Naissance de l'état, naissance de l'administration :
le rôle de l'écriture en Égypte, au Proche-Orient et en Chine

Emergence of the state and development of the administration:
the role of writing in Egypt, Near East and China

LISTE DES AUTEURS

Matthieu BEGON
Université Paris IV-Sorbonne
Paris (France)
matthieu.begon@live.fr

Wouter CLAES
Musées Royaux d'Art et d'Histoire
Parc du Cinquantenaire, 10
1000 Bruxelles (Belgique)
w.claes@kmkg-mrah.be

François DESSET
Tehran University (Iran)
francois.desset@wanadoo.fr

MARCELLA FRANGIPANE
Sapienza University
Rome (Italy)
marcella.frangipane@uniroma1.it

Caleb R. HAMILTON
Monash University
Melbourne (Australia)
caleb.hamilton@monash.edu

Stan HENDRICKX
Sint-Jansstraat 44
B-3118 Werchter (Belgique)
s.hendrickx@pandora.be

Béatrix MIDANT-REYNES
CNRS, UMR 5608 TRACES
Maison de la Recherche
5, allée Antonio-Machado
31058 Toulouse Cedex 09 (France)
bmidant-reynes@yahoo.fr

Juan Carlos MORENO GARCÍA
UMR 8167 Orient & Méditerranée
CNRS/Université Paris IV
Paris (France)
jcmorenogarcia@hotmail.com

HANS J. NISSEN
The Free University of Berlin
(Germany)
nissen.hans@googlemail.com

LUCA PEYRONEL
Dipartimento di Studi Classici
Umanistici e Geografici Università
IULM Milano
Via Carlo Bo, 1
20143 Milano (Italy)
luca.peyronel@iulm.it

OLIVIER ROCHECOUSTE
Department of Ancient History
Macquarie University
Sydney (Australia)
olivier.rochecouste@mq.edu.au

Yann TRISTANT
Department of Ancient History
Macquarie University
Sydney (Australia)

Pascal VERNUS
École Pratique des Hautes Études
Paris (France)
pascal.vernus798@orange.fr

Wang HAICHENG
University of Washington
Box 353440
Seattle, WA 98195 (USA)
haicheng@uw.edu

Erratum

Il a été porté à notre attention que deux erreurs se sont glissées dans l'article intitulé «The Significance of Predynastic Canid Burials in Ancient Egypt» publié par Mary Hartley dans le volume 25 (2015) de notre revue. Page 59, à la fin du 5e paragraphe, l'intention de l'auteur était de faire référence à Van Neer et al. 2004: 120 au lieu de Friedman et al. 2011: 120. Le nom de l'auteur a aussi été mal orthographié («Freidman» au lieu de «Friedman»). La rédaction d'*Archéo-Nil* présente ses excuses pour les désagréments occasionnés.

It was brought to our attention that two errors occurred in the article entitled "The Significance of Predynastic Canid Burials in Ancient Egypt" published by Mary Hartley in the volume 25 (2015) of our journal. On page 59, end of the fifth paragraph, the author's intent was to reference Van Neer et al. 2004: 120 instead of Friedman et al. 2011: 120. The name of the author was also regrettably misspelt ("Freidman" instead of "Friedman"). *Archéo-Nil*'s team sincerely apologises for any hurt or confusion these errors may have caused.

Sommaire du n°26

Études et essais

Lectures

Early writing, archaic states and nascent administration: ancient Egypt in context (late 4th-early 3rd millennium BC)

Juan Carlos Moreno García, UMR 8167 Orient & Méditerranée, CNRS/Université Paris IV, Paris, France

Shortly after the Spanish conquest of the Aztec Empire, the first viceroy appointed by emperor Charles V, Don Antonio de Mendoza, ordered the compilation of a most unique document, the so-called Codex Mendoza, sometime around 1540. The main goal of this document was to provide the emperor with a first-hand historical record of the newly acquired territory, most notably the formation and organisation of the Aztec polity, its wealth, resources and the social hierarchy found there, just prior to the arrival of the Conquistadors. Composed in Aztec pictograms accompanied by Spanish comments, the information was structured in three main sections: a chronological list of the cities conquered by each one of the Aztec emperors, the composition of the tribute delivered by each city to its master and a description of the Aztec society and its social hierarchies. This sumptuous manuscript provides thus crucial historical and administrative information, encoded in a proto-writing system, and reveals at the same time some of the main domains in which writing was operative for the needs of Aztec rulers: lists of kings and their deeds, lists of tribute and lists of people and crafts (Berdan & Anawalt 1992). However, even if the system employed was not a fully developed writing, another aspect emerges in Aztec political culture that shares similar developments in other parts of the world: the use of recording systems in order to construct a selective memory of the past, including the intentional destruction of previous "historical" records, both by Aztec emperors and by the succeeding Spanish rulers (Diel 2014). In both cases the ultimate goal was not only to record essential practical data (such as lists of tribute and local authorities) but also to provide unique legitimate ideological genealogies about what the past was and, especially, what the past should be from now on.

Therefore, the Codex Mendoza constitutes a good illustration about how selective uses of information, as well as a restricted access to it, appear as inseparable from the history of writing and, more crucially, from the new forms of political organisation that crystallised into the earliest documented states.

What is more, this document is particularly meaningful as it was produced in a proto-writing system developed to record crucial information for the ruling elites of a society with no contact with other foci of literacy, such as Europe, Africa and Asia. As the selected data registered consisted of deeds of rulers, lists of tribute and lists of people and their social hierarchy, these three themes correspond to some of the main hypotheses, still passionately debated, about the origins of writing. Did it only appear for practical reasons, as a mnemonic tool that helped register complex information and operations crucial for the earliest bureaucracies? Or, on the contrary, was the principal justification for its existence the commemoration of rulers and their most prestigious activities, in order to legitimise their power and to secure new forms of social control (from calendars to weight systems)?

For many decades writing has been considered one of the most conspicuous components of the "civilisational pack", as it was formulated by Gordon Childe. In this perspective, writing was concomitant with urban development, monumental buildings, complex irrigation networks, craft division (including the first bureaucracies), increasing social hierarchisation and, in general, with superior forms of social organisation (states), in marked contrast with other, "inferior" forms (tribes, chiefdoms). Of course, exceptions to this general trend were also inevitable, the Inka empire probably being the most cited. Despite the absence of writing, Inka rulers managed nevertheless to record and classify complex information thanks to ingenious devices such as the *quipu* or assemblages of coloured strings, where knots and colours helped the collecting and recording precise data of different kinds, from census to tribute and labour obligations (Salomon 2013; Urton 2015). In any case, the model of the "civilisational package" (Wengrow 2015) was inspired by the late 19th and early 20th century archaeological discoveries in the Near East, most noteworthy those in southern Mesopotamia, where the earliest cuneiform tablets were contemporary of the first "big" cities (Uruk), of societies with well-defined hierarchies and of complex forms of economic and administrative organisation (Liverani 1998; Nissen 2015). In fact, the model was so potent that it was considered universal, as other ancient civilisations such as Egypt, India and China seemed to have reproduced it. Its influence is still apparent in discussions about the earliest development of writing in Egypt, as it was supposed that the Nile Valley should have followed a similar path towards civilisation and that writing accompanied the emergence of urban life and the first bureaucracies.

Cities, measures and writing: an ineluctable path towards writing and centralised administration?

However, this narrative has been recently challenged in the light of the archaeological discoveries made during the last two decades. First of all, the site of Göbleki Tepe, in southeastern Turkey, a tell where several round structures with huge T-pillars (up to six metres) have been found, some of them sculpted with low reliefs depicting animals and complex abstract motifs. The ritual purpose of the complex seems evident, but what is really surprising is that it dates back to 10,000-8,000 BC, that is to say, prior to the emergence of the Neolithic, when hunting and gathering still represented the basis of human subsistence in societies with a low density of population and with allegedly simple forms of organisation (Dietrich & Notroff 2015; Wengrow 2015). The very dimensions of the complex, as well as the labour necessary to erect these structures (probably involving several hundreds of people) and the possibility that it served the symbolic needs of people living quite far from the site, suggests that complex architecture, organisation of labour on a significant scale and elaborated rituals were already operative prior to the development of agriculture, sedentary life and writing (Bernbeck 2013; Vidale 2013).

Urban development also appears under a different light thanks to recent discoveries. Early Mesopotamia seemed again to provide clear evidence of this historical trend following a clear evolutionist perspective: agriculture and sedentary life would have led to the development of permanent settlements from which the first cities emerged during the second half of the 4th millennium BC. Such cities (Uruk being the quintessential model, with up to 40,000 inhabitants around 3200 BC) were characterised by monumental architecture, distinctive neighbourhoods/areas, a marked social hierarchy and specialised areas devoted to craftsmanship (Nissen 2015). Under these circumstances, writing was considered to represent a specialised recording tool aiming to encode transactions and to record information in a context of an increasingly complex organisation and division of activities. The five thousand proto-cuneiform tablets found at Uruk, dating to 3200 BC, not only provided the most ancient evidence of writing. Also essential clues about the conditions under which writing emerged, as a utilitarian instrument at the service of the elites that controlled huge ritual areas, extensive networks of trade centres and substantial labour and economic assets. So, urbanism was indissolubly linked to centralisation and social stratification, the perfect environment for the invention of writing.

