THE ANCIENT WORLD REVISITED: MATERIAL DIMENSIONS OF WRITTEN ARTEFACTS

Edited by *Marilina Betrò, Michael Friedrich and Cécile Michel*

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Introduction: Towards a Holistic Study of Written Artefacts in Ancient History

Division of labour during the nineteenth century has not only led to the establishment of professional academic disciplines but also to the disjunction of fields intrinsically linked to each other. Linguistic, temporal or geographical boundaries in the humanities often define a discipline, thus, creating seemingly natural divisions. The 'national' histories (e.g. of events, science, literature, philosophy) and the tripartite division between (classical) Antiquity, the (dark) Middle Ages and the (enlightened) Modern Period as well as the various attempts at remedying the problems caused by this partition, such as the Late Antiquity or Early Modern Period are probably the most conspicuous. However, cases when the same subject matter is divided according to diverging national traditions, such as definitions of 'inscription',[1] or source types, such as historians studying a topic by interpreting literary texts and archaeologists doing the same but using objects that have survived or were dug up from the ground, are even more intricate. The uneasy relationship between the study of transmitted literature, i.e. texts, and archaeological evidence, i.e. objects, in some cases, has produced rather different approaches to ancient history.[2] Ideology plays a major role in many of these approaches, particularly for national histories or other

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1 The French tradition emphasises the objects and public functions of inscriptions: 'Ensemble de caractères écrits ou gravés sur un monument, une médaille, une monnaie, généralement pour commémorer le souvenir de quelqu'un ou de quelque chose, ou pour indiquer la destination d'un édifice', see <https://www.cnrtl.fr/definition/inscription> (accessed on 25 July 2023); an Italian definition is similar: 'Qualsiasi scritta, incisa nella pietra, nel marmo, nel metallo, fusa nel bronzo, ecc., o scolpita su un monumento, per memoria di persone o di avvenimenti, come dedica, intitolazione', see <https://www.treccani.it/vocabolario/iscrizione/> (accessed on 28 July 2023); the *Oxford English Dictionary* (OED) highlights the material: '*esp*. a legend, description, or record traced upon some hard substance for the sake of durability, as on a monument, building, stone, tablet, medal, coin, vase, etc.', see <https://www.oed.com/dictionary/inscription_n?tab=meaning_and_use#328883> (accessed on 25 July 2023); the German tradition additionally has a negative main criterion, excluding writing that belongs to school or chancery: 'Inschriften sind Beschriftungen verschiedener Materialien, … die von Kräften und mit Methoden hergestellt sind, die nicht dem Schreibschul- oder Kanzleibetrieb angehören', see <https://www.inschriften.net/projekt/richtlinien/edition.html> (accessed on 25 July 2023); also see Cooley 2012, 117–127; Panciera 2012; and below.
2 For Chinese cases, see Selbitschka 2011 and Selbitschka 2015.

'narratives', respectively, critiques of these tales. All this has been well-known for at least a century and is critically re-examined at regular intervals, depending on the tide of intellectual vogues. There is, however, one field of enquiry, which has only received the full attention it deserves in recent years, namely, the study of written artefacts.

Written artefacts are 'natural or artificial objects with visual signs applied by humans',[3] including manuscripts and inscriptions from the first clay tablets to contemporary graffiti. While this definition emphasises the fact that written artefacts are *material objects containing writing* and other content, the disciplines studying them traditionally single out certain aspects. Philologists and historians, including epigraphers, have almost exclusively been interested in texts, the rare species of experts in 'auxiliary sciences', such as diplomacy, palaeography and codicology, were, by definition, relegated to the second rank, art historians were concerned with images, musicologists with musical notation, and so forth. Not only did disciplinary boundaries hamper a better understanding of written artefacts, but also a lack of knowledge about Asian, African, and American cultures and their traditions of scholarship. The last two decades have seen great advances regarding the codex cultures,[4] but moving further away from the Mediterranean and the Near East, scholarship has just begun. The following statement of the late Johan Peter Gumbert (1936−2016) concerning the need for comparison may just as well be applied to the study of written artefacts in general:

> Regional codicologies are needed for the understanding of the culture's own book; but it is comparative codicology that does not only help us to understand the books for our neighbours, but also to understand our own books better – because we see what is different; we learn that things we thought self-evident were not so; we learn to ask questions that we never asked before, and we begin to understand the larger history of our book forms.[5]

Looking back, one does not have to share the obsessions of post-structuralist authors in order to see that a lot of modern scholarship on written artefacts has been textual scholarship. On the one hand, this has produced the highly developed art of textual criticism with amazing results for the reconstruction and

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3 Slightly modified after a working paper of the Theory and Terminology group (TNT) of the Centre for the Study of Manuscript Cultures (CSMC) at the University of Hamburg: 'Definition of "Written Artefact"'; written artefacts produced by mechanical means, such as moveable type printing, will be neglected in what follows, similar to the field of book history that is mainly concerned with the Western printed book; for a collection of articles on 'exploring written artefacts', see Quenzer 2021.

4 One of the major achievements is certainly Bausi et al. 2015.

5 Gumbert 2014, 23.

interpretation of texts, on the other hand, it has moved the very same texts to an ideal sphere beyond space and time. Textual transmission is seen as a process of 'corrupting' the 'original', and the critical procedure is similar to a court case with 'witnesses' and judgement.[6] This type of scholarship was developed in biblical and classical studies for 'works', as a rule composed by great authors, and for producing a printed, authoritative edition of the text allowing to interpret the 'intentions' of its author. Even in this field, however, there are texts whose transmission is not reducible to an author's *Urtext* with the help of a stemma,[7] even less so with anonymous texts from the Middle Ages, whether Chinese or Latin. The first attacks on traditional philology, however, came from experts in modern literature, who looked at manuscripts in a new way.

1 Modern European literary manuscripts: Text production

A *discours* on the concepts of work and text as well as author and critic emerged among French scholars in the 1960s, while, at about the same time, editorial enterprises led to an increased interest in text production after the devaluation of the 'author' by American New Criticism and Roland Barthes, with scholars studying the drafts and other 'pre-texts' of modern works.[8]

In 1968, Louis Hay had established a research unit for studying the manuscripts of Heinrich Heine, which had been acquired by the Bibliothèque nationale de France one year before; in the following years, scholars working on manuscripts of Marcel Proust, Émile Zola, Gustave Flaubert, and Paul Valéry joined the group. After various transformations, in 1982 the Institut des textes et manuscrits modernes (ITEM) was established. It is devoted to the study of mod-

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6 The essay *Textkritik* by Paul Maas (1880–1964) was first published in 1927, but is, together with the classic *Storia della tradizione e critica del testo* by Giorgio Pasquali (1885–1952), first published in 1934, still a point of reference; in an addition from 1937, Maas had already stated that the stemmatological method *sensu stricto* would not work for 'contaminated' transmission ('im Bereich einer Kontamination versagt die strenge Stemmatik'), see Maas 1957, 31.
7 See e.g. the unedited texts of Aristotle, whose transmitted *Urtext* is an edition of the first century BCE, transforming them into works (personal communication Christian Brockmann, 24 July 2023), also see Canfora 2002 with the telling title *Il copista come autore*; similar observations on the editorial role of scribes ('copyists') and the consequences thereof have been made for many cultures, for ancient Egypt, see Ragazzoli 2017, 96.
8 For a lucid summary written by a participant to the debate, see Hay 1988 (French original 1985).

ern literary manuscripts, using and further developing the new approach called *critique génétique* (genetic criticism) after the *Essais de critique génétique*, a collective volume edited by Hay in 1979.[9] In 1985, Hay wrote, according to the English translation from 1988:

> manuscripts [...] make it possible to examine how the pen works in its irrefutable material presence. In this way they manifest a level of reality to which no speculative interpretation can penetrate and possess a material richness that no effort of analysis can hope to exhaust. This becomes even clearer when we realise that manuscripts by their singular properties force us to change our habits of thought. They force us to take into account the unpredictable, since our knowledge changes every time an important document is discovered or a new technology gives access to previously unknown information. Likewise we must come to grips with their heterogeneity, since they are diverse by nature: sometimes they are the testimony of the original stimulation, sometimes the record of the remote memory like notes, notebooks or diaries; sometimes they document early operations like projects, workplans or scenarios, sometimes they are the instruments of revision such as sketches, early versions and most often rough drafts. Their polymorph structure is yet another challenge, as manuscripts have no respect for the convention of linearity, overflowing the page into multiple spaces. The ways in which the text is laid out on the page, with marginal notations, additions, cross-references, deletions, alterations, in different handwriting styles, and with drawings and symbols, texture the discourse, increase the significations and multiply the possible readings.[10]

The intellectual activities resulting in a 'work' are clearly still at the centre of the enquiry, but the written artefacts are now acknowledged to manifest a superb 'level of reality' and 'to change our habits of thought'.[11] Some Anglo-American scholars, such as Jerome McGann (b. 1937) in his *A Critique of Modern Textual Criticism* of 1983, followed a similar approach.[12] Genetic criticism is also applied in the study of modern composers,[13] but rarely outside of Europe.[14]

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9 Hay 1979. See the rich website of the ITEM at <http://www.item.ens.fr/thematique>, and the series *Textes et manuscrits*, edited by Hay and published since 1982 at the CNRS, especially the volume *De la lettre au livre: Sémiotique des manuscrits littéraires* (1989); for a recent assessment of the institute, see Zanardo 2019.

10 Hay 1988, 69.

11 For a more recent description of genetic criticism and the relevance of material evidence, see Grésillon 2016, 45–128.

12 See McGann 1983; it is perhaps no accident that he published a work devoted to the role of layout and typography in modernist literature, see McGann 1993, and became one of the early proponents of 'digital humanities'.

13 For the long-term project studying the works of Beethoven, see <https://beethovens-werkstatt.de/projekt/> (accessed on 26 July 2023).

14 The late Raoul David Findeisen (1958–2017) was one of these rare exceptions, for his first article on text production, namely, of a Lu Xun manuscript, see Findeisen 2022.

Gérard Genette (1930–2018) had participated in the earlier *discours* and published a highly influential work titled *Seuils* (English 'paratexts') in 1987. Coming from the other end of the production of modern literature, namely, the printed book, he discussed elements which he termed *paratexte*. Briefly, everything which is not part of the work in the strictest sense is 'paratext', i.e. an accessory to the text, including front and back matter, illustrations, advertising materials and reviews. This term has made a career, firstly, in book history and was also adopted for the study of manuscripts and other media, although it had been developed for the printed book of the modern publishing world.[15] A recent publication states three main functions of paratexts in manuscripts:

> 1) structuring (e.g. offering navigation aids that guide the reader, such as tables of contents), 2) commenting (e.g. glosses and annotations that offer interpretations and explanations of a text), and 3) documenting.[16]

> Paratexts are 'settings' for the textualisation both of historical events and, at time, of the intimate impulses and emotions of individual people. In certain manuscripts paratexts depict a more vivid picture of the historical role of manuscripts as real objects in the hands of real people; it is there that opinions, feelings, inclinations, etc. of the individuals involved in the production and transmission of manuscripts can find their textual transposition.[17]

In this respect, colophons, ownership and reader notes are among the most informative paratexts.[18]

2 Medieval European literary manuscripts: Textual variance

The wealth of variants and the resulting problems of editing texts had always been a topic in the field of Western European medieval literature. In the tradition of earlier discussions of orality and literacy, Paul Zumthor (1915–1995) had proposed his concept of *mouvance* since 1972, insisting that 'une mobilité essen-

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15 See Genette 1987; in academia outside of the Francophone world, the term has been misunderstood as some sort of text, therefore, it has been suggested to replace it by 'paracontent', see Ciotti et al. 2018.

16 Ciotti and Lin 2016, vii.

17 Ciotti and Lin 2016, viii.

18 For a brief overview on the state of the art, see Ciotti and Lin 2016, vii, and for colophons in the pothi book form, Balbir and Ciotti 2022.

tielle du texte médiéval'[19] was a product of the oral culture of the Middle Ages, caused by *intervocalité* as opposed to the *intertextualité* of written texts.[20] Bernard Cerquiglini (b. 1947) criticised the 'Lachmannian method' and the 'best-text method' of Joseph Bédier (1864–1938) in his polemical essay *Éloge de la variante. Histoire critique de la philologie* (1989), and claimed variance to be an integral part of textual transmission in manuscripts in the Middle Ages.[21]

One year later, his British colleague Stephen G. Nichols (b. 1936) proposed a 'new philology' that he later presented as 'material philology' (1997) or even 'materialist philology' (1996).[22]

> Material philology takes as its point of departure the premise that one should study or theorize medieval literature by reinserting it directly into the *vif* of its historical context by privileging the material artifact(s) that convey this literature to us: the manuscript. This view sees the manuscript not as a passive record, but as a historical document thrusting itself into history and whose very materiality makes it a medieval event, a cultural drama.[23]

Nichols and the German medievalist Siegfried Wenzel edited *The Whole Book: Cultural Perspectives on the Medieval Miscellany* in 1996, which became a milestone for the study of those multifaceted artefacts called 'miscellanies' in European medieval literary studies.[24] In their introduction, they call for 'attention to the single manuscript as a historical artifact' by taking the following into account:

> Such features as the ink and script of a given text; the quality and size of the material on which it is written; the layout in which it presents itself to the eye; the makeup of each individual volume, with its gatherings, colophons, subscriptions, and binding; further, the company of other works in which a given text was first gathered and has been preserved; and finally, its particular textual variants, especially those that resulted from factors other than scribal misreading or carelessness – all these features yield information, over and above that implied in the texts themselves, about the text's audience, its purpose and even the intention an individual scribe may have had in producing this particular copy. Beyond transmitting basic information about a given text, they speak to us about its social, commercial, and intellectual organization at the moment of its inscription.[25]

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19 Zumthor 1972, 71.
20 See Zumthor 1987, 160–168.
21 See Cerquiglini 1989; for the rectification of the 'Lachmann phantasm' and its creation by Bédier in 1913, see Primavesi and Bleuler 2022, 11–13, 63–68, and for the present state of stemmatology, Roelli 2020; for Cerquiglini's impact on an Egyptologist, see Quirke 2004, 29–33.
22 Nichols 1990; Nichols 1997; Nichols and Wenzel 1996; the first article mentioned the marginalisation of medieval studies.
23 Nichols 1997, 10–11.
24 For a discussion of this ambiguous term, see Friedrich and Schwarke 2016, 1–17.
25 Nichols and Wenzel 1997, 1.

This materialist philology 'goes beyond traditional textual criticism' and

> postulates the possibility that a given manuscript, having been organized along certain principles, may well present its text(s) according to its own agenda, as worked out by the person who planned and supervised the production of the manuscript. Far from being a transparent or neutral vehicle, the codex can have a typological identity that affects the way we read and understand the texts it presents. The manuscript agency – manuscript kind or identity – can thus offer social or anthropological insights into the way its texts were or could have been read by the patron or public to which it was diffused.[26]

Paying close attention to material aspects has generally become part and parcel of medieval studies by now – for those still working with manuscripts and not completely relying on modern editions.[27] However, it is clear that codicological or other material features are still considered secondary to the text, as is illustrated by the title of a contemporary review article discussing these and other attempts at the methodological renovation of medieval literary studies: 'Towards a Universal History of the Text'.[28] This does not come as a surprise, since the 'new' philologists were literary scholars. Without provocative labels, an American medievalist such as Tim William Machan contributed reflections on the nature of medieval texts, and mentioned the new opportunities provided by digital tools and the possibility of displaying variants as hypertext in a collection of articles from 1994.[29] Digital tools are now ubiquitously used for presenting a variety of modern or any other type of manuscript.

3 Image, layout, and script: Visual organisation

The relationship between text and image had been a topic much earlier in medieval art history, presumably due to the importance of the physical artefact to this discipline and the large corpus of manuscripts extant. It appears in 1980 in the title of a *Festschrift* to the German medievalist Friedrich Ohly (1914–1996), who in 1968, together with the historian Karl Hauck (1916–2007), established the first 'inter-disciplinary' *Sonderforschungsbereich* 'Mittelalterforschung' in the humanities, funded by the Deutsche Forschungsgesellschaft (DFG, German

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26 Nichols and Wenzel 1997, 2; the introduction to 'new philology' above has been taken from Friedrich and Schwarke 2016, 4.
27 See Bloch et al. 2014 and the review of this *Festschrift* to Nichols in Cohen 2017.
28 See Wandhoff 1997.
29 See Machan 1994, 190–191.

Research Foundation).[30] In 1987, the International Association of Word and Image Studies / Association Internationale pour l'Étude des Rapports entre Texte et Image was founded and has produced a wealth of studies in regular conferences and publications. Its periodical *Word & Image: A Journal of Verbal/Visual Enquiry* has appeared since 1985 and is mainly concerned with Western European medieval and Byzantine art history, once in a while also including glimpses into other traditions. A conference on 'the dynamics of text and image on objects and monuments from Mesopotamia' was held at New York University in 2018, showing the fertility of this topic in ancient non-European traditions.[31] Diagrams, being neither image nor text, are only sporadically dealt with.[32]

The Journal of Typographic Research was first published in 1967. Its title was changed to *Visible Language* four years later with the sub-title *The Journal for Research on the Visible Media of Language Expression*, nowadays presenting itself as *The Journal of Visual Communication Research*.[33] The changes reflect an expansion of this particular field from typography to other 'visible media of language expression', finally arriving at visual communication at large, including images and graphics. One of the many authors using this inclusive approach was the same McGann who had published his critique of textual criticism in 1983. His *Black Riders* from 1993 introduces typography and layout as essential to understanding modernist English literature.[34] After the turn of the millennium, types of layout in manuscripts have been addressed more than once with special emphasis on the opening. The term 'impagination' was coined very recently to describe related phenomena in a cross-cultural perspective.[35] Manuscript architecture, the three-dimensionality of manuscripts, is rarely addressed.[36]

Another approach was proposed by the philosopher Sybille Krämer in 2003.[37] In her concept of *Schriftbildlichkeit* (iconicity of script), almost all writing is inherently iconic because it inscribes surfaces materially and perceptibly,

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30 See Meier and Ruberg 1980; for more recent theoretical assessments, see Vouilloux 2005; Pérez-Simon and Hériché-Pradeau 2013.

31 See <https://isaw.nyu.edu/publications/newsletters/021/conference-1> (accessed on 15 July 2023); for ancient Egypt, see, among many others, Baines 2007.

32 But see Hamburger, Roxburgh and Safran 2022.

33 See <https://journals.uc.edu/index.php/vl/about> (accessed on 15 July 2023); for applying the term to other visual media, such as film, see Mitchell 1994.

