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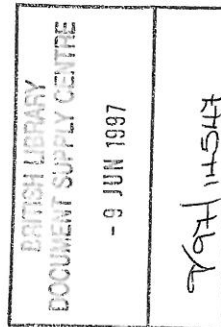
Tel: 01570 422351 ext. 297
01570 424797 (direct line)

VAN STIPHOUT

Civilizations of the Ancient Near East

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JACK M. SASSON
EDITOR IN CHIEF

JOHN BAINES
GARY BECKMAN
KAREN S. RUBINSON
ASSOCIATE EDITORS



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Memory and Literacy in Ancient Western Asia

H. VANSTIPHOUT

TO SAY THAT WRITING is the ancient Near East's single most important cultural contribution is a truism that cannot be weakened by repetition. The consequences of that contribution are immense and can be appreciated only after a thorough and multidisciplinary study. I shall here raise issues only about literacy and its impact on the cultural systems involved. That I will draw illustrations mostly from cuneiform civilizations is not because of personal predilection: cuneiform is not only the earliest but also the most important writing system to come to us from the ancient Near East. Furthermore, our documentation for cuneiform writing is far richer than that for any other writing system of antiquity.

A writing system is the graphic representation of features of language—lexical, grammatical, and syntactic. This implies that there must be phonetization of some kind and that this phonetization must be at the same time systematic and abstracted from the contents, context, and intention of an actual individual message. Essential to any human language is that its basic element, the word, not be merely a label for an idea or an object but function in combination and within a phrase or sentence, obeying a system of rules we call "grammar." It is also important to note that the level and the method of so-called phonemic notation are not identical concepts, so that a writing scheme that uses an alphabet must

not automatically be judged more advanced or developed than one that uses a syllabary or logographs. The efficiency by which the grammatical structure of a language is expressed is a much more important consideration than the language's number of signs.

Somewhat independently of this close link, or conceptual isomorphy, with language, writing as a cultural action may be said to show three interrelated specific aspects. First, the operational aspect consists of the execution of signs by means of an instrument on a carrier, signs meant to represent the linguistic features known as words, morphemes, or phonemes, or all three. Second, the functional aspect is closely related: the operation is intended to convey a "message"—or, perhaps better, a piece of language—by proxy and therefore consists of the fixation in time and space of an otherwise ephemeral linguistic communication. In terms of the general scheme underlying every communication, this means that the operation itself establishes contact and presumes the code, while the intention is precisely to get the message through in the absence of the addressee and sometimes the context. Therefore, the functional aspect may be said to cover also the conditions under which, and the reasons for which, the message is twice encoded. Third is the material aspect: the operation, originating under specific conditions and with specific intentions, results in a concrete

object that is not identical to, or even coextensive with, the message.

ORIGIN AND DEVELOPMENT OF WRITING

Sources and Critical Issues

True writing originated for the first and, according to some, for the only time in the ancient Near East. To be precise, it was in southern Iraq in the last centuries of the fourth millennium BCE that *homo literatus sumericus Urukensis* invented writing for his Sumerian language. The felicitous term is Marvin Powell's, and it implies that the invention of writing is related to the emergence of the city of Uruk (modern Warka, biblical Erech) as southern Mesopotamia's major urban center. The first written documents, which are economic and administrative in nature, are dated archaeologically to the period 3300–2900 and were located at or near the site of Uruk. The thorough and painstaking studies by M. W. Green have removed most of the doubts that the language of the documents is Sumerian. It is therefore not without interest that Sumerian literary tradition ascribes the invention of writing to a prince of Uruk. Not long afterward, the Nile Valley also shows evidence of a writing system that seems full-fledged. From the first two dynasties (circa 2900–2650), we have a relatively important number of written documents, such as private stelae, name tags, jar sealings, and inscriptions on pottery. Although at this stage the Egyptian writing system was in principle capable of recording all of language, the uses to which it was put were much more limited, and continuous language was not written down. For the sake of completeness, it should be noted that the Iranian Plateau offers early documents written in the Proto-Elamite script. Yet, these economic texts and early inscriptions hardly differ from their Mesopotamian counterparts, and this script is merely an early and short-lived variant application of Mesopotamian cuneiform.

Two questions may be posed: Was writing invented just once or several times? And how exactly did cuneiform writing, which is undoubtedly the first in any case, originate? Partisans of

monogenesis point to the structural near identity between the oldest (Sumerian) system and its near contemporary, Egyptian. Ignace J. Gelb claims that he can follow the period of development into phonetization in much detail for Sumerian, in contrast to Egyptian or even Chinese. He also disallows the evidence of the great civilizations of the New World, the Maya and the Aztecs; these would not, for him, constitute true writing, since they have not progressed from the vague and uncertain and partial principle of phonetization to systematic phonetic, or rather phonemic, writing. Yet, since recent progress in deciphering Maya has proven beyond a reasonable doubt that Maya is indeed a true writing system, it follows that writing can be discovered twice, just as metallurgy or agricultural techniques can. By the same token, the dependence of the Chinese system on Sumer is no longer the most probable hypothesis. Further, research after Gelb has observed that even the Egyptian system may have developed gradually and independently—by coincidence only slightly later than the invention in Sumer. In fact, polygenesis (multiple origins) now seems to be accepted as the more probable hypothesis.

A vexingly unexplained problem is the absence of evolutionary stages in some material. However, the argument seems to involve a *petitio principii*: we only call a system "true writing" precisely because of its relative completeness. Half a writing system is no writing system. One may have some sympathy with the view that the evolutionary approach to the origin of writing is irrelevant or plainly wrong. Furthermore, it is very much a matter of degree and appreciation: as noted, the earlier stages of Egyptian writing do show a gradual refining, adaptation, and, indeed, growth of phonetization. Still, the fact remains that we have much more material for the several steps the system went through in Mesopotamia. The reason might be twofold: the material lends itself much better to preservation, and it is probable that the incidence of writing was much higher since, from very early on, the distribution or functional spread is much wider. This last observation implies that an answer to the second question—how exactly true writing originated—can be attempted most fruitfully on the basis of the Mesopotamian evidence and example.

The Moment and the Conditions of the Invention of Writing

It should be remembered that writing, as such, was something completely new at its invention; indeed, just like human language, it may be said to have constituted a Lamarckian leap instead of a Darwinian evolution. But this does not mean that it was the first or the only sign system available to the Sumerians of the fourth millennium. To the contrary, there is plenty of evidence that these early Sumerians, just like every other community, used a number of slightly interrelated sign systems that may be roughly broken down in three groups.

First of all, there are drawings or other manufactured representations of objects, animals, and men on cylinder and stamp seals or on pottery or other artifacts. These are often highly stylized, so that a degree of abstraction, leading to a certain uniformity, may be said to have reached a systemic level. But the systematization seems dictated by representational or aesthetic considerations and traditions.

