

Larsen

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STATE AND SOCIETY

The emergence and development of social hierarchy and political centralization

Edited by

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11 Introduction: literacy and social complexity

MOGENS TROLLE LARSEN

The relevance of a group of chapters devoted specifically to the question of literacy and the function of writing in early societies in this book hardly needs to be explained, and yet, traditionally it is assumed that the introduction of written texts marks a clear-cut break between such disciplines as archaeology and history, just as it defines the transition from prehistory to history. This terminology is somewhat unclear, however, and should be examined with care: firstly, when observing individual societies it becomes obvious that writing has its roots in sociopolitical developments which belong to the 'pre-historic' phases (see Nissen 1985, p. 360); and secondly, we can see that writing was used for such diverse purposes in different societies that it is impossible to establish hard and fast definitions of such concepts as 'history' versus 'pre-history' on the basis of the presence or absence of writing.

The common practice therefore has consequences for our conception of central features in the range of problems taken up in this book. We are not simply dealing with a question which relates to periodization and definition of terms, for writing is connected with basic features in the transformation of societies from 'simple' to 'complex', the rise of the state, or the development of cities.

The introduction of writing has in fact often been seen as one of the decisive factors in the process of state formation and urbanization, but agreement seems only to exist in very broad terms. In his classic study of the pre-industrial city Gideon Sjoberg claimed that literacy was 'the single firm criterion for distinguishing the city, the nucleus of civilization, from other types of early settlements' (Sjoberg 1960, p. 33), and Gordon Childe's famous list of the ten criteria of urbanism naturally includes the use of writing along with, for example, population concentration, craft specialization, monumental architecture, social stratification and long-distance foreign trade (Childe 1957). I. J. Gelb, in his authoritative *A study of writing* claimed that writing can only exist in a civilization, and a civilization cannot exist without writing (1963: p. 222).

However, there have been dissenting voices who have pointed out that this kind of classificatory precision is difficult to relate to observable phenomena in the real world. Wheatley's extensive study of the origin and nature of the ancient Chinese city contains a critique of the use of literacy as a defining criterion for urbanism, since it

would force us to exclude from that category both the large but compact Central Andean settlements of Inca times, foci of the only true empire in pre-Columbian America (as well as the earlier Peruvian ceremonial complexes), and the dense aggregations of people in the Yoruba territories (Wheatley 1971, p. 377).

Concentrating on the problem of historical process rather than definition and classification, the French anthropologist Claude Lévi-Strauss has suggested, on the other hand, that there is a clear correlation between the introduction of a system of writing and the development of complex societies, cities, and empires, all of which were constructed on inequality, stratification, and subjugation. He posits an indisputable connection between the invention of writing and social or intellectual developments in such a context, and the traditional high cultures of, for example, Egypt and China stand out for him as clear examples of such developments, whereas on the other hand the African states which had no system of writing characteristically have been unable to reproduce themselves over long periods of time. So, the claim is that writing appears to be necessary for a centralized, stratified state to reproduce itself (Lévi-Strauss 1955, pp. 265-6).

This debate is obviously relevant for the proper conceptualization of early societies, and I shall return to it. However, there is a further complication stemming from the actual practice in the fields which are concerned with the development of complex societies that made use of writing. Impenetrable barriers have been erected between distinct fields of study called 'philology' and 'archaeology', each with its own institutions, traditions, journals, and conferences. In my own field of ancient Near Eastern studies, where documents are uncovered in the ground during excavations rather than in libraries and archives, such attitudes become particularly important and have far-reaching consequences. Texts have been regarded as a kind of autonomous evidence which could, indeed should, be dealt with separate from pots, houses—even art. As a result it is quite common to be in a position where texts have no precise archaeological context, since it was often regarded as unimportant to record in which house or room a group of documents were found, or the relationship of texts to other objects found in the same locality.

Obviously, such poor excavation techniques are not responsible for the continuation of this problematic state of affairs today; it is rather the lack of a clear understanding of the fact that texts are archaeological objects like potsherds and bones, and that it is only a combined analysis of the entire mass of evidence from an excavation that has any chance of reaching satisfactory analytical results.

Once inscribed material is given over to the epigrapher, the archaeologist seldom refers to it again other than to date a particular level, or identify his site. Rarely are tablets studied by the archaeologist as the most valuable artefact in relation to other artefacts. Likewise, the epigrapher loses the

valuable information on context in the interpretation of his texts (Gibson 1972, p. 113).