34 McGann 1993.

35 See Chang, Grafton and Most 2021.

36 See Müller and Saurma-Jeltsch 2009.

37 See Krämer 2003; indebted to the debate on orality and literacy, this term emerged from Krämer's earlier attempts to conceptualise non-phonetic writing or 'operative writing', such as mathematical notation or universal writing systems suggested by Leibniz and others, see Krämer 1996, 105–107.

thus, being similar to images, but, simultaneously, closer to language, embodying a discrete and syntactically ordered system of references.[38] Her work has inspired art historians, mainly in the German-speaking areas, and one of them has looked anew at the non-alphabetic writing systems of East Asia.[39]

4 Against interpretation: Materiality as a concept

In 1988 a collective volume appeared, that would deeply impact following discussions even beyond its German-speaking audience, also in the Anglo-American world via its 1994 partial English translation. *Materialität der Kommunikation*, in the English translation *Materialities of Communication*, set out to drive the final nail into the coffin of the interpretative business, especially in all aspects involving the German concepts of *Geist* (spirit) and *Geisteswissenschaften* (humanities): 'we are fed up with the hypotheses of understanding and their semantics'.[40] The concluding essay by one of the editors in the English volume is titled 'A Farewell to Interpretation'.[41] Mostly concerned with modern media history and the past and present of the humanities, the concept of materiality serves to discuss theoretical problems in the originally seventy-five contributions, of which only twenty made it into the English version, with three additional ones coming from other publications, and the introductory and the closing essays rewritten for the English volume.[42] The article of the Egyptologist Jan Assmann (b. 1938) is instructive for our purpose, not only because it is one of the few not dealing with modern times but also because of its theoretical implications:

> If writing is language made visible (*Visible Language* being the name of a related periodical), then hieroglyphic writing is more than a writing system. It refers not only to the Egyptian language, but also to the 'world' that is, to objects and events. Hieroglyphics can represent these independently of a specific articulation of a single language.[43]

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38 Krämer and Totzke 2012, 23.

39 See e.g. Mersmann 2015.

40 Pfeiffer 1988, 24, not in the introductory essay in the English volume.

41 See Gumbrecht 1994; in the meantime, the author had received a position at Stanford University and addressed his American audience directly in this piece, just a few years later he proposed a 'return to philology', see Gumbrecht 2003; for a philological critique of this enterprise see Ziolkowski 2005.

42 See Gumbrecht and Pfeiffer 1994, vi.

43 Assmann 1994, 15.

> Wherein, then, lies the assumed 'world reference' of Egyptian hieroglyphic writing? It lies in the *materiality* of the sign and not in what we call *semanticity*. [...] It may seem surprising to interpret the iconic reference of Egyptian hieroglyphics as materiality. The concept of materiality brings to mind the purely material, such as stone or paper, engraving or coloring, rather than a characteristic such as iconicity. What I mean is this: every sign has two aspects, the aspect of its functioning within a sign system, by which it can refer to a specific meaning, and the aspect of its physical manifestation, by which it can indicate this meaning. [...] The concept of materiality includes the second aspect and everything that serves as a physical carrier of meaning. [...] In this sense, the iconicity of hieroglyphs is an aspect of their materiality that can be shed with no change to their language-referential meaning.[44]

In addition to its contribution to the conceptual framework centred around materiality, it further discussed the inscriptional modality of communication as a third type beside the oral and the written, with the inscriptional modality more closely resembling the oral than the written one:

> The aestheticized script [...] takes the place of the voice. The monument takes the place of the body, and the monumental physical situation, limited by space, takes the place of the oral physical situation, restricted by both time and space.[45]

Excluding papyri from his ruminations, Assmann has brought, in his sense, the materiality of writing and the spatiality of inscriptions to the discussion of written artefacts, which still inform today's scholarly endeavours, at the same time, similar to many other theoreticians, refraining from a discussion of the materials used.[46]

5 Codicology and archaeometry: Concrete materiality

The debates on the *materiality* of written artefacts mentioned above have mainly been conducted by members of disciplines focusing on texts with a theoretical interest, as opposed to the study of their *material composition*. Codicology did not play any role in these deliberations, although this branch of science had

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44 Assmann 1994, 17–18.
45 Assmann 1994, 25–26.
46 For a historically informed reassessment of Mayan and Egyptian hieroglyphs following the argument developed by Assmann, see Houston and Stauder 2020.

advanced considerably in the second half of the twentieth century.[47] Taking its name from the *codex* book form,[48] it has developed a refined vocabulary for describing and analysing the physical structure of the Mediterranean codex. Recent developments in this field have produced major innovations and no longer consider codices as static entities, but apply stratigraphic methods to study their history, hopefully inspiring similar endeavours for Asian and American cultures and book forms such as rolls or pothi.[49] Statistical codicology allows insights into larger contexts, and even the most complex part of book technology, the binding, is now approached in a cooperation of scholars and conservators.[50] Dominique Charpin called for a 'diplomatics of Mesopotamian documents' in 2002,[51] and archaeometric methods had already been included in the study of a corpus of Neo-Sumerian clay tablets in 2004.[52] A number of palaeographic studies have demonstrated the usefulness of adapting methods developed for writing on other media to the study of clay tablets.[53]

Except for art history traditionally being involved in the *materials* of the works of art it studies, archaeology is the only other major discipline dealing with physical objects by definition; if written artefacts are found, the study of their content is usually left to historians or philologists. Thus, although written artefacts, without doubt, belong to material culture, neither archaeology nor anthropology considers them inside the frame of their enquiries as a rule. Thus, the *Journal of Material Culture* (since 1996) has not published work on written artefacts. While the lone voice of the classicist Kenneth W. Clark (1898–1979) had already claimed in 1951 that 'manuscripts belong to archaeology',[54] historians of the ancient Near East or Egypt have been much less hesitant to include material features in the study of texts.[55]

Just as codicology 'helps' philology, archaeology is supported by the 'auxiliary science' of archaeometry or archaeological science. It is a cover term for

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47 See Gumbert 2004.

48 For the term *book form* see Gumbert 2013.

49 For a very brief overview, see Friedrich and Schwarke 2016, 8–15, Malachi Beit-Arié's *Hebrew Codicology* was published in 2022, <doi.org/10.25592/uhhfdm.9349> (accessed on 6 August 2023); for a first step towards a codicology of the scroll (or roll), see Andrist et al. 2022.

50 For the former, see Maniaci 2021, for the latter, Bausi and Friedrich 2023.

51 See Charpin 2002, for an English version see Charpin 2010, 25–42, Chapter 2.

52 See D'Agostino, Pomponio and Laurito 2004.

53 See Devecchi 2012; Devecchi, Müller and Mynářová 2015 and Devecchi, Müller and Mynářová 2019.

54 See Clark 1951; I am grateful to Paola Buzi for having drawn my attention to this publication.

55 See e.g. Radner 1995.

scientific methods to date, analyse and characterise artefacts.[56] The Research Laboratory for Archaeology and the History of Art was founded at Oxford University in 1955; the publication of its *Bulletin of the Research Laboratory for Archaeology and the History of Art* commenced three years later. It was subsequently titled *Archaeometry*, thus, giving birth to the now more common name of the new 'discipline', and remains, together with its competitor, the *Journal of Archaeological Science* from the British capital, founded in 1974, one of the major periodicals in the field. The first Chair of Archaeological Science in Britain was established in 1989.[57] Major museums and archaeological departments have archaeometric laboratories today, but most of them follow tradition and do not count written artefacts among their objects of study, at the same time, struggling with the ever-increasing costs of instrumentation and the need for its continuous updating.

Some spectacular cases, such as the so-called Archimedes palimpsest,[58] aroused greater interest in the opportunities which scientific methods offered for the study of manuscripts only towards the end of the twentieth century. By now, methods range from optics using a simple microscope to genomics and proteomics, requiring highly sophisticated instrumentation.[59] There are still only a few long-term research units devoted to written artefacts *and* possessing a laboratory, therefore, most of the studies are conducted with the help of project funding and concern individual artefacts or small corpora.

6 Ancient inscriptions and manuscripts: Materiality, spatiality, and practices

All ancient civilisations with writing systems have left inscriptions on durable materials, while their manuscripts, as a rule, did not survive, with the exception of clay tablets from the ancient Near East.[60] What we have to our avail has been excavated, not always by archaeologists, whether Mesopotamian clay tablets, Egyptian papyri, Indian birch-bark manuscripts or Chinese bamboo rolls. Disci-

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56 See Leute 2016; Buckley 2020.

57 For the 1990 inaugural lecture of the first chair, see Tite 1991.

58 For a popular account on the recovery of the lost text, see Netz and Noel 2007.

59 For up-to-date case studies, see Brockmann et al. 2014 and Brockmann et al. 2018; for a guide to 'biocodicology', see Fiddyment et al. 2019, also see Creydt and Fischer 2021.

60 For clay tablets being manuscripts, see Michel 2021.

plinary boundaries arose according to circumstances and are fuzzy, thus, for example, papyrology

> cannot actually be defined by the material support: Potsherds can belong to epigraphy or papyrology, depending on their origin and nature, while the great parchment codices of the fourth and fifth centuries are most usually thought of as papyrological texts. [...] A public/private dichotomy is undermined by papyri put up as public notices, and many types of content are found in both epigraphical and papyrological texts – edicts of Roman governors, to give only one obvious example. Nor does geography divide the field: Both papyrological and epigraphical texts can be found from Britain to Afghanistan, although, for environmental reasons, most papyrological material comes from Egypt. Material that in Egypt would be considered papyrological finds a home in the *Corpus inscriptionum iranicarum* when written in a Persian language.[61]

This holds true, *mutatis mutandis*, for the study of other ancient written artefacts as well. Considering codices and other book forms, that is, *material* objects as texts, bespeaks a certain innocence still to be found in those disciplines concerned mainly with texts, just as the common phrase of 'editing a manuscript'. In epigraphy, 'inscription' is commonly used in an ambiguous way, referring to the material object *and* to its written content. A conceptual disambiguation similar to the one available for manuscripts would certainly be appreciated.[62]

Epigraphy is a conservative discipline. The developments sketched above for the study of manuscripts do not have a parallel in the study of inscriptions, where it was only very recently realised that the former might inspire the latter.[63] Epigraphy has emerged as an 'auxiliary science' from the study of 'classical antiquity', that is, from the Greco-Roman Mediterranean, then branching out to ancient Egypt and Mesopotamia, later periods and, finally, to all 'epigraphic cultures'. The term 'monument', still often used for the artefacts, points clearly to the presupposition that most of them have a commemorative function.[64] Publication of huge corpora has made the written content of inscriptions available, in the earlier stages just editing the 'main' texts, later on including graffiti and more precise information on the position of the inscriptions. By now, digital

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61 Bagnall 2009b, xvii.

62 See Lorusso et al. 2015 for a survey of definitions of 'manuscript' and 'manuscript book' and for a new definition, completely abstracting from content and material support: 'A MS is an artefact planned and realised to provide surfaces on which visible signs are applied by hand; it is portable, self-contained, and unique' (Lorusso et al. 2015, 1).

63 See e.g. Harter-Uibopuu 2021.

64 See OED, <https://www.oed.com/dictionary/monument_n?tab=meaning_and_use#35970163> (accessed on 28 July 2023).

tools provide new opportunities for improving the accessibility of the data, and virtual reality allows us to experience reconstructions of inscribed spaces.[65]

Ramsey MacMullen (1928–2022) introduced quantitative methods to Roman epigraphy under the label 'epigraphic habit' in 1982,[66] a concept which is still productive.[67] In the same year, Giancarlo Susini (1927–2000), who had already, much earlier, considered inscriptions to be archaeological objects and not only written data, mentioned *ambiente* (environment) and *paesaggio* (landscape) as constituent elements of the epigraphic enquiry.[68] The elaborated definition of inscription by Silvio Panciera (1933–2016) as 'its more or less intentional deviation from what may be said to be "normal" writing in the context in which it was produced' (1998) takes into account material and spatial features.[69] The concept of 'epigraphic landscape' appeared in English-language academia in the late 1990s, becoming more or less a commonplace by now.[70] In 2022, Kelsey Jackson Williams proposed a 'theoretical model of the epigraphic landscape', taking 'landscape' literally and suggesting three aspects to be studied: the monument, the stone in its space and the stone in its landscape.[71] The *Sonderforschungsbereich* 'Materiale Textkulturen' at the University of Heidelberg (2011–2023, funded by DFG) and its publications have given additional momentum to a broader approach to the study of inscriptions.[72] Since 2019, the Cluster of Excellence 'Understanding Written Artefacts' at the University of Hamburg has de-

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65 For the Miletus project of an archaeologist, an ancient historian and computer scientist, see <https://www.csmc.uni-hamburg.de/written-artefacts/research-fields/field-b/rfb02.html> (accessed on 1 August 2023).

66 See MacMullen 1982.

67 See e.g. Cooley 2012; Nawotka 2020.

68 '[L]'ambiente e il paesaggio cui l'iscrizione era destinata, quegli ambienti e quei paesaggi nei quali è successivamente vissuta', see Susini 1982, 17; also see Cebrián Fernández 2021, 15.

69 Panciera 2012, 8, where the author also adds a more positive element, namely, its 'unidirectional communication'.

70 For a much-quoted example, see Cooley 2000; for a study of Chinese stone inscriptions in 'landscapes of words', see Harrist 2008.

71 See Williams 2022; his case study is taken from early modern Europe, but 'both classical and post-classical students of epigraphy can benefit from a methodological conversation begun across chronological boundaries' (Williams 2022, 17). It remains to be seen whether Alfred Gell's concept of *agency* will grow roots in epigraphy; for its use in manuscript studies, see Kohs and Kienitz 2022.

72 See the respective volumes of its series *Materiale Textkulturen*, often dealing with the *Sonderforschungsbereich*'s topic 'materiality and presence', e.g. Balke and Tsouparopoulou 2016; Bolle 2019; in spite of the philosophical inclination of the introduction, Petrovic, Petrovic and Thomas 2019 also include studies which are much more down to earth.

veloped a cross-cultural approach in one of its research fields.[73] A *Handbook of Epigraphic Cultures* is scheduled to appear in 2024.[74]

Albeit heuristically, the general state of affairs in the fields related to the study of ancient written artefacts may be illustrated by five volumes of the *Oxford Handbook* series, dealing with *Hellenic Studies* (2009), *Roman Epigraphy* (2018), *Egyptian Epigraphy and Palaeography* (2020), *Papyrology* (2009) and *Cuneiform Culture* (2011), although the scope and purpose of these collective volumes differ to a considerable degree. The first contains a brief chapter on Greek epigraphy, but it deals only with texts and ways to retrieve texts that have become illegible.[75] The volume on Roman epigraphy has two chapters on inscriptions as 'monuments': 'Inscribing Roman Texts: *Officinae*, Layout, and Carving Techniques' and, on a more abstract level, 'The "Epigraphic Habit" in the Roman World' – they follow the one on 'The Main Types of Inscriptions' that classifies them according to textual criteria.[76] Most of the thirty-five chapters use the inscriptions' content for studying topics of ancient history. Turning to the volume on ancient Egypt, it faithfully reflects the perpetual fascination with hieroglyphs and the palaeographic problems they pose. With the exception of an article on the tools and materials of carving and painting,[77] however, it continues to distinguish 'genres' of inscriptions, that is, texts,[78] and, only in passing, has something to offer on the material features of written artefacts.

The last two volumes differ from the other ones, as they deal mainly with manuscripts. The introduction to *The Oxford Handbook of Papyrology*, which was quoted above in length, states the problems explicitly when it comes to defining the discipline and its subject matter, and acknowledges that 'Graeco-Roman papyri still dominate the book, just as they do the subject'. In spite of these limitations, there are substantial chapters on materiality, book forms and palaeography.[79] One contribution discusses papyrological 'archives' and 'dossiers', highlighting another problem often encountered in the study of written artefacts, namely the diverging use of terminology in related disciplines.[80] The title of *The Oxford Handbook of Cuneiform Culture* already signifies that it is not

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73 See <https://www.csmc.uni-hamburg.de/written-artefacts/research-fields/field-b.html> (accessed on 28 July 2023).

74 Edited by Kaja Harter-Uibopuu, Ondřej Škrabal and Jochen Vennebusch.

75 See Rhodes 2009.

76 Beltrán Lloris 2015a; Beltrán Lloris 2015b; Edmondson 2015.

77 See Stocks 2020.

78 See Stauder-Porchet and Stauder 2020.

79 See Bülow-Jacobsen 2009; Cavallo 2009; Frösén 2009; Johnson 2009; Taylor 2011.

80 See Vandorpe 2009.

concerned primarily with disciplines and methods, but with the culture studied by them. The first of seven parts on different aspects of the cuneiform world is devoted to 'Materiality and Literacies', and opens with a chapter on 'Tablets as Artefacts, Scribes as Artisans', thus, taking the artefact as the starting point, not the text.[81]

In stark contrast to the handbooks of epigraphy discussed above, Alison E. Cooley's single-author work *The Cambridge Manual of Latin Epigraphy* from 2012 contains, in addition to a case study, more fundamental reflections on the nature of inscriptions ('Monuments not Documents')[82] and general observations on 'epigraphic culture in the Roman world',[83] including the interplay with other media, such as papyri, and writing-boards:

> Conventionally, epigraphers do not study coins or papyri, but this traditional division of labour between epigraphists, numismatists, and papyrologists is rather arbitrary, and runs the risk of ignoring similarities between these different uses of writing, as already explored to some extent earlier. [...] In order to understand epigraphic culture, it is essential to recognize the permeability of the boundaries between writing that has been preserved on all kinds of media. The medium used for a particular type of text can depend purely upon regional natural resources rather than upon the intention of the writer. Understanding inscriptions involves analysis not just of their texts, but also of their lettering and archaeological context, and it requires us to be ready to look for comparisons not just between inscriptions that are obviously related to each other, but to cast our gaze onto other forms of writing too.[84]

After introducing possible ways of classifying inscriptions by function, type of text, fabric or writing method, and quoting an example of the traditional categorisation according to content, Cooley concludes:

> What [such categorization] does not do is to reflect accurately the motivations that prompted people to create inscriptions. [...] After all, although an inscription on a statue base may be categorized as basically 'honorific' in purpose, it made a big difference who funded it, whether that statue was set up in a public place, or in a house, or at a tomb, and whether the statue was decreed by a town council or province, or set up by someone's freedman.[85]

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81 See Taylor 2011; in addition, see Cartwright and Taylor 2011.
82 See Cooley 2012, 220–228; the same author had already stated the 'methodological principle of interpreting inscriptions in terms of their overall appearance, not just their texts' much earlier, see Cooley 2000, 1.
83 Cooley 2012, 117–325.
84 Cooley 2012, 125–126.
85 Cooley 2012, 128.