However, social complexity and centralisation of political authority, within an increasingly hierarchical social structure, is not necessarily inherent to the development of cities. Almost contemporary "mega-sites" discovered in Ukraine, with a comparable population (up to 20,000 people), can hardly be equated with Mesopotamian "cities". The settlements consisted in thousands of huts disposed in concentric circles, with limited evidence of social hierarchy, no monumental architecture, and no traces of specialised ritual areas. Even craft activities were executed at a domestic level (Wengrow 2015; Müller et al. 2016). So, the concentration of thousands of people in permanent settlements was not inevitably concomitant with the emergence of more complex forms of political organisation and of marked hierarchical orders. Another clue in the same direction comes from Africa. The archaeological exploration of the ancient site of Jenne-Jeno, in the Niger Delta in West Africa, has revealed a major urban site (around 800 AD) with an estimated population of about 11,000 people. It was organised as multiple tightly clustered settlements built onto more than 130 ha of tell surface within a 12 km² area rather than as a nucleated single site. As McIntosh has pointed out, Jenne-Jeno has some of the usual attributes of complexity (concentration, population growth, and increasing scale) but not others (subsistence intensification, highly visible ranking or stratification, an effective central control, and imposing public or elite monuments: S. McIntosh 1999; R. McIntosh 2015). In fact, clustering emerged here as a way through which different specialist corporations preserved and displayed distinct identities, while at the same time they had immediate access to other providers of needed goods and services and access to those to whom they themselves provided materials. But the exchange system was not organised and controlled by a superior power. It functioned instead organically through the relations of reciprocity forged among corporate groups. The political and economic organisation of Jenne-Jeno and its hinterland seems thus heterarchical (R. McIntosh 2015: 370–371).

Jenne-Jeno is not a unique case of an urban layout where the relationship between social power, monumentality and hierarchy is problematic. Another variant appears in the cities of the Indus Valley civilisation (2600-1900 BC). Although the population was hierarchically organised, each city had a distinct pattern of multiple-walled sectors or clusters, as if the cities had been ruled by competing elites, with fluctuating centres of power located in different walled sectors. Another unique feature of the Indus cities is the lack of conspicuous temples or administrative buildings. Although they were linked to a network of smaller urban and rural settlements in the surrounding hinterland, and all these settlements were loosely integrated

by a shared ideology and material culture, the use of a common writing system, and the use of a standardised system of weights, they do not reflect an authoritarian society nor a centralised ruling elite, but a plurality of elite communities inside each city (Kenoyer 2008). In despite of the developed urban planning and sophistication of the constructions, writing seem to have played a very limited role, mostly reduced to labels, inscribed tokens and seals, used in many cases by communities of merchants, sometimes over long distances (Vidale 2004; 2005).

Finally, other urban models associated with early uses of writing are exemplified by many Mayan and Aztec cities, truly political celebrations of local kings through monumental architecture and elaborated decorative programs in which writing (as in the Maya kingdoms) boasted of the achievements, rank and family connections of their rulers. However, nucleation was rare and many cities consisted, in fact, in monumental core areas surrounded by dispersed residential areas (farms, houses) over great extensions, and where specialised craft production was only important in some of these cities. So, if the population density in Early Dynastic Uruk would have been about 100-125 people per hectare, at Tikal the core area had an estimated overall density of 2-5 people per hectare or just 11 at Copán (Webster 1997). But in despite of the massive monumentality displayed by many Maya cities, their elites failed to create institutions that effectively concentrated power and wealth in the hands of kings, thus betraying the political fragility of rulership (Webster 1997: 140). This probably explains why probably accounting and administration played a minor role in the emergence of Maya writing, while it was inextricably tied up with image and with the celebration of elites, their lineages and their claims to kingship (Law 2015). Finally, a different scenario can be detected in the Early Bronze Age southern Levant. There, nucleation and the construction of massively fortified cities hardly show any sign of significant social hierarchy, wealth differences or monumen-

tal architecture. Rather they seem to correspond to decentralised forms of power in which governance relied on a network of members from cooperating and competing houses, with no trace of the use of writing in despite of their closeness to foci of literacy such as Egypt and Mesopotamia (Chesson 2003a; 2003b; 2015; cf. nevertheless Genz 2010). Autonomous villages might possibly represent a variant of this phenomenon but on a lesser scale (Faust 2005). On the contrary, in northern Syria contemporary elites began a process of consolidation of their social and political position both in small settlements and cities. A manifestation of their leading role was the construction of shrines and temples for collective ritual and increased ceremonial display. The presence of administrative tools such as tokens and seal impressions suggests that these elites not only built public edifices; they also controlled the ritual and economic activities that took place there (Pinnock 2013; Valentini 2015). All these examples reveal "other ways of being urban", as cities and big settlements also happened to be places where power was distributed in ways that worked the challenge or undercut straightforward linear hierarchies of authority and administrative control (Yoffee 2005: 34–38, 179; Sinopoli et al. 2015; see also Lawrence & Wilkinson 2015).

So, nucleation and urban development did not necessarily lead to more hierarchical forms of social and economic organisation, in which increasingly complex forms of administration and decision-making inspired the development of bureaucracy and recording devices. Tokens were an early form of accounting and administrative tool that appeared in villages and settlements all over the Middle East, from western Syria to central Iran. According to their interpretation proposed by Denise Schmandt-Besserat, early literacy was no more than a bureaucratic accounting tool whose sole precursor was an increasingly complex and uniform system of clay counters, attested all over the Middle East from the 8th millennium BC. These tiny tokens were made of clay or stone and shaped into simple geo-

metrical forms—spheres, cylinders, cones, discs, and tetrahedra (Schmandt-Besserat 1992; 1996). While their original function has been extensively discussed, evidence from Neolithic Syria (6300 BC) reveals that in some buildings tokens were carefully stored along with hundreds of clay stamp-sealings from bags, baskets, jars, and doors as well as a variety of other small stone, ceramic, and bone artefacts. Moreover, none of the constructions in which they were found seems to have been inhabited domestically. These tokens should probably be interpreted as records of transactions, but exactly which quantities and commodities they represented is impossible to say. It is likely, however, that their use was local at best (Duistermaat 2012).

In fact, not only tokens, but also seals, appeared for the first time in Neolithic villages of the ancient Near East in order to regulate and control access to goods stored at the household level (Akkermans & Duistermaat 1997; Duistermaat 2012). As for seals, as Duistermaat has put it recently, in Neolithic Syria stamps were already in use long before they were employed as seals in a control system. So, not every stamp necessarily is a seal in the administrative sense of the word, as these stamps were used for non-administrative purposes, including decoration and magical protection as early as the 10th-9th millennium BC. And when a sealing system did emerge, in the Late Neolithic period (about 6300 BC), seals were used by large numbers of people to control their stored private goods, in contexts where circumstances forced them to hand over the direct supervision over their stored properties to others in their own community. Furthermore, seals were then intended for a local or domestic setting rather than a wider audience. A phenomenon that occurred long before bureaucratic or hierarchical administrative systems emerged and elites began to exploit the power of seals. In fact, the non-administrative functions and uses of seals continued in later periods in Mesopotamia (Akkermans & Duistermaat 1997; Duistermaat 2012). However, univocal links, on an evolutionary scale, between stamps, seals and bureaucracy/administration are further questioned in the light of stamps produced by the Neolithic and Chalcolithic cultures of Anatolia, the Balkans, the Carpathian Basin and Italy. The earliest examples from the first half of the 7th millennium were found in central Anatolia, while the clay stamps in Greece and southeastern Europe are widely spread from the end of the 7th to the 4th millennium BC. Anatolia and Southeastern Europe stamps are quite different from those from the Near East, mainly used as decoration and ritual tools that never lead to administrative uses (Lichter 2011). As in the case of cities, seals and stamps did not necessarily lead to the development of writing and administrative devices.

However, with the expansion of Uruk (3600-3100 BC), new administrative tools were introduced, such as cylindrical stone seals and stored tokens in sealed clay envelopes, in a context of massive distribution of rations by means of mass-produced, standardised bowls. These developments reveal the merging of counting and sealing technologies, with the invention of the sealed clay envelope in which clusters of tokens could be stored. Finally recording quantities of objects took another step towards abstraction, as empty envelopes were flattened into flat tablets of clay, whose surfaces bore impressions of tokens and seals. So, in the Uruk IV (3300-3100 BC) period tablets, mostly unbaked and unsealed, exhibit a range of some 900 incised word signs and five different numerical systems for counting different types of commodity. The mature stage of literate accounting at Uruk (also attested in smaller numbers in settlements across southern Iraq and southwest Iran: Desset 2012; Petrie 2014) appeared during the Uruk III period (3100-3000 BC), when the forms of the incised ideograms show much greater standardisation and have lost much of their pictorial quality. Document formats can be much more complex too, with 'secondary' accounts summarising and consolidating the contents of many 'primary' records, often over several years (Nissen et al. 1993; Englund 1998:

61–64; 2004; Robson 2007; Wagensonner 2009: 36–38). As Robson has put it, by the end of the 4th millennium BC, southern Mesopotamian city states had implemented an extensible and powerful literate technology for the quantitative control and management of their assets and labour force. In doing so, they had created in parallel a new social class—the scribe—who was neither economically productive nor politically powerful, but whose role was to manage the primary producers on the elite's behalf (Robson 2007: 43).