The scholarly practices and traditions built up in these different fields have compounded the problems. Where archaeologists tend to define their discipline in terms of 'method', ancient historians and philologists have pursued a sometimes quite strongly defended positivist attitude and concentrated their efforts on the texts as texts. One consequence of this unresolved conflict has been that most young and daring archaeologists have chosen to work in prehistoric areas and periods, and the great advances in archaeological field techniques as well as interpretative analysis have consequently been made there.

However, as the studies collected here indicate, there is a growing awareness of the importance of a unified approach. An exciting example of the possibilities that lie in a truly integrated combination of texts and other archaeological artefacts can be found in the work being carried out at the moment in the field of Mayan archaeology, where a whole new framework for our understanding of socio-historical developments is growing out of the evidence introduced by hieroglyphic writings. It is indeed time for some of the old barriers between the traditional disciplines to fall, for, in the words of John Baines: 'Archaeology and writing complement each other's silences' (Ch. 12).

Interpretations: literacy and complexity

The question of the proper evaluation of the rôle played by the introduction of writing has been discussed widely over the last couple of decades, with Jack Goody as perhaps the most influential anthropological contributor. In 1963 he published an article with Ian Watt which was entitled 'The consequences of literacy', a programmatic statement which has undoubtedly had a significant impact on many people's thinking about this subject. This article started a long and involved debate which was partly orchestrated by Goody himself in a collection of papers which had the title 'Literacy in traditional societies'. However, Goody's and Watt's first contribution was important not only because it raised a number of essential questions, but perhaps also because it overstated the issues, since this created the need for responses from specialists in a number of different fields. Goody has since distanced himself from at least the title of the paper, calling it 'brash' (1986, p. 12), and instead wants to speak of the 'implications' of writing. He has written two books on the topic since, and it seems fair to say that his later work has moved consistently towards a more balanced and careful analysis than the one offered in the first paper. This is important to realise, for quite a number of critical studies have since then continued to attack Goody for positions which do not seem to be defended by him any more.

He has made it clear that he did not intend to identify literacy as a 'sufficient'

cause for social or intellectual developments, and defended himself against his critics by pointing out that

choosing a topic to investigate means not only being seen as believing that human affairs are determined by a single factor. Some writers even appear to assume that what is meant by 'causal relations' are those determined in just this way – that is, situations that have one cause, everywhere, all the time (1986, p. xv).

On the other hand, he maintains that literacy is one of the most important pre-conditions for a number of changes or developments which affect social, political, cultural, and cognitive structures. Obviously, the introduction of writing does not immediately or necessarily lead to such changes:

The written tradition is cumulative, it builds up over time. I have tried to outline the effects of such a tradition on the evolution of the organization of societies, especially in its transitional phases. But I see these effects as trends rather than as necessities (1986, p. 184).

These sentiments are echoed by another major participant in the literacy debate, Elizabeth L. Eisenstein, who wrote an influential study of the printing press as an agent of change in Europe. It is important to note that she speaks of 'an' agent rather than 'the' agent, but on the other hand

one cannot treat printing as just one among many elements in a complex causal nexus, for the communications shift transformed the nature of the causal nexus itself. It is of special historical significance because it produced fundamental alterations in prevailing patterns of continuity and change (Eisenstein, p. 1983: p. 273).

Goody's project was defined as 'the analysis of writing on "modes of thought" (or cognitive processes) on the one hand, and on the major institutions of society on the other' (1977, p. ix); the first part of this project seems to be concluded with the book *The domestication of the savage mind* from 1977, and I have discussed this book in the light of the Mesopotamian evidence elsewhere (Larsen 1987b). The treatment of the second part of Goody's project is contained in his work *The logic of writing and the organization of society* which addresses four main problems as they relate to literacy: organized religion, economic activities, the political system of early states, and lastly the legal system. With respect to state formation Jack Goody suggests that 'writing was not essential to the development of the state, but of a certain type of state, the bureaucratic one' (Goody 1986, p. 92). Like Lévi-Strauss, Goody introduces the example of African states as a contrast to the developments described for the ancient Near East, and he refers to studies which show the difference between the 'traditional case' (non-literate of course) where we find an

emphasis on patron-client relationships, and the colonial regime, 'the impersonal, situational authority of the salaried office-holder'.

It seems to me that Goody's analysis is incapable of moving beyond a set of very general statements, and that the more adventurous conclusions drawn by him concerning conditions in the ancient Near East in most cases are flawed by the fact that his analysis attempts to combine evidence from a 3000 year long literate tradition. His insistence that writing played a vital rôle in the development of a bureaucratic type of state is hardly a controversial position, but rather a restatement of views expressed by, for instance, Lévi-Strauss.