Second, and very probably arising out of the first group, there are representations that are loaded with symbolic value; we know, because some of them, such as the emblems belonging to a number of deities, survived until the very end of cuneiform civilization and may be even beyond that, implying that their referent reaches much further than the single and individual object or animal. Such a system of symbols can only be effective if it reflects a common ideology or body of beliefs and convictions. This phenomenon is found all over the world, and in some cases, it results in the construction of "messages" by means of an assemblage of different symbols. Every history of writing contains illustrations of this, and there are some very fine examples on late Predynastic Egyptian objects. Strangely enough, these assemblages are rare in Mesopotamia: at most, a number of scenes depicted on seals might be interpreted in this way, but the impression remains that even in these cases the combined scene, as such, is generalized and becomes a new and composite symbol. In any case, such assemblages can hardly qualify as protowriting, since the linguistic link is absent. As a matter of fact, sign systems that are based on a combination of these first two

groups and represent a coherent corpus of meanings while independent of any single language have been found everywhere and are certainly not restricted to societies without writing. Heraldry is one such system, and the modern world abounds with insignia: traffic signs, icons in airports and railway stations, signs on car dashboards, and icons in computer programs.

A third group consists of identifying or mnemonic devices: arbitrary simple linear designs used as marks on all kinds of objects in everyday use. These are frequent from early on in Egypt (potters' marks), but relatively rare in Mesopotamia.

Mesopotamia, with its northern and eastern border regions, abounds in another class of objects, the relevance of which has been noticed only since the 1960s. Excavations have yielded large numbers of very small clay objects of sundried simple shapes: spheres, cones, discs, and the like, some of them incised with lines or crosses. These "tokens" are especially abundant from 3500 onward; the number of different shapes increases, and there are apparently no significant regional variations between finds, spots, such as northeastern Syria (Habuba al-Kabira), Sumer (Uruk), north-central Mesopotamia (Khatfaj), central Iran (Tepe Sialk), and southern Iran (Choga Mish). Archaeologists used to give them scant attention—indeed, they often just threw them away—until Pierre Amiet built a theory on them, which was later worked out extensively by Denise Schmandt-Besserat. The theory (developed in the chapter "Record Keeping Before Writing," above) in broad outline runs like this: The tokens were used in a system of accounting, standing for (units of) goods. This economic system is of great age; tokens go back as far as the ninth millennium—when farming began. Starting as a simple bookkeeping device, they really come into their own with the advent of large-scale trading at about 3500. They then served also as bills of lading and the like; in order to restrain fraud, a "bullae" were enclosed in a ball of clay called a "bullae." Bullae often have marks on the outside corresponding with the tokens inside—sometimes made by actually pressing the tokens into the soft clay before closing up the ball. The next step was obvious: since the "contents" are marked by making a sign on the clay of the bullae,

they may just as well be dispensed with, and so, the clay tablet was invented before writing itself.

Is this how writing was invented? From the technical point of view, there seems little doubt that this evolution in practice and function of a generalized token system indeed led to the use of clay tablets as carriers of economic messages in the broadest possible sense. But something is lacking: the token system does not imply a notation of phonemic or grammatical features. Indeed, if the spread of the system was as wide as has been claimed (almost the complete Fertile Crescent, including Egypt), such a notation would surely be impossible. Furthermore, the more specific the meaning of a token in such a system becomes, the more different tokens are needed, which would tend to make the system far too unwieldy. Two discoveries by M. W. Green are very important in this respect. First, she demonstrated that the repertoire of signs in the very early period was far greater than later, while obviously the content of the "texts" is highly conventional and extremely simple. Second, she also demonstrated that in the very early tablets the signs are arranged in boxes that do two things: they make visible the format of the "text," thus making it "readable," and within the boxes the arrangement and sequence of the signs becomes gradually more regulated. While the first aspect illustrates that the proliferation of signs was felt to become a problem from early on—indeed, the growth of the number of signs tapers off and is very much reduced once "full" writing appears—the second suggests that an important step had been made: not just the signs themselves but also, and perhaps more so, their sequence and arrangement carry meaning. In this way a combination of signs can be used for a meaning that is more than, and different from, the disconnected series of the separate signs. This happens in hieroglyphic as well as in cuneiform. But even more important is the implication that in this way an important (albeit rather abstract) linguistic feature can be expressed: syntax, being a rule-governed series or chain of distinct semantic units. The next step is obvious in hindsight: the system is used to express other linguistic features as well, and though we will probably never have certainty on this point, I would suggest that the conceptual route led from syntax notation over morpheme notation to pho-

neme notation, and not the other way around, in this respect also, true writing works like true language. The very probable hypothesis that this was done—in both hieroglyphic and cuneiform—by means of partial or complete homophony, of which general technique the hieroglyphic predilection for rebus writing is only a specialized instance, does not change this. And so we are back to Powell's *homo literatus sumericus Urukensis*, for however plausible and well founded the token theory is, it does not explain by itself the step to true writing. I would venture that the great invention was indeed just that—a conscious invention with perhaps a definite purpose, although partly based on an existing technique for limited and specific communication. As with all great inventions, novelty is but one, not very important, aspect. The main fact about the invention is that its applicability is raised to an incredible degree both as to domain and to substance.

Evolution and Implications

In both cuneiform and hieroglyphic, the invention relatively quickly led to more-general application and specific refinements or adaptations. This evolution, which is partly mixed with the invention itself, has four aspects. First, there is the emancipation from the system of tokens and symbols. This emancipation is of course implied in the transition from purely administrative to linguistic notation. This motif is splendidly illustrated in an episode from the Sumerian narrative poem *Enmerkar and the Lord of Aratta*: the Lord of Aratta is vexed and despondent when, looking at the tablet written—allegedly for the first time—by Enmerkar, he does not see the iconic or symbolic signs he may have expected, but "words" in the form of "nails."

Second, giving a linguistic content to the newly invented system has serious implications. Whereas the head of a donkey, a cow, or a sheep is just that in any language, now the drawing of a foot can be used for a range of different linguistic units: foot, to stand, to go, to walk, to run, and so on. This weakening of the significance of direct pictorial denotation—or, for that matter, of restricted conventionalism—leads in both systems to subsidiary systems that are remarkably alike. To the original set of logographs is added a set

Enmerkar Invents Writing

500 This speech was [too difficult?], its contents were too long;

The Messenger's mouth was too slow; he could not repeat it.

Since the Messenger's mouth was too slow, and he could not repeat it,

The Lord of Kulab patted some clay and set down the words as on a tablet.

Before that day, there was no putting of words on clay;

505 But now, when the Sun rose, it verily was so: The Lord of Kulab had verily put words on clay!

524 "Enmerkar, son of the Sun, gave me this tablet; "O Lord of Aratta, look upon this clay; if you are able to grasp its meaning,

If you can tell me whatever you may find to reply, [I will bring back that reply to Enmerkar].

536 After he had spoken thus The Lord of Aratta took his Brazier to the messenger.

The Lord of Aratta kept looking at the clay; But the spoken word was but a nail; his brow darkened

While he kept looking at the brazier.

of classifiers and a set of purely phonographic additions, thus making it possible to identify correctly the intended word or phrase. In hieroglyphic, this generally works out as a conventional group of signs used on the level of the individual word or phrase, or almost on a lexical level, and such a group consists of one or a few basic logographs, some classifiers, and some so-called phonetic complements. These last are a relatively small set of single-consonant or biconsonant signs, of which the former might easily have been used as a more or less full-fledged consonantal alphabet, but which was never so used. In cuneiform, the phonemic notation gradually becomes more important, in that grammatical forms are spelled out more and more explicitly in Sumerian. When Akkadian starts using cuneiform, the phonetization is vastly extended. By translating from the one language into the other, the original set of logographic applications is doubled, as are the derived phonemic usages. On the whole, one might say that Sumerian remains a mixed system, while Akkadian is basically phonemic. The late and learned return to a plethora of logographs is to be understood as inkhorn preciosity or as a shorthand system, or both.