Pot-marks represent another domain in which early notation systems served to convey information. Whereas in some cases the marks show clear similarities with signs of writing systems, their precise aim is still badly understood: did they help classify pots, their contents, their provenance, their destination or a combination of these uses? In the case of Early Dynastic Mesopotamia, it has been argued that pottery marks obeyed different purposes: technological quotations, indication of the volume of the vessels and, perhaps, also information about their content or their owner. Yet a crucial difference distinguishes them from their Egyptian counterparts, as the pots on which they were incised served household purposes. In Egypt, on the contrary, pot marks apparently formed a coherent system within an institutional, not domestic, context. Thus, while in the Naqada II period they were rare and correspond to a domestic, non-standardised production, as well as to short-lived individual storage practices within habitats, in the Naqada III period, on the contrary, collective storage, centralisation of the production of pots and institutional organisation of economic activities are apparent. The fact that similar signs are found over great distances suggests that, in some cases, pot marks indicated the provenance of the contents. In other cases, the great variety of signs, present in different types of pottery and grouped in different manners suggest that the marks belonged to different encoding systems used simultaneously (Bréand 2005). Some groups of signs should be considered in direct rela-

tion to the production of their carriers as a means of counting the manufactured pots. The scalable nature of some signs and the fact that they are inscribed on both open and closed shapes (which were not destined for the same functions) suggest that the role of these marks should be understood within the *chaîne opératoire* of pottery production. So, these signs probably were an *aide-mémoire* used by the potters themselves in order to control part of their production. Given the contemporary emergence of hieroglyphic writing, concomitant with the formation of a central court that uses an official system of counting (as the tags containing numerals in Tomb U-j attest), this example of a non-official system of counting reveals the development of an alternative system of communication that cannot be deciphered outside of its context of use, and therefore cannot be considered as a transcription of hieroglyphs. The rarity of these signs, which have been found thus far at four different sites located in both Upper and Lower Egypt, indicates an occasional aspect in the usage and production of the signs (Bréand 2008; 2009).

In fact, later evidence, from the middle and late 3rd millennium, also suggest that pottery marks are linked to the process of pottery production, and more precisely to the control of production prior to its firing (Andrássy 2015; Rzeuska 2015). Also during Naqada III times the production of bread moulds knew a huge increase probably linked to a change in production level, from domestic to a specialised one. As they occasionally bear pre-firing marks, this fact could point to a change in the organisation of their production (Bréand 2015). However, the interpretation of such signs is far from clear and, as in the case of pot marks, they could convey different meanings, a characteristic that continued through the 3rd millennium (Warden 2014: 136–137). In all, pottery marks appeared both in Egypt and in Mesopotamia in a proto-literate stage of their respective cultures and introduced primitive information noting practices, some of which developed later into writing (Koliński 2003). Some of these practices

may be considered as survivors of older traditions (such as Mesopotamian and Syrian tokens and Egyptian labels), others as innovations that were later abandoned when writing was more widely adopted. But, in general, their interpretation still raises many questions. One further example is provided by the pot marks recovered at the Early Bronze Age III (2830-2500 BC) level of Tell es-Safi/Gath, in Israel, an important fortified political centre of about 24 ha. No clear evidence of high status and/or public buildings has been uncovered at the site. However, the architectural remains correspond to a domestic neighbourhood where more than three hundred pot marks have been recorded, together with an ivory cylinder seal, other ivory items and maceheads made of non-local stone. Clearly, expensive trade goods were being brought into the site from outside the immediate vicinity of the site and of the region. As the archaeologists working at the site have observed, their discovery in a commoner's house is indicative that such goods were not simply signatures of elite trade networks. Perhaps it was a residential area for middle-class families involved in transport and trade, as several figurines of donkeys have been also found there. Nevertheless, no clear pattern of interpretation emerges from the study of the pot marks (Greenfield et al. 2016).

Finally, weigh measures constitute another kind of early administrative device. As Rahmstorf has pointed out, it is most likely that the beginning of measuring weight only appeared with the intensive use of (precious) metals. The oldest known definite weights date around 3000 BC when precious metals like gold and silver became intensively exploited for the first time in Predynastic Egypt and Uruk period Mesopotamia. These metals (and also highly valuable stones like lapis lazuli) required measurement by weight because of their amorphous shape, as it was not possible to count them or to fill them in measuring jugs. Without weighing it was not possible to achieve any precision in calculating their value in comparison with other goods. Consequently, the weight standards or units have to be commonly agreed and verified by an authority. Any agreed weight standard needs an *étalon*, and in early Mesopotamia and Egypt the (presumed) exactness was often verified by authorities' symbols or inscriptions on the weight itself. For economic reasons it is imperative that the weights, as well as the weight units or the system of weight, have a large geographic sphere of acceptance. The study of 3rd millennium weights by Rahmstorf in the region from the Aegean to the Indus Valley has shown that most probably only a handful of units of weight were in contemporary use around the middle of the millennium: one system of weight with three interrelated weight units (7.83 g; 9.4 g; 11.75 g) in the East Mediterranean (Syria, Anatolia and the Aegean), one in the Indus region with a unit of 13.71 g, a Mesopotamian system of weight with a unit of c. 8.33 g, and finally an Egyptian unit (13–14.5 g?) which as yet escapes any precise fixation for the 3rd millennium BC. It therefore seems more likely that independent traders were the most important agents in the dissemination of this knowledge. Their range of interaction of probably only a few hundred kilometres will have overlapped with the range of other traders, who then received and transmitted the knowledge in their turn. According to Rahmstorf, it is more likely that such groups of traders, with an external but limited range of social power, were indeed the agents of diffusion of this innovation during the 3rd millennium BC. Such a scenario speaks therefore against strong hierarchical forces working from above, but instead for coalitions, federations, and other examples of shared or counterpoised power. Such flexible, contingent, and constantly fluctuating power relations are described as a heterarchy (Rahmstorf 2012: 315–316; 2014).

In the light of all this evidence, one may conclude, following Rahmstorf's arguments, that the establishment of control mechanisms was fundamental to achieve institutionalised and long-term inequality in some societies. The adoption of such control mechanisms enabled a group of people (the elite) to regulate and hence dominate

resources. Some of the best archaeological indications are writing, the practice of sealing and the invention and standardisation of metrological systems. However, the crucial question is how many members of the given society were able to participate in the regulation of power. The archaeological evidence often does not imply a strongly hierarchical society, or a society where a single person (king or chief) and/or his followers/kin could dominate. Instead the archaeological record points to flexible and fluctuating power relations. Therefore, some early complex societies of the second half of the 3rd millennium BC (like Greece or the Indus Valley) can be better described as heterarchical than hierarchical. For prehistoric Europe it is argued that social power was highly fluid and that no long-term systematisation of power relations is traceable before the Iron Age (and even then it is often debatable). Therefore, any claim for the existence of simple or complex chiefdoms in prehistoric Europe (outside the Aegean) during the Copper and Bronze Age seems to be misleading (Rahmstorf 2012).

Writing, kings and "big" institutions

As we have seen, social complexity and the development of recording and measuring tools was not ineluctably linked to centralisation of power, social hierarchy, economic control by a ruling elite or the birth of writing. Even the best early documented examples of writing, those from Egypt and Mesopotamia, illustrate different trends towards the development of writing in which appears, apparently, as quite different social and political contexts.

Early Mesopotamia

In the case of 4th millennium Mesopotamia, the development of administrative record-keeping tools was concomitant with the expansion of the distribution of rations and the emergence of great ceremonial buildings, both in southern Mesopotamia and in northern "Greater" Mesopotamia (Bretsch-

neider 2007; Oates et al. 2007; Frangipane 2007; 2010b). At the same time, the distinctive material culture of Lower Mesopotamia began to appear more widely, first in the Susiana plain of southwestern Iran, later in the Jazira of northern Iraq and Syria and along the Euphrates River in Turkey. The material culture included specific forms of architecture; wheel-made, sand-tempered ceramics with distinctive forms and surface treatments; and tools of administration including carved stone seals, clay tokens, and clay tablets with numbers on them. It seems that these phenomena were related to the spread of Uruk material culture, which represented movement of people rather than simple trade or acculturation (Petrie 2014; Emberling & Minc 2016; Schwartz & Hollander 2016). The city of Uruk in southern Mesopotamia was then one of the first urban centres, not only for its large size (250 ha) and monumental architecture, but because of the effects its emergence had on regional settlement patterns. However, recent archaeological research also reveals that in the dry farming plains of Upper (northern) Mesopotamia, a major urban centre at Tell Brak has more recently been identified as a centre of urban proportions (130 ha) by the middle of the 4th millennium BC, developing in a separate Late Chalcolithic urban tradition that also included sites like Arslantepe and Hamoukar (Oates et al. 2007; Oates 2007; Emberling & Minc 2016). At Tell Brak, a monumental building that was neither temple nor palace was built before 4000 BC. Later on, around the middle of the 4th millennium, about 800 seals were discarded in an area with mass grave deposits containing the bones of fallen enemies, together with enormous quantities of cattle bones (they could have fed over 7000 people). Such evidence strongly suggests the celebration of a major victory or victories (Oates 2012). Besides Uruk and Tell Brak, similar phenomena can be also detected in relatively small societies.

It was the case, for instance, of Arslantepe where Frangipane evokes "a centralised society without urbanisation", even a "village-based centralised power structure"

(Frangipane 2007; 2012). In this vein, Huot has recently warned about simplistic evolutionary views in which the first cities developed from villages (Huot 2014), while Lawrence and Wilkinson have also stressed that multiple paths to urbanism can be identified within a single region—northern Mesopotamia. According to their view, early urbanism was here a phased and pulsating phenomenon that could be sustained only within particular geographic parameters and for limited periods (Lawrence & Wilkinson 2015). In Arslantepe, Period VII (3900-3500 BC) witnessed the emergence of elite residences, which occupied the higher and more central position in the settlement, while public buildings (such as Temple C) were adjacent to them but were more peripheral (the same pattern is also found at Tepe Gawra). Around 3400 BC a palace developed in which intense distribution occurred on a daily basis, not as an occasional and ceremonial event, and these activities were controlled by a complex administration using *cretulae* and seals and by an increasing distinction of the elites and their activities. However, no urbanisation is visible around Arslantepe, a settlement relatively small and largely occupied by public and elite structures. Given the huge numbers of people coming to the palace and the intensity of the redistribution and administrative operations performed there, it seems that large sectors of the population did not live in Arslantepe, but in villages in the surrounding plain. No specialised quarters or craft activity areas have yet been found at the site. So, in despite of its centralisation and increasing development of an elite, it seems that the local hierarchy was not so pronounced as in Lower Mesopotamia (Frangipane 2012).