After touching on the 'epigraphic habit', Cooley suggested studying the 'graffiti habit'.[86] Completely disregarded or only taken note of in passing by traditional epigraphy, graffiti across times and spaces have become a popular topic for many disciplines, offering the opportunity to study humankind's urge to leave traces of writing.[87]

A few recent publications stand out in terms of their approaches. The collective volume *Writing as Material Practice: Substance, Surface and Medium* edited by Kathryn E. Piquette and Ruth D. Whitehouse (2013) offers nothing much new in principle, but has to be mentioned because it aimed decidedly at an *archaeological* approach to writing and included contributions dealing mainly with the ancient Near East and the Mediterranean, but also with ancient America.[88] Michele Cammarosano has presented holistic studies of the ancient Near Eastern wax boards (2014) and 'The Cuneiform Stylus' (2019),[89] integrating visual and textual evidence as well as materials analyses and experimental archaeology. In *Materiality of writing in early Mesopotamia*, Thomas E. Balke and Christina Tsouparopoulou have collected contributions dealing with material aspects of ancient Near Eastern written artefacts in 2016.[90] In 2018, Hella Eckardt presented a study on the inkwell and other writing implements in the Roman world, demonstrating how material evidence may lead to an understanding of social and cultural practices.[91] Also in 2018, Francisca A. J. Hoogendijk and Steffie M. T. van Gompel edited a volume on the concrete 'materiality of texts' from ancient Egypt. It included studies on material aspects of writing and written artefacts by papyrologists, Egyptologists, archaeologists and technical specialists, providing models for future cooperation.

Approaches first stimulated by the study of modern and medieval European manuscripts together with advances in materials sciences and imaging techniques have arrived in the field of ancient history. The reader will have noticed that, with the exception of ancient Egypt and the ancient Near East, the cultures of Asia, Africa and America play hardly any role. These limitations to a comparative study of written artefacts are caused by different reasons, on the one hand, by the small number of experts in these fields, on the other hand, by the fact that research on East Asian cultures is flourishing – but conducted mainly in

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86 Cooley 2012, 111–116.

87 For a cross-cultural approach see Škrabal et al. 2023.

88 See Piquette and Whitehouse 2013.

89 Cammarosano 2014 and Cammarosano 2019.

90 See Balke and Tsouparopoulou 2016.

91 See Eckardt 2018.

East Asian languages. It is still a long way to a truly holistic approach, but the journey has begun.

<p style="text-align:center">*</p>

Against this backdrop, the present volume offers eleven case studies exploring various aspects of written artefacts from the ancient world. The studies are arranged in five sections.

The first section 'Methodological Considerations' reminds us of various kinds of limitations caused by our sources, present knowledge and received traditions. Jesper Eidem and Cécile Michel draw attention to the challenges posed by the huge number of Mesopotamian clay tablets known and their uneven distribution in space and time. The authors discuss two examples from the early second millennium BCE, that are unusually rich and seemingly complete. Since it is unknown, however, how these 'archives' came about, they only provide illuminating 'flashes', but should not be used to draw far-reaching conclusions. This situation will not even be remedied by new discoveries, thus, the authors call for great caution in writing history. The random survival of written artefacts is also discussed in Jorrit Kelder's contribution. He re-examines the comparatively small corpus of Mycenaean Linear B tablets and shows that their materiality and functions have to be taken into account when attempting to understand the society that produced them. Against the paradigm that they represent palace administration, evidence from many other sources allow the author to build a strong hypothesis for an extended bureaucracy, at the same time, contradicting the image conveyed by Homer and his exegetes: absence of evidence is not evidence of absence.

The Egyptian, Chinese and Indian evidence is discussed in 'Early Uses of Writing'. John Baines and Cao Dazhi juxtapose Egyptian and Chinese epigraphical evidence for the emergence of writing and suggest that both in addition to everyday writing on perishable materials had a pictorial realisation of the script. While the pictorial style was soon dismissed in China, hieroglyphical writing continued to be used in Egypt for millennia. The iconic quality of the script and the importance of some key concepts such as 'life' (*ankh*) led to some signs' complete detachment from the words they represented and their inclusion in pictorial contexts, just as hieroglyphical inscriptions in general were only used in such contexts. In addition, the authors discuss how and in which contexts kings and elites used writing to control and display status, and for what audiences. To a certain extent, India presents a completely different case. There is

no hard evidence for writing before Emperor Aśoka, and it was probably created from pre-existing scripts, such as Aramaic. After discussing the two scripts apparent in his inscriptions, Ingo Strauch introduces the stone inscriptions on rocks and pillars promulgating the ruler's and the Buddha's *dharma* found all over Aśoka's empire and analyses their production, content and function in relation to the place where they were set up. The existence of 'cover letters' with instructions for the local officials can be inferred from some inscriptions which erroneously copied part of them. These letters allow one to reconstruct the purpose of these inscriptions and some practices connected with them. Numerous mistakes, particularly those made in areas where Dravidian languages were spoken, may have led to the centralisation of the production of the stone pillars. Furthermore, dated inscriptions clearly show a development: small inscriptions which were difficult to access were first engraved in rocks at sites of religious festivals; larger ones followed, but, similar to the former, they were not expected to be seen every day; finally, pillars erected in public spaces close to Buddhist monasteries demonstrated the emperor's power and support.

Section 3 addresses the 'Co-presence of Written Artefacts' and, thus, aspects which will go unnoticed by purely textual studies. Andréas Stauder looks at a Theban necropolis from the Early New Kingdom and the spatial setting of text–image relations in the funeral chapels of three selected tombs. The funerary chapels were open to visitors and used wall decoration for displaying the status and wealth of the deceased and their family. Taking the inscribed texts as a starting point, the author analyses and contextualises their content in relation to the imagery and the tomb owner, revealing the highly complex and tailor-made decoration programmes. They were created by master artists who included references to earlier tombs in them. The unusually long and difficult-to-read inscriptions appear as speech emanating from the dominant figures, thus, not primarily conveying linguistic meaning but make the presence of these figures felt. The author does not stop short here, but continues to describe the experience a visitor may have had when walking through the spaces and discovering the references to earlier tombs. Moving from inscriptions to manuscripts, Philippe Clancier takes the reader to the houses of two exorcist families from Late Babylonian Uruk and the clay tablets found there. A close reading of the archaeological assemblage and the content of the tablets, mainly exorcism, medicine and divination, discloses studying and teaching activities in these houses. Further evidence from other sites supports hypotheses concerning the movement of tablets and the events which led to the destruction of one of the houses, demonstrating the *Sitz im Leben* of the materials unearthed.

The fourth section on 'Material Features' contains three contributions. Michele Cammarosano presents a comprehensive study of wooden boards in Hittite Anatolia. By collecting data from various domains, such as iconography and linguistics, besides the content of clay tablets, it becomes possible to place Hittite wooden boards into the context of other writing supports, such as clay or wax tablets, and outline their production and usage, including sealing practices. Although no specimen has survived, abundant evidence that they played an important role in cult and ritual, note-taking and administration is available, calling for a comparison beyond the Hittite world. Stefano de Martino introduces the small corpus of clay tablets from the kingdom of Mittani, once a powerful state before it was conquered by the Hittites. Pursuing a holistic approach, he, firstly, discusses the content and language of the Mittanian documents, then considers their chemical composition. It could be shown for the tablets from Tell el-Amarna that the two types of clay both came from the vicinity of the Mittanian capital. Two formats are used, the 'landscape' format for administrative texts and the 'portrait' format for longer texts and letters, such as the ones found in Tell el-Amarna. None of the administrative tablets originated from the capital, but their uniform appearance points to the existence of central standards. In her study of six hieratic papyri from the collection that arrived at Turin in 1824, Susanne Töpfer examines not only the 'famous' side of these papyri but also the other one, whether recto or verso, and thereby provides glimpses into the 'biography' of these objects and scribal practices. Most of the manuscripts in the collection come from the administration of the royal necropolis of Deir el-Medina, many of them having been reused after having served their purpose. Asking what was important to the ancient Egyptians themselves, she shows that one of the 'famous' texts was actually written on the verso of an administrative document that had become useless. This text may have served as a model or template for inscriptions. Another 'famous' papyrus was probably some kind of notebook for preparing official documents, while yet another one must have been an archival document. The author successfully contextualises the artefacts in contemporary practices paying close attention to details of the material constitution and preservation of the papyri. In addition, she uncovers the restauration work of nineteenth-century conservators and proposes to preserve the present state of the 'patchwork papyri' because the patches have become integral parts of them and their history.

The final section moves to 'Cultural Encounters' between social strata or ethnic groups. Drawing on theories of hegemony and folk culture, Gianluca Miniaci inspects a phenomenon in Egyptian hieroglyphic writing that existed for less than a millennium. Manipulation, especially mutilation of signs in rela-

tion to the deceased, first appeared in the twenty-fourth century BCE in the royal sphere, then, continuously changing, moved into the private domain, and, finally, became inconsistent before being abandoned in about 1500 BCE. The author argues that this usage originating from funerary inscriptions of kings and queens in the Memphite necropolis proliferated to the tombs of high-ranking officials in the same place, then spread to other sites and lower social strata. After two centuries without evidence of the mutilating practice, it started anew in about 1800 BCE, again in the royal sphere and again spread to officials and lower social groups. Towards the end of the period under scrutiny, the practice was first abandoned by the royal family before it also vanished from the private sphere, exemplifying that fragments of 'high' or 'official' culture may leak into what has been called 'folk culture'. The second contribution by Ludwig Morenz addresses a similar encounter, this time between Egyptians and Canaanites. Based on Egyptian signs, the latter invented alphabetic writing around 1900 BCE at the temple of the Egyptian goddess Hathor in the Serabit area of northwestern Sinai, as witnessed by numerous rock stelae erected in front of the architectural complex. Egyptian mining expeditions had established this largest sanctuary outside the Nile Valley and worshipped the goddess as the 'mistress of turquoise', the material they had come for. At the margins of the kingdom, Egyptians engaged with Canaanites on an equal footing, leading, among others, to equations of gods. The iconic quality of some of the Canaanite letters was used for expressing cultural identity, for example, the letter *aleph* for representing the deity Hathor-Baʿalat. Drawing on Egyptian and Canaanite sources, the author succeeds in recovering the name of the local He tribe. The use of the letter *he* testifies to a much more self-confident and active local group than previously ascribed to the 'subalterns' who created a writing system we still benefit from today.

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Methodological Considerations

Jesper Eidem, Cécile Michel

Some Mesopotamian Challenges: A History Based on Tablets Unevenly Distributed in Time and Space

Abstract: The more than three millennia of ancient Mesopotamian cuneiform tablets, yearly augmented by new finds from sites across the Middle East, provide a unique and, at times, extremely detailed historical record. The information, however, is very unevenly distributed in time and space – as illuminating *flashes* rather than comprehensive overviews. The authors of this chapter draw on cuneiform sources from sites in early second millennium Anatolia and Upper Mesopotamia to exemplify the challenges which even very rich material poses to modern scholars, challenges which we believe will remain even as the cuneiform record inevitably grows substantially in the future.

1 Introduction

Simple tablets of clay inscribed with cuneiform characters are our main sources for what has been called 'half of history' – from the invention of cuneiform in Lower Iraq sometime around 3300 BCE and into the first century CE.[1] Cuneiform first became known through monumental inscriptions, and deciphered principally with the aid of the trilingual Behistun inscription in the middle of the nineteenth century CE. Clay tablets with cuneiform signs also began to appear and to be recognised as such at many new excavations at sites in Iraq, ancient Mesopotamia and other parts of the Near East. Large collections of cuneiform tablets were found and helped to illuminate an otherwise virtually lost world. These collections of manuscripts were called 'archives' by Assyriologists.[2] This is not the place to discuss the history of discovery, which will be generally well-known,[3] but it may be relevant to recall that the evidence now available has a

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1 Michalowski 2021; Michel 2021a, who explains why clay cuneiform tablets are manuscripts.
2 For convenience, we also use the word 'archive' for any group of tablets found physically together, but this term, of course, covers a variety of different concrete situations (Veenhof 1986; Pedersén 1998; Brosius 2003; Faraguna 2013; Bausi et al. 2018).
3 Fontan 1994; Larsen 1996; Chevalier 2002; among others.

wide distribution in time and space, as shown on the map (Fig. 1), which highlights only the sites of discovery of more than 500 tablets.
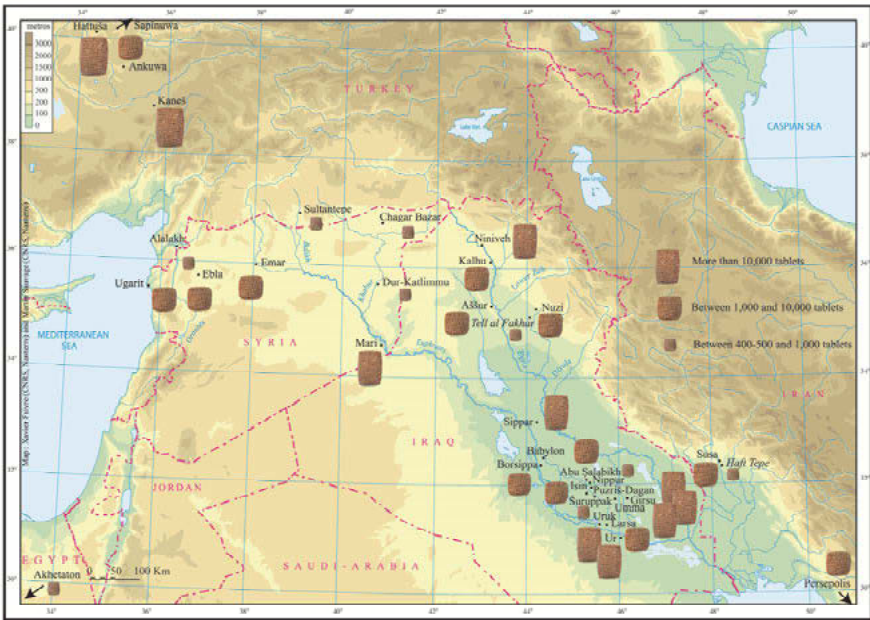

Fig. 1: Map showing the main sites where cuneiform tablets have been found, prepared by Xavier Faivre and Martin Sauvage, and translated from Lion and Michel 2016, 9.

We can very basically distinguish three main categories of tablets: the first two categories, which will not be our concern here, are those which are of scholarly content and part of the stream of scientific, religious and literary tradition, and the official and display texts reflecting royal power and propaganda.[4] The last and by far the largest category are tablets of everyday content: letters, bills, account lists, contracts, in short, the kind of documents most of us have in our own drawers at home. Needless to say this is a precious and globally unique kind of evidence. Many tablets – of unbaked clay – have survived fairly intact in the dry Middle Eastern climate and can now provide *flash* insights into human

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4 For a modern categorization of cuneiform texts, see the attempt made by a French and British team in the CDLI:wiki, <https://cdli.ox.ac.uk/wiki/doku.php?id=text_typologies> (accessed on 1 September 2022).

affairs thousands of years ago. The denseness of some of this evidence is truly remarkable – the best example is perhaps provided by the family archives excavated in houses of the early second millennium merchant settlement in Kaneš (Central Anatolia), and to which we will return below.

While such *flashes* of information and deep insights are fascinating, they should not mask the real difficulties ancient Near Eastern scholars have in weaving together coherent narratives – not to mention structural comprehension – of ancient societies from them. This is, of course, not a new observation. The same *caveat* can be found in numerous studies on Mesopotamian history.[5] But is there a solution to this problem?

An obvious answer could be simply patience: fairly loose estimates of the total number of tablets unearthed and now in public and private collections – some hidden from view – easily approach the figure of one million,[6] but this is, no doubt, but a fraction of the tablets still hidden in the thousands of ancient settlement mounds strewn across the vast areas of the Middle East where cuneiform script was in use. The real number is, naturally, a wild guess, but we would not be surprised if the retrievable number of tablets approaches or exceeds a hundred million. Therefore, one view could have it that we may simply wait for more of this hidden treasure to become available and the many overlapping *flashes*, which will then eventually throw more solid light on ancient realities. It is, indeed, easy to quote examples which might support such a view. Apart from the Old Assyrian archives from Kaneš already mentioned, the best example is undoubtedly the trove of information and insights provided by the unexpected find of a large mid-third millennium state archive in Tell Mardikh, ancient Ebla (north-west Syria), in 1974 – a corpus which has opened up a wide new horizon on the history of Upper Mesopotamia.[7] But – and this is fundamental – even with more millions of new tablets, the evidence will remain *flash*-like and challenging for historians. In this situation, it is important to raise awareness of what is really at stake. Which factors have structured the survival of the evidence available, and presumably also the evidence which will become avail-

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5 See e.g. Van de Mieroop 1999; Zettler 2003.

6 A fairly recent and careful attempt to assess a total count of known tablets and their total text matter reaches the figure of *c*. 500,000 cuneiform texts (Streck 2010), but is clearly on the low side. The large number of manuscripts and inscriptions in private or hidden collections or circulating on the market are difficult to estimate. An instructive indication, just a small tip of the iceberg, is provided by the listing of some 1,700 cuneiform tablets offered for sale by major auction houses in recent decades (Theis 2017; Theis 2021; Theis 2022).

7 Matthiae 2021.

able in the future. To illustrate this, we briefly discuss two examples drawn from Anatolia and Upper Mesopotamia in the early second millennium BCE.

Table 1: Chronological chart showing main sites and rulers mentioned in the text (all dates BCE).

Kaneš	Aššur	Mari	Babylon
Level II *c.* 1940–1835			
	Šamšī-Adad *c.* 1808–1775		Hammurabi *c.* 1792–1750
Level Ib *c.* 1832–1700		Yasmah-Addu *c.* 1782–1774	
	Išme-Dagan *c.* 1774–?	Zimrī-Lîm *c.* 1774–1761	

2 The Old Assyrian texts from Kültepe

The first example deals with the so-called private 'archives' belonging to Assyrian merchants found at the site of Kültepe, in Central Anatolia, near the modern city of Kayseri.[8] Merchants from Aššur, on the Tigris in northern Iraq, established long-distance trade with Central Anatolia and settled there in about forty localities during the late twentieth and early nineteenth centuries BCE. Kaneš, located at Kültepe and a thousand kilometres away from Aššur, was at the centre of this trade network. The site was explored several times in the late nineteenth and early twentieth centuries CE before being excavated continuously from 1948 by a Turkish archaeological team.[9] Kültepe is divided in two main areas, the mound, where the local palace and temples were built, and the lower town, located on the north-east of the mound, where the Assyrian merchants were living mixed with the local inhabitants. Up to now, the excavations on the mound have yielded only forty cuneiform clay tablets, while in the lower town, no less than 22,700 tablets have been unearthed.[10] More than 22,000 of these tablets date to the first half of the nineteenth century BCE and were found in houses inhabited predominantly by Assyrians. Each of these houses yielded

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8 Larsen 2015 offers a general presentation of this period.

