," in which they store information. But computer memory is no more like human memory than the teeth of a saw are like teeth; these are loose metaphors that embrace as many differences as similarities. It is not the least of its liabilities that the "information superhighway" obscures this distinction, to the point that some of its supporters suggest that computer memory is superior because it remembers so much more (Ranade 1991).[15] This is precisely to misinterpret what experience is and how it generates ideas. Computers "remember" things in the form of discrete entries: the input of quantities, graphics, words, etc. Each item is separable, perhaps designated by a unique address or file name, and all of it subject to total recall. Unless the machine malfunctions, it can regurgitate everything it has stored exactly as it was entered, whether a single number or a lengthy document. That is what we expect of the machine.

Human memory, on the other hand, is the adhesive of the mind that holds our identity together from moment to moment. This makes it a radically different phenomenon from computer memory. For one thing, it is fluid rather than granular, more like a wave than a particle.

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[15]As we noted in Chapter Two, this is the same way we view text and language itself—as a storage device for ideas. But "signs" are just that—not experience, reality, or the ordering of information into ideas, but simply data.

Like a wave, it spreads through the mind, puddling up here and there in odd personal associations that may be of the most inexplicable kind. It flows not only through the mind, but through the emotions, the senses, the body. We remember things as no computer can—in our muscles and reflexes: how to swim, play an instrument, use a tool. These stored experiences lodge below the level of awareness and articulation so that there is no way to tell someone how we drive a car or paint a picture. We don't actually "know" ourselves.

Moreover, where we deal with remembered experiences, there is rarely total recall. Experiences may be there, deeply buried in our brain, but they are mostly beyond recollection. As we have seen in chapter two, our memory is rigorously selective, always ready to focus on what is essential at a given moment in a given context. It edits and compacts experience, represses and forgets—and it does this in ways we may never fully understand. If we could draw a full anatomy of memory in all its elusive variety, we would have the secret of human nature itself. The shape of memory is quite simply the shape of our lives; it is the self-portrait we paint from all we have experienced.

> A passerby whistles a tune at the exact moment that you notice the reflection of a branch in a puddle which in its turn and simultaneously recalls a combination of damp leaves and excited birds in some old garden, and the old friend, long dead, suddenly steps out of the past, smiling and closing his dripping umbrella. The whole thing lasts one radiant second and the motion of impressions and images is so swift that you cannot check the exact laws which attend their recognition, formation, and fusion.... It is like a jigsaw puzzle that instantly comes together in your brain itself unable to observe how and why the pieces fit, and you experience a shuddering sensation of wild magic. (Nabokov 1980: 16)

Experience, as Nabokov describes it here, is more of an amalgam than a filing system. Sometimes a single component overpowers all the rest. In time, this amalgam boils down into a rich residue of feelings, general impressions, habits, and expectations. Either by itself, through

the catalyst of a sensual experience, or spark of information, that residue bubbles up into a well-formed insight about life which we may speak or paint or dance or perform for the world to know. And this becomes, whether articulately or as an unspoken existential gesture, an *idea.* From moment to moment, human beings find new things to think and do and be: ideas that erupt seemingly from out of nowhere.

We are remarkably receptive and adaptable animals, and the range of our cultural creativity seems unlimited. It would be a great loss if, by cheapening our conception of experience, memory, and insight, our contemporary infatuation with information storage and retrieval blunted these creative powers. There are computer scientists/engineers/designers who seem well on their way toward doing that, however. They believe they can simulate our originality on the computer by working out programs that include a "fuzzy logic" randomizing element. Because this makes the output of the program unpredictable, it has been identified as "creative." But there is all the difference in the world between such contrived randomness and true originality. Again, the data processing model works to obscure the distinction. In the human mind, an original idea has a living meaning; it connects with experience and produces conviction. What the computer produces is "originality" at about the level of a muscular spasm; it is unpredictable, but hardly meaningful.

Of course, there are other forms of experience that come to us more neatly packaged and labelled: things learned by rote or memorized verbatim, precise instructions, procedures, names, addresses, facts, figures, directions. What such experiences leave behind is much like what fills computer memory: *information* in the proper sense of the term. Our psychological vocabulary does not clearly distinguish these different levels and textures of memory; we have simply the

one word for the remembrance of things past. We *remember* a phone number; we *remember* an episode of traumatic suffering that changed our lives. To sweep these different orders of experience under the rubric of *information* can only contribute to the cheapening of the quality of life.

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