From these examples it seems apparent that the distribution of foodstuff was crucial in the emergence of administrative systems and that the emergence of specialised economic institutions, monumental buildings and recording and administrative tools cannot be directly linked to the development of centralised authorities such as kings. In fact, both the nature of these early monumental buildings and of their rulers is hard to establish. Early large constructions cannot be reduced to the category of "temples", as they coexisted with other institutions in which appear to be a political landscape, centred in cities, where power was shared among several authorities, from chiefs of great households to leaders at the head of institutions. Such monumental edifices were apparently used for assemblies and ritual consumption. This points to some kind of confederate system associating different social units, a stage where huge ceremonies or feast occurred, with redistribution operations. The sealings and the archaic tablets recovered in those complexes are linked to those operations (Bretschneider 2007; Butterlin 2015; Emberling 2015). Only later, in pre-Sargonic times, the nature of these institutions becomes more precise, but under different political conditions. It was then that "true" temples are clearly discernible (Liverani 2013: 310–320). As ritual and managerial agencies, the range of their economic administered activities included labour management as well as control over flows of agricultural produce, textiles and herds. But the centre of power and the state was the palace, which controlled the flow of strategic goods, long-distance trade and the military and could dispose of the property and production of the temple (Schrakamp 2013; Roaf 2013).

Consequently, in late 4th millennium Mesopotamia, the use of writing was centred on the administration of the vast assets (land, grain, herds, labour) of otherwise rather impersonal institutions and not in celebrating early rulers and their deeds. That is why, for instance, the use of the Sumerian royal list as an historic source is so problematic, as it was a kind of ideal genealogy intended to provide prestigious links with a mythical past in order to legitimise kingship, not to record actual rulers, whose very existence is dubious in many cases (Michalowski 1983). That is also why Uruk IV lists of early authorities (such as the Sumerian List Lu A) did not convey the Sumerian word for king (LUGAL) but a term, NAMEŠDA, which corresponds to an administrative

official and that was translated into Akkadian, more than a millennium later, by the word *šarrum* "king", perhaps an anachronistic reference to the highest authority in a remote past (Bourguignon 2012; Charvát 2012; Roaf 2013: 435). During the late 4th and early 3rd millennium, the highest authority at Uruk was the "ruler" (en). Texts from Archaic Ur (3000-2700 BC) reveal a division of power and decision-taking between different spheres: the sanctuary of Nanna, perhaps the king (lugal), the palace and, finally, the city of Ur and the smaller settlements depending of it, each one ruled by its respective "mayor" (énsi), managed by the royal quarter concerning agriculture, but all of them remaining autonomous political entities (Sallaberger 2010; Benati & Lecompte 2016).

To conclude with another case study, recent work on archaic Ur represents an excellent illustration of these historical trends, from early impersonal institutions to the later emergence of kings, in the second half of the 3rd millennium, long after the invention of writing. As Banati has shown, in archaic Ur (early 3rd millennium BC), sealing and cuneiform records were part of a bureaucratic apparatus developed to manage and keep track of economic transfers. The creation of these managerial systems dealing with standardised goods kept in controlled warehouses, and large-scale exchange of commodified comestibles, point to institutionalised exchange patterns. Judging from the cuneiform tablets, the most important economic operations managed by the institutional spheres (including a sacred household that employed administrators and people involved in cultic activities) were exchanges and distribution of staple products, administration and allotments of cultivated land and, to a lesser extent, organisation of labour. As for the managers themselves, they constituted a large bureaucracy with well-defined roles and performing economic tasks. However, the political and institutional structure of archaic Ur remains largely unknown. Titles usually translated as "king" or "mayor" seem to correspond, in fact, to high officials and administrators, and the presence of monarchic institutions cannot be ascertained. In all, two phases are to consider about the organisation of archaic Ur. During the first half of the 3rd millennium BC, it existed an *official* level where institutional powers administered (and perhaps centralised?) land and resources; and a *household* level characterised by domestic storage of staples and multiform authority patterns over storing and packaging of commodities. A broad network of feasts, patronage links, horizontal labour mobilisation strategies, and, judging from the funerary record, no marked elite system, can also be inferred. This pattern suggests flexible (heterarchical) power relations and an overall incipient political economy. But in the second half of the 3rd millennium emergent elites left their trace in the written and archaeological record, when the proliferation of bureaucratic control mechanisms and records dealing with field estates suggest a centralised, non-kinship management of resources, labour and land. It was then that a group of officials, possibly attached to centralised institutions, administered a system of commodity production, storage and distribution, and when large-scale building programs were developed. Furthermore, the temple of Nanna probably emerged as one of the major power nodes within a system characterised by large-scale economic integration. The counterpart was a general reorganisation of land tenure and labour patterns, to the point that part of the population was deprived of direct access to resources and land and became dependent of institutions. In this light, labour organisation, commoditisation phenomena, landholding patterns, commensality manipulation, and control over information processing, may be regarded as pivotal sources of power in the archaic Ur political economy (Benati 2015).

So, while writing was developed by relatively impersonal institutions, which operated within an heterarchical power system, the emergence of kings seems a later development that played no significant role in its appearance.

Early Egypt

Contrary to the Mesopotamian model, cities and "big" institutions seem largely absent in Egypt during the 4th millennium BC. Comparable large-scale buildings are unknown and recent archaeological discoveries at Hierakonpolis have revealed a much more "precarious" monumental landscape instead, made of perishable goods that recalls later developments in other Nilotic areas, such as the sizeable huts of early 2nd millennium Kerma, in Nubia. However, the massive production of bread and beer at the site, and the early homogenisation of bread moulds, pottery and cultural markers across the Nile Valley, from Elephantine to Lower Egypt, suggests, if not a unique political power at least a cultural koiné. As for the use of record-keeping technologies, it appears more restricted than in Mesopotamia, with writing only playing a marginal role. At Naqada, for instance, many clay-sealings dating from Naqada IIB-C (about 3450 BC) have been recovered from a very specific location at South Town, perhaps a kind of institutional or "communal" sector, since most of the clay administrative devices were primarily used for internal control of storage facilities. However, despite the funerary evidence about an increase in social stratification, Naqada remained a small town (Di Maria 2007; Fattovich 2007). Imports of Near Eastern cylinder seals in Egypt are first observed in Naqada IIC and sealing practices, utilising locally derived iconography, were then quickly adopted by IID, as evidenced at the elite cemetery U at Abydos (Stevenson 2016: 18, 21).

During the Early Dynastic, monumental brick architecture continued mainly restricted to tombs and massive funerary enclosures. As for other kinds of buildings, its traces are rare. At the Early Dynastic town area of Hierakonpolis, a huge mud-brick gateway was built; although it has been referred to as forming part of a palace complex, in the absence of other evidence it is unclear to what sort of building it relates. Roughly from the same period mud bricks were employed for the construction of substantial buildings in the Delta, but their interpretation as residences or administrative centres is not sure (Stevenson 2016: 29). In the case of Tell el-Farkha, a former internally complex residential structure, surrounded by a wooden defensive wall, as well as breweries were abandoned during the Naqadian period. It was then that a major building with thick walls and additional storage rooms were erected, as well as a large building with could have played the role of a protected storage facility connected with it. Moreover bigger houses appeared then, with rooms arranged around rectangular courtyards. Finally, a large mastaba was built together with a burial complex surrounding it (Chłodnicki 2014).

Under these premises, the crucial factor was not the emergence of huge managerial but impersonal agencies, supported by a substantial bureaucracy within the framework of large-scale agricultural and labour management and an increasingly hierarchic social structure in very specific areas (city-states). Instead, the control of flows of wealth over an extensive territory seems to have been the major move towards political homogenisation over a relative vast but unequally settled territory. Especially when considering the pastoral roots of the Nilotic Neolithic cultures, the exploitation of a rich natural environment (agriculture just being one of its components), and the mobility of peoples between Nubia, the deserts and the Nile Valley. As Wengrow and others have observed, *"what came to be shared across this extensive region were the materials and practices—including, and perhaps especially, modes of ritual practice—out of which more local contrasts and group identities were constructed. It may be precisely the maintenance of local differences within a shared social milieu that gave rise simultaneously to such geographically expansive uniformities and, within them, to the kind of internal variations observed in ceramic assemblages and other traditional markers of archaeological 'cultures'"* (Wengrow et al. 2014: 107). As Wengrow has put it, the increasing arid conditions meant that populations became more mobile and developed more focused pastoral strategies centred on mixed herds

of cattle, sheep and goat. Hunting, fishing and foraging remained important seasonal pursuits, but their new prominence in ritual and ceremonial contexts suggests they were taking on increasingly central cultural roles as mobile stores of value, to be deployed in important social transactions. Burial grounds of varying size become a widely visible feature in the archaeological record and frequently occupy prominent topographic locations, thus producing a new type of cultural landscape and new forms of territoriality. Tombs and funerary rites became signal attachments to particular grazing lands and pathways of movement extended spatially beyond the Nile Valley, both east and west (Wengrow et al. 2014). It has been suggested that Saharan rock art (animals, abstract symbols, etc.) might correspond to territorial markers associated with the use of pasture areas, migrating paths, etc., by specific groups of herders (Lenssen-Erz 2012).