Third, the method of phonetization in the subsidiary system is a different one. Egyptian consists of a mixed system of a consonantal alphabet with a number of bi- and triconsonantals. (See

the chapter "Ancient Egyptian and Other Afroasiatic Languages," earlier in this volume.) The Sumerian-Akkadian system is a complete syllabic set consisting basically of signs for the values V, VC, CV, and CVC (where V = vowel and C = consonant). Both facts are of great importance for the further spread of writing in the ancient world.

Lastly, the signs themselves undergo modification to various degrees. In Egyptian the early pictorial design of most signs is kept for monumental purposes and in some later periods is even more detailed than in the earlier periods. Writing in ink on such surfaces as papyrus, writing boards, and ostraca was in a cursive form that developed by the Old Kingdom into the distinct script known as hieratic that was partly replaced from the seventh century by a further development known as demotic. The hieroglyphic form remained in use not only for stone carving but also for other monumental uses (wall painting, sarcophagi, amulets, holy or magic objects, ritual texts, and the like); therefore, hieroglyphs are integrated into works of art, even when they record very long texts. It is no surprise to have monuments or objects whose adornment mixes to a degree written language with nonverbal, symbolic representation. The image remains very important.

In cuneiform, quite the reverse is true. From very early on, the material—wet clay and a sharp-

Language, Writing, and Literature

ened reed stylus—almost obliterates the recognizable shape of the original "object," which in many cases was already highly stylized. Cuneiform, therefore, does not put any value at all on the image in writing. The image and meaning of writing, on the other hand, is all-important. Cuneiform writing, as such, acquires almost a mystical value, as does the carrier of the writing, the cuneiform tablet.

Spread and Transformation

From the early second millennium onward, writing spread all over the ancient world. Egyptian writing remained almost completely restricted to the pharaonic culture and, therefore, to the valley and delta of the Nile and to the Egyptian language. Almost, that is, since in the second century hieroglyphic provided the basis for the Merotic alphabetic script, and demotic was the model for its cursive variant; the Merotic language is still only partly understood. Nevertheless, Egyptian writing may very well have influenced some of the early Aegean scripts, as it certainly laid the foundation of the Proto-Sinaitic "alphabet."

Cuneiform knew its greatest expansion in this period. Babylonian cuneiform was used, sometimes in a simplified form and with slight adaptations, for such different languages as Hittite and its Anatolian relatives, Hurrian, Urartian, Elamite, and to a less certain extent, early forms of northwest Semitic. The Babylonian language itself was used internationally: when Egypt ruled the east it used Babylonian even for correspondence with its own Syrian possessions. On the purely technical level, cuneiform has also stood godfather to the Ugaritic and related early forms of the Semitic alphabet, and to the Persian syllabary. Furthermore, the idea of strict "syllabography," which is found at different places in the eastern Aegean in the second and first millennia, may also have been influenced by the simplified forms of Babylonian cuneiform.

There are also other monumental systems comparable with Egyptian hieroglyphic, such as the "Hittite" and Urartian hieroglyphs, although it is not known under which influence they originated (Egyptian, Aegean, or indigenous). And there are a number of undeciphered groups of texts or even single documents. But the greatest

renewal or transformation was, of course, the development of the Semitic alphabet, which begins to be used toward the end of the second millennium (a chapter on the Semitic alphabet appears below).

A major point resulting from this overview is that apart from a few exceptions (such as Ugarit), we possess no, or not nearly enough, evidence of the effect of literacy beyond the two high cultures and their immediate neighbors, who took over the writing systems.

PURPOSE AND IMPACT

What, if any, the original purpose of writing, beyond basic bookkeeping, may have been can no longer be traced with certainty, and I am not sure this is a meaningful question. What one can do, however, is to interrogate the earliest documentation and the subsequent developments.

The hieroglyphic and the cuneiform systems in their earliest stages show different uses of writing. In Egypt during the first two dynasties, monumental writing was used for various marks of ownership, such as seals and tags, and elaborate titularies for kings and high officials were recorded; purely administrative writing has been almost entirely lost. A bit later comes the most important group, funeral inscriptions, which contain important juridical, administrative, and economic information, in addition to the religious data. The earliest longer texts date to the Fifth and Sixth dynasties and include autobiographies of high officials (see "Ancient Egyptian Autobiographies," below). The extensive corpus of Pyramid Texts, inscribed in royal burial apartments and intended to further the king's destiny in the next life, points to the existence of large bodies of religious texts for use in the cult. In Mesopotamia the first documents are overwhelmingly economic or administrative in nature; inscriptional material comes later, followed closely by religious, literary, and, from very early on, "learned" material in the form of word lists. These developments are only approximations for two reasons. First, the invention itself quickly becomes autonomous, in that it tends to impose its own, new purposes; but the

early stages still reflect in some way the pre-writing communication technology and its traditions. Second, the differences between the two systems in their early stages are to a degree dependent on the different material and societal circumstances and, to a lesser degree, on the accidents of preservation and excavation.

But in any case, the evidence allows us to question the dogmatic view that writing was invented solely for the purpose of economics and administration. Three things indicate that this is too restricted a view. First, the evidence shows that almost right from the beginning (in Egypt) or very soon after it (in Mesopotamia), writing was fully used for noneconomic or nonadministrative purposes. Second, an overview of the development of cuneiform economic documents shows a double and somewhat contradictory evolution. In the earliest phase, we see a falling of the number of object-specific signs, caused no doubt by the gradual spreading of true writing over nonlinguistic notation; in later times, the massive and all-pervading administrations of the Akkadian and Ur III periods show that, in fact, the vast majority of documents no longer contain language in a meaningful sense. They have become tabulated forms, and the bits and pieces of what once was language are now mere formulaic symbols, the one important exception being the nomenclature of persons, functions, places, periods, and activities. Third, the study of the archaic economic documents from Mesopotamia reveals that the most important linguistic information to be culled from them consists in the grouping of signs into boxes and the makeup of the document—in other words, in syntax, which, after all, is independent from, or unnecessary for, the substantial or referential information. Therefore, it seems much more correct to say that writing was invented at a time when society was in need of a sophisticated administrative and economic bureaucracy and that the new invention, partly based on the older system(s) of identification and accounting, was immediately put to use in order to achieve this organizational level. But it seems clear that the prime purpose of writing was the notation and recording of language, as such. The prime impact is, of course, that language, once recorded, can be stored and retrieved at will.

Memory and Literacy in Ancient Western Asia

While nonliterate societies abundantly illustrate that the recording of language does not by itself enhance the importance of language, it nevertheless gives language a quite different and more permanent function. It depersonalizes language and its use, and thus plays a normative role as well, differentiating between nonwritten and written language; this split may create almost unbridgeable chasms. It emancipates language from the shackles of place, occasion, and, most of all, time. Since retrieval is always possible, it actually makes the language user more conscious of the qualities and properties of language itself. It formalizes, generalizes, and perpetuates the features and intentions of language by cutting it loose from a momentary utterance. Writing's virtually infinite possibilities for storage and retrieval undoubtedly tended to favor the systematization and structuring of knowledge, its immediate products, and even other cultural phenomena dependent on, or at least cognate with, language, such as ordered lists, publication, and thus confirmation of social and administrative principles, structuring of large-scale reflective and poetical discourse, and so forth. Thus, from the beginning, there seems a high degree of congruence between the purpose and the impact of writing. But, of course, writing can do all these things and more only if there is someone to record (and in many cases, preserve) and someone to retrieve the information. (See "Archives and Libraries" below.) Some of the native North American-derived scripts remained on the (nonexistent) level of literacy shown by Claude Lévi-Strauss's Nambikwara chief, since their inventor kept them to himself. In other words, literacy must spread to some degree, or writing will die.