9 Özgüç 2003; Kulakoğlu and Kangal 2010.

10 Michel 2003 and Michel 2021b for an up to date inventory of the Old Assyrian tablets.

from a dozen to more than a thousand tablets. The remaining six or seven hundred tablets date to the eighteenth century BCE. Kültepe tablets represent the earliest written attestation of the Assyrian language and are, thus, referred to as Old Assyrian texts.

Fig. 2: Tablets found *in situ* in the house of Šalim-Aššur excavated in 1994 in the lower town of Kültepe, ancient Kaneš. © Kültepe Archaeological Archives.

Given that the Old Assyrian levels of Aššur have not been excavated because they are located underneath the monumental buildings of the first millennium Assyrian capital, only twenty-four discarded tablets and thirty royal inscriptions have been recovered there.[11] Thus, the tablets, envelopes and fragments discovered at Kültepe provide a very partial and one-sided view of the history of the Old Assyrian trade and its actors. They offer *flashes* of the organisation of the

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11 Michel 2003, 121–123.

trade, society and daily life of Kaneš inhabitants and, indirectly, of Aššur inhabitants.

Gojko Barjamovic, Thomas Hertel and Mogens Larsen published a major study in 2012 based mainly on the Kültepe texts, including dates, to propose a reconstructed social and economic history of the Old Assyrian period.[12] Their analysis, based on statistical and prosopographical data, centres on the distribution of '1250 dated events recorded in c. 1150 individual texts'.[13] The resulting graph[14] would indicate that the Old Assyrian texts stem from a short span of time of thirty years:

> The graph shows that both the rise and the fall are so steep that we need to find new ways to describe and explain the development of the Old Assyrian community at Kanesh.[15]

Among the several possibilities to explain the 'abrupt increase' of the records around *c*. 1893, the authors suggest the following:

> A commercial system based on venture trade and relatively brief visits (two or three years) to Central Anatolia (...) was becoming replaced by a pattern of long-term partnerships with semi-permanent agents living abroad for many years at a time.[16]

The authors explain the 'sharp decline' of 'dated text' around 1865,[17] thirty years before the destruction of many houses by fire, by an 'economic recession', which would have happened after the death of the most prominent merchants.[18]

This study is based on the assumption that we have a sufficiently complete and continuous corpus of texts for the period considered – the archaeological Level II of the lower city of Kaneš, i.e. nineteenth century BCE – to carry out a statistical analysis. Each Kültepe 'archive' corresponds to tablets found in one house and belonging to individuals who lived there during a limited period of their lives, often related by family links, eventually over two or three generations.[19]

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12 Barjamovic, Hertel and Larsen 2012.
13 Barjamovic, Hertel and Larsen 2012, 55.
14 Barjamovic, Hertel and Larsen 2012, 56.
15 Barjamovic, Hertel and Larsen 2012, 58.
16 Barjamovic, Hertel and Larsen 2012, 62.
17 The selected corpus included in the graph of Barjamovic, Hertel and Larsen 2012, 56, fig. 14, does not correspond to *dated texts* but texts mentioning a date.
18 Barjamovic, Hertel and Larsen 2012, 69–70.
19 For Old Assyrian archives, see Michel 1998; Michel 2018; Veenhof 2003; Veenhof 2013; Larsen 2008.

Each of the Kültepe 'archives' comprises an average of 40% or more of letters sent from Aššur or the other Old Assyrian settlements in Anatolia; a total of some 9,000 letters have been unearthed at Kültepe. Letters very rarely include dates; when they do so, the date usually concerns a past event and not the time the letter was written. Thus, the chronological organisation of letters is only possible when they evoke the same business and eventually provide a follow-up.

Legal texts form the second important group of tablets found within houses. These include commercial and family contracts, on the one hand, and legal texts, on the other hand. A few of the latter may include a date referring to a past event. Loan contracts are the most numerous legal texts; they regularly consist of commercial loans which can run over more than a year. In many cases, loans include a date with a year name. The legal validity of the loans was provided by their clay envelope on which the text was copied and which was sealed by the debtor and the witnesses. Once the debt was repaid, the tablet was given back to the debtor who eventually 'killed' it, discarding it or breaking the envelope, thus, cancelling the legal validity of the contract; therefore, loans should have a limited validity. Loan contracts are regularly found in the house of the creditor, and more rarely in the house of one of the witnesses.

Several loans could be listed in long memoranda which were kept for personal accounting; some of these texts could include dates running over more than twenty years. A small number of loans are known both by their contract and memoranda and there are sometimes duplicates of these memoranda, this means that the graph may include two or more texts referring to the same loan.

The graph created by Barjamovic, Hertel and Larsen is based on dates mentioned in 1,150 Old Assyrian texts;[20] this number corresponds to 5% of the total amount of Old Assyrian tablets discovered to date. Loan contracts and memoranda represent no less than 75% of the texts included in the graph, but 15%, at most, of the total of tablets found at Kültepe. Letters mentioning dates represent some 10% of the graph, but letters constitute more than 40% of the Old Assyrian texts. The analysis of texts found in a single house show that they regularly include old letters belonging to past generations: letters are often the oldest texts found in a house.[21] This graph is cer-

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20 The graph caption, Barjamovic, Hertel and Larsen 2012, 56, fig. 14, is 'The chronological distribution of Old Assyrian Texts'.

21 Michel 2008 and Michel 2018, 59–60, 64–65 for the archive of Ali-ahum and his son Aššur-taklāku which includes a group of some thirty letters addressed to his father Iddin-Suen. See

tainly instructive and must be analysed as part of the economic development of loan procedures. However, there is an obvious bias in basing the history of the period on such a graph, given the random character and discontinuous nature of the sources at our disposal.

Scholars specialising in the Old Assyrian period have only a tiny fraction of the tablets that remain to be found, not to mention what must have been written by the Assyrian merchants living in Aššur, Kaneš and some forty other towns of Central Anatolia. Only nine hectares of the lower town have been excavated in Kültepe itself, but recent soundings suggest that the lower town extended all around the tell.[22] Several Assyrian merchants owned houses in both Aššur and Kaneš, and sometimes also in other Anatolian towns where they could have left tablets as well.[23]

Moreover, we do not know whether all the texts found in a house were voluntarily preserved and filed there or if some of them were discarded and left there. Texts themselves regularly allude to the extraction of tablets from an 'archive' and the transfer of some tablet containers between two houses or two towns, and when moving to another town, it is probable that individuals would bring with them their most important tablets. Each individual 'archive' found at Kültepe is inherently incomplete.

The Kültepe tablets document certain individuals and some of their activities in an ad hoc manner. When studying the texts found in a house, many questions need to be addressed, such as: Why do we have *these* texts? Do we have all texts that were kept by the inhabitants of a house? How did they sort their texts? What do we lack?

3 The Kingdom of Šamšī-Adad

Discovery of early second millennium BCE archives from ancient Mari and later contemporary smaller archives at sites such as Chagar Bazar, Tell Bi'a and Tell Shemshara combine to illuminate, among many other things, the

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also Larsen 2010, 6, which includes two letters sent to Issu-arik the grand-father (texts nos. 2–3) who was presumably active during the years 1935–1890.

22 Kulakoğlu 2010, 45.

23 This is, for example, the case with Šalim-Aššur, who had a house in Durhumit, where he died and was buried (Larsen 2010, 26), or Ali-ahum, who shared his time between Aššur, Kaneš and Burušhattum, where he must have left some of his letters, legal texts and personal accounts (Michel 2018, 59).

'kingdom of Upper Mesopotamia' ruled by Šamšī-Adad, and virtually un-known from other sources (Fig. 3).[24] This short-lived kingdom at its maximum extent spanned an area more or less equivalent to that briefly occupied by the infamous 'Islamic State' a few years ago (2014–2017), a not entirely coincidental parallel, which, however, we shall not pursue further here. What is important in this context is to examine the origin and composition of the sources available, and we may begin with Mari, which has produced the major evidence by far.
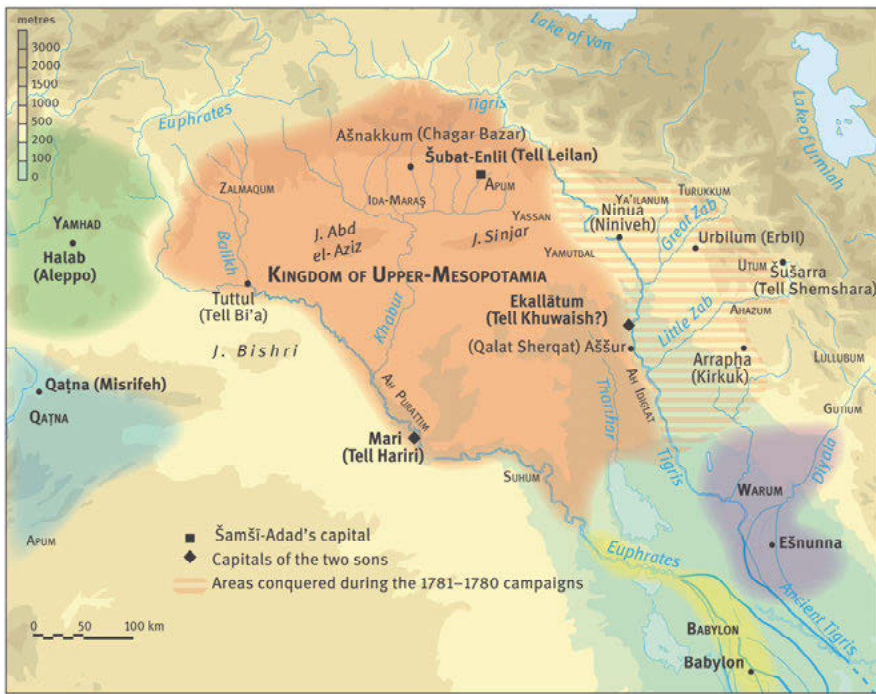

Fig. 3: Map of Upper Mesopotamia with the sites mentioned in text. Map: Jesper Eidem, Cécile Michel and Martin Sauvage, after Sauvage 2020, 81.

24 For a fresh overview in English of this period and the relevant sources, see Arkhipov 2022. The reign of Šamšī-Adad is mentioned in the *Assyrian King List* and a few official inscriptions from Aššur and Nineveh, but apart from this formal information, there are only a very few references to Šamšī-Adad or his kingdom outside the sources discussed here (Arkhipov 2022, 320–327).

Mari (modern Tell Hariri) was an important capital for centuries, situated on the Middle Euphrates in Syria, but Zimrī-Lîm, its last king, was defeated by Hammurabi of Babylon and Mari destroyed *c.* 1760 BCE. When French archaeologists excavated the royal palace of Mari in the 1930s, they found groups of cuneiform tablets in various rooms of the complex, but the main find was made in a small room (no. 115) flanking the inner court. There were thousands of tablets here, principally the diplomatic and political correspondence of the King Zimrī-Lîm, but also a large group of letters dating to the time of his predecessor, Yasmah-Addu, a son of Šamšī-Adad placed as a 'junior' king in Mari. Seven small labels written by officials of Hammurabi and once probably attached to wickerwork boxes where the tablets had been stored were found together with the tablets. Six of the labels refer to 'tablets of servants of Zimrī-Lîm' and the last to 'tablets of the servants of Šamšī-Adad'.[25] This latter group famously include many letters sent by Šamšī-Adad himself to his son Yasmah-Addu. They also include letters sent from Išme-Dagan, another son of the king who was in control of the eastern part of the kingdom, and many letters sent by officials and other associates of Yasmah-Addu.

The situation in room 115 shows that Hammurabi officials, after the conquest of Mari, probably sorted through the tablet groups available left in the palace, and gathered the main state correspondence in boxes in room 115. Furthermore, an overview of the tablets still remaining indicates that groups of important documents are missing, such as most of the letters one would have expected Hammurabi himself to have sent to Zimrī-Lîm while they were still allies. Such documents were presumably removed by Hammurabi's officials and taken to Babylon.

We clearly already face a complicated situation at this level, but there is more. Scattered in various rooms of the Mari palace were thousands of administrative documents from the fourteen year reign of Zimrī-Lîm, some found where they had been used and/or stored, but similar documents from the former reign were predominantly found as fill-in benches and other secondary contexts, and fittingly described as 'dead archives'[26]. Thus, the site of Mari provides us with examples of three main categories of surviving/available textual evidence.

– 'dead' archives – discarded in antiquity – and in many cases lost;
– 'inactive' archives – kept for potential reference in antiquity – for any number of ad hoc reasons; and
– 'living' archives – left *in situ* by destruction and/or abandonment.

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25 Charpin 1995 and Charpin 2019, 14–15.
26 Charpin 2012.

Considering how these categories apply to the evidence for the reign of Šamšī-Adad, we can note, firstly, that other contemporary groups of texts were found elsewhere in Mari, such as in the smaller 'oriental' palace,[27] and, no doubt, un-excavated portions of the very large site may still hide further evidence. This is, of course, a situation which applies generally. The early part of Šamšī-Adad's long reign (*c.* 1830–1775 BCE) is still poorly known, but he initially established himself in the city of Ekallātum, a site located somewhere north of Aššur.[28] Later, he left the son Išme-Dagan in charge there, and himself moved to the new capital of Šubat-Enlil, ancient Šehna, modern Tell Leilan in the Upper Habur Basin, while Yasmah-Addu was placed in Mari to the south-west. Ekallātum has not yet delivered any evidence and, as we shall see, major text groups from this period have not surfaced at Tell Leilan. This means that regarding the state correspondence of the kingdom, virtually only the segment from Mari is available, and however spectacular that may be, we would certainly also like to have, for instance, some of the letters Šamšī-Adad sent to Išme-Dagan, not to mention the letters Šamšī-Adad would have received from both sons and other important contemporary figures. New excavations may, of course, remedy this situation, but any optimism in this regard must clearly be tempered with caution. Events at the relevant sites post Šamšī-Adad may well have turned most of the sources desired into 'dead' or, at least, 'inactive' archives.

Estimating the original output of cuneiform tablets in any particular context is complicated at best, but we must assume that a large number of documents, especially of administrative content, were discarded at more or less regular intervals. The levigated clay was sometimes recycled,[29] or the tablets were simply dumped into garbage pits or fill used for construction purposes. Some of the earlier administrative documents found at Mari provide a good example of the latter practice. This is hardly surprising, but what of the substantial group of letters from the time of Yasmah-Addu found in room 115 at Mari? The curious fact about these letters is that they were kept in the Mari palace many years after the demise of the Šamšī-Adad kingdom, and were still there when Hammurabi of Babylon conquered and destroyed Mari. Why did Yasmah-Addu's successor and rival keep all these documents? No adequate explanation has been provided yet for this 'inactive' archive.[30] Purely historical interest is hardly the answer,

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27 Charpin 1985

28 Ziegler 2002, and more recently the site of Tell Ḫuwaish, *c.* 18 km north of Aššur was suggested as ancient Ekallātum, see Ziegler and Otto 2022.

29 Taylor and Cartwright 2011.

30 See e.g. Finet 1986.

and the best theory is that the documents were left basically because of a hesitance to discard them. Some of the subject matter in them was still relevant and so they survived, probably fairly undisturbed and un-consulted, until the Mari palace was destroyed.[31] A fairly unusual situation and clearly very lucky for us. Of course, we would have liked to have known where in the palace they were kept before being boxed in room 115, and whether Hammurabi's officials also picked specimens from this group to carry off to Babylon.

As mentioned previously, smaller subsidiary archives from the same period have been excavated at other sites in Upper Mesopotamia. The more notable finds come from the provincial centres of Chagar Bazar (ancient Ašnakkum) and Tell Bi'a (ancient Tuttul) in north-eastern Syria, and include series of administration notes dating to the latter part of Šamšī-Adad's reign. Especially the extensive text groups from Chagar Bazar provide extremely interesting information on the internal organisation of the kingdom, but most of the tablets were apparently discarded, 'dead' archives.[32] The correspondence received by the local governor from other main actors in the kingdom, if still preserved, has not yet been located.

Moving to the capital of the Šamšī-Adad kingdom, ancient Šubat-Enlil (*alias* Tell Leilan), excavated 1979–2010 by a Yale University team, very few documents from the time of the famous king have yet been found.[33] This largely reflects deliberate research strategies of the project, which, after an initial focus on the early second millennium levels, concentrated on earlier occupations. The former efforts, however, produced two large groups of tablets, both dated to the period after Šamšī-Adad. The latest and largest of these group, excavated in the so-called 'Lower Town Palace East' in 1985 and 1987, is a composite group of documents from the reigns of two successive local kings a generation or so after Šamšī-Adad. Interestingly it represents a small-scale parallel to the large 'archive' found in room 115 of the Mari palace: a smaller group of letters from the early king, and a much larger one from his successor. In this case, however, the whole group, *minus* selected pieces, seems to have been set aside as an 'inactive' archive by the next, third king. Eventually, it was probably dumped into rooms of the palace where it was found, mixed with fill used in a reconstruction project.[34]

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31 Eidem 2004.

32 Lacambre 2010.

33 For an overview of the epigraphic finds from Tell Leilan of the second millennium BCE, see Eidem 2012.

34 Eidem 2017.

Finally, in the far eastern corner of the kingdom, at Tell Shemshara, located on the Rania Plain in what is now the Kurdish Autonomous Region of Iraq, Danish and Iraqi archaeologists in the 1950s retrieved small, but very informative archives belonging to one of Šamšī-Adad's vassals, a local nobleman by the name of Kuwari. His own archive of letters was found by the Danish team in a room of his palace, which was destroyed by fire in a rebellion *c.* 1780 BCE. It reveals an exciting story of how Kuwari, originally posted as governor by a local kingdom in the Zagros mountains, was obliged to become a vassal of the mighty Šamšī-Adad.[35] The letters sent to Kuwari from Šamšī-Adad himself, his son Išme-Dagan, and various of their officials, thus, come from what was a 'living' archive, frozen in time by an act of war – while Šamšī-Adad was still alive.[36]

Fig. 4: The Danish camp at Tell Shemshara, 1957. Second figure from left: the field director Harald Ingholt (photo Jørgen Læssøe).