Hence, and contrary to Mesopotamia, monumental tombs remained visible landscape marks of authority over the otherwise sparsely and unevenly populated (relatively) vast territory ruled by early Egyptian pharaohs and proto-pharaohs. Building ceremonial mortuary landscapes, used both as symbols of collective memory for populations highly mobile and as foci of political allegiance to rulers, seems more pertinent to explain the apparently diverging path followed by the emergence of early political powers in the Nile Valley. Especially when a recent reevaluation of the chronology reveals a shortening of the Egyptian Predynastic, the period over which state formation occurred (it began around 3800 BC), a finding that accentuates a contrast with neighbouring southwest Asia. It reinforces the suggestion that, despite their geographical proximity, prehistoric societies in Africa and Asia followed very different trajectories to political centralisation (Dee et al. 2013).

Mobility and flows of wealth may also explain some particularities of the fiscal basis of the most ancient monarchy, as it can be inferred from the extant evidence, as it consisted in: 1) the circulation of the king and his retinue (the "Followers of Horus") across the country collecting tribute (gold, cattle); 2) the foundation of specialised productive domains (vineyards, etc.) scattered across the country, especially in the Delta; 3) the development of monumental tombs as symbols of power and royal authority, which received huge amounts of goods from royal domains and from the palace; 4) the development of labels, tags and marks on pottery (and other containers) in order to record the amount of produce ceremonially received and the scope of the authority of the king. In other words, instead of a compact power centralised on cities, monumental centres, vast agricultural agencies and an intensive exploitation of the nearby territory, early pharaonic authority has more the aspect of a tentacular authority, spread over vast distances (when compared with Mesopotamian states centred on single cities) and where royal tombs (including those of the king's retinue) marked the symbolic presence of the king.

In this perspective, royal tombs, ceremonial writing and monumental iconography represent the Egyptian variant of the "civilisational package", as opposed to cities, elaborated bureaucracy and administrative documents and managerial agencies (temples), as they can be found in Mesopotamia. From its pastoral roots in the Late Neolithic, the territory was "marked" through the use of iconography, only that now it centred on the king. "Marking" the territory through royal symbols (serekhs being the most conspicuous) and by means of increasingly complex sets of scenes (Sinai: Ibrahim & Tallet 2008; Aswan: Hendrickx et al. 2012; Gebel Sheikh Suleiman: Somaglino & Tallet 2014; Western Desert: Darnell 2002: 19–24; 2011; Ikram & Rossi 2004) represents the continuity of an older tradition that corresponds to the posited fluidity of early royal authority, more centred on control of flows than on compact territories (such as Sumerian city-states competing among themselves for land and water). In this vein, mobility and the exploitation of different ecological niches (hunting, fishing, herding, gathering) implies that sedentary life and cities

were of relative secondary importance, even during the late 4th millennium BC and, in any case, had no parallel with what was happening then in southern Mesopotamia.

Another Egyptian particularity related to the origins of writing is the centrality of the king himself and of the ceremonies related to the provision of his tomb. Wengrow has stated that many examples of what is regarded as the earliest Egyptian writing appear on labels attached to a wide range of commodities such as textiles, oils, and alcoholic drinks that were stored and transported in standardised ceramic containers. These labels not only provide bureaucratic information relating to quality and provenance, but also carry images that link the commodities in question to royal ceremonies and to particular locations in which the king performed rituals to ensure the fertility of the land (Wengrow 2010: 13). In high status burials of the 1st Dynasty elaborated tags convey information about quantities of precious goods, accompanied by royal names and complex scenes of royal action. But their quality, high value (some tags were carved on ivory), complex elaboration (several craftsmen worked on each of them; cf. also Piquette 2013), the density of high status imagery, and the ceremonial context in which they were produced correspond less to mere bureaucratic practices and practical uses than to symbolic ones linking the deceased to the king and to the productive sphere of royal power (Wengrow 2008; Vernus 2011). Wengrow suggests that these strategies intended to redefine long-distance trade in terms of a moral economy of movement centred upon the person of the king (Wengrow 2008: 1028), while Vernus recalls examples in which the names of dignitaries inscribed on some pots hardly referred to administrative operations but, instead, to participants in ceremonies (Vernus 2011). Wengrow suggests the possibility that temple and palace bureaucracies in the ancient Near East may have been using systems of marking and notation, not only to monitor the quantity and quality of manufactured goods (as has long been recognised) but also to enhance the value of such products through specialised procedures of packaging and labelling (Wengrow 2010: 13).

In all, early Egyptian writing seems to encompass notions of prestige, remembrance and provenance as well as a less "utilitarian" use than in contemporary Mesopotamia, be it in the form of administrative documents or in lexical lists. However, when the first monumental buildings were built in Egypt, in the form of royal and elite massive brick tombs, the use of writing appears surprisingly modest in these constructions, mostly reserved to tags and labels and only in a few cases to stelae and other prestige items (statues, architectural elements, etc.), to the point that it is often quite difficult to ascribe a particular archaic tomb to an official or a king. Monumentality and iconography still were preferred to convey the basic notions of authority, from the colossi of Coptos to decorated maceheads and rock-art compositions. In comparison, writing appears as a rather modest tool, reserved to evoke personal names and titles (with persons) and provenance (with goods) in which represented the construction of a mental landscape of power whose cores (Abydos, Hierakonpolis, Memphis, Buto, Coptos, etc.) were dispersed over a large territory. Such prestige early use of writing has nothing of abnormal as other historical examples are also well known, from runes to Maya hieroglyphs and early Chinese texts (Houston 2004; Wang 2014).

Early writing and the administration of political memory

The very notion of prestige involves another element to consider in the development of writing. It became a tool that made it possible to build up and to pass on official memories centred on the emerging authorities. Writing provided them with new, made-to-measure "pasts", with ductile forms of legitimisation and of self-presentation emancipated from the collective sanction exerted until then by the community (as in the case of traditions and oral genealogies).

Not that rulers could simply do without the agreement of the ruled and ignore the cultural foundations upon which legitimacy was accepted in the societies they governed. Quite the contrary, this new social memory was now the responsibility of a new class of specialists, at the service of kings, able to produce (and manipulate) documents in support of their claims, even to provide sophisticated links with supernatural powers more and more secluded in specific buildings and only accessible through elaborated rituals and prayers transmitted through writing. In the most extreme cases, this goal could be achieved through the utter destruction of competing or alternative written narratives in order to rewrite the official new history (May 2012; Kelly 2006; an example from China: Pines 2013; 2014; Durrant 2014). Thus, time became centred on royal achievements, such as the reigning years used in the compilation of calendars, chronologies and annals. Royal genealogies were anchored in salient events on the past, achieved by kings and invoked to deploy an official memory made up of kings, such as royal lists, the invention of royal ancestors and the production of links with gods and mythological heroes (one can think in the Sumerian King List or in the "predynastic" section of the pharaonic royal annals). Beyond these common points, writing was mobilised in different ways by Mesopotamian and Egyptian rulers in order to create a new legitimacy adapted to their needs.

In the case of Mesopotamia, it seems as if the impersonal and highly bureaucratised power of the late 4th-early 3rd millennium was more focused on divinities and heroes than on kings themselves. As stated before, the head of the temple institutions played both religious and political roles. Only later were their secular duties commandeered by individuals called "mayors" (*ensi*) and "king" (*lugal*), perhaps in a context of military conflicts between cities. Glyptics is an essential source of information in this respect, but also some types of sources compiled much later. This is the case of royal hymns, which constitute about a quarter of the Sumerian literary corpus. Yet Sumerian royal hymns are only attested in the Ur III and Old Babylonian periods (*c.* 21st–17th centuries BC), after which they died out as a genre. However, kings also figured prominently in other Sumerian literary works, most notably narratives about (semi-divine) heroes or historical and mythological kings. They range from Sumerian tales surrounding Gilgameš, the semi-divine heroic king of Uruk, the Sumerian King List, the *Lament over the Destruction of Sumer and Ur*, and *The Cursing of Agade*, as well as some literary letters (Rubio 2009: 34–37; 2016: 238–246; Brisch 2011: 706–707). As for written historical narratives, they are only attested towards the end of the Early Dynastic Period. They evolved within the genre of votive inscriptions, the earliest of which only name the deity for whom a pious act was intended or who was the consecrator of an object. However, the pious act is not yet expressed, as if the "narration" was in part a performance. Under these conditions, the ideology of early power was not expressed in writing (restricted to account and economic proto-cuneiform tablets) but in images, mainly thanks to the development of cylinder seals. However, their protagonists are not kings but mythical heroes and participants in banquets who may be deities, priests or rulers. Other monumental means (such as the "Lion hunt" stele, the Uruk Vases or the Standard of Ur) convey a similar imagery (Selz 2014).

In sharp contrast, the centre of early pharaonic ideology is not gods and temples but kings and their tombs. An excellent example is Tomb 100 at Hierakonpolis, as it includes early iconographic influences from Mesopotamia together with motifs repeated on rock art (Hendrickx 2011). As foci of rituals and ceremonies, the tags and objects placed in their tombs recorded the extent of their authority and the links tying together the ruling elite. Early lists of kings appear in seals (Dreyer 1986; 1996: fig. 26) while tags, labels (and subsequently annals) celebrate their deeds. Quite surprisingly, monumental writing was scarcely used in these monuments, to the point that for decades huge tombs in Saqqara have been alternatively

interpreted as royal tombs or as burials of high officials, as the lack of inscriptions made it difficult to identify their owners. And while massive banquets were celebrated in palaces and temples in Mesopotamia (as in Tell Brak), in Egypt they appear instead to have played a major role in royal tombs. Huge amounts of cattle were presumably consumed in ceremonies relative to the construction and endowment of the tomb, as the presence of cattle bones and flint butchering knives confirm. Loyalty to the ruler and collective identity ceremonies continued to revolve around cemeteries, thus continuing a practice going back to the Neolithic, when pastoral populations gathered together at their necropoleis. Bucrania and human sacrifice in archaic Saqqara

tombs and in Classic Kerma tumuli attest of the longevity of these practices (Chaix 2001; Wengrow 2006: 241–242, 245; Morris 2007). In any case, the selective memory created by early pharaohs through writing revolved about their crucial role as mediators between gods and people, as protectors of Egypt and as guarantees of the prosperity of the country: building temples and ritual equipment, fighting enemies, measuring the level of the annual flood, collecting taxes and celebrating ceremonies became the main concerns of the monarchy. Definitely, as it also happened in private tombs since the 27th century on, writing expanded and combined with iconography as a powerful tool that expressed new values concomitant with a new social order.