THE STRUCTURES OF LITERACY

Apart from the hundreds of thousands of documents written in a disconcerting variety of scripts, we have no clear indications of the spread of literacy in the ancient world. What we do have are indications of the range of activities for which writing—and thus literacy—was important or even necessary. And these were manifold.

A first structural aspect of literacy can be said to consist in the social function fulfilled by literate. We know from the mass of documents that almost every aspect of life was subject to a detailed administration, much of which was, of course, kept in writing and, therefore, by literates. The different format, formulae, and intention of the classes of documents imply a degree of differentiation and specialization. There is in Mesopotamia a very broad common system of economic administration—or simply bookkeeping—underlying the whole system of government and society; although there are changes over the years, within any given period this remains essentially the same, whether the books are kept for temple, palace, or even private households or commercial firms. But temple, palace, and local government also require specialized services. In the case of the temple, these literati will be closely connected and even partially identical with cult personnel and the priesthood. The palace will supervise and control the civil, military, and big commercial services. Local government will be responsible for state policy on the local level, and an important task will be the administration of justice. All these functions will have to be executed under the supervision of literates. And so, the schools, where literacy in the broad sense is the main preoccupation, but where also the rudiments of specialized vocations are first set forth, are in a way the most important locations of the literacy system. They are responsible for the training of a class of literates, or "scribes"; they are also the places where "purely scientific" training is undertaken; these "scientists"—diviners, astrologers, physicians, and such—then have the opportunity to enter civil or temple service because of their specialized knowledge. (See "The Scribes and Scholars of Ancient Mesopotamia," later in this volume.) Specialists in literary texts also belong to this group, in that they may remain attached to the school but go into service in temple or at court. In any case, the school system results in a literate class, which normally has a rather important function in society.

This class of literates has its own internal structure. While the mass of alumni will probably have remained in the broad middle range of their specialized profession for the whole of their career—be it the law court, the temple, or one of

the great branches of civil administration—there seems to be a top layer of very high officials. We know from biographies (mainly from Egypt) and a number of prosopographic studies (both in Egypt and Mesopotamia) that these top officials may well be put in charge of totally different branches of government during their active life (such as mayor of an important city, provincial tax collector, governor, or high courtier). We have no indication, and some doubt, that this system of promotion is based on academic or administrative excellence, rather than upon family relations. At least in the early phases in Mesopotamia (third and early second millennia), the academic profession seems to have its own organization, apart from temple and palace. And even in the first millennium, specialists such as physicians, diviners, and astrologers seem to have had their own department with local branches, albeit under the direct orders of the king, as witnessed by many reports to the palace coming from all parts of the country. There seems also to have been opportunities for free employment, perhaps not unlike public scribes: economic documents, incantation texts, and the like drawn up for private persons are easily recognizable, being far less well written than temple or palace documents of the same kind. Also, as early as the beginning of the second millennium, the big commercial families of Assur, being private persons, personally kept up the correspondence with their trading colonies in faraway Anatolia. (See the chapter "Kanesht" in Part 5, Vol. II.)

Now apart from the twin indications of the sheer mass of documents, and the diversity and all-pervading nature of writing on all levels of society, the spread and rate of literacy in Mesopotamia and Egypt—and, for that matter, elsewhere in the ancient world—is very uncertain. But the overwhelming importance of written documents in all walks of life suggests that literacy was more extensive than primary sources report. In fact, one may well surmise that in the early second millennium, which was a period of great literary flowering in Mesopotamia (as it was in Egypt), literacy was more widespread than at the end of that millennium and the beginning of the next, when, according to our documentation, all or most writing was closely linked to temple and palace. In any case, the relative com-

plexity of the writing system will have had little or nothing to do with the spread of literacy. Japan has the highest degree of literacy by very far in comparison to some other industrial giants, which goes to prove that literacy is far more dependent on a nation's political and social priorities and prejudices than on the intricacies of the script. Also, the rate of functional illiteracy is growing alarmingly precisely in alphabet-using "simple" alphabet in the ancient Near East (well before 1000) made no perceptible change in the degree of literacy before the Hellenistic period, and certainly not an immediate one; even in the West, Greece remained for centuries a much more fundamentally oral society than Mesopotamia had been for the last two millennia.

The structure of ancient literacy can also be seen from the contents and perhaps even the method of education, which was always literate. Both Egypt and Mesopotamia possessed a standard system of formal education by 2000. In regard to Egypt, we are well informed about the general outlines, since we have numerous references in literary and other texts and, most of all, the priceless schoolboys' exercises from Dayr al-Madina (Deir el-Medina, 1300–1100). As regards Mesopotamia, our knowledge is much more detailed and, since it deals with two languages (Sumerian and Akkadian), perhaps also intrinsically more relevant. The Old Babylonian school, or Eduba (Sumerian É.DUB.BA, literally "tablet house"), provided its students with a fairly comprehensive education based on the two "major" subjects: cuneiform writing and the Sumerian language. By 1800, but perhaps even as early as 2000, Sumerian was no longer a spoken language, although the kings of the Third Dynasty of Ur had probably reintroduced it as the official language at the end of the third millennium. (See "Sumerian Literature," below.) Since the foundation of the two major academies at Ur and Nippur is ascribed to the most famous king of that dynasty, Shulgi (circa 2034–2047), there is probably a relationship between these facts. As soon as the basic drawing techniques had been mastered by simply repeating the different strokes, the signs and their readings were taught. These signs were learned from sign lists arranged in several ways: phonologically (such as the list *tu-ta-ti*, which arranged the signs ac-

cording to their vowel); graphically (such as the list *a-a, a-a-a*, arranged according to groupings of simple signs); or lists that gave the meaning and the Akkadian reading together with the Sumerian sign (such as *Ea = náqtu*). As the student progressed, he had to copy, and probably learn, the more complex lists, culminating in the study of the great encyclopedic lexical list *UR5-RA-hubullu*, or kindred works (see the chapter "Ancient Mesopotamian Lexicography"). By that time, Sumerian grammar had to be learned as well. For this purpose, there were lists of grammatical paradigms comparing systematically the Sumerian nominal and verbal grammatical system to its Akkadian counterpart. Syntax and style were probably taught in this phase by two means: by studying simple texts culled from the collections of proverbs and the like and from a few texts apparently composed with this didactic purpose in mind, since they most systematically progress from simple to more complicated verbal and syntactical constructions, of which only a very few are repeated; and by copying and probably analyzing literary works.

The classics to be studied consisted of the great narratives about the deeds of the gods, the hymn collections, the historical lamentations, and the epics about the heroic house of Uruk (Enmerkar, Lugalbanda, and Gilgamesh) from which the dynasty of Ur pretended to descend. Copies of real or invented royal inscriptions were recopied and studied. There are indications that composition in Sumerian was a subject as well, and it is probably in this light that one must interpret the numerous and always delightful compositions known as "School Essays," "Dialogues," and certainly the "Disputations." Two practical subjects connected with writing were instruction in legal formulas and letter writing. Probably connected to hymnology, music was also taught, and on the so-called practical side, mathematics and surveying. The overall picture is that the main vehicle and the central point of the whole educational system was the mastery of Sumerian cuneiform. The scribal character of education remains preponderant throughout: the Mesopotamians summarized scribal education, including linguistic, literary, and scientific training and competence as *NAM.DUB.SAR* (Akkadian *tupšarrûtu*), "the

scribe's competence," and *cu.sum* (Akkadian *mišlum*) "orthocalligraphy."