The claim that writing was a prime mover in the development of complex societies or bureaucratic states appears to spring from a conviction that it was of fundamental importance for the promotion of 'the homogeneity of the ruling classes, as prime instrument in the consolidation of their power, and as the principal disseminator of their value systems' (Wheatley 1971, p. 377). Lévi-Strauss argued with great force that the primary function of written communication was to facilitate exploitation and subjugation (1955, p. 266).

The idea that writing was the technology of repression is not, in fact, a position which is peculiar to the anthropological and archaeological discussion of literacy. The postulated relationship between literacy and social complexity and development, which has of course played a large role in a number of extensive alphabetization campaigns in the Third World, has been hotly debated in several contributions to the study of literacy (see in general Street 1984). Lévi-Strauss himself pointed out that the great efforts to spread 'enlightenment' and literacy in Europe after 1800, including the building of schools, etc., may be seen in conjunction with such factors as the development of military service, a general proletarianization, and the need for literate workers in the new industries (1955, p. 266). At the time the debate in Europe dealt rather openly with these questions, as pointed out by Clanchy:

Opponents of government policy were worried that schools might succeed in educating people to a point where there would be a surplus of scholars and critics who might undermine the social hierarchy. Such fears were allayed by reformers emphasizing elementary practical literacy and numeracy (the three Rs of reading, writing and arithmetic) rather than a liberal education in the classical tradition, which remained as much the preserve of an élite of *litterati* in 1900 as it had been in 1200 (Clanchy 1979, p. 263).

These attitudes indicate that the technology of writing clearly has a double function, being both (and, according to Lévi-Strauss, primarily) a means of repression and a powerful tool for the intellect which can be used to combat such repression. The Belgian anthropologist Luc de Heusch in his discussion of literacy supplements Lévi-Strauss's analysis:

The city, where writing appeared, manifests this grandeur, this new dimension which man grasps for himself. The freedom of the mind, or at least the possibility that this may eventually be achieved, reveals itself in the

first eyes which knew how to decipher these terrifying signs. As if a gigantic wager had been struck, where the stakes this time were either the misery of history (the implacable will of gods and conquering masters), or the progressive liberation of the mind from all cultural bonds, the possibility that man might become the conscience of the world, truly *homo sapiens* (de Heusch, p. 146).

It is understandable that modern Western man, who lives in a world which is dominated by the written word, tends to see illiteracy as an indisputable sign of backwardness and primitivity. Any newspaper report on a poor developing country will as a matter of course link illiteracy with hunger and underdevelopment, and alphabetization campaigns have been seen as the prerequisite for economic and technological progress. The monopoly on written communication which was retained by the colonial powers, and which had grotesque results in countries such as Zaire, had to be replaced by a condition of equal access to information. However, it has become exceedingly clear that widespread literacy is no cure for political inequality, and that democracy, freedom, development, progress, and all of these other potent dreams do not materialize as a result of alphabetization campaigns. Literacy does not create social development.

In this introduction I take as my point of departure the evidence from Mesopotamia where some of the potential of this invention was first realized in the small city-states on the alluvial plain in what is now southern Iraq. More than 5000 years ago the first written documents in man's history were composed here, and the evidence for the first couple of centuries of literate practices is sufficiently extensive to allow us to draw at least some tentative conclusions.

Mesopotamian writing

The Uruk phenomenon

The first known human system of writing was invented in southern Mesopotamia around 3100 BC, and this script, developed and changed in both subtle and drastic ways, continued to be used in the ancient Near East until the beginning of the Christian era – known as the cuneiform system of writing (Gelb 1963, Hawkins 1979).

The earliest known texts come from the sacred precinct Eanna in the town Uruk, and they number about 4000. They have been found in secondary deposits and they belong to two phases known as Uruk IV and III, in all covering perhaps a century. Contemporary with the Uruk III texts is a group of documents from a place known as Jamdat Nasr, and from a slightly later date are texts found at the ruins of the town Ur (for a survey of the evidence from Mesopotamia see Nissen 1986b, pp. 316–22).

Uruk was at this time remarkably large and contained a series of monumental building complexes, presumably all of them temples. It seems to have

dominated a rather large area at the southernmost end of the alluvium, even though it was not necessarily the major city in southern Mesopotamia at the time (Jasim & Oates 1986, p. 349).

According to Hans J. Nissen, who is in charge of the project that aims to publish and analyse the texts from Uruk, southern Mesopotamia was settled on a large scale only a couple of centuries before the first texts were written. It seems that a change in climate led to a drying up of the waterlogged land near the head of the Persian Gulf, and this resulted in a major influx of people who took advantage of the extraordinarily fertile land. The very first steps towards complex sociopolitical systems, including a hierarchical settlement structure, were taken in the neighbouring Khuzistan plain. Small settlements had existed on the alluvial plain, but around 3300 it suddenly became very extensively settled. The phase between this date and the first texts is – as is so often the case – a poorly documented formative period during which we may postulate 'the formation of economic units of a size and complexity previously unknown' (Nissen 1985, p. 350). When writing first appeared Uruk was undoubtedly one of the largest urban sites in the region, with a population that can conservatively be estimated as above 10 000 (see Adams & Nissen 1972).