Bibliography

Akkermans, P.M.M.G. & Duistermaat, K., 1997. Of storage and nomads: the clay sealings from Late Neolithic Sabi Abyad, Syria. *Paléorient* 22/2: 17–44.\

Andrássy, P., 2015. Pot marks in textual evidence? [in:] Budka, J.; Kammerzell, F. & Rzepka, S. (eds.), *Non-Textual Marking Systems in Ancient Egypt (and elsewhere)*. Lingua Aegyptia, Studia monographica 16. Göttingen: 245–253.

Baines, J., 1995. Origins of Egyptian Kingship [in:] O'Connor, D. & Silverman, D. P. (eds.), *Ancient Egyptian Kingship*. New York: 95–156.

Baines, J., 2004. The Earliest Egyptian Writing: Development, context, purpose [in:] Houston, S. D. (ed.), *The First Writing: Script invention as history and process*. Cambridge: 150–189.

Baines, J., 2008. Birth of Writing and Kingship: Introduction [in:] Midant-Reynes, B., Tristant, Y., Rowland, J. & Hendrickx, S. (eds), *Egypt at Its Origins 2: Proceedings of the international conference "Origin of the State: Predynastic and Early Dynastic Egypt", Toulouse (France), 5th–8th September 2005*. OLA 172. Leuven: 839–847.

Benati, G., 2015., Re-modeling Political Economy in Early 3rd Millennium BC Mesopotamia: Patterns of Socio-Economic Organization in Archaic Ur (Tell al-Muqayyar, Iraq). *Cuneiform Digital Library Journal 2015:2* http://www.cdli.ucla.edu/pubs/cdlj/2015/cdlj2015_002.html

Benati, G., & Lecompte, C., 2016. New Light on the Early Archives from Ur: The "Ancient Room" Tablet Hoard [in:] Kaniuth, K.; Stucky, R.A.; Kaelin, O. & Mathys, H.-P. (eds.), *Proceedings of the 9th International Congress on the Archaeology of the Ancient Near East 9–13 June 2014, Basel*. Wiesbaden: 13–30.

Berdan, F. F. & Anawalt, P. R. (eds.), 1992. *The Codex Mendoza*. Berkeley/Los Angeles.

Bernbeck, R. 2013. Religious revolutions in the Neolithic? "Temples" in present discourse and past practice [in:] Kaniuth, K.; Löhnert, A.; Miller, J.L.; Otto, A.; Roaf, M. & Sallaberger, W. (eds.), *Tempel im Alten Orient. 7. Internationales Colloquium der Deutschen Orient-Gesellschaft 11.–13. Oktober 2009, München*. Wiesbaden: 33–47.

Bourguignon, A., 2012. La liste Lú A et la hiérarchie des fonctionnaires sumériens [in:] Wilhelm, G. (ed.), *Organization, Representation, and Symbols of Power in the Ancient Near East. Proceedings of the 54th Rencontre Assyriologique Internationale at Würzburg 20–25 July 2008*. Winona Lake: 249–256.

Bréand, G., 2005. Les marques et graffiti sur poteries de l'Égypte pré- et protodynastique. Perspectives de recherches à partir de l'exemple d'Adaïma. *Archéo-Nil* 15: 17–30.

Bréand, G., 2008. Signes sur poteries et enregistrement comptable en Égypte pré et protodynastique. L'exemple du signe des «bâtons brisés». *Cahiers Caribéens d'Égyptologie* 11: 37–81.

Bréand, G., 2009. The corpus of pre-firing potmarks from Adaïma (Upper Egypt). *British Museum Studies in Ancient Egypt and Sudan* 13: 49–72.

Bréand, G., 2015. Pot marks on bread moulds in settlement context during Naqada III period: A comparative view from Adaïma (Upper Egypt) and Tell el-Iswid South (Lower Egypt) [in:] Budka, J.; Kammerzell, F. & Rzepka, S. (eds.), *Non-Textual Marking Systems in Ancient Egypt (and elsewhere)*. Lingua Aegyptia, Studia monographica 16. Göttingen: 187–213.

Bretschneider, J. 2007. The 'Reception palace' of Uruk and its architectural origin [in:] Bretschneider, J.; Driessen, J. & Lerberghe, K. van (eds.), *Power and Architecture. Monumental Public Architecture in the Bronze Age Near East and Aegean*. OLA 156. Leuven/Paris/Dudley MA: 11–22.

Brisch, N., 2011. Changing images of kingship in Sumerian literature [in:] Radner, C. & Robson, E. (eds.), *The Oxford Handbook of Cuneiform Culture*. Oxford: 706–724.

Butterlin, P., 2015. Late Chalcolithic Mesopotamia: towards a definition of sacred space and its evolution [in:] Laneri, N. (ed.), *Defining the Sacred: Approaches to the Archaeology of Religion in the Near East*. Oxford: 60–72.

Chaix, L., 2001. Animals as symbols: the bucrania of the grave KN 24 (Kerma, northern Sudan) [in:] Buitenhuis, H. & Prummel, W. (ed.), *Animals and Man in the Past. Essays in Honour of Dr. A. T. Clason*. Groningen: 364–670.

Charvát, P., 2012. From king to god: The NAMEŠDA title in Archaic Ur [in:] Wilhelm, G. (ed.), *Organization, Representation, and Symbols of Power in the Ancient Near East. Proceedings of the 54th Rencontre Assyriologique Internationale at Würzburg 20–25 July 2008*. Winona Lake: 265–274.

Chesson, M., 2003a. Tales of the city? Urbanism in the Early Bronze Age Levant from Mediterranean and Levantine perspectives. *Journal of Mediterranean Archaeology* 16: 79–102.

Chesson, M., 2003b. Households, houses, neighbourhoods and corporate villages: modeling the Early Bronze Age as a house society. *Journal of Mediterranean Archaeology* 16: 79–102.

Chesson, M., 2015. Reconceptualizing the Early Bronze Age Southern Levant without cities: Local histories and walled communities of EB II-III society. *Journal of Mediterranean Archaeology* 28: 23–50.

Chłodnicki, M., 2014. Tell el-Farkha. The changes in spatial organisation of the settlement – from the Predynastic to the Early Dynastic periods [in:] Mączyńska, A. (ed.), *The Nile Delta as a Centre of Cultural Interactions between Upper Egypt and the Southern Levant in the 4th Millennium BC*. Studies in African Archaeology 13. Poznań: 57–72.

Darnell, J.C., 2002. *Theban Desert Road Survey in the Egyptian Western Desert. Vol. 1: Gebel Tjauti Rock Inscriptions 1-45 and Wadi el-Hôl Rock Inscriptions 1-45*. Oriental Institute Publications 119. Chicago.

Darnell, J.C., 2011. The Wadi of the Horus Qa-a: A tableau of royal ritual power in the Theban Western Desert [in:] Friedman, R. N. & Fiske, P. N. (eds.), *Egypt at Its Origins 3. Proceedings of the Third International Conference "Origin of the State. Predynastic and Early Dynastic Egypt", London, 27th July – 1st August 2008*. OLA 205. Leuven/Paris/Walpole, MA: 1151–1193.

Dee, M.; Wengrow, D.; Shortland, A.; Stevenson, A.; Brock, F.; Flink, L. G. & Ramsey, Chr. B., 2013. An absolute chronology for early Egypt using radiocarbon dating and Bayesian statistical modelling. *Proceedings of the Royal Society A* 469: 20130395. http://dx.doi.org/10.1098/rspa.2013.0395.

Desset, F., 2012. *Premières écritures iraniennes: les systèmes proto-élamite et élamite linéaire*. Naples.

Diel, L.B., 2014. The poetics and politics of Aztec history [in:] Raaflaub, H. A. (ed.), *Thining, Recording, and Writing History in the Ancient World*. Malden: 372–390.

Dietrich, O., & Notroff, J., 2015. A sanctuary, or so fair a house? In defense of an archaeology of cult at Pre-Pottery Neolithic Göbleki Tepe [in:] Laneri, N. (ed.), *Defining the Sacred: Approaches to the Archaeology of Religion in the Near East*. Oxford: 75–89.

Di Maria, R.,2007. Naqada (Petrie's South Town): The sealing evidence [in:] Hanna, H. (ed.), *The International Conference on Heritage of Naqada and Qus Region*. Naqada: 65–78.

Dreyer, G., 1986. Ein Siegel der frühzeitlichen Königsnekropole von Abydos. *MDAIK* 43: 33–43.

Dreyer, G., 1996. Umm el-Qaab: Nachuntersuchungen in frühzeitlichen Königsfriedhof. 7./8. Vorbericht. *MDAIK* 52: 11–81.

Dreyer, G., 1998. *Umm el-Qaab I. Das prädynastische Königsgrab U-j und seine frühen Schriftzeugnisse*. Archäologische Veröffentlichungen 86. Mainz am Rhein.

Duistermaat, K., 2012. Which came first, the bureaucrat or the seal? Some thoughts on the non-administrative origins of seals in Neolithic Syria [in:] Regulski, I.; Duistermaat, K. & Verkinderen, P. (eds.), *Seals and Sealing Practices in the Near East*. OLA 219. Leuven/Paris/Walpole, MA: 1–15.