THE ORDERING AND SHAPING OF MEMORY

Since writing in any form or shape intends at the very least to perpetuate an otherwise ephemeral utterance, it may also be said to replace memory. This implies that there must be a reason why a specific utterance was deemed worthy of being recalled. Then, too, the technology and nature of writing will influence the external organization and the immanent structure of language in its memorable aspects.

Organizing the Message

Recent analyses have done much to elucidate the major role writing played in achieving organization. Since the invention of writing was so closely linked to the concept of economic and administrative notation, it should not be surprising that an administrative document clearly shows the advantage of a written format. Apart from mere preservation, these advantages include the following: (1) listing, which unburies human memory; (2) classification, difficult in speech or memory when the unclassified mass of factual information is great and complex; (3) clear reciprocal tabulation, which would be cumbersome when not visible or easily retrievable; (4) high definition by unequivocal sign differentiation of terms that might otherwise be either easily confused with one another or whose difference would otherwise demand extensive explanation; and (5) permanence and therefore ease of control. These features have led to more or less fixed models for administrative documents, which after the advent of true writing can become even more explicit. It is remarkable that in both the hieroglyphic and the cuneiform systems, these latter linguistic explicitations in later times revert to language-based tabulating formulas. A last and very important effect of writing technology is that only in this way can the mass of organized documents themselves be grouped, summarized, and classified. The process can be repeated virtually endlessly on a geometrically progressing scale of magni-

tude, with the documents engendering meta-documents. The point is that the mental effort needed for drawing up and using this documentation is no longer simple memory—except, of course, that the format of the document must be remembered—but is instead the use of a conceptual structure suggested by a certain technological layout that writing makes visible and thereby possible.

The link between administrative listing and classification of information and "other" writing can be perceived clearly in some of the oldest written documents. In the archaic Mesopotamian documents, one sees the growing impact of phonetization and syntax notation, illustrated by the grouping of signs in boxes whose disposition defines and explains the document. But also some very old "literary" pieces have passages that almost qualify as economic or administrative lists. Examples are a number of the official inscriptions from Lagash (modern Tell al-Hiba) in southeastern Mesopotamia, and the opening of the Egyptian *Story of the Eloquent Peasant*, which includes a list of products in the middle of the narrative flow.

In Mesopotamia the format of administrative documents generated a special kind of literary (in its broadest possible meaning) document, the royal inscription. A simple type of administrative document would note that (1) a commodity has been (2) forwarded to (3) a destination by (4) an official on (5) a certain occasion. Very early we find a kind of ideological or narrative counterpart somewhat like this: (1) for the god X, (2) the ruler Y (3) has built (4) temple Z. These texts grow by natural but ordered accretion, not unlike the systematics of an administrative document. The names of the "officials" as well as of the "destinations" are expanded with titles, descriptions, and so on, which grow into a fixed system of titles. Also the activities are expanded from a single building activity to a multitude of disparate actions undertaken for a series of divinities and at different locations. Out of these very simple origins, elaborate "biographies" or "annals" grew, and they represented a kind of royal account rendered to the divine patron.

Both in Mesopotamia and in Egypt, the organized-list format had an effect on the organization of language itself. However, the documentation in cuneiform is far richer, far more signifi-

cant, and, because of the bilingual nature of much of the material, far more relevant. From the very beginning of true writing, and no doubt primarily for educational reasons, so-called lexical lists were drawn up. They listed either words arranged thematically (such as professions, fish, geographical names, vessels, or artifacts) or signs with their pronunciation. Soon afterward, an Akkadian column was added to both types, so that via the Akkadian the "meaning" was noted as well. Still later came comparative lists of contrasted grammatical forms in Sumerian and Akkadian, which in turn led to lists noting Sumerian particles with their grammatical function. The important point is that the principle underlying all this effort of collection, classification, organization, and analysis is the principle of writing. To the Mesopotamians themselves, therefore, the term approximating what we would call "science" or "knowledge" was simply *tupšarrûtu*, "the art, knowledge, and technique of the scribe." Ancient reflection upon reality and the world was based on language in its written, not its spoken form, as was the case with, for instance, much of Greek philosophy. Therefore, even our thematic lists are not treatises on botany, medicine, government, or law. They are, instead, scribal collections of appropriate terms that do have their own graphic structure and articulation but also their graphic dynamics. They tend to expand by accumulation or accretion. But this accretion is governed by the organization of the sign list, in that subseries (such as geographical provenance, color, or size) can be entered at different points of the base list and so applied to different lemmata. Nor is the accretion exclusively caused by the need for actual completeness: reality is transcended, in that also obviously impossible entries, which are never found in actual texts outside the lexical material, are listed as well, since the system seems to predict them. The sign is all-pervading and more important than its contents. Somewhat paradoxically, this overriding preoccupation with writing also implies that for the first time in intellectual history, the student is thrown back onto language itself, not its referential aspect. This explains why the analysis of their linguistic material led ancient scribes to the discovery of the principles of language structure and typology, of morphemics and even phonemics, millennia

before the formulation of structuralism and centuries before the Greek views on and discourse about language, or rather about the "meaning" of (spoken) words, which were essentially philosophical and rhetorical, and not linguistic. All this tends to show that writing very soon became emancipated from its utilitarian application and was used and studied for its own sake, since it was the basic method of dealing with language, reality, and thought.

Ordering the Discourse and the Text

Mainly but not exclusively in literary or in official compositions (a distinction that is not meaningful for the ancient world), we find even more-penetrating influences of writing on the text. The impact of writing is felt even on the textural and decorative level. On Egyptian monuments the hieroglyphs are very often integrated into the design to form essential elements in artistic and architectural compositions. Some hieroglyphs acquire human limbs to become acroteria. Also both in Egypt and in Mesopotamia there are plenty of fancy writings, aberrant spellings, and sign plays, not necessarily with corresponding phonic properties or even with attempts at conscious and meaningful ambiguity, which are to be regarded as having the same function as mere sound- or wordplays. The authors and their public doubtless regarded them as such, and they are as much a part of elegant discourse as other poetic tactics. In both Egypt and Mesopotamia there were specialized uses of the signs in the script to enhance the meaning of texts or to create new forms. In Egypt these practices led to forms of cryptography and to elaborate developments of the hieroglyphic script, especially in the Greco-Roman period, when lists of signs and their readings and meanings were also compiled (see the sidebar in the chapter "Ancient Egyptian and Other Afroasiatic Languages"). In Mesopotamia this specialized style engendered a type of literary text and was ultimately derived from literacy-based "philology" consisting of the different possible intervention(s) of signs or sign groups, which, after all, is the system underlying some of the most developed Mesopotamian "lexical" lists and is the major method in their native commentaries. This style consists of breaking down a

sign group or a statement into its constituent parts, elaborating upon these parts by alternative readings, other interpretations, other meanings, and the like and repeating the proceedings even with alternate spellings of the same original "base" signs. A splendid and well-known example is the last tablet of *Enuma Elish*, the Babylonian didactic theological poem about the creation, the organization of the universe, and praise for Marduk's omnipotence. This tablet lists and comments on the fifty names of Marduk, using this technique with as much gusto, albeit in a poetic vein, as is spent on the more abstruse passages in some of the major lexical lists. The interpretations are all based on the written-list format and can come only from works like these. Nor is the usage restricted to this somewhat late composition. Far earlier, it is found in a number of hymns, which by their format might as well be called litanies. Famous examples are the great *Hymn to the City of Nippur* and the didactic *Hymn to the Hoe*, but there are many more examples. This style is common to all of them in an almost exclusive way, so that stylistics, based on literacy-based "learned" philology, has created a genre or type belonging to itself.