The concentration of a large population, massive public buildings, and the existence of writing are elements which classically belong together in any analysis of early state formation or urbanization. There is another feature which is characteristic of the Uruk period: a very extensive territorial expansion of the Uruk phenomenon. In recent years we have seen the excavation of sites in Syria which are very heavily influenced from Uruk – in fact, some appear to represent veritable colonies, such as the very large, walled city at Habuba Kabira on the Euphrates. This settlement is, like sites such as, for instance, Jebel Aruda, to be seen as an intrusion into the local traditions; other sites in the same region, such as Tell Brak, show clear signs of heavy influence from the Uruk tradition, but they still retain their local characteristics – in contrast to the 'colonies' which show pure Uruk assemblages (Oates 1986, p. 252; Algaze 1986, pp. 285–90). Nissen has also pointed out that we have long known of other evidence, for instance from seals, which point to commercial contacts between Egypt, the Aegean, Anatolia, and central Iran (1976, p. 6). It has been suggested that the stimulus towards the development of an Egyptian system of writing came from such contacts with Uruk people, perhaps by way of the 'colonies' in Syria (Moorey 1987).

The basis for such settlements is somewhat obscure; the large, walled town at Habuba gives the impression of real colonization and the implantation of significant numbers of people, but trade and the procurement of essential raw materials for the centre on the alluvium is also bound to have played a significant rôle. It has been suggested that such expansion had to be based on a political unification of the alluvial Mesopotamian plain itself, an area which is otherwise characterized through most of the third and second millennia by a decentralized city-state pattern (Algaze 1986, p. 289).

Even more unclear is the background for the collapse of this Uruk network in the north-west, a breakdown which led to the abandonment of Habuba

Kabira and the destruction of other sites. These events can be dated unequivocally to late Uruk IV, i.e. before the bulk of the textual documentation from Uruk itself.

Algaze suggests that we are faced with one of the recurring 'breakdowns' which characterize Mesopotamian history:

due to the timeless and essentially unresolvable conflict caused by the regularization and intensification of economic demands, mostly of an agricultural nature, on a chronically unstable alluvial environment (1987, p. 289).

He connects the termination of the expansion towards the north-west with signs of a crisis at Uruk itself, but Potts has indicated that the contact broken off with the north-west appear to be to some extent replaced with a differently oriented network towards the south where contacts with Mesopotamia are attested from sites in the Persian Gulf and Oman (Potts 1986).

At Uruk itself the centuries between 3300 and 3100 cannot be described except in very broad terms. We have a sequence of public buildings from Uruk, including terraced temples, and during the late Uruk period these grew from relatively modest edifices to gigantic complexes where a single building could measure 85 × 55 m and be erected on a huge artificial platform (Heinrich 1982, pls 114–24). All the known texts have been found within the sacred precinct in Uruk.

The emergence of writing

From the Uruk period and indeed earlier, calculi or counters made of clay have been discovered from a series of sites, including several which lie outside Mesopotamia proper, and it has been suggested that these objects formed part of a system of notation which may be seen as a logical precursor of writing, serving a similar purpose (see Schmandt-Besserat 1981).

There are some doubts about the interpretation of the early counters, pre-dating the late Uruk period, since these have been found both in extremely ancient contexts, going back to the neolithic, at sites where complex accounting procedures seem unnecessary, and in archaeological contexts (such as graves) which are not so easily explained in terms of an administrative function of the counters (Dittmann 1986, pp. 333–34). However, the existence of the system in the Uruk period itself, attested primarily at Susa and Uruk, is not in doubt.

We seem to have a development beginning with a set of counters of clay which were given a variety of shapes, each one presumably not just representing a figure, but indicating the nature of the item counted. Such counters are occasionally found encased in a ball or bulla of clay which may have impressions of a cylinder seal (sometimes more than one) on its surface; the sealing obviously marks responsibility, since seals were the property of individuals (or in some cases of offices), and a clay ball with counters in it could function as a vehicle for the communication of information in time or space.

The next step was to provide the surface of the clay ball with impressions which represented the tokens inside it, so that opening it constituted an act of verification and control. And the final step in this sequence was then to dispense with the tokens completely and simply impress numerical signs in the surface of what now became a clay 'tablet'. When some genius then combined this purely numerical information with signs representing the items counted, such as the head of an ox or a pot of a distinctive shape, we are faced with what we must call true writing.