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35 Eidem and Læssøe 2001.
36 In this sense, the small archive from Shemshara is still unique. One reason is certainly that the site apparently saw little subsequent occupation in contrast to, for example, Mari, but other 'living' archives from this period are no doubt preserved and may be retrieved one day.

Therefore, the kingdom of Šamšī-Adad, a fleeting but important early state formation in Upper Mesopotamia, and, in some measure, a catalyst for the later Assyrian empire, is, as yet, best revealed to us by two rather fortuitous events. The most important is certainly the decision made in ancient Mari, for whatever exact reason or whim, to not discard a large portion of Yasmah-Addu's correspondence. The second was an intuitive decision made by the field director at Tell Shemshara in 1957 to excavate exactly the spot where the main palace archive was buried – before the site was flooded.[37] Without these events, extant evidence would today be limited to series of administrative notes providing only a spare chronological and formal framework. Instead we have a very rich, nuanced and sometimes very intimate impression of at least the later history of the kingdom of Šamšī-Adad,[38] but one heavily influenced by fortunes of preservation and discovery, and still very much an open file.

4 Conclusions

The two examples briefly outlined above reflect the primary expertise of the authors, and it is important to note that the relevant evidence can no doubt be counted as some of the more privileged available from the extant record of cuneiform data. In spite of the abundance of preserved manuscripts, ancient Mesopotamia remained fundamentally semi-literate, writing and reading being practiced mostly within narrow circles of bureaucrats and scholarly scribes. The early second millennium BCE, to which our examples belong, was exceptionally a period of more extensive literacy. Many merchants and mid- to high-level officials were clearly able to read and write, and numerous letters provide lively and engaging information. Even this fortunate situation, however, remains challenging due to the uneven and sometimes inexplicable distribution of the evidence. The bulk of the Old Assyrian tablets from ancient Kaneš containing dates, for instance, seems to belong squarely within a *c.* thirty-year period, a generation or so before the destruction of Level II, but does this, as suggested, reflect a particularly affluent period of the trade, or could it be a mere coincidence? Older tablets were regularly discarded, and this might account for the assumed low-intensity activity in the initial phase of Level II, while, on the other hand, the latest tablets could have been evacuated before the final destruc-

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37 Eidem 2020.
38 Charpin and Ziegler 2003, 75–168.

tion. Hopefully the publication and retrieval of further evidence may serve to reach firmer conclusions and, meanwhile, we are also left to speculate to what extent additional textual finds may provide us with new and perhaps surprising perspectives on the 'kingdom of Upper Mesopotamia', a fascinating chapter of Mesopotamian history, illuminated by apparently rich but very circumscribed sources.

In the end, there is no predictable system to which tablets may be preserved and become available. The reality which faces historians of the ancient Near East, therefore, is a lack of archival completeness and continuity – and, not least, more summaries which might provide a secure framework for the casually preserved segments. Documents in any archaeological context usually represent only selected or deselected portions of the original contextual scribal output. We are, of course, all aware of this, but may still be tempted to portray our evidence as more representative of the ancient reality than it actually is. There is no ultimate solution to this challenge, which we believe will basically remain as more millions of tablets eventually appear. Scholars must still be detectives of the past. They must carefully consider the origin and composition of very casual or incidental evidence, and only then use it for judicious reconstructions, which, in the end, can only be tentative. The immediate enthusiasm and joy elicited by a new tablet find, entirely appropriate, is usually tempered by its relative isolation and all the cold tracks which it opens up. This is at once an exciting but also frustrating situation, relatively unique in relation to other fields of ancient history, where the appearance of major new textual sources is rare. The history of the ancient Near East, viewed through the lenses of the extant cuneiform record, may be likened to a multiple award-winning motion picture of which only randomly dispersed segments representing a few percent of the original version are preserved.

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Jorrit Kelder

Epigraphy, Archaeology, and our Understanding of the Mycenaean World

Abstract: In this paper I will examine not only how the materiality of Linear B texts – the earliest known texts written in Greek – may inform us about their use and meaning within Mycenaean society, but also how their materiality and related chances of survival may have skewed our understanding of that same society. In order to highlight such potential pitfalls, I will summarise the main characteristics of the corpus of Linear B as well as the general contexts in which these texts were, and indeed still are, found.

1 Writing in and our understanding of the Bronze Age Aegean

Unlike various regions in the Near East, writing came relatively late to the Aegean. The first scripts arrived on Crete in the second millennium BCE and include, as far as we can tell since none of these scripts have yet been deciphered, at least two hieroglyphic writing systems (of which the Phaistos disc may be the most famous example) and a, possibly, derivate linear script; now commonly known as Linear A.[1] The various Minoan scripts are known primarily from clay tablets and nodules, but other materials were also used. We have inscriptions on stone (e.g. on small offering tablets and vases),[2] whereas imprints on clay sealings strongly suggest the use of other, perishable materials. This appears to have included very thin animal skin (perhaps even parchment), possibly papyrus (leather string-imprints suggests a document that was folded and then secured with strings and a knot) and perhaps wood (although there is no positive proof for the latter).[3] Writing in the Mycenaean world emerged even later, and was, or so it is commonly thought, first developed when a Mycenaean group took over control of the palace of Knossos at some point in the late fifteenth

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1 For an overview, see Ventris and Chadwick 1973, 37–42; Chadwick 1987, 45; Steele 2017. For the relationship between Linear A and Cretan hieroglyphic, see Ferrara, Montecchi and Valério 2022.
2 Davis 2014.
3 Whittaker 2013, 112.

century BCE.[4] The Mycenaean script took its form after Linear A, and is, consequently, known as Linear B. From Knossos, the concept spread across the Greek mainland.[5]

Like the literate cultures of the ancient Near East, the Mycenaeans wrote on clay. The tablets that have been recovered come in two shapes: (1) in a format that resembles Near Eastern tablets, the so-called page-shaped tablet, and (2) the so-called palm-leaf-shaped tablets. This – the use of clay tablets – is where the comparison with the Near East really ends, for, unlike in the Near East, the scope of the extant Mycenaean texts is extremely limited. There is an explanation for this, for Mycenaean tablets were not meant to last. Indeed, most of the texts suggest that we are dealing with day-to-day records of the flow of goods, objects, and people within a given administrative region. The sole reason for the tablets' survival is that they were baked in the fire which destroyed the buildings in which they were stored. Virtually none of the tablets that have been discovered so far predate the destruction of their respective palace by more than a year, thus, providing us with a very faint and fragmentary impression of the palace administration in its final stages.

Whilst some very vague parallels in administrative praxis between Linear B and Near Eastern archives have been proposed, there is really very little to suggest anything more than superficial similarities.[6] Unlike the Near East, we have no literary texts, no treaties, no *omina* or religious texts. What we are left with are essentially receipts or registrations of outstanding debts to the palatial treasury, and not much more. Again, unlike the Near East, no *private* Linear B archives have been uncovered to date. The *archives* of the Mycenaean world, therefore, were inherently different from contemporary archives in the Near East.

Also unlike the Near East, our evidence for writing in the Mycenaean world is extremely limited. Archaeologists have recovered so-called archives at various sites; the largest collections were found at Knossos and at Pylos in Messenia and include some 4105 and 1056 tablets, respectively.[7] Indeed, the tablets from this latter site played a pivotal role in the eventual decipherment of Linear B in 1952 by Michael Ventris, who established that the language behind the script was an archaic form of Greek. Apart from Knossos and Pylos, Linear B tablets have also been uncovered at Mycenae (78 tablets), Tiryns (25 tablets) and Thebes (in Boeotia; 304 tablets), Chania (on Crete; 5 tablets) and Volos (2 tab-

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4 Karagianni 2015, 27–28.

5 Chadwick 1976, xiii.

6 Rougemont 2011, esp. 388–389.

7 Nakassis 2022, 5; see also Palaima 2004, 270; Nikoloudis 2006, 142.

lets):[8] all of these sites were, or could be identified as, important centres known from the *Iliad*, and, consequently, it was swiftly assumed that writing in the Mycenaean world was essentially restricted to the palatial elite, and then only to cover a very limited array of activities – I will come to this below.

Fig. 1: Map of the Mycenaean world, with the centres where Linear B inscribed clay tablets have been found. 1: Dimini, 2: Thebes, 3: Mycenae, 4: Tiryns, 5: Aghios Vasileios, 6: Pylos, 7: Iklaina, 8: Chania, 9: Knossos. The fragment on the left was found at Iklaina (courtesy Michael Cosmopoulos), the clay sealing on the right comes from Aghios Vasileios (photo by Adamantia Vasilogamvrou, Athens Society of Archaeology).

Exciting discoveries have been made at a place called Aghios Vasileios in Laconia in recent years, and amongst the finds are numerous (at least one hundred) Linear B tablets.[9] Because of this, and the apparent quality of other finds – there are, for example, indications that some of the buildings there were decorated with colourful frescoes – it is now often assumed that this site may have been ancient Lakedaimon, and that the palace during its heyday controlled much,

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8 Nikoloudis 2006, 142; for Volos, see Skafida, Karnava and Olivier 2012.
9 Aravantinos and Vasilogamvrou 2012.

perhaps all, of Laconia.[10] In a way, these finds seem to confirm the supposition that writing in the Mycenaean world was essentially restricted to palace life. Indeed, the presence of Linear B tablets has by now become so firmly tied in archaeological theory to the presence of a Mycenaean palace, that such tablets have almost become a diagnostic feature: when we find tablets, we will find a palace!

2 Cracks in the paradigm

That the concept of writing being restricted to the palace may not be entirely correct, or alternatively, that we may have to widen our definition of a *palace* in the Mycenaean world, is, however, suggested by recent discoveries at the village of Iklaina, a place not too far from Pylos. Here, the remains of a village with a major central building have been discovered that must have thrived in the fifteenth and fourteenth centuries BCE, whilst it is not quite of the scale of palaces like Pylos, let alone Tiryns or Mycenae, clearly served as the local seat of power. Amongst its charred remains – the building was burnt, and though the excavator has changed his mind regarding the exact date of the destruction several times, it now seems this may have happened around 1250 BCE[11] – was a fragment of a Linear B tablet.[12] This, of course, suggests that writing may not have been limited to palace administration and that it was more widespread than previously thought.

There are, indeed, various reasons to suggest that Linear B was not solely the preserve of the palace administration, and that even within the palatial spheres, it was used for a wider array of purposes than is currently thought. Examples of the latter are various (total of 140) so-called 'stirrup jars' with Linear B signs painted on them. Whilst some inscriptions clearly indicate a royal interest in the contents of these pots (they bear the sign 'wa-na-ka-te-ro', usually taken as an abbreviation for *wanakteros*, 'royal', from *wanax*, 'king'),[13] most other signs are generally understood to reflect either the names of the (supervisors of the) respective pottery workshops, or perhaps the producers of the olive oil that was supposedly kept in these jars.[14] Seeing that most of these pots were

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10 Vasilogamvrou 2013; Hope Simpson 2018, 291.
11 Cosmopoulos et al. 2019.
12 Cosmopoulos 2019, 358.
13 Judson 2013, 84.
14 Judson 2013 for extensive discussion.

made (and found) on Crete, they probably served a very simple role in administering the flow of oil on and from Crete (for some of these vessels were found in Thebes and in the Argolid).[15] As such, they were part of the palatial sphere of administration, but their presence seems to suggest a wider literacy of some sort that may have extended to some leaders of pottery workshops or olive oil facilities.

Some degree of literacy may be expected amongst workshop leaders, and perhaps even personnel of palatial workshops. So-called clay *labels* may testify to this, as do inscribed sealings. A fragment of a stone weight with an incised Linear B inscription ('e-qe-'?) from Dimini (found in one of the small rooms, identified as industrial areas, attached to megaron A) also suggests that writing was understood by the workmen using this particular weight.[16] Similarly, one may imagine that priests and priestesses were literate. A sherd from a kylix with an otherwise unintelligible inscription also comes from Dimini.[17] Kylikes, vessels that are shaped much like a modern champagne glass, were commonly used for banquets and religious festivals, and the sherd was found near what may plausibly be described as an altar. Moreover, seven identical signs ('ka') were carved into the stone lintel of the Kazanaki tholos (a monumental, beehive-shaped tomb) at nearby Volos, whereas a grave in the cemetery of Medeon yielded a unique seal bearing a three-sign Linear B inscription.[18] The seal is now on display in the Delphi Archaeological Museum, and labelled as ivory, though it is most probably of bone. It was found in a chamber tomb (239), in a Late Helladic IIIC context (the chronological designation for the period immediately following, and perhaps coinciding with, the collapse of the palaces; that is, the twelfth century BCE). Unless one wants to propose that Linear B writing survived the collapse of the palaces, it is likely to have been a heirloom. The signs are legible and read 'e-ko-ja' or if they were meant to be read from the seal-

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15 Hallager 1987; Judson 2013.

16 Adrymi-Sismani and Godart 2005, 47–69; Adrymi-Sismani 2016.

17 Adrymi-Sysmani 2016, fig. 2.23; see also Pantou 2010, 383 (whose point that neither the inscription on this sherd nor that on the nearby weight can be considered as evidence for administrative literacy at Dimini, seems to be mostly inspired by her hypothesis that the region had no single central administrative centre, but several centres; yet even if this model were correct, I can see no reason to suppose that literacy was absent at Dimini, and these inscriptions unintelligible).

18 Whitley 2005, 59–61, figs 103 and 104; Adrymi-Sismani and Alexandrou 2009; it has been proposed that the signs, of varying sizes, represent the seven cremation burials, apparently of adults and infants, within the tholos. The identification of the signs as Linear B is controversial, however, and it has been suggested they may merely have been symbols (Janko 2015, 45). For the seal from Medeon, see CMS V/2 no. 415; Younger 1989, 31–32, n. 4.

impression, 'ja-ko-e' (as it happens, all three signs are symmetrical and can thus be read both from left to right and dextroverse). Either way, the meaning of these three signs eludes us, though we could perhaps think of a personal or place name.

Fig. 2: An overview of possible Linear B writing on various different materials. Clockwise, from the upper left corner: the Uluburun diptych (courtesy Cemal Pulak), an inscribed stirrup jar found at Thebes (at the Archaeological Museum of Thebes), the bone seal from Medeon (CMS V/2 no. 415), the stone weight from Dimini, now in the Archaeological Museum of Volos (courtesy Daniel Diffendale) and a Linear B clay tablet (KN Co 903) from Knossos. Public domain.

The small number of inscribed objects other than clay tablets have led most academics to assume that the use of Linear B was extremely restricted and was only used for administrative purposes within the palatial organisation. But I would prefer to flip that line of reasoning, and suggest that the very presence of these *other objects*, few though they are, indicates a wider use of the script – beyond the palace archives.[19]

Interestingly, the tablets themselves seem to support the suggestion that writing may have been more widespread than previously thought. In the first

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19 Palaima (2000, 236–237) has argued along similar lines, noting that the palaeography of some sealings suggest 'the existence of non-centrist habits of writing and spelling among individuals (and related institutions) who only periodically came within the orbit of the central tablet-writers and the central administration'.

place, because the medium, clay, is a far from ideal canvas for the intricate signs of the Linear B syllabary. I am not the first to note this; in fact, both Ventris and his collaborator John Chadwick already pointed this out in their famous book *Documents in Mycenaean Greek*, and Chadwick was even more explicit in his book *The Decipherment of Linear B*:

> The character of the script, with its fine lines and delicate curves, in striking contrast to the contemporary Cypro-Minoan script, is also an indication that clay was not the only material used for writing: the signs are much more suited to writing with pen and ink.[20]

Chadwick then continues by suggesting that the clay tablets were, in fact, used only for rough work and temporary records which were designed to be scrapped once they had been transferred to a more permanent record – Chadwick suggested papyrus or animal skin. There may have been other media on which the Mycenaeans kept their records, and here I should highlight the work of my colleague Willemijn Waal, who has recently suggested that the very shape of the so-called palm-leaf tablets may be more than just a hint. She argues, quite convincingly I feel, that the Mycenaeans may have initially used real palm leaves for their documents, and later shaped their (additional) clay tablets after these.[21] The use of leaves for writing is not as strange as one might think; similar practices have been observed elsewhere in the world, for example, in India and the Far East. Moreover, as Waal noted, in many languages – including my own – the use of leaves for writing is still reflected in today's terminology for script bearers – think of folia, leaf, *Blatt*, *hoja*, *feuille*, *foglio* or *blad*. Later Greeks may even have had a (rather distorted) memory of such a practice in the Mycenaean world; Herodotos's 'phoinikeia grammata' may originally not have meant 'phoenician letters', but rather 'letters on palm leaves' – seeing that the word *phoinix* can refer to a palm tree, the colour purple or, indeed, to Phoenicia. By Herodotos's time, both the use of leaves for writing and Linear B script had probably been long forgotten, whereas the Phoenicians were still frequent trading partners – he may have simply misinterpreted (and countless of his readers ever since) an ancient scribal term.

I feel that Waal's suggestion is appealing, for it would in many ways make Mycenaean scribal traditions much more in line with contemporary Near Eastern and Egyptian traditions, where we do have clear evidence for a whole swathe of materials that were used to write on, including metal strips, wooden

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20 Chadwick 1958, 130; see also Ventris and Chadwick 1973, xxxiii.
21 Waal 2021, 211.

writing boards[22] and papyrus. Given the close connections between the Mycenaean world and the Near East, it would be remarkable if the Mycenaean scribes behaved completely different from their counterparts in Anatolia, the Levant and Egypt. Indeed, from oblique references to Ahhiyawan (almost certainly the Hittite designation for the Mycenaean world) diplomatic correspondence, it is quite clear that the Mycenaean kings normally wrote to their vassals and foreign peers. In the so-called 'Tawagalawa letter', the Ahhiyawan king is specifically mentioned to have 'written' to his vassal Atpa (*IŠ-PUR*) means 'he [the king] sent'), whereas later on, the same text refers to a message to the Hittite king that was apparently conveyed orally; something so out of the ordinary that it warrants special mention in the text.[23] Though clay tablets were regularly used to convey diplomatic messages in the Near East, I would argue that a similar praxis is inherently unlikely in the case of Ahhiyawan–Hittite correspondence. The routes taken by Near Eastern messengers were mostly land-based, but unbaked clay tablets must have been less suitable for maritime travel (though I acknowledge that the king of Alashiya (Cyprus) wrote to the Egyptian king Akhenaten on clay!). It seems to me more likely that Mycenaean correspondence with the Hittites was written down on perishable but more waterproof materials (e.g. wooden tablets that were used in contemporary Anatolia). Moreover, there is no reason to suppose that such correspondence was written down in cuneiform – it may well have been in Greek (Linear B), Luwian or Hittite (hieroglyphs); scripts that lend themselves (as noted above) much more readily to writing with ink. It is abundantly clear that the ancients believed the early Greeks had written on things other than clay, such as parchment, cloth, lead strips, leaves and wood – there are clear references to this in, for example, Pliny and the Suda, the Byzantine encyclopaedia.[24] Indeed, Gregory Nagy has recently argued the (Iron Age) Cypriote word διφθεράλοιφος, which is usually translated as 'teacher of letters' or more generically as 'scribe' but etymologically means 'leather-painter', may reflect the survival amongst certain groups on Cyprus of, by that time already ancient, Mycenaean writing traditions.[25]

The problem with all this is, of course, that without physical evidence it must largely remain conjecture. Whereas there are clear indications of the use of

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22 See Waal 2011 for an argument that Anatolian scribes also wrote directly on wood; Symington 1991 for writing on wooden boards coated with wax.