On the level of composition or structure, literary works in a more subtle way. As our literary competence in reading ancient Egyptian and Mesopotamian grows, it is becoming gradually clearer that these texts usually show a closely knit structure, far greater and stricter than that of many other literatures that seem less emancipated from a possible previous oral stage or a particular oral performance. A prime example is the Sumerian tale *Gilgamesh and Agga*, a short piece of 114 lines that uses only about 160 different words. The story is admittedly simple and straightforward, but well and cleverly articulated. An analysis, however, shows how sophisticated the arrangement of the text really is. By the use of repetitions, antitheses, reciprocal passages, dialogic structures, and other kinds of parallelism, the simple linear structure is buttressed by at least three other structural lines: serial congruence, where passages "answer" earlier passages; pivotal congruence, where the format of a passage is repeated in a similar structural context; and the dialogue structure. Furthermore, even in the repeated passages, there is a tendency to give them in reverse order, a

lovely trick that was featured in many compositions. Indeed, even in much longer narratives, the clever and meaningful structural use of repetition and parallelism becomes a major compositional technique. Now the point is that repetition in written literature by itself is sometimes regarded as a hallmark of oral composition, although verbatim repetition is not accomplished all that easily in a purely oral environment. But the highly sophisticated use of diverse kinds of structural parallelism is surely dependent on fixation of the text as part of the composer's work. It is true that fixation can also happen by means of learning by heart. But this is in a way immaterial: the fixation of the text is the cause of all these structural techniques, whether this is done by remembering or by writing. And it seems somewhat perverse to posit a complicated and difficult training to learn long compositions by heart—a phenomenon for which we have no evidence whatsoever—when we possess thousands of written texts, originating in an academic environment dedicated to writing. Even when a Renaissance sonnet or a Japanese haiku are learned by heart, they are products of the learned and the literate. A high degree of structural organization does seem to be an outcome of literacy, the reason being again the easy retrievability implied by writing.

Specific to Mesopotamia is one more interesting aspect of literacy shaping the text. The Mesopotamians had a great admiration, verging on veneration, for the cuneiform tablet. Indeed, the fate of the universe was written down on a "Tablet of Destinies" (*tup šimātīm*), worn around the neck or on the garment of the supreme deity. The decisions of the gods could be read from the liver of sacrificed sheep, because the gods had written it down on that liver as on a tablet. Native tradition had it that the tablet was so venerable that it even antedated writing itself. In the narrative poem *Enmerkar and the Lord of Aratta*, it is said that Enmerkar initiated writing when he "patted some clay and set words on it as if on a tablet." In the Old Babylonian period, which saw the greatest flowering of classical Sumerian literature, the most common and most handy tablet format was an oblong of about 13 by 9 centimeters (5 by 3 inches), which would carry about 30 to 35 lines of writing on each of its two sides. Analysis of some thirty Standard

Sumerian compositions reveals that they range between 60 and 640 lines each, but that there is a marked tendency toward multiples of 60/70. Indeed, the most popular lengths seem to have been 120 to 140 and about 280 lines. Furthermore, some compositions show clear structural pivots regularly at around 60 and 70 lines. Thus, it seems safe to say that at least in Mesopotamia, even the format of the medium has controlled the length and articulation of the text. Certainly in the later Babylonian tradition, larger works were divided into tablets functioning like our chapters or perhaps volumes, in most cases with their specific structure or special topic. As the term itself implies, there is an almost complete ideological homology of *tupšarrūtū* and the tablet, since the former literally means something like "tabletopology."

Shaping the Memory by Creating the System

There is one last, important way in which literacy has influenced or even shaped the cultural and poetic memory. The principle of intertextuality is fully at work in the literatures of both Egypt and Mesopotamia. This intertextuality takes different forms, starting with somewhat straightforward copying and adaptation, such as the way in which huge chunks of older material rightly belonging to compositions about the gods Enlil, Enki, and Ninurta are incorporated into the new creed expressed in *Enuma Elish*. Many compositions contain allusions to others, and in a few cases, a composition can only be fully understood when we become familiar with other members of a group or cycle of texts. Thus, the Akkadian poem about Sargon of Akkad known as *Šar tamhāri* makes little sense unless other parts of this wonderful cycle are also known. At the same time, it alludes clearly and in some detail to the Sumerian cycle about Gilgamesh. But as Goodnick Westenholz has shown, this cycle also illustrates how at least some of the cycle is based on much earlier written material in the form of official inscriptions from the times of Sargon and Naram-Sin themselves. In other compositions, one often sees intrusions from text types of an altogether different nature. Some of the learned or semilearned compositions called "Disputations" contain much lore and learning

culled from the lexical lists, and even a heroic narrative like *Enmerkar and the Lord of Aratta* includes a listing of dogs of different colors, which parallels what is found in an encyclopedic list. Furthermore, works reflecting historical ideology or theory, such as the historical laments and in a way the *Curse of Agade*, are based on the system presented in the Sumerian kinglist—a literary work if ever there was one. Examples like these could easily be multiplied. The important point is that even barring the influence of one literary composition on another, all these intertextualities ultimately derive from the actual environment in which every important document was drawn up, studied, copied, or handed down—the school, which was not only devoted to writing but whose whole existence and intention was meant to elaborate, foster, and perpetuate literacy.

Now the articulate system of literature in its broadest sense is also manifestly based on intertextuality in the sense of organized literacy. Unequivocally, oral literary systems—and there are remarkably few of those—teach us that oral literature uses at best only about half a dozen clearly discriminate types of discourse and that to a large extent originality or creativity is a factor of the recreative performance of existing pieces, and much less of the conception and construction of "original" work. With literacy the constraints of immediate performance fall away; the text is divorced from its occasion; it becomes truly autonomous precisely because it is fixed as such. This also makes it possible to bring out, or to grasp better, all or at least more aspects of its immanent poetical structure, its virtual ambiguities that enrich rather than weaken its "meaning." The greater distance created by its existence as an objective, material thing—a tablet or a papyrus—also allows for the detection and intellectual use of the way in which it means what it means. The possibilities for refining and discriminating among different kinds of discourse and for reserving well-defined types for sundry intentions become virtually infinite, since, although some kind of public performance remains important and must be presumed for most of our material, the moment and the circumstances of such a performance are deferred and can thereby no longer wholly or for the most part dictate the construction of the piece. Literacy

allows for clear and fine distinctions between discourse types, be it on the level of texture, structure, or both. Also, and somewhat parallel to what happened with administrative documents, it allows for grouping and classification based on the distinctions carried by those feainful than others, which in turn allows for meta-textuality alongside of intertextuality. Going by C. K. Chesterton's famous dictum that once you have seen an elephant you may call it "tiny," the finely distinguished and at least synchronically stable system of literature also allows one to play around with it. It takes a high degree of literacy, even of literary competence, to create an effective satire or parody. Although parody is a basic mode of metaphorical social behavior, a literary form has to create a constant concinnity between an underlying "serious" model and the mock-