Durrant, S. W. 2014. The task and ritual of historical writing in early China [in:] Raaflaub, K.A. (ed.), *Thinking, Recording, and Writing History in the Ancient World*. Chichester: 19–40.

Emberling, G., 2015. Mesopotamian cities and urban process, 3500-1600 BCE [in:] Yoffee, N. (ed.), *The Cambridge World History. Volume III: Early Cities in Comparative Perspective, 4000 BCE-1200 CE*. Cambridge: 253–278.

Emberling, G. & Minc, L., 2016. Ceramics and long-distance trade in early Mesopotamian states. *Journal of Archaeological Science: Reports* 7: 819–834.

Englund, R.K., 1998. Texts from the Late Uruk period [in:] Bauer, J.; Englund, R. & Krebernik, M., *Mesopotamien: Späturuk-Zeit und Frühdynastische Zeit*, Universitätsverlag. Freiburg/Göttingen: 15–233.

Englund, R.K., 2004. Proto-cuneiform account-books and journals [in:] Hudson, M. & Wunsch, C. (eds.), *Creating Economic Order: Record-keeping, Standardization, and the Development of Accounting in the Ancient Near East*. Bethesda: 23–46.

Fattovich, R., 2007. Exploration at South Town by the Naples Oriental Institute (1977-

1986) [in:] Hanna, H. (ed.), *The International Conference on Heritage of Naqada and Qus Region*. Naqada: 46–56.

Faust, A., 2005. The Canaanite village: social structure of Middle Bronze Age rural communities. *Levant* 37: 105–125.

Frangipane, M. (ed.), 2007. *Arslantepe* Cretulae. *An Early Centralised Administrative System before Writing*. Rome.

Frangipane, M., 2010a. *Economic Centralisation in Formative States: The Archaeological Reconstruction of the Economic System in 4th Millennium Arslantepe*. Rome.

Frangipane, M., 2010b. Different models of power structuring at the rise of hierarchical societies in the Near East: primary economy versus luxury and defence management [in:] Bolger, D. & Maguire, L. C. (eds.), *The Development of Pre-State Communities in the Ancient Near East. Studies in Honour of Edgard Peltenburg*. Oxford: 78–86.

Frangipane, M., 2012. Fourth millennium Arslantepe: the development of a centralised society without urbanisation. *Origini* 34: 19–40.

Genz, H., 2010. Thoughts on the function of "public buildings" in the Early Bronze Age Southern Levant [in:] Bolger, D. & Maguire, L. C. (eds.), *The Development of Pre-State Communities in the Ancient Near East. Studies in Honour of Edgard Peltenburg*. Oxford: 46–52.

Greenfield, H. J., Shai, I. & Maeir, A. M., 2016. Understanding Early Bronze Age urban patterns from the perspective of non-elite neighbourhood: The excavations at Tell es-Safi/Gath, Israel [in:] Stucky, R.A.; Kaelin, O. & Mathys, H.-P. (eds.), *Proceedings of the 9th International Congress on the Archaeology of the Ancient Near East 9–13 June 2014, Basel*. Wiesbaden: 475–489.

Hendrickx, S., 2011. Iconography of the Predynastic and Early Dynastic periods [in:] Teeter, E. (ed.), *Before the Pyramids. The Origins of Egyptian Civilization*. Oriental Institute Museum Publications 33. Chicago: 75–81.

Hendrickx, S.; Darnell, J. C. & Gatto, M. C., 2012. The earliest representations of royal power in Egypt: the rock drawings of Nag el-Hamdulab (Aswan). *Antiquity* 86: 1068–1083.

Houston, S. D. (ed.), 2004. *The First Writing: Script invention as history and process*. Cambridge.

Huot, J.-L., 2014. From village to city, the wrong question? [in:] McMahon, A. &

Crawford, H. (eds.), *Preludes to Urbanism. The Late Chalcolithic of Mesopotamia*. Cambridge: 63–66.

Ibrahim, M. R. & Tallet, P., 2008. Trois bas-reliefs de l'époque thinite au Ouadi el-Humur: aux origines de l'exploitation du Sud Sinaï par les Égyptiens. *RdÉ* 59: 155–180.

Ikram, S. & Rossi, C., 2004. An Early Dynastic *serekh* from the Kharga Oasis. *JEA* 90: 211–214.

Kahl, J., 2001. Hieroglyphic Writing During the Fourth Millennium BC: An analysis of systems. *Archeo-Nil* 11: 102–134.

Kelly, J., 2006. Writing and the state: China, India, and general definitions [in:] Sanders, S. L. (ed.), *Margins of Writing, Origins of Cultures*. Oriental Institute Seminars 2. Chicago: 15–32.

Kenoyer, J. M., 2008. Indus urbanism: new perspectives on its origin and character [in:] Marcus, J. & Sabloff, J. A. (eds.), *The Ancient City: New Perspectives on Urbanism in the Old and New World*. Santa Fe, NM: 183–208.

Koliński, R., 2003. Pottery marks—Evidence for early writing practices in Thinite Egypt and Early Dynastic Mesopotamia [in:] Popielska-Grzybowska, J. (ed.), *Proceedings of the Second Central European Conference of Young Egyptologists*. Warsaw: 85–90.

Laurito, R., & Mezzasalma, A. (eds.), 2004. *All'origine dell'amministrazione e della burocrazia*. Rome-Bagnasco di Montafia.

Law, D., 2015. Reading early Maya cities: interpreting the role of writing in urbanization [in:] Yoffee, N. (ed.), *The Cambridge World History. Volume III: Early Cities in Comparative Perspective, 4000 BCE-1200 CE*. Cambridge: 158–180.

Lawrence, D. & Wilkinson, T. J., 2015. Hubs and upstarts: pathways to urbanism in the northern Fertile Crescent. *Antiquity* 89: 328–344.

Lenssen-Erz, T., 2012. Pastoralist appropriation of landscape by means of rock-art in Ennedi highlands. *Afrique: Archéologie et Arts* 8: 27–43.

Lichter, Cl., 2011. Neolithic Stamps and the Neolithization Process. A Fresh Look at an Old Issue [in:] Krauss, R. (ed.), *Beginnings — New Research in the Appearance of the Neolithic between Northwest Anatolia and the Carpathian Basin*. Rahden: 35–44.

Liverani, M., 1998. *Uruk la prima città*. Rome.

LIVERANI, M., 2013. *Immaginare Babele. Due secoli di studi sulla città orientale antica.* Rome.

MAY, N.N. (ed.), 2012. *Iconoclasm and Text Destruction in the ancient Near East and beyond.* Oriental Institute Seminars 8. Chicago.

MCINTOSH, R.J. 2015. Different cities: Jennejeno and African urbanism [in:] YOFFEE, N. (ed.), *The Cambridge World History. Vol. 3: Early Cities in Comparative Perspective, 4000 BCE-1200 CE.* Cambridge: 364–380.

MCINTOSH, S. K., 1999. Modeling political organization in large-scale settlement clusters: a case study from the Inland Niger Delta [in:] MCINTOSH, S. K. (ed.), *Beyond Chiefdoms: Pathways to Complexity in Africa.* Cambridge: 66–79.

MICHALOWSKI, P., 1983. History as charter: some observations on the Sumerian king lists. *Journal of the American Oriental Society* 103: 237–248.

MORRIS, E.F., 2007. Sacrifice for the state: First Dynasty royal funerals and the rites at Macramallah's Rectangle [in:] LANERI, N. (ed.), *Performing Death. Social Analyses of Funerary Traditions in the Ancient Near East and the Mediterranean.* Oriental Institute Seminars 3. Chicago: 15–37.

MÜLLER, J.; RASSMANN, K. & VIDEIKO, M. (eds.), 2016. *Trypillia Mega-Sites and European Prehistory 4100-3400 BCE.* Themes in Contemporary Archaeology 2. London.

NISSEN, H., 2015. Urbanization and the techniques of communication: the Mesopotamian city of Uruk during the fourth millennium BCE [in:] YOFFEE, N. (ed.), *The Cambridge World History. Volume III: Early Cities in Comparative Perspective, 4000 BCE-1200 CE.* Cambridge: 113–130.

NISSEN, H., DAMEROW, P. & ENGLUND, R. K., 1993. *Archaic bookkeeping: writing and techniques of administration in the ancient Near East.* Chicago.

OATES, J., 2007. Monumental public architecture in Late Chalcolithic and Bronze Age Mesopotamia, with particular reference to Tell Brak and Tell al Rimah [in:] BRETSCHNEIDER, J.; DRIESSEN, J. & LERBERGHE, K. VAN (eds.), *Power and Architecture. Monumental Public Architecture in the Bronze Age Near East and Aegean.* OLA 156. Leuven/Paris/Dudley, MA: 161–181.

OATES, J., 2012. Early administration at Arslantepe and Tell Brak (ancient Nagar). *Origini* 34: 169–178.

OATES, J.; MCMAHON, A.; KARSGAARD, P.; AL QUNTAR, S. & UR, J., 2007. Early Mesopotamian urbanism: a new view from the North. *Antiquity* 81: 585–600.

PETRIE, C.A., 2014. Iran and Uruk Mesopotamia: chronologies and connections in the fourth millennium BC [in:] MCMAHON, A. & CRAWFORD, H. (eds.), *Preludes to Urbanism. The Late Chalcolithic of Mesopotamia.* Cambridge: 137–155.

PINES, Y., 2013. Reassessing Textual Sources for Pre-Imperial Qin History [in:] DMITRIEV, S. & KOROLKOV, M. (eds.), *Sinologi Mirak Iubileiu Stanislava Kuczery: Sobranie Trudov.* Moscow: 236–263.

PINES, Y., 2014. Zhou history and historiography: Introducing the bamboo manuscript Xinian. *T'oung Pao* 100: 287–324.