23 Kelder 2010, 29, esp. n. 80; Waal 2022, 244; for the text, translation and commentary of the Tawagalawa letter, see Beckman, Bryce and Cline 2011, 101–122, esp. 105.

24 Waal 2021, 215; Pliny, *Naturalis Historia* 13.21; Suda φ 787, <http://www.stoa.org/sol/> (accessed on 16 November 2022).

25 Nagy 2020.

leather or other perishable materials for writing in the Minoan world, no leather or papyrus has been found from Mycenaean sites, and no larger Mycenaean texts have been found on anything other than clay tablets. As a result, we may read, even in fairly recent handbooks, that 'no evidence suggests that they [the Mycenaeans] used parchment, as the Minoans did. It follows that literacy was not widespread'.[26] Yet, a recent study by Martien Dillo now suggests that the famous diptych from the Uluburun shipwreck may yield the first Mycenaean writing on perishable material.[27] The diptych is made of choice boxwood and ivory hinges, and must date – with the rest of the ship – to the final years of the fourteenth century BCE.[28] The fields for writing were originally covered in wax to facilitate writing, but next to these fields, one can just make out a number of incised figures. These were already noted when the tablet was found in 1986, and the diptych was duly subjected to inspection by Emmett Bennett Jr., the doyen of Mycenaean studies at that time. He, however, did not recognise any of the signs. In a letter to Barry Powell (March 1989) he wrote that, as a consequence, 'it would be wiser not to claim that the diptych itself is inscribed'.[29] Subsequent studies have, indeed, largely ignored the presence of these signs on the wooden tablets, or, if they are mentioned, dismissed them as the marks of the diptych's owner. Dillo, however, has now proposed that these signs represent Mycenaean numerals and include the numbers 100, 3 and the hitherto unattested sign for 100,000.

Regardless of whether one is inclined to accept Dillo's identification (and I certainly am), the case of the Uluburun diptych demonstrates an unfortunate tendency amongst Aegeanists: what we do not recognise is ignored, absence of evidence is taken as evidence for absence, and whole paradigms are subsequently built on datasets that are simply incomplete. In the case of Mycenaean Greece, there is, as I hope to have demonstrated, ample evidence for a much more eclectic writing culture than was previously assumed. Hints are everywhere: the morphology of the script, the shape of the tablets, the small number of inscribed objects other than clay tablets, such as the inscribed seal at Delphi and stone weight from Dimini, later Classical traditions, and, of course, contemporary scribal practices in nearby Anatolia, Cyprus and Egypt.

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26 Shelmerdine 2008, 13–14.

27 Dillo 2021, 222–223.

28 For the fourteenth century BCE date, see Pulak 1998, 214; though Manning (2014, 109) has since questioned the reliability of this date. I thank Peter James for this reference.

29 Powell 1991, 66; quoted in Dillo 2021, 221.

3 Factoids and interpretations

I will conclude my paper by highlighting how the field's reluctance to look beyond its own paradigm has had a demonstrably problematic effect on our understanding of the Mycenaean world – not just its scribal culture but also its political and societal structure. In order to do so, we will need to go back to the years immediately following Ventris's decipherment of Linear B. The small but growing corpus of Mycenaean texts had become intelligible and these demonstrated that, much like their Near Eastern contemporaries, the Mycenaeans were keen administrators.

Yet, the existence of what appeared to be a fairly extensive Mycenaean bureaucracy did not fit at all with Homer's world of heroes, cattle raiding and sackers of cities. As Oliver Dickinson already pointed out:

> the world of Homer's heroes, in which wealth is essentially represented by livestock and movable treasures, and to acquire these by raiding is not thought at all reprehensible, seems completely at odds with the world of orderly taxation of territories' produce reflected in the Linear B texts.[30]

Moreover, new finds at other Mycenaean citadels, including Thebes and Mycenae itself, demonstrated that the palatial administration, by and large, affected only a relatively limited area around the palatial centres. Despite the fact that Ventris himself had already warned against an overreliance on the evidence provided by the Linear B texts, the limited geographical reach of the various palatial administrations was readily taken as evidence for small territorial states, whereas the relative dearth of references to other known centres or regions outside these reconstructed realms was seen as evidence for political independence. Rather than resembling the united Mycenaean world described in the *Iliad*, the Mycenaean world, thus, would have been much more like the later, Iron Age world of independent city-states (similar to the world in which Homer himself would have lived).[31] This idea has persisted to this very day.

Indeed, although our understanding of the Mycenaean world in many ways has improved dramatically since Ventris's days, the majority of theoretical models of Mycenaean palatial society that are used in today's academic dis-

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30 Dickinson 1994, 81.
31 Dickinson 2019, 42; although Dickinson then notes that it is quite possible that Mycenae may have exercised varying degrees of influence over other palatial centres, 'some more like vassals but still technically independent, *much as in the Hittite Empire*' (my italics).

course are vestiges of the era in which Linear B was first deciphered. As such, these models inherited a number of flaws from earlier research, but these flaws, even though some are quite obvious and often even recognised, have never really been properly addressed.

The equation of the administrative purview of the various archives with actual political boundaries is, I think, one of the most egregious examples of this. Open a given textbook or Wikipedia, and it will inform you that each of Mycenaean palaces controlled a limited territory – usually comparable with a modern province.[32] These territories are reconstructed on the basis of the Linear B texts; for example, by plotting toponyms in these lists against known modern place names or (more reliably) geographical features, such as mountain ranges. It goes beyond the scope of my paper to demonstrate exactly how problematic our understanding of all these reconstructed territories really is, though it may be illustrative to note that the realm of the palace of Thebes is often thought to have included parts of the island of Euboea, because there is a reference to cattle being sent from that island to the palace on the occasion of a religious festival. I would argue that sending a couple of cows to a given city does not necessarily indicate any kind of power relationship between the regions involved, yet even this really silly argument has permeated the paradigm to such an extent that it is hardly ever called into question.[33]

Indeed, even in the case of the extremely intensively studied palace of Pylos, only *one* site – the site of Pylos ('pu-ro') itself – can be identified on a map with absolute certainty. The other identifications of places boil down to reasoned speculation at best, and sheer guesswork at worst. Despite these serious reservations, the *Kingdom of Pylos* has become a boilerplate for our understanding of other Mycenaean kingdoms and, thus, we read in most textbooks how Pylos controlled Messenia, Thebes, southern Boeotia, and Aghios Vasileios, probably Laconia.[34] In the Argolid, where we have at least three (Mycenae, Tiryns and Midea) and probably more (Argos, Nauplion) heavily fortified citadels, it is quite clear that this model does not really work, and that there, at least, the palaces must have belonged to a single polity.[35]

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32 For Pylos: Bennet 1998; most recently Hope Simpson 2014; see discussions in Galaty and Parkinson 2007 for various approaches to the economic and political reach of the palaces.

33 But see Kelder 2008; Palaima 2011.

34 Shelmerdine 2006; see also (for Knossos and Pylos) Bennet 2017, and see various discussions in Driessen and Van Wijngaarden 2022, that argue for regional and even intraregional diversity and fragmentation.

35 Crouwel 2008.

This problem is usually glossed over, or the Argolid is simply accepted as an exception to the rule of 'one palace equals one kingdom'. Yet, it really ought to make us pause and wonder how these various palaces interacted with each other, and whether we can indeed equate the administrative purview (which is already a heavily reconstructed construct based on a fragmentary corpus) with political boundaries. The answer to this question is, I think, that we cannot, and I have argued in numerous studies that lots of evidence (the remarkable cultural homogeneity of the Mycenaean world, the remains of what was probably quite an extensive and extremely well-built network of roads, but, above all, a number of Hittite texts which refer to a Great King of Ahhiyawa) rather suggest that most, if not all, of the palaces fell under the sway of a single peripatetic ruler.[36] There is even some evidence from the texts for such a scenario, and this was observed by Nicholas Postgate, who noted that, to a Near Eastern archaeologist, the uniformity of shape and size of the Linear B tablets throughout Greece appear to indicate political unification, since in the Near East, every polity was characterized not only by its own specific way of administration but also by the shapes and sizes of the tablets. Postgate noted this at a conference for Aegean prehistorians in 2001: his observations were noted, and – much like the signs on the Uluburun diptych – duly ignored.[37]

Postgate raised his point again in his 2013 book on *Bronze Age Bureaucracy*, where he wrote:

> by analogy with Mesopotamian parallels, specifically Assyria, the close similarities between the archives from the different mainland palaces might suggest that they all belonged to a single overarching system, making each palace more akin to an Assyrian provincial capital than an independent polity, with the written documentation as a feature of a single dispersed administrative system rather than indigenous to each separate centre.[38]

Yet again, few if any Aegean prehistorians took notice. The apparent reluctance to question existing paradigms and an overreliance on the extant evidence have not just resulted in a very problematic understanding of Mycenaean political

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36 See e.g. Kelder 2005; Kelder 2010 and, most recently, Kelder 2018. Other have argued along similar lines, e.g. Lohmann 2010 and Eder and Jung 2015 (who – erroneously – seem to be under the impression that I exclude Knossos from my model, yet, at the same time, follow (albeit without references) my 2008 argument for a single, peripatetic *wanax* ruling over all the palatial centres).

37 Postgate 2001, 160.

38 Postgate 2013, 411.

geography but of Mycenaean society as a whole.[39] Indeed, we even have trouble understanding the very top of Mycenaean society. The Linear B texts refer to a *wanax*. The title is clearly the Mycenaean predecessor of Homer's *anax*, a designation for kings and deities, and thus it seems fair to assume that the Mycenaean *wanax* must also have been someone of significant importance. Yet, the same texts also refer to a number of other important figures, most notably the *lawagetas*. As far as the texts go – and, again, they do not go very far – the *lawagetas* seems to have been pretty similar to the *wanax*: both held a *temenos* – probably some sort of special, dedicated and, perhaps, sacred plot of land. Both seem to have been at the very apex of the Mycenaean social pyramid, though the texts indicate that the production of the *temonos* of the *lawagetas* was more modest than that of the *wanax*, perhaps indicating that the *lawagetas* was somehow of slightly lower status. Moreover, a single (*sic*) text from Pylos indicates that the *wanax* appointed (or perhaps buried) a specific official (a *damokoro*; perhaps an overseer of royal storerooms comparable to the Hittite AGRIG official, as Marco Poelwijk and I have argued in another paper).[40] Based on the *wanax*'s apparent involvement in this investment ceremony, and because the title *lawagetas* can be understood as 'leader of the people', it has been variously suggested that the *wanax* was a local king, or perhaps a priest-king, whereas the *lawagetas* was either a crown prince or the military commander.[41] Though there may be some very vague *comparanda* in Indo-European legends, such a duality, with essentially two top dogs at the very top of Mycenaean society, would be almost unparalleled. Anywhere else in the ancient Near East, the king was at the same time the supreme military commander, a worldly autocrat and the state's principal conduit to the world of the gods. There certainly were crown princes in the ancient Near East, but they never held a function or prestige that was essentially identical to that of their father: there was never any doubt who, at any given time, was in charge. To argue that we have something wholly different going on in the Mycenaean world would, *a priori*, require extremely conclusive proof. But this is lacking.

The interesting thing is that, if we were to interpret the Mycenaean evidence through the prism of a Near Eastern archaeologist (as Postgate already pro-

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39 I should note here that simply citing the *majority's view* (if it is indeed that), does not, in my book, constitute a valid argument. In fact, one would expect the proponents of such a view, apparently shared by so many specialists, to be able to present *unequivocal* evidence to support their idea. In the case of the paradigm of multiple culturally similar yet politically independent Mycenaean states, however, no such evidence has *ever* been presented.

40 Kelder and Poelwijk 2016.

41 Wundsam 1968, 58; Ruijgh 1985, 167; Palaima 1995.

posed), the whole problem of a *wanax* and *lawagetas* with essentially overlapping functions disappears. In such a scenario, one could easily imagine – as I argued in 2008 – that the *wanax* was the LUGAL.GAL (the Great King), and the *lawagetas* precisely what his name implied; the ruler of the people, a local, vassal king. In such a scenario, numerous previously peculiar archaeological features would now become wholly explicable. The two-partite structure of many Mycenaean palaces, for example, with two similar, adjacent throne rooms, could now be seen as the palace of a local ruler, with a larger throne room for the occasionally visiting Great King. An itinerant court would, again, be completely compatible with contemporary practice in the Near East and, indeed, with the much later European Middle Ages (where one would have the *Pfalzen* as residencies for local vassal rulers, that doubled as lodgings for the emperor on his occasional inspections). Such a scenario, moreover, would also explain why we have – admittedly very scrappy – indications of considerable investment in a system of roads. The quality of especially Mycenaean bridges – some of which continued to be in use well into modern times – only makes sense if these roads were somehow of importance to the survival of the state. It may be more than coincidence that these bridges can only be reasonably compared to later Roman roadworks, which were primarily built to facilitate the speedy deployment of troops and goods, and for speedy communication within the framework of a unified state (a useful comparison may perhaps be made to China's Grand Canal, which was similarly created at a time of unification under the Sui dynasty, or, indeed, the network of roads created under China's first emperor).[42] Similarly, we would no longer struggle to explain away the remarkable cultural uniformity of the Mycenaean world. Despite minor regional differences, the pottery production, fresco manufacture, script and administration (as we have seen) were essentially the same throughout palatial Greece, and whilst this does not necessarily indicate political unity, it is surely significant that nothing similar can be observed until Roman times: during the Classical period, for example, regional cultural and linguistic diversity was far more pronounced. However, most importantly, such a scenario would fit completely with the written Hittite evidence available, which indicates the presence, at least in the thirteenth century BCE, of a Great King, a LUGAL.GAL, of Ahhiyawa; that is Mycenaean Greece.

The problem with all of these reconstructions is, of course, that we are balancing probabilities based only on a very limited number of hard facts. Whilst we do, of course, have archaeology as a tool to reconstruct aspects of the past,

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42 I thank Michael Friedrich for this parallel.

this tool is notoriously ill-suited to reconstruct more abstract aspects of ancient societies, such as political structures. In the ancient Near East, this shortcoming is compensated by an abundance of texts, dealing not only with mundane aspects of life, such as taxation or trade, but also with things such as religion, diplomacy and even *history* (of sorts). All of that is conspicuously lacking in the Linear B texts, but because they are the only written sources from the Mycenaean world itself, there has been a tendency to use them to understand aspects of that world that have no relation to their content. This is understandable because we have got to work with what we have, but, as I hope to have demonstrated, the results are predictably problematic. What is worse is that some of the *factoids* that have been distilled through such dubious analyses have become embedded in academic debate, and now serve to as a point of departure for subsequent research projects. An example is a recent paper in the American journal *Hesperia* which came uncomfortably close to circular reasoning: we know that there was no overarching larger Mycenaean state and that the Mycenaean polity was politically fragmented, therefore, as a result, all evidence that suggests otherwise, including the fairly explicit Hittite texts, must simply be wrong. And indeed, in this paper, it was argued that the Hittites simply misconstrued the political reality of the Hittite world in order to accommodate their own preconceptions of kingship – even though those very same texts indicate personal relationships and visits between the Hittite and Mycenaean courts.[43] Apparently, people who lived at the same time on either side of the Aegean, and who had regular and even personal contacts, had it wrong, whereas we, three thousand years later, know it better. It is possible but inherently unlikely, and I would like evidence for such a claim. None of that, as far as I can see, has ever been presented.

4 Looking forward

I should like to end my paper on a positive note, for not all is bad in Aegean prehistory (though, in view of all the above, we should perhaps call it Aegean protohistory instead!). In recent years, for example, we have gained a much better understanding of the scribes who were at work in the different palaces. Some 32 scribal hands have now been identified at Pylos, who were responsible

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43 Blackwell 2021; for personal relationships between Hittite and Ahhiyawan elites, see Waal 2019, 21.

for writing 1107 tablets, whereas 100 distinct scribes appear to have written more than 3300 tablets at Knossos.[44] Waal has already noted that the number of scribes at both places seems large compared to the modest number of texts, and suggested that this may again point to a wider range of materiality of Mycenaean script bearers.[45] At the same time, there is a growing understanding that the Mycenaean world should not be seen as distinct, but instead very much as a part of the ancient Near East. This tendency has already led to some important new publications, and I should like to highlight here especially the recent book *The Ahhiyawa Texts* by Gary Beckman, Trevor Bryce and Eric Cline – an Assyriologist, a Hittitologist and an archaeologist – which, for the first time, brought together in an accessible way all Hittite texts pertaining to what is almost certainly the Mycenaean world (Ahhiyawa).[46]

I hope to have highlighted in this paper that comparing evidence from one's own field to evidence from different fields is precisely what leads to new insights. Indeed, the merit of doing so is now increasingly appreciated, and a number of recent projects (such as the CREWS and VIEWS projects headed by Pippa Steele,[47] or, indeed, the research by Willemijn Waal to which I have already referred) have begun to bridge the disciplinary divides. Similarly, the book in which this paper is published has a profoundly holistic approach, and includes chapters that focus not only on writing practices in the ancient Near East, but also on early scribal traditions in China and India. Such an approach is the way forward for gaining a better understanding of *how the ancient world worked*, though there are, of course, also dangers in such a comparative approach. One very real danger is an overreliance on supposed facts from one given field in order to interpret datasets from one's own field of enquiry: I have given some examples from my own field of enquiry (Aegean prehistory, particularly the political organisation of the Mycenaean world) in the lines above. Comparing data from different fields, therefore, also requires the intellectual honesty to critically examine one's own data and those of others, as well as the willingness to reassesses supposed certainties and dominant paradigms. I hope that this chapter presents some possible venues to do precisely that.