ingly applied or totally inverted system of anti-values, with the resulting text and the masked intentions hovering somewhere in between. That these effects of literacy were present then as now is splendidly illustrated by the pitiful remains of what once was the Babylonian *Tale of the Fox*. Fragmentary though it is, the material makes it clear beyond doubt that it heralds the creation of a "new" genre, namely, the satirical animal epic. Furthermore, this genre is manifestly constructed out of at least five different preexisting genres, which by themselves are unconnected. These are (1) animal fables and stories, responsible for the actors and the tonality of the piece; (2) disputations, responsible for the dialogic structure and also for the animals being presented as standing for different attitudes or values; (3) court tales, responsible for the actual argument presented as a series of

pleas before a court; (4) serious heroic narrative, responsible for the tongue-in-cheek high-flown speeches and the epic conventions; and (5) serious tales about the works of the gods and their responsibility for the universe, effecting the pervasive and heavily satirical tone of mock seriousness. It is highly relevant that in Egyptian literature an identical or at least very comparable natural evolution can be observed. Among the compositions, *The Story of Sinuhe* is a new creation in generic terms, consciously using existing modes and types in order to compose a new kind of literature, which goes beyond the confines and articulations of the system out of which it was put together. Here we perceive clearly intertextuality and metatextuality at their best even as a totally new artifact was being created. And this could only happen in a literate environment. The perception of the world, of language, and of self has here been fundamentally altered through literacy.

From The Tale of the Fox

1. The Contestants as Animals.

They were chased away, and entered their holes;
The Fox crept away deep inside his hole;
The Wolf crouched in the midst of his lair;
The Dog kept guard at the entrances, and kept looking out. . . .

2. Dog's Boast in Mock-Heroic Terms.

The Dog opened its mouth and bayed;
Fearful to them was his barking;
Their hearts were so overcome that they vomited.
"My strength is overpowering; I am the talon of the Thunderbird, the ferocity of the Lion."
"At my call mountains and rivers fly in flight;
"I take up my heavy duty before the sheep;
"Their very life is entrusted to me instead of to shepherd or herdsmen!
"I am sent on the rounds in the open and near the water-
"ing places; I encircle the fold.
"At my baying panther, tiger, lion, wildcat flee;
"Birds cannot fly away or set their course;
"No rustler can steal from my pens!"

3. Fox, Being Accused by Dog, in Turn Accuses Wolf: A Self-Righteous Defense Against Treason and Slander, Based upon Common Wisdom in the Form of Proverbs.

"[. . .] I shall bring torch and pitcher into the temple;
"[. . .] let [all my sins] be expelled in your presence;
"[I] will sacrifice with my whole family to my lord Enlil!"
Thus did Fox pray to Enlil.

5. Fox Tricks the Gods into Forgiveness by Promising to Go on Pilgrimage: A Mock Votum.

"[. . .] I myself am the [trustee] of Enlil!"

"[While] our very child-n, those of the house of truth . . .

"[But] Dog has spoken slanderous words.

"[Should I] have done injury, I would gladly bear the punishment.

"[I did not] bite flesh, nor did I drink blood;

"[And still, as] an enemy, I am bound.

4. A Mock Declaration of Innocence, on the Grounds of Moral Impossibility.

"Why do you stoke up the smoldering thicker?"

"Why do you are verily a slanderer;

"You are the evil one who cuts even his friend's throat.

"Why do you keep adding flames to the already burning reed?"

His heart grew heavy; his tears were profuse.
He spoke to them:

Fox replied, weeping bitterly;

INTER-LIBRARY LOAN

Social Organization, and the Archaeological Record: The Case of Early Egypt," in *State and Society*, edited by JOHN GLEDHILL, BARBARA BENDER, and MOGENS TROLLE LARSEN (1988); J. S. JUSTESON, "The Origin of Writing Systems: Preclassic Mesamerica," *World Archaeology* 17 (1985-1986); R. LEBRUN and F. VALLAT, "L'Origine de l'écriture à Suse," *Cahiers de la délégation archéologique française en Iran* 8 (1978); E. S. MELTZER, "Remarks on Ancient Egyptian Writing with Emphasis on Its Mnemonic Aspects," in *Proceedings of Visible Language*, edited by P. A. KOLERS ET AL. (1979); DENISE SCHMIDT-BESSERAT, *Before Writing* (1992); WOLFGANG SCHENKEL, "Schrift," in *Lexikon der Ägyptologie*, vol. 5, edited by WOLFGANG HELCK and WOLFHART WESTENDORF (1984); HERMAN TE VELDE, "Scribes and Literacy in Ancient Egypt," in *Scripta Signa Vocis*, edited by H. L. J. VANSTIPHOUT ET AL. (1986).

EVOLUTION AND IMPLICATIONS

JOHN BAINES, "Communication and Display: The Integration of Early Egyptian Art and Writing," *Antiquity* 63 (1989); D. O. EDZARD, "Keilschrift," in *Reallexikon der Assyriologie und Vorderasiatischen Archäologie*, vol. 5 (1976-1986); H. L. J. VANSTIPHOUT, "Militum, or the Image of Cuneiform Writing," *Visible Religion, Annual for Religious Iconography* 6 (1938); HERMAN TE VELDE, "Egyptian Hieroglyphs as Linguistic Signs and Metalinguistic Informants," *Visible Religion, Annual for Religious Iconography* 6 (1938).

SPREAD AND TRANSFORMATION

M. DIETRICH and O. LORETZ, *Die Keilschrift, Die Phönizisch-kanaanischen, und altarabischen Alphabete in Ugarit* (1988); and G. R. DRIVER, *Semitic Writing: From Pictograph to Alphabet* (1944; 2nd ed., revised and edited by S. A. HOPKINS, 1976).

Purpose and Impact

JEAN BOTTÉRO, "Symptômes, signes, écritures," in *Divination et rationalité*, edited by J.-P. VERNANT ET AL. (1974); *Mésopotamie: L'Écriture, la raison, et les dieux* (1987); and "L'Écriture et la formation de l'intelligence en Mésopotamie ancienne," *Le Débat* 62 (1990); JACK GOODY, *The Domestication of the Savage Mind* (1977); *The Logic of Writing and the Organization of Society* (1986); and *The Interface Between the Written and the Oral* (1987); JACK GOODY, ED., *Literacy in Traditional Societies* (1968); JOHN HALVERSON, "Goody and the Implosion of the Literacy Thesis," *Man* 27 (1992); ERIK A. HAYLOCK, *The Literate Revolution in Greece and Its Cultural Consequences* (1982); ROBERT K. LOGAN, *The Alphabet Effect: The Impact of the Phonetic Alphabet on the Development of*

BIBLIOGRAPHY

Origin and Development of Writing

SOURCES AND CRITICAL ISSUES

JERROLD S. COOPER, "Writing," in *International Encyclopedia of Communications*, vol. 4, edited by ERIC BARNOWITZ ET AL. (1989); IGNACE J. CELB, *A Study of Writing* (1952; 2nd rev. ed. 1963); M. W. GREEN, "The Construction and Implementation of the Cuneiform Writing System," *Visible Language* 15 (1981); ROY HARRIS, *The Origin of Writing* (1986); JOHN SÖREN PETERS (1991); MARVIN A. POWELL, "Three Problems in the History of Cuneiform Writing: Origins, Direction of Script, Literacy," *Visible Language* 15 (1981); GEOFFREY SAMPSON, *Writing Systems: A Linguistic Introduction* (1985); H. L. J. VANSTIPHOUT, "Enmerkar's Invention of Writing Revisited," in *DUMU-E-DUB-BA-A: Studies in Honor of Åke W. Sjöberg*, edited by H. BEHRENS ET AL. (1989).