Bullae associated with counters as well as numerical tablets have been discovered at several sites in the north and north-west, Nineveh, Mari, Habuba, Jebel Aruda, and Tell Brak, as well as a series of sites on the Iranian plateau: Godin Tepe, Tepe Sialk, Tall-i-Ghazir, Chogha Mish, and Susa in Khuzistan (Schmandt-Besserat 1981, Vallat 1986, Van Driel 1982). From Tell Brak we even have two clay tablets, unfortunately unstratified, which appear to contain numerals and pictograms, and these are totally different from anything known from Uruk. It is therefore suggested that they may represent a stage of writing which has until now not been preserved anywhere else, or that they may represent an independent, north-western version of a pictographic script (see Jasim & Oates 1986). Unfortunately, the archaeological evidence available for the context of these counters, bullae and numerical tablets is sporadic and uncertain, but there can be no doubt that they formed part of an administrative system which further developed using the early writing.

The 'proto-Elamite' writing used on tablets found in Susa and on sites on the Iranian plateau, indeed as far away as Seistan (Amiet & Tosi 1978), represents a script which is in many respects similar to the contemporary Uruk III signs, but apparently not directly related to them. This script is supposed to have originated on the plateau (Vallat 1986, p. 339), and the possibility cannot be excluded that the examples available at the moment, primarily from Susa, reflect a development from a simpler stage, comparable to and perhaps contemporary with Uruk IV.

Precursors of writing, indeed written documents, are accordingly known from several places and regions in the ancient Near East at the end of the 4th millennium, and we may be in for new and surprising discoveries. At the moment, however, I feel inclined to subscribe to the view expressed by Powell that the inventor of the first system of writing 'was both a Sumerian and a citizen of Uruk' (1981, p. 422), and it follows that the earliest script has its basis in the sociopolitical developments which took place here.

The Uruk tablets

The texts found in the sacred precinct Eanna, where we have temples dedicated to the skygod An and the leading goddess Inanna, form by far the largest group, and they must therefore be central to any attempted analysis of the socio-economic structure of the period. As already mentioned, they stem from at least two main phases, corresponding roughly to the building levels IV and III at Uruk, but they have all been found in secondary deposits as fill or in rubbish dumps. The internal chronology accordingly has to be determined to a

large extent on the basis of palaeography and other "internal" criteria, since clear-cut dating on the basis of stratigraphy in most cases is impossible to establish. It seems, however, that it is possible to distinguish at least the two main groups without much uncertainty, whereas subgroups are difficult to determine (Nissen 1986a, 1986b).

Some 85 per cent of the documents are economic records, and the remaining roughly 15 per cent consist of so-called 'lexical texts', documents which are in the nature of sign lists, where the signs are ordered in accordance with some taxonomic principle. Unfortunately, the reasoning behind the ordering of the signs cannot in all instances be recognised, but the later phase III texts are easier to grasp, since they often list, on separate tablets, signs which refer to such categories as birds, objects of metal or of wood, textiles, pots – and, of special interest here, titles and professions.

This list of professions (Civil 1969, pp. 3–12) acquired an astonishing prestige and popularity and was copied in scribal schools for more than 600 years, in spite of the fact that many of the titles and even signs in it were no longer used in normal practice, and it exists in more than 125 early copies from Uruk alone. It presents an ordered, apparently hierarchical list of political and social categories, beginning with a sign which in later tradition was rendered 'king', or 'leader'; then follows a list of some 15 titles which include officials who appear to be responsible for 'law', 'the city', 'the troops', 'ploughs', and 'barley', as well as some priestly titles and 'the chairman of the assembly'. In the next sections we find a series of items where professions (e.g. 'smith', 'silver-smith', 'shepherd' and 'herald') are presented in conjunction with titles which must refer to such positions 'overseers' or 'headmen'.

Nissen concludes from this ordering that we are faced with a carefully implemented, mature organizational structure where we find a two- or three-tiered hierarchy, which shows the following levels: first, the simple profession; next, an intermediary level where officials are called 'junior' or 'young', plus the name of a profession; and finally the top level where we find persons referred to as 'senior' plus profession. The standardization of the titulary indicates that we are dealing with a set of officials who have the same type of rank in their relationship to a higher authority (Nissen 1976, p. 14).

The economic records all appear to reflect the workings of a centralized temple administration. The keywords found in many of them are BA, which means 'to give' (according to Nissen 'distribution'), and GI, which means 'to return' ('revenue').