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44 Jeremy Rutter's online course, lesson 25, 'The Linear B Tablets and Mycenaean, Social, Political and Economic Organisation' <https://sites.dartmouth.edu/aegean-prehistory/lessons/lesson-25-narrative/> (accessed on 4 October 2022).

45 Waal 2021, 212.

46 Beckman, Bryce and Cline 2011.

47 Two large research projects funded by the European Research Council; more information can be found at <https://crewsproject.wordpress.com> and <https://viewsproject.wordpress.com> (accessed 16 November 2022).

Abbreviation

CMS V = Ingo Pini (ed.), *Kleinere Griechische Sammlungen*, 2 vols (Corpus der minoischen und mykenischen Siegel, 5/1–2), Berlin: Gebr. Mann Verlag.

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Early Uses of Writing

John Baines, Cao Dazhi 曹大志

Material, Spatial, and Social Contexts of Early Writing: Egypt and China

Abstract: The earliest Egyptian complex sign system was ancestral to the scripts that developed from around 3100 BCE onward. In China the first writing is not securely attested until *c.* 1400–1250. In both civilisations the principal writing media were perishable and are lost but must be allowed for. Both systems had two realisations, one more pictorial and less cursive than the other. Egypt retained this feature, whereas it disappeared in China from *c.* 1050. Display inscriptions included titles relating to king and court. Shang 商 dynasty titles written with pictorial signs are generally termed 'clan emblems'. Interpretation as titles provides a more consistent reading, rendering desirable a rethinking of administrative structures. Kings manipulated titles as an instrument of control, as is exemplified by rather later inscriptions.

1 Introduction

In both Egypt and China, writing emerged from societal contexts in which information that might be transmitted verbally had no clear counterpart in visual forms. Over some centuries in Egypt, from the late fourth to the early third millennium BCE and through several phases, there developed first a way of recording meanings through a limited repertory of signs, and then a double, some centuries later triple, form of visual notation that conveyed all the essential features of the Egyptian language. That language stabilized gradually in writing, in forms that remained largely normative for millennia, despite changes in its spoken counterpart that included a fundamental transformation of its syntax.

Scripts, the visual contexts in which they were used, and the language were essential to the definition of Egyptian civilisation. At the same time as writing developed, oral and bodily practices that were no doubt equally essential took on forms that endured, although probably in more flexible and less slowly changing realisations. Whether these included writing displayed on the human body and its coverings is unknown, but parallels in Western Zhou China, where some inscriptions on bronzes narrate that inscribed artefacts documenting the award of privileges were attached ceremonially to a belt, remind us of that pos-

sibility (see Section 4 below). In this chapter we address more the written than the oral side of the domains just evoked. Nonetheless, the visual and material residues of writing, as well as the contexts for which evidence is available, would not have existed or have had meaning without the lived, oral setting, which must be borne constantly in mind.

China offers an altogether longer background than Egypt for the use of sign systems in predecessor societies, with graphic signs on elite ceramics stretching back into the later Neolithic, up to two millennia before the late second millennium, from which the script is well attested. So far, there is no consensus about how Chinese writing originated, what period is the earliest for which a writing system should be posited, how far the older graphic systems – which consisted of altogether fewer elements than the signs in the writing system – influenced it, or indeed which systems should come into consideration. Nonetheless, the visual character of the script, which was created and gradually acquired a distinctive appearance of its own, was surely influenced by its elite visual environment. Here, we seek to take into account Paola Demattè's arguments in her *The Origins of Chinese Writing* (2022), in which she valuably covers both writing as it is generally understood and the wider background of graphic systems, while pursuing the possible origin of writing further back than can be attested archaeologically.[1] The prime examples we use date to the Anyang period (安陽), corresponding to the last nine kings of the Shang 商 dynasty of traditional texts (*c.* 1250–1050 BCE); this was at least a couple of centuries after the initial development of writing. Later in this chapter we discuss aspects of Late Shang/Anyang and Western Zhou 周 evidence that offer enlightening parallels for Egyptian material mainly of the Old Kingdom (later third millennium BCE). Here, we build upon the approach that Cao Dazhi has developed and published in several articles (see Section 4 below).

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1 Li Feng and Branner 2011 includes several chapters relevant to the earliest writing in China. We do not refer to them in this section because points in them that are valuable for our discussion are incorporated in other references we give.

Table 1: Early Egypt: very approximate, rounded dates.

Predynastic period	
Naqada IIA–C	*c.* 3450–3250
Naqada IIIA, B; 'dynasty 0'	*c.* 3250–3050
Early Dynastic period	
First dynasty	*c.* 3050–2850
Second dynasty	*c.* 2850–2700
Third dynasty	*c.* 2700–2625
Old Kingdom	
Fourth dynasty	*c.* 2625–2475
Fifth dynasty	*c.* 2475–2325
Sixth dynasty	*c.* 2325–2175

After a presentation of the two cases, the discussions below address two principal issues. The first concerns a characteristic that the earliest Egypt evidence and that of Anyang period China share, which is the presence of more than one set of graphic forms. In the Egyptian case, for the earliest phase of which we use the term sign-system rather than writing in order to leave some issues open, two styles are present in the find of Tomb U-j at Abydos, the earliest and most informative source, where they were applied to different material supports and at different scales (for dates, see Table 1).[2] In China too, two main surviving categories of material support – oracle bones and ritual bronzes – bear writing, but they use the same basic system (little writing survives on other non-perishable media). On the main prestige medium of bronzes a distinctive style of inscription was used in the Xiaoshuangqiao and Anyang periods for a very much more limited range of signs than occur in standard writing (see Section 3 below). This was much more formal and pictorial than the writing known from oracle bones; the latter began to be widely adopted on bronzes near the end of the Anyang period.

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2 Fundamental publication: Dreyer, Hartung and Pumpenmeier 1998. We approach this material evidence along lines similar to Stauder 2021, whose brilliant discussion readers may wish to compare with our summary treatment.

Table 2: China: Central Plain chronology for Early Bronze Age; dates rounded.

Central Plain chronology	
Erlitou (Luoyang)	*c.* 1800–1500 BCE
Erligang (Zhengzhou; Early Shang)	*c.* 1500–1350 BCE
Xiaoshuangqiao/Huanbei	*c.* 1350–1250 BCE
Anyang/Yinxu (Late Shang)	*c.* 1250–1050 BCE
Western Zhou	*c.* 1050–771 BCE

A second issue that has longer-term ramifications is how and in which contexts kings and elites used writing to control and display status, and for what audiences. Here, Egyptian and Chinese bodies of evidence diverge strongly. Relevant Egyptian material spans more than a millennium, from about 3250–2150 BCE (hieroglyphic writing continued to be used in display throughout later times). By contrast, the Chinese sources we address are mostly of the Anyang and early Western Zhou periods (*c.* 1250–950 BCE), developing up to that point and beyond, into the fuller narrative and discursive context of long inscriptions on bronzes, as well as almost certainly on other, lost media. Egyptian and Chinese usage evolved in different directions, but the approaches of rulers to elites and elite display in the two contexts can be profitably compared. Interpretation of the meaning of the Chinese material relates closely to issues connected with the presence of more and less pictorial and formal styles of writing, whereas that is less the case for Egypt. A high proportion of display in both traditions is in contexts relating to the dead, in China notably in the ancestor cult but not restricted to it.

Both for Egypt and for China, the aesthetic context of writing is essential. Egyptian hieroglyphic writing remained tied to the symbolic domain of high-cultural works of art throughout its history of more than three millennia. Many centuries passed before inscribed hieroglyphic texts of any length began to be publicly visible, in the entrance areas of non-royal elite tombs of the late third millennium BCE, as well as perhaps in much less well attested royal monumental complexes. In China of the Erligang, Anyang, and Western Zhou periods, 'decorative' patterns rather than pictorial representation were at the core of surviving art, with the premier medium of bronzes – mostly vessels but also other types – acquiring writing, but not in visually salient settings. Pattern and writing remained separate, with writing mainly on vessel interiors and not immediately visible to the living (see further Section 3 below). As noted above, in Anyang times this writing had two realisations. These are a style of monograms and short groups with enhanced pictorial content that is widely termed 'clan

signs/emblems' and is the form found on bronzes; and the standard script that is found on vast numbers of oracle bones, which exhibits rather simple and rigid sign forms that are constrained by the recalcitrant medium.[3] For both Egyptian and Chinese traditions, mundane writing on perishable materials for administrative and other cultural purposes was very probably present, but apart from a few brush-written signs on oracle bones it hardly survives.[4] In both cases it is an open question how long it was before writing became central to administration. Even when it had acquired that status, administration possessed prestige alongside practical utility (or as some scholars emphasize, often at the expense of utility),[5] and this continues to be the case today.

There is no evidence that the earliest writing was used in monumental contexts. While such usages could be undiscoverable if they were practised on perishable media and in contexts inaccessible to archaeology, nothing points toward their having existed in the systems' initial stages of development. The only partial exception is the presence of rock art bearing Egyptian royal names from just before the Dynastic period and around its beginning. The relevant sites, however, are outside the settled area of Egypt even if sometimes very near it, and they exploited an existing mode of display in desert regions; they should probably be seen as adaptations of emerging practices of writing to a special context, rather than primary influences on it.[6] We know of no indication that the earliest Chinese writing was used on monuments; there too, however, it is improbable that any material that may have existed would survive to be discovered.

Writing has effects in the lived world, in many different ways. We mention below how in the Egyptian case key concepts could be materialized in hieroglyphic form in order to be rendered visible in action. This type of usage, which is on the fringes of both images and writing, has parallels almost everywhere, and it appears to have been particularly important in the earliest stages of writing.[7] In Western cultures, heraldry offers a compelling instance of a similar phenomenon that originated in periods of low literacy but has survived into the present.

Our comparison of bodies of evidence from the earliest accessible periods in the use of writing in Egypt and China can itself be compared with Anthony Barbieri-Low's treatment of the two societies through contrasting themes for later periods in his illuminating book *Ancient Egypt and Early China: State, Soci-*

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3 For background on oracle bones, see e.g. Keightley 2000; Thorp 2006, 173–185.

4 See notably Qiu Xigui 2000, 60–67; Bagley 2004.

5 For later periods in Egypt, see e.g. Eyre 2009.

6 Hardtke et al. 2022.

7 Compare Dahl 2023 for Iran.

ety, and Culture.[8] Like him, we select our materials on the basis of their thematic similarities, not in terms of absolute chronology. Our topics are separate from his. Neither of us can emulate his parallel expertise in the two traditions.

Fig. 1: Map of Egypt in early periods. Drawn by Alison Wilkins.

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8 Barbieri-Low 2021.

2 The emergence of writing in Egypt

In Egypt, Tomb U-j at Abydos (see the map in Fig. 1), which was probably the burial of a ruler, has produced the earliest surviving examples of a complex sign system, dating from Naqada IIIA, *c.* 3200 BCE (see the chronology, Table 1).[9] The system has two realisations that hardly overlap: miniature signs carved into rectangular bone tags (Fig. 2), typically around 1.5 cm high, the majority of which bear two characters (some of them filled with pigment); and very large, relatively untidy signs, mostly single, painted in black on crude ceramic vessels (Fig. 3). The signs on both media are well and confidently executed; the system is unlikely to have been devised for the funeral and burial of the tomb's occupant. It is not known what the U-j sign system communicates. Günter Dreyer proposed that it recorded the sources of the goods to which the tags were attached and the contents of the vessels. His readings seem plausible, but they have been questioned, and some of his assumptions are backward projections of phenomena attested from later times. The material is too scant for confident interpretation. David Wengrow has pointed out additionally that the tags appear to have been produced in groups and might have been made for the funeral.[10]

The miniature signs on the tags are similar in appearance to later hieroglyphs, with which they share the characteristic of including a number of species of birds in the repertory (the extent of which is not known). Several signs depict important cultural features, notably the 'palace façade' motif, a throne, and what is known from later as the shrine of Upper Egypt. These representations of large pieces of material culture relate to an environment of buildings and furniture that were originally created in reeds and mudbrick. The co-presence of reeds and brick – the latter also being the material of Tomb U-j – suggests that the reed elements may have been material tokens of a disappearing but symbolically important tradition, not least because the palace façade motif was itself a transformation into brick of a pattern originally created in organic materials, as was the case also in ancient Mesopotamia.

9 For the tags and signs on the vessels, see Stauder 2021; discussion of the aesthetic context, Baines 2010.
10 Wengrow 2008.

Fig. 2: Sample bone tags from Tomb U-j at Abydos. Naqada IIIA, *c.* 3200 BCE. Courtesy Deutsches Archäologisches Institut, Abteilung Kairo.

Fig. 3: Inscribed pots 2/1 and 5/8 from Tomb U-j at Abydos. Naqada IIIA, *c.* 3200 BCE. Courtesy Deutsches Archäologisches Institut, Abteilung Kairo.

No palace, temple, or elite settlement of the period has been discovered. With exceptions at Hierakonpolis and in the Nile delta,[11] such elements were probably set on the floodplain beside the river and cannot be recovered. But the elite goods, of which the thoroughly plundered Tomb U-j produced tantalizing fragments of exquisite quality, may have been displayed in a rather plain environment, within which there was craftsmanship of a high order, notably in textiles and other forms of weaving, as well as a strong emphasis on colour. The practice of sealing, which had been introduced in the previous couple of centuries,

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11 Hierakonpolis: see McNamara 2008; Tell el-Farkha: Ciałowicz, Czarnowicz and Chłodnicki 2018.

provides the clearest pointer to the types of context and material out of which the sign system emerged.

The U-j seal designs build upon those of the preceding Naqada II phase, while going beyond them and introducing a new level of complexity.[12] Five seal designs that have been reconstructed from fragmentary impressions found in the tomb use a paradoxical strategy of setting a rectangular field of decoration against a background pattern, as if what is shown is an impression of a seal on a fabric or, for example, basketry (Fig. 4); a similar treatment is attested for Proto-Elamite sealings from Iran. There is a pervasive miniaturisation, together with a focus on the animal world. Pattern is used largely as a background, within which the rectangular fields contain mainly discrete elements that include a human-made standard as well as a motif similar to the later *ka* sign (a pair of spread human arms joined to form three sides of a rectangle); these are schematic and of uncertain identification. Just one surviving motif is human, showing a man holding a stick and stretching his other arm forward. Two characteristics of these compositions seem significant: the pictorial character of major elements in the rectangular fields; and the separation of most of the motifs from one another, so that they do not interact straightforwardly. Hieroglyphic signs, including those of the beginning of the Dynastic period, were probably created in a setting that included a comparable visual language of images that are grouped at arbitrary scales and mostly do not touch one another.

The signs on vessels could be forerunners of later cursive scripts, but their large size suggests that their function in context was to act as a display more than to convey specific information, perhaps being exhibited during the funeral and/or in the deposition of grave goods in the tomb. The repertory includes emblems on poles, a post or tree, palm fronds, bucrania on poles, shells, and a fish. All of these are objects are attested as display items, notably in reliefs on palettes and on decorated ivories (although the fish may seem a little out of place). Thus, bucrania are depicted as prominent motifs on architecture, while palm fronds are shown on the prows of boats (and remain symbols of celebration to this day). This usage may thus have adapted an existing practice of pot-marking for a new purpose.

Both groups of signs are pictorial. Apart from natural phenomena such as birds, the repertories of what they depict belong in the elite milieu, either through being used locally, like the buildings mentioned above, or because they were arduously acquired imports, such as the elephants on the tags and seashells on the pots.

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12 Hartung 1998.
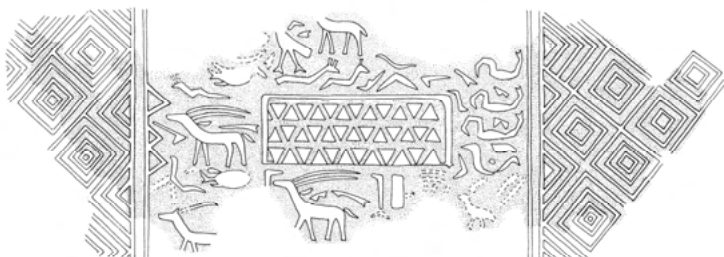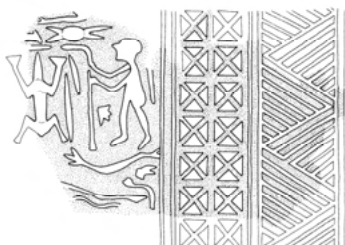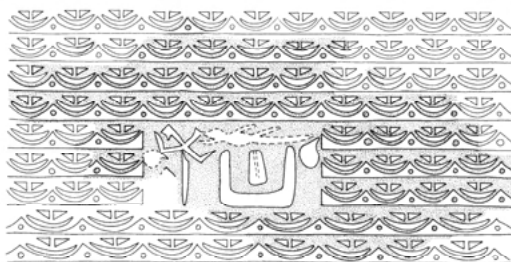
Fig. 4: Reconstructed seal designs from clay impressions from Abydos Tomb U-j. After Dreyer, Hartung and Pumpenmeier 1998, 109, fig. 72. Naqada IIIA, *c*. 3200 BCE.

Fig. 5a: The Hunters' Palette, probably from Abydos. Height *c*. 64 cm. Siltstone. London, British Museum, EA 20790 and EA 20792, Paris, Louvre, E 11254. After Smith 1949, 111, fig. 25. Naqada IIIA, *c*. 3200 BCE.
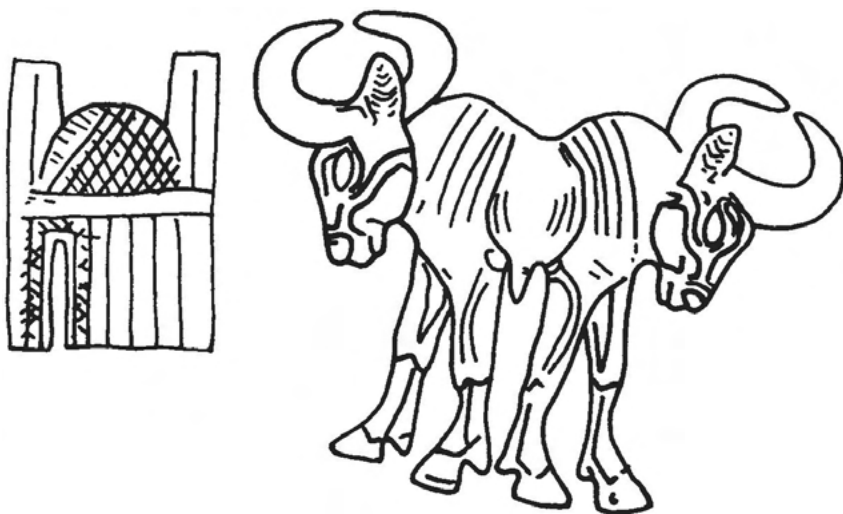
Fig. 5b: Enlarged drawing of the detail at top right in Fig. 5a.