THE MOMENT AND THE CONDITIONS OF THE INVENTION OF WRITING

PIERRE AMIET, "Il y a 5000 ans les Élamites inventaient l'écriture," *Archéologia* 12 (1966); and "La Naissance de l'écriture ou la vraie révolution," *Revue biblique* 97 (1990); JOHN BAINES, "Literacy and Ancient Egyptian Society," *Man*, n.s. 18 (1983); and "Literacy,

INTER-LIBRARY LOAN

Language, Writing, and Literature

Western Civilization (1986); JOSEF VACHEK, *Written Language Revisited* (1989).

The Structures of Literacy

BENDT ALSTER, "Interaction of Oral and Written Poetry in Early Mesopotamian Literature," in *Mesopotamian Epic Literature: Oral or Aural?*, edited by M. VOGELZANG and H. L. J. VANSTIPHOUT (1992); JAN ASSMANN, "Schrift, Tod, und Identität: Das Grab als Vorschule der Literatur in Ägypten," in *Schrift und Gedächtnis*, edited by ALEIDA ASSMANN ET AL. (1983), and *Das kulturelle Gedächtnis: Schrift, Erinnerung, und politische Identität in frühen Hochkulturen* (1992); HELMUT BRUNNER, *Altägyptische Erzählung* (1992); CHRISTOPHER EYRE and JOHN BAINES, "Interactions Between Orality and Literacy in Ancient Egypt," in *Literacy and Society*, edited by KAREN SCHOUROE and MOGENS TROLLE LARSEN (1989); MOGENS TROLLE LARSEN, "What They Wrote on Clay," in *Literacy and Society*, edited by K. SCHOUROE and M. T. LARSEN (1989); PIOTR MICHALOWSKI, "Orality and Literacy in Early Mesopotamian Literature," in *Mesopotamian Epic Literature: Oral or Aural?*, edited by M. VOGELZANG and H. L. J. VANSTIPHOUT (1992); A. W. SJÖBERG, "The Old Babylonian Euba," in *Sumerological Studies in Honor of Thorkild Jacobsen*, edited by S. J. LIEBERMAN, Assyriological Studies 20 (1975); ROSALIND THOMAS, *Literacy and Orality in Ancient Greece* (1992); H. L. J. VANSTIPHOUT, "How Did They Learn Sumerian?" *Journal of Cuneiform Studies* 31 (1979).

The Ordering and Shaping of Memory

ORGANIZING THE MESSAGE

JEREMY A. BLACK, *Sumerian Grammar in Babylonian Theory* (1984); MIGUEL CIVIL, "The Sumerian Writing

System," *Orientalia* 42 (1973), and "Lexicography," in *Sumerological Studies in Honor of Thorkild Jacobsen*, edited by S. J. LIEBERMAN, Assyriological Studies 20 (1975).

ORDERING THE DISCOURSE AND THE TEXT

H. L. J. VANSTIPHOUT, "Some Remarks on Cuneiform *Epitaphs*," in *Scripta Signa Vo-is*, edited by H. L. J. VANSTIPHOUT ET AL. (1986), "Towards a Reading of 'Gilgamesh and Agga,' Part II: Construction," *Orientalia Lovaniensia Periodica* 17 (1986), and "Repetition and Structure in the Atrata Cycle: Their Relevance for the Orality Debate," in *Mesopotamian Epic Literature: Oral or Aural?*, edited by M. VOGELZANG and H. L. J. VANSTIPHOUT (1992).

SHAPING THE MEMORY BY CREATING THE SYSTEM

JOAN GOODNICK WESTENHOLZ, "Heroes of Akkad," *Journal of the American Oriental Society* 103 (1983), and "Oral Traditions and Written Texts in the Cycle of Akkade," in *Mesopotamian Epic Literature: Oral or Aural?*, edited by M. VOGELZANG and H. L. J. VANSTIPHOUT (1992); JOHN BAINES, "Interpreting *Sinule*," *Journal of Egyptian Archaeology* 68 (1982); CHRISTOPHER EYRE, "Why Was Egyptian Literature?" in *Sesto Congresso Internazionale di Egittologia: Atti, vol. 2* (1993); H. L. J. VANSTIPHOUT, "Love, Learning, and Levity in the Sumerian Disputations: A Matter of Form, or Substance?" in *Dispute Poems and Dialogues in the Ancient and Medieval Near East*, edited by G. REININK and H. L. J. VANSTIPHOUT (1991).

SEE ALSO *The Scribes of Ancient Egypt* (Part 9, Vol. IV) and *The Scribes and Scholars of Ancient Mesopotamia* (Part 9, Vol. IV).

Archives and Libraries in the Ancient Near East

J. A. BLACK and W. J. TAIT

ARCHIVES AND LIBRARIES WERE a vital element both of the cuneiform scribal traditions of the ancient Near East and of the almost completely independent hieroglyphic and hieratic scribal tradition of Egypt. They played a key role both in administrative practice and in the handing on and development of the literatures. Unfortunately, intact archives and libraries rarely survive, and their original locations have not often been the object of competent archaeological work; the evidence from Egypt is particularly disappointing in this respect.

NATURE AND LOCATIONS

Cuneiform World

Almost any group of documents excavated together can be called an "archive," on a broad definition of the word. Within Mesopotamia and the rest of the regions using cuneiform writing, "library" tends to be reserved for a collection including literary, historical, and perhaps scientific texts, in an institutional building such as a palace or temple or in a private house—where it might be the property of a scholar-scribe or priest, such as the library of Qurdi-Nergal at Sul-tantepe, or that in the house of Rap'anu at Ugarit. In practice the distinction between archive and library is often impossible to make, since administrative, legal, and business records may be

stored in the same room as traditional or scientific texts used for scribal training, and priests or scholars kept their family records at home with their private libraries. Occasionally archival records (state letters and legal documents) were incorporated into the educational repertoire and repeatedly copied.

Temples may have had a limited involvement in legal procedures, but they do not appear to have served as storage places for official records (except those of their own commercial activities, such as the "bank" operated from the temple of Nabu at Nimrud [Kalkhu] in Neo-Assyrian times). However, scholarly libraries of literary, scientific, and pedagogical texts and copies of historical documents existed at the temples of Nabu in the Assyrian capitals—Nineveh (modern Tell Kuyunjik, Nebi Yunus), Nimrud, and Dur-Sharrukin (modern Khorsabad)—and at the temple of Shamash at Sippar (modern Abu Habba) in Babylonia.

The time span covered by documents from individual private archives seems to range up to as much as two hundred years, (for example, the Egibi family archives, or Ur-Utu's archive from Tell al-Der), while the archives from Nuzi (Nuzi, modern Yorghun Tepe) span some five generations. But most documents will belong to the last couple of generations. Within the literary tradition, the Sippar library contained one tablet more than five hundred years old, but this was probably exceptional.