There are texts which refer to one single transaction:

2 SHEEP TEMPLE DEITY "INANNA"

(see Nissen 1985, p. 357, Fig. 8).

There are also elaborate compositions which include several such transactions and give a summary and/or total, and we have lists which have been interpreted as ration lists, a genre which became very widespread in later periods. Peggy Green's (1981) study of these records confirm Nissen's analysis of the

hierarchically structured Uruk society, and has added a lot of detail. She places great emphasis on the contrast between texts from the two levels IV and III, showing convincingly that texts were used in a much more elaborate way in the later phase, recording more information, more detail, and indeed new categories of information. The typical level III text therefore consists of several entries, organized in boxes or cases, and the surface is often divided up into columns. There appears to be no single entry text from phase III at all, but that may be accidental, since we must assume that the normal procedure was the same here as in all other periods: a tablet is written to record one single transaction; later on this is incorporated into another record which combines a number of single entries, perhaps covering a short period of time, perhaps reflecting a certain type of transaction; and such records could then again become incorporated in still more elaborate accounts which reflect the total activities of a certain office or individual during a specified period of time.

The level III tablets show that the transactions recorded became quite complex, involving more hierarchical levels of personnel and more departmental or distributional levels' (Green 1981, p. 362). The redistributive nature of the economic system is well documented, and of special interest are the ration lists which are attested only from the later phase. Nissen has pointed out that we may have other indications of the rationing system from this time, for during the whole period we find enormous numbers of crude clay pots which contain about 2 litres, pots which could be interpreted as the containers for the standard daily ration of barley handed out to workers in temples and other large establishments (Nissen 1985, p. 350).

The texts primarily refer to cattle, metals, wool, and textiles, and there is documentation for large herds of cattle in and around Uruk. References to quantities of metals, both crude and precious, as well as the archaeological evidence for an abundance of these commodities in southern Mesopotamia indicate the existence of links to other geographical areas. The plain itself is fertile, but it is entirely lacking in stone and metal, even in wood fit for construction purposes, and these commodities accordingly had to be imported. This early phase therefore provides the first example of the classic Mesopotamian situation which was marked by extensive foreign trade, where metals, wood, stone, and luxury items were imported in exchange for wool and especially textiles (Nissen 1985, p. 360, Larsen 1987a).

The logic of writing: Uruk and Peru

Dittmann (1986) has attempted to reconstruct the administrative hierarchy in early Susa on the basis of an analysis of the sealings found on the clay bullae associated with the counters. His basic assumptions are, first, that the sealings identified the senders to the recipients of the bullae; and secondly, that the motifs on the sealings reflect the status of its user/owner. Since bullae could have more than one sealing impressed on them, it is further assumed that these indicate different hierarchical levels, and that the sealings

leading person connected with what is called 'the army- and hunting-unit'; 'industrial' and 'storage' units are connected with 'the Temple/Palace-unit'.

These features of Susa social structure are contemporary with the early Uruk IV phase, and they are (not surprisingly) in accord with the picture reconstructed from the tablets. Dittmann's analysis indicates in a general way the level of complexity which could be served and sustained by a system of recording which still did not use a real system of writing. It is very clear, as has been pointed out repeatedly, that the seal was a highly important element in the administrative system – as it continued to be in the succeeding periods. It is presumably also not accidental that when writing was introduced, tablets were rarely sealed in these early bureaucracies.

In the Uruk period it seems that the system of counters was drastically expanded from a very simple pattern of a few shapes to an elaborate structure which included scores of different types of counters. This may be viewed as an attempt to infuse more information into it, an attempt which appears to have overburdened its capacity (Green 1981, p. 362).

These simple observations led Nissen to conclude that

by the time writing appeared, most steps towards a higher, civilized form of living had been taken. Writing appears merely as a by-product along the course of rapid development towards a complex life in towns and states (1985, p. 360).

Also Green recognizes that writing was introduced into an already complex culture:

the socio-economic basis – a stratified society, a redistributive system, and voluminous transactions – preexisted in ancient Mesopotamia. So, too, did the demand for accountability and record-keeping, attested by the widespread use of tokens (calculi) and seals (1981, p. 367).

However, Green is more willing than Nissen appears to be to see writing as an essential technology which formed a necessary part of the basis for the bureaucratic structure that was subsequently built up:

The emergence of a large-scale, centralized, bureaucratic institution, however, might itself have been a consequence of the creation of the tools which empowered its functioning. Certainly, writing enabled the administration to grow and, through written liability, to maintain direct authority over even the lowest levels of personnel and clientele (Green 1981, p. 367).