PINNOCK, F., 2013. Syrian and North Mesopotamian Temples in the Early Bronze Age [in:] KANIUTH, K.; LÖHNERT, A.; MILLER, J.L.; OTTO, A.; ROAF, M. & SALLABERGER, W. (eds.), *Tempel im Alten Orient. 7. Internationales Colloquium der Deutschen Orient-Gesellschaft 11.–13. Oktober 2009, München.* Wiesbaden: 385–406.

PIQUETTE, K. E., 2013. "It Is Written"?: Making, remaking and unmaking early 'writing' in the lower Nile Valley [in:] PIQUETTE, K.E. & WHITEHOUSE, R. D. (eds.), *Writing as Material Practice: Substance, Surface and Medium.* London: 213–238.

RAHMSTORF, L., 2012. Control mechanisms in Mesopotamia, the Indus Valley, the Aegean and Central Europe, c. 2600–2000 BC, and the question of social power in early complex societies [in:] KIENLIN, T.L. & ZIMMERMANN, A. (eds.), *Beyond Elites: Alternative to Hierarchical Systems in Modelling Social Formations.* Bonn: 311–326.

RAHMSTORF, L., 2014. Early balance weights in Mesopotamia and Western Syria: origin and context [in:] BIELIŃSKI, P.; GAWLIKOWSKI, M.; KOLIŃSKI, R.; ŁAWECKA, D.; SOŁTYSIAK, A. & WYGNAŃSKA, Z. (eds.), *Proceedings of the 8th International Congress on the Archaeology of the Ancient Near East, Warsaw, April 30th–May 4th 2012*, vol. 3. Wiesbaden: 427–441.

REGULSKI, I., 2010. *A Palaeographic Study of Early Writing in Egypt.* OLA 195. Leuven.

ROAF, M., 2013. Temples and the origin of civilisation [in:] KANIUTH, K.; ROAF, M. & SALLABERGER, W. (eds.), *Tempel im Alten Orient.* Colloquium der Deutschen Orient-Gesellschaft 7. Wiesbaden: 427–443.

Robson, E., 2007. Literacy, numeracy and the state in early Mesopotamia [in:] Lomas, K.; Whitehouse, R. D. & Wilkins, J. B. (eds.), *Literacy and the State in the Ancient Mediterranean*. London: 37–50.

Rubio, G., 2009. Sumerian literature [in:] Ehrlich, C. S. (ed.), *From an Antique Land. An Introduction to Ancient Near Eastern Literature*. Lanham: 11–75.

Rubio, G., 2016. The inventions of Sumerian: literature and the artifacts of identity [in:] Ryholt, K. & Barjamovic, G. (eds.), *Problems of Canonicity and Identity Formation in Ancient Egypt and Mesopotamia*. CNI Publications 43. Copenhaguen: 231–257.

Rzeuska, T. I., 2015. Noughts and crosses: pot-marks on the late Old Kingdom beer jars from Wast Saqqara [in:] Budka, J.; Kammerzell, F. & Rzepka, S. (eds.), *Non-Textual Marking Systems in Ancient Egypt (and elsewhere)*. Lingua Aegyptia, Studia monographica 16. Göttingen: 251–281.

Sallaberger, W., 2010. The city and the palace at archaic Ur [in:] Šašková, K.; Pecha, L. & Charvát, P. (eds.), *Shepherds of the Black-headed People: The Royal Office vis-à-vis Godhead in Ancient Mesopotamia*. Plzen: 31–36.

Salomon, F., 2013. The Twisting Paths of Recall: Khipu (Andean cord notation) as artifact [in:] Piquette, K. E. & Whitehouse, R. D. (eds.), *Writing as Material Practice: Substance, Surface and Medium*. London: 15–43.

Schmandt-Besserat, D., 1992. *Before Writing: From Counting to Cuneiform*. Austin.

Schmandt-Besserat, D., 1996. *How Writing Came About*. Austin.

Schrakamp, I., 2013. Die "Sumerische Tempelstadt" heute. Die sozioökonomische Rolle eines Tempels in frühdynastischer Zeit [in:] Kaniuth, K.; Roaf, M. & Sallaberger, W. (eds.), *Tempel im Alten Orient*. Colloquium der Deutschen Orient-Gesellschaft. Wiesbaden: 445–465.

Schwartz, M., & Hollander, D., 2016. The Uruk expansion as dynamic process: A reconstruction of Middle to Late Uruk exchange patterns from bulk stable isotope analyses of bitumen artifacts. *Journal of Archaeological Science: Reports* 7: 884–899.

Selz, G., 2014. Considerations on narration in Early Mesopotamia [in:] Koslova, N.; Vizirova, E. & Zólyomi, G. (eds.), *Studies in Sumerian Language and Literature. Festschrift für Joachim Krecher*. Winona Lake: 437–454.

Sinopoli, C. M.; McIntosh, R. J.; Morris, I. & Knodell, A. R., 2015. The distribution of power: hierarchy and its discontents [in:] Yoffee, N. (ed.), *The Cambridge World History. Vol. 3: Early Cities in Comparative Perspective, 4000 BCE-1200 CE*. Cambridge: 381–393.

Somaglino, Cl. & Tallet, P., 2014. Une campagne en Nubie sous la Ière dynastie. La scène nagadienne du Gebel Sheikh Suleiman comme prototype et modèle. *Nehet. Revue numérique d'Égyptologie* 1: 1–46.

Stevenson, A., 2016. The Egyptian Predynastic and state formation. *Journal of Archaeological Research*. DOI 10.1007/s10814-016-9094-7

Urton, G., 2015. Inka administration in Tawantinsuyu by means of the knotted-cords [in:] Yoffee, N. (ed.), *The Cambridge World History. Vol. 3: Early Cities in Comparative Perspective, 4000 BCE-1200 CE*. Cambridge: 181–206.

Valentini, S., 2015. Communal places of worship: ritual activities and ritualised ideology during the Early Bronze Age Jezirah [in:] Laneri, N. (ed.), *Defining the Sacred: Approaches to the Archaeology of Religion in the Near East*. Oxford: 102–117.

Vernus, P., 2011. Naissance des hiéroglyphes et affirmation iconique du pouvoir: l'emblème du palais dans la genèse de l'écriture [in:] Vernus, P. (ed.), *Les premières cités et la naissance de l'écriture*. Nice : 27–58.

Vidale, M., 2004. Growing in a foreign world: For a history of the "Meluhha villages" in Mesopotamia in the 3rd millennium BC [in:] Panaino, A. & Piras, A. (eds.), *Schools of Oriental Studies and the Development of Modern Historiography. Proceedings of the Fourth Annual Symposium of the Assyrian and Babylonian Intellectual Heritage Project*. Milan: 261–280.

Vidale, M., 2005. The short-horned bull on the Indus seals: a symbol of the families in the Western trade? [in:] Franke-Vogt, U. & Weisshaar, H.-J. (eds.), *South Asian Archaeology 2003. Proceedings of the Seventeenth International Conference of the European Association of South Asian Archaeologists (7-11 July 2003, Bonn)*. Aachen: 147–158.

Vidale, M., 2013. T-shaped pillars and Mesolithic "chiefdoms" in the prehistory of Southern Eurasia: a preliminary note [in:] Bombardieri, L.; D'Agostino, A.; Guarducci, G.; Orsi, V. & Valentini, S. (eds.), *SOMA 2012 Identity and Connectivity Pro-*

ceedings of the 16th Symposium on Mediterranean Archaeology, Florence, Italy, 1–3 March 2012. Volume I. Oxford: 51–58.

Wagensonner, K., 2009. Non-textuality in the ancient Near East. Some glimpses from the Mesopotamian field [in:] Andrássy, P.; Budka, J. & Kammerzell, F. (eds.), *Non-Textual Marking Systems, Writing and Pseudo Script from Prehistory to Modern Times*. Lingua Aegyptia, Studia monographica 8. Göttingen: 333–367.

Wang H., 2014. *Writing and the Ancient State. Early China in Comparative Perspective*. Cambridge.

Warden, L. A., 2014. *Pottery and Economy in Old Kingdom Egypt*. Culture and History of theAncient Near East 65. Leiden-Boston.

Webster, D., 1997. City-states of the Maya [in:] Nichols, D.L. & Charlton, Th.H. (eds.), *The Archaeology of City-States. Cross-Cultural Approaches*. Washington-London: 135–154.

Wengrow, D., 2006. *The Archaeology of Early Egypt. Social Transformations in North-East Africa, 10,000 to 2650 BC*. Cambridge.

Wengrow, D., 2008. Limits of decipherment: object biographies and the invention of writing [in:] Midant-Reynes, B.; Tristant, Y.; Rowland, J. & Hendrickx, S. (eds), *Egypt at Its Origins 2: Proceedings of the international conference "Origin of the State: Predynastic and Early Dynastic Egypt", Toulouse (France), 5th–8th September 2005*. OLA 172. Leuven: 1021–1032.

Wengrow, D., 2010. Introduction: commodity branding in archaeological and anthropological perspectives [in:] Bevan, A. & Wengrow, D. (eds.) *Cultures of Commodity Branding*. Walnut Creek: 11–33.

Wengrow, D.; Dee, M.; Foster, S.; Stevenson, A. & Ramsey, Ch. B., 2014. Cultural convergence in the Neolithic of the Nile Valley: a prehistoric perspective on Egypt's place in Africa. *Antiquity* 88: 95–111.

Wengrow, D., 2015. *Cities before the State in Early Eurasia*. Goody Lecture 2015. Halle (Saale).

Yoffee, N., 2005. *Myths of the Archaic State. Evolution of the Earliest Cities, States, and Civilizations*. Ann Harbor. Cambridge.