As pointed out earlier, Wheatley objected to the idea of urbanism being defined by the absence or presence of literacy and he mentioned that to do so would exclude the Andean states, the Inca empire. It may therefore at this point be relevant to introduce comparative evidence from the Inca state in Peru, since

this very elaborate political system is brought into the argument as an example of a state or empire which could apparently reach a very high degree of complexity without access to a proper system of writing.

In fact, the evidence from Peru compared with Mesopotamia shows that we should speak of the importance of a system of recording and notation rather than necessarily of 'writing'. The Inca state made use of the so-called 'quipus', strings with knots which could, at a basic level, function as counters for recording numerical information, somewhat in the same way as the clay tokens from the ancient Near East. But it is apparent that these quipus allowed an elaborate administrative system to function, where officials could keep track of deliveries to storehouses, set up and consult inventories, etc.

Officers were established in each of the districts, who, under the title of *quipucamayus*, or 'keepers of the quipus', were required to furnish the government with information on various important matters. One had charge of the revenues, reported the quantity of raw material distributed among the labourers, the quality and quantity of the fabrics made from it, and the amount of stores, of various kinds, paid into the royal magazines. Another exhibited the register of births and deaths, the marriages, the number of those qualified to bear arms, and the like details in reference to the population of the kingdom. These returns were annually forwarded to the capital, where they were submitted to the inspection officers acquainted with the art of deciphering these mystic records. The government was thus provided with a valuable mass of statistical information, and the skeins of many colored threads, collected and carefully preserved, constituted what might be called the national archives (Prescott 1847, p. 134).

After the conquest the Spanish administrator often referred to quipu records which gave them information of the obligations of provinces towards the central authorities in the Inca capital (see Murra 1982). The courts of the conquerors, even the royal *audiencias*, without hesitation accepted sworn testimony based on the quipus, even when these referred to affairs which went relatively far back in time. This system was accordingly quite efficient and capable of handling great amounts of information (there is a reference to a quipu which has a knot in the 10 000th place; see Rowe 1946, p. 326), with a fair degree of complexity.

The Inca state made use of special 'annalists', officials who were charged with the duty to record the important events in each province, scholars who were entrusted with the history of the ruling clan, and 'poets' who performed songs and ballads at the court, retelling the most glorious events in the history of the Inca state. Even in this purely oral sphere, the quipus could be used as a 'system of mnemonics', since the colour code was connected with abstract concepts. The quipu could therefore function as a mnemonic aid, affording 'great help to the memory by way of association' (Prescott 1847, p. 135), and it was used even for the learning of historical narratives, where 'the quipus served the chronicler to arrange the incidents with method and to refresh his memory'.

(Prestcott 1847, p. 136; see also Rowe 1946, p. 326). It has been concluded from such observations that

the Andean peoples possessed substitutes for writing which were so satisfactory that they probably never felt the need for anything more elaborate (Rowe 1946, p. 325).

The comparison with the early Near Eastern system of calculi seems at first sight obvious and compelling: it appears very probable that the counters had functions which were identical or at least very similar to those fulfilled by the quipus. It is of course unfortunate that there is no corroborating archaeological evidence so that counters could be linked in an unequivocal way with major administrative buildings, for instance in Uruk itself, but this may be due to the accidents of excavation. However, I would suggest that it is meaningful to compare the quipu system with the earliest so-called 'true writing' from Uruk.

The script which developed out of the combination of numerical signs and drawings was obviously of an ideographic nature, where each sign stood for an object or concept. For some 600 years its use was restricted to economic/administrative records (plus the lexical lists which played a rôle in the scribal education), and this fact alone explains several characteristic features in the system. It was a not a graphic rendering of speech, but rather a mnemonic system which depended on an oral complement. Green has pointed out that the script of the Uruk texts, culminating in the level III texts, formed a kind of 'visually oriented' system as opposed to a 'linguistically oriented' one, as it later became. Her analysis has shown how these early texts made use of a whole series of graphical devices such as tablet shape, division of the surface into boxes, columns, rows, etc., use of tall, wide or narrow columns, subdivisions of boxes, formats for summaries and total etc. (Green 1981, pp. 361-3). Such features are not unknown to anyone who has ever attempted to fill in a form or to extract information from a statistical yearbook. It is obvious that such modern records are indeed not 'linguistically oriented', since they consist mainly of logograms (Arabic and Roman numerals), and no one could make much sense of them by simply reading them aloud. 'Reading' such texts involves introducing many words which do not appear in the documents as such, but which can be inserted on the basis of an interpretation of graphic indicators such as lines, paper colour, size and shape of the form, and organization of the information itself (see Larsen 1986).

In fact, early Uruk writing does not unequivocally represent any specific language, since logograms can be read in any language. The introduction of syllabic elements in the texts, i.e. the initial spelling out of infixes and suffixes, etc. is not clearly attested in these early texts. The written message does not in a direct way represent a spoken one, a principle which remained basically valid for most of the next millennium in texts written in Sumerian. Only the grammatical elements which are absolutely indispensable to the identification of a phrase were written, and when literary texts begin to be written down around 2500 BC even they make use of basically the same system. This means

that the text as we have it appears to give a sequence of cues, presumably designed to aid a person who was preparing for an oral performance - which is not too far removed from the use to which the quipus could be put. An isolated archaic version of such a literary composition is accordingly only understandable to someone who is already thoroughly familiar with the full text (see Civil & Biggs 1966).

Uruk writing was a more powerful system of recording than the quipus, simply because it enabled any given record to contain more explicit information, including, for instance, names of persons and places. It was therefore capable of sustaining a more complex bureaucratic machine, but it should be kept in mind that it may have been possible to reach a comparable degree of complexity by way of specialized officials in the Inca state. One cannot help but wonder whether a more explicit system of notation or a script of some kind would not have become a necessity for a further development and elaboration of the Inca state.

Conclusion

There is no need to refute monocausal, crude explanations which nobody is willing to defend anyway. The emergence of writing does not *create* or *cause* social complexity, the rise of the state, urbanism, slavery, or freedom. It is, on the other hand, what Kathleen Gough so nicely called 'an enabling factor' (1968, p. 84, see also Street 1984, and Larsen 1987b).

The Mesopotamian and Peruvian evidence points to the complexity in the relationship between writing and speech, and between the aspect of recording and of communication, a complexity which serves as a warning against ethnocentric schemes of explanation. Writing is not a simply defined entity, and our preconceived notions based on our own alphabetic experience cannot be transferred to other historical situations where other types of writing may be used in quite different ways, serving various purposes.

Some of the chapters in this book deal with societies and historical situations where writing was used in basically the same way as in Mesopotamia. Thus, Nieke, Chapter 14, is on precisely the same kind of terrain in her study of the early Scottish kingdom of Dalriada:

The introduction and use of writing by the secular authorities should be seen as just one of a series of measures these early rulers were taking to strengthen their control over the kingdom.

In the particular historical situation literate practices, reflected in the received corpus of annals, kinglists and genealogies, and 'civil surveys', were part of a wider framework of political control mechanisms which included some measure of regulation of the production, distribution, and use of prestige goods and imports.

Mesopotamia is unusual in one respect, however, since it represents perhaps the most stubbornly bureaucratic use of writing known from any ancient civilization. For some 600 years after the introduction of true writing it was used exclusively by the administrators. And from one period of some 75 years at the very end of the third millennium, the so-called 'Ur III period', we have hundreds of thousands of such administrative texts which present an incredibly elaborate structure of administrative procedures. Single documents could regulate transactions involving tens of thousands of persons, and at the same time the loss of half a pound (0.25 kg) of wool from a warehouse would be discovered and accounted for with a frightening inevitability. So it seems fair to say that the potential of this technology for its use as a controlling device was realized to the full in Mesopotamia.

On the other hand, writing was not used for display purposes for many centuries, in direct contrast to the situation found in Egypt. Some of the chapters show that writing played a significant rôle also as a system of symbols which stood as public statements of the unique rights and powers of the rulers, but of course, writing is only one of many such public display systems, together with, for example, architecture and ritual.

Driscoll's (Ch. 13) analysis of the Pictish stones clearly indicates the importance of the control by an élite of a symbolic system which displays the privileges held by the ruling class in a given society. Even though he deals with symbols which did not constitute a system of writing, there is a remarkable agreement between his analysis of these standing stones in Scotland and Baines's (Ch. 12) of Egyptian display inscriptions, with Baines making the point that

the system of display . . . sustained the ruler's and the élite's position, either through the image of a world view and of themselves that it conveyed to others, or through the élite's exclusive access to it, or through both

and Driscoll assuming that

such a symbolic system would be under the control of a political and/or religious élite by virtue of their superior access to material and cultural resources and that they would employ it to promote and secure their authority.

It appears that writing was used in this fashion by 'knowledgeable social actors' (Driscoll, Ch. 13), which leads to the conclusions drawn by Harbsmeier in his study (Ch. 15) of recent inventions of writing. For the illiterate, writing is not just a technology of communication, it has a reality in the field of magic, as pointed out by Nieke for early Scotland. And the conscious, deliberate use of the technology of writing, whether for display purposes and maybe in conjunction with ritual, or in the context of miracles and religious teaching, obviously has a central place in any analysis of the relationship between literacy and power.

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