On present evidence, the U-j sign system was an isolated phenomenon: nothing comparable is known from before or from the following century or more. The only possibly related object is the 'Hunters' Palette' (Fig. 5a), a piece of unknown provenance and now divided between the British Museum and the Louvre, that shows an elaborate elite hunt, with in its top right corner a pair of signs/motifs of a reed building and a double bull (Fig. 5b). These cannot form a direct part of the scene, and we suggest that they notate a king's identity. The signs are unique and can hardly be set within a history of writing, but their presence in a pictorial setting of stylistically more familiar character suggests that they, or just as probably their visual environments, were ancestral to the later integration of hieroglyphs – indeed their almost obligatory presence – in elite pictorial compositions.

Andréas Stauder argues that the U-j system should be evaluated on its own terms and that it is too limited to constitute a writing system in the sense of something that notates language.[13] In that respect, it has parallels with a number of other early systems, with the difference that it had a successor, seemingly after a gap, in a dual writing system with pictorial and cursive realisations. Probably both images and the marking of pots continued in the century or more after Tomb U-j, but in contexts that have not been discovered or identified. A rich range of images and three-dimensional works, such as other palettes, finds

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13 This is the prime topic of Stauder 2021.

from the Main Deposit at Hierakonpolis,[14] and a deposit from Tell el-Farkha in the Nile delta,[15] may include objects that belong within this gap. If securely dated material becomes known, it may be possible to situate these assemblages more precisely; but very few of these pieces bear writing.

From Naqada IIIB or dynasty 0 (*c.* 3150–3050 BCE), there is clear evidence of writing that uses signs with phonetic values to notate words in the Egyptian language. The sign repertory includes some uniconsonantal signs, and by the mid-first dynasty, around a century later, almost the whole range of these is attested.[16] This change demonstrates that those who devised the script analysed the language as a language. From this point onward, there is no doubt that a script in the normal sense was present. It drew on very much the same cultural store of visual conventions as the U-j system, but at present it is impossible to say whether the latter influenced the former. The cursive form of the script, which is attested primarily in ink on pottery, is considerably abbreviated from full pictorial forms, suggesting it developed for at least some decades, perhaps corresponding to dynasty 0, which was a period of uniform culture over the Nile Valley and delta. The examples on pots are mainly annotations with royal names and information about the source of vessels or their contents.[17] Pottery is not a good primary medium for writing – although secondary writing on sherds became very common – and the existence of the ink cursive suggests that at the same date there was ink writing on organic surfaces. Egyptologists generally apply the term 'hieratic' only to cursive writing from about the third dynasty onward,[18] that is, from a date when a significant repertory of signs is attested, but we would argue that hieratic emerged from the existing cursive and is better not separated from it.[19] Systems of incised or painted potmarks that do not constitute writing predated the ink cursive and existed alongside it, in a pattern that must have limited the latter's range of use. Among possible organic media for writing, papyrus is not attested until more than a century later, around 2950 BCE, but it could have been invented already; or other materials such as bone – also attested for hieroglyphic writing – or palm products could have been used. Because almost all finds come from the desert and burial areas, the picture they give of the spread of writing is almost certainly unrepresentative.

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14 Whitehouse 2002, with references.

15 See Ciałowicz 2011.

16 Morenz 2021, 80–85.

17 Kaiser and Dreyer 1982, 263, fig. 14, pl. 58.

18 Regulski 2009.

19 An intermediate script form, cursive or 'linear' hieroglyphic, is attested from the mid-third millennium BCE onward.
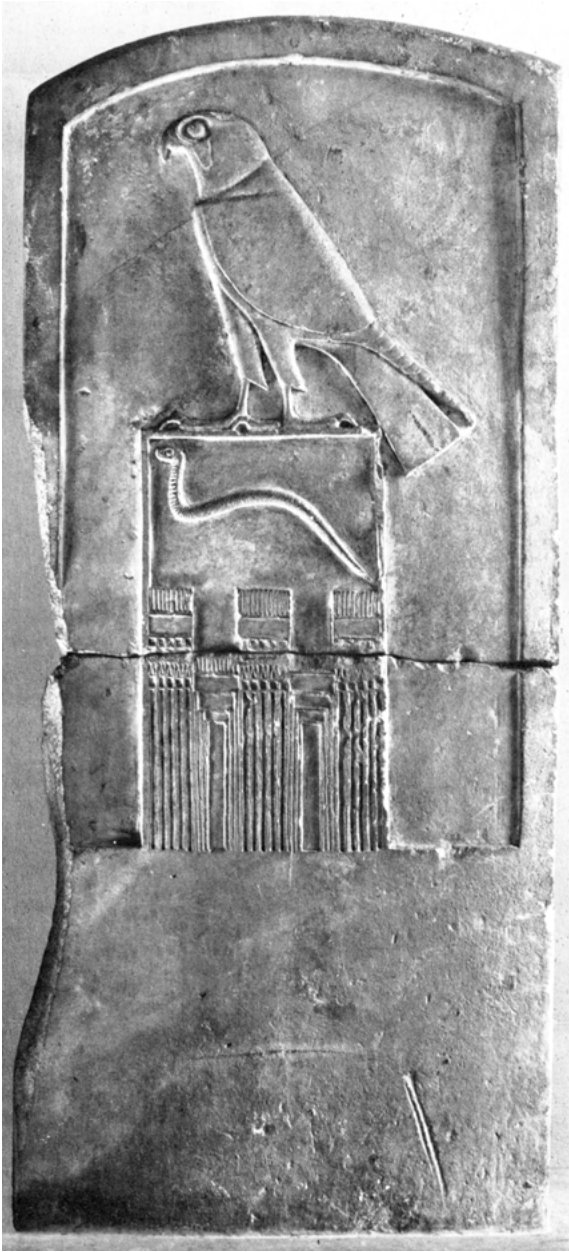
Fig. 6: Tomb stela of King Wadj of the first dynasty (*c.* 2950 BCE), with decoration consisting of his Horus name, from Abydos. Original height 2.5 metres, perhaps 40% below ground. Paris, Louvre, E 11007. Courtesy Hirmer Fotoarchiv München.

Fig. 7: Stela of Merika from Tomb 3505 at Saqqara. Limestone. Height of inscribed area 130 cm. End of first dynasty, *c.* 2900 BCE. After Emery 1958, 30–31, pl. 39.

Alongside the cursive, the hieroglyphic script was in active use. We mention the two in this order because, although cursive is a simplification of the more pictorial hieroglyphic, it was no doubt already the vast majority of writing. Both the writing system and its contexts of use developed greatly during the first dynasty. Perhaps the most striking change is the creation of large-scale inscribed monuments. Stelae well over a metre high bearing the names of kings were set up at their tombs (Fig. 6), whereas those buried in subsidiary tombs had small and crude hieroglyphic markers that were perhaps placed in the grave with them.[20] At the dynasty's end, the privilege of a large and lasting tomb stela was extended to one or two very high officials (Fig. 7; see also below, Section 4). In other contexts, the inherited restriction of such display to relatively small objects seems to have continued. The hieroglyphic script is often termed 'monumental', but a key characteristic of Egyptian art and its use of writing is its near-indifference to scale, a point that applies also to the core term in the Egyptian language: *mnw*, often rendered 'monument', refers to anything a king commissioned or created that was of lasting value, including quite small inscribed objects. At what would now be termed a monumental scale, writing often could not be read because viewers could not get close enough to it, so that it had an effect more of completeness and cultural significance – functions of writing that are common across the world – than of conveying linguistic meaning. Such usages often carry a message of privilege and exclusion.

A further characteristic of the emergent hieroglyphic system is that some single hieroglyphs notating important ideas possessed or acquired an autonomous form that could be used to display agency in pictorial compositions or in mixed pictorial-textual ones. These signs could also be shown with human limbs to render that agency more explicit.[21] The prime example of this is the sign for 'life' ☥ (*ꜥnḫ*/*ankh*), which depicts something like a looped and knotted strip of cloth, with likely amuletic associations.[22] A relief on a miniature ivory cylinder shows the god Horus giving the sign to King Narmer (or Narmeher), who is represented by the catfish hieroglyph of his name with added human arms smiting his enemies (Fig. 8).[23] Quite quickly the *ankh*-sign came to be used as a separate monumental element, notably along with *ḏd* 'duration', and *wꜣs* 'power'.[24] In later periods all these hieroglyphs were also made into artefacts. The sign for

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20 Martin 2011.

21 Baines 1985, 41–63.

22 Not mentioned by Wendrich 2006, or Quack 2022, 84–98.

23 Whitehouse 2002, 434, fig. 4.

24 Fischer 1972.

'god' (*nṯr*), which is derived from a pole displaying a pennant, went through a similar process.[25] A comparable materialisation of signs is found alongside the earliest Mesopotamian (Uruk IV and Jemdet Nasr) and Iranian (Proto-Elamite) writing (*c*. 3200–2800 BCE), with emblems of place and of deities being used as discrete units of meaning in pictorial scenes (Fig. 9).[26]
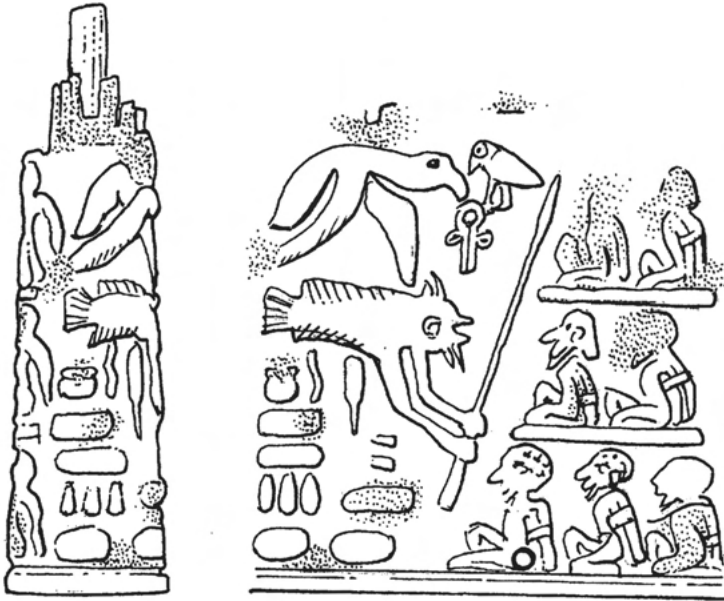
Fig. 8: Ivory cylinder of King Narmer (or Narmeher) from Hierakonpolis. Dynasty 0, *c*. 3050 BCE. Height 5.5 cm. Oxford, Ashmolean Museum, E.3915. Drawing by Marion Cox.

Despite the *ankh*-sign's seemingly ordinary background, it acquired great prestige, being depicted as held in the hands of deities. It is altogether less common even on figures of kings, as well as hardly ever being shown with non-royal people and never in an everyday setting; it is also rare as an amulet.[27] Thus, the usage of symbolically-laden hieroglyphs could become completely detached from their origin, functioning within the conventions of writing and images. For more than 1500 years, cursive writing, which was altogether less symbolically

25 Baines 1990.

26 Englund 1998, 102, fig. 31; Dahl 2023.

27 Quack 2022, 55, 265.

freighted than hieroglyphs, was only very exceptionally used in pictorial contexts. It was possible to transpose text from one system into the other, but their usages overlapped rather little, except where cursive script was used in preparing drafts for hieroglyphic inscriptions.
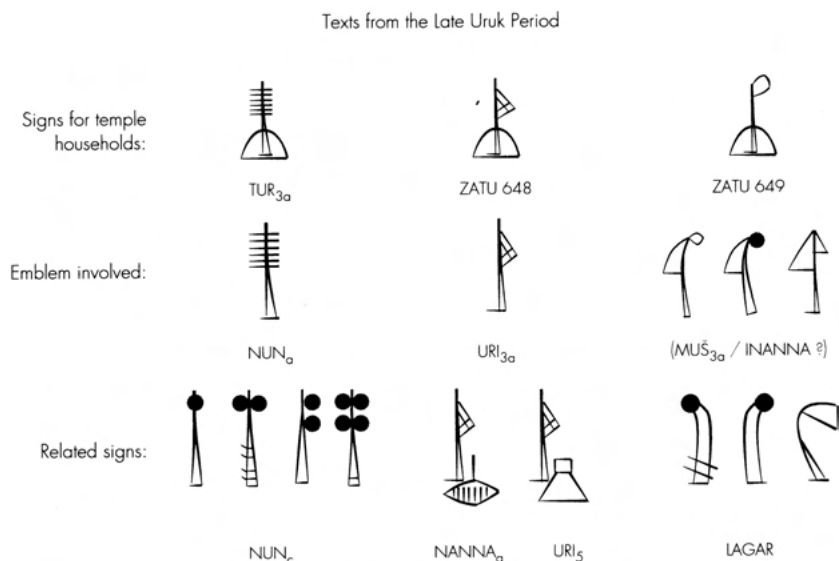
Fig. 9: Signs representing probable temple households on archaic Mesopotamian tablets from Uruk (*c.* 3200 BCE). After Englund 2006, 14, fig. 8.

By the end of the second dynasty, and plausibly up to a century earlier, hieroglyphic and its cursive counterpart had been extended to be used for texts in continuous syntax. We do not discuss that development here, but at the end of this chapter we analyse a text in continuous hieroglyphic script. On monuments, hieroglyphic writing was subordinate in status to images while also being essential to them, in an interplay that continued until the end of Egyptian civilisation. Inscriptions in hieroglyphs without accompanying images that were not integrated into an architectural setting were uncommon. The earliest plausible examples are of the fifth dynasty (*c.* 2400 BCE), but they happen to be on loose blocks that cannot be confidently placed in context.[28]

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28 Hassan 1932, 81, pl. 18; Sethe 1933, 232; Brunner 1965, pl. 2; Brunner 1968 (correction to reading).

3 Early writing in Central Plain China

In China writing is first attested from the Early Bronze Age (see the chronology on Table 2).[29] The first Bronze Age phase on the Central Plain is named for Erlitou 二里頭, a very large site east of modern Luoyang 洛陽 (see the map in Fig. 10).[30] Excavations there have yielded finds of the earliest bronze vessels, the prestige medium that developed for more than a millennium, as well as elaborate forms of hardstone jewellery, but no definite writing. Graphic signs that are found on bone and pottery, including a few quite complex examples, are similar in appearance to those of both earlier and later periods, demonstrating a marked cultural continuity. Examples in pottery of important ritual vessel shapes that were later realized in bronze strengthen this impression of continuity. Thus, writing could have emerged alongside graphic usages that were present in the Erlitou phase, some of them inherited from earlier – significant urban sites appeared in the late Neolithic – but the juncture at which this happened could also have been a little later. Sites in the Central Plain are not favourable to the preservation of most organic materials, so that the patterning of finds cannot be a decisive criterion for identifying when writing appeared.

The Erligang 二里崗 phase, following Erlitou, was a state-level society, of a much larger scale than Erlitou, that expanded in many directions.[31] Its type-site is within the modern city of Zhengzhou 鄭州. This location makes detailed exploration impossible, but limited areas of sites around the city have been excavated. Moreover, culturally Erligang sites have been found over a vast distance. They include many bronzes, some of enormous scale (Fig. 11), weighing up to 150 kilograms and demonstrating great technical mastery, as well as having vessel forms that remained in use for over a millennium, decorated with patterns that continued to be developed for many centuries. Most are uninscribed.

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29 For background to this section, see Demattè 2022.

30 Demattè 2022, 228–237; for Erlitou and Erligang, see also Wang Haicheng 2014, 41–43, 176–180.

31 Steinke and Ching 2014, with essays therein.
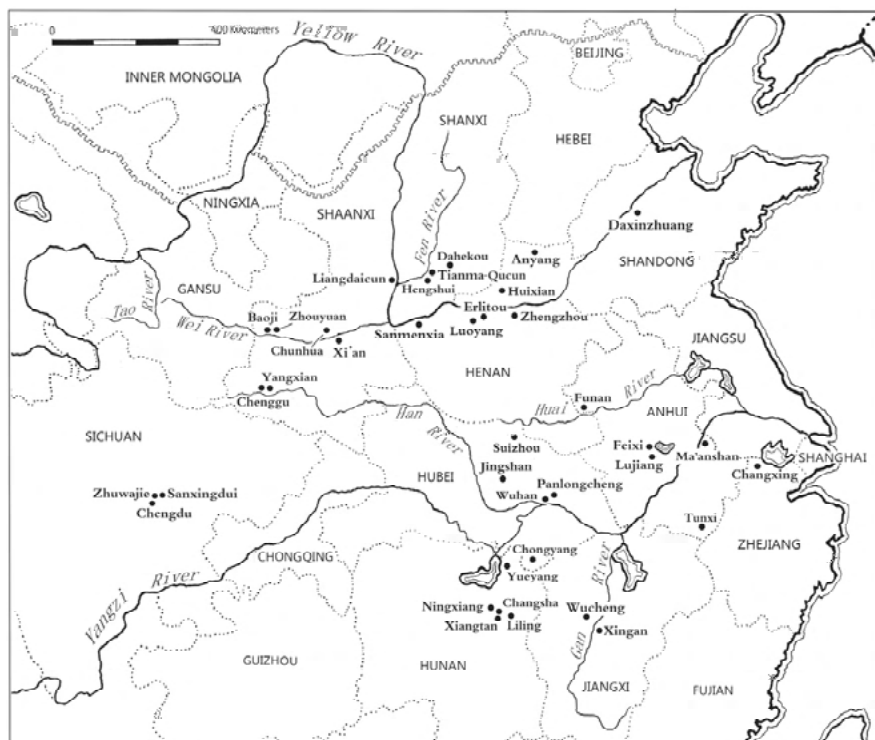
Fig. 10: Map of significant sites in China, Erlitou to Western Zhou periods (*c*. 1800–750 BCE). Drawn by Li Xiating 李夏廷.

From the 1950s onward just a few inscribed potsherds were found at sites in the Zhengzhou area, and their dating was controversial. The discovery in the late 1990s of comparable inscribed artefacts in secure archaeological contexts at the large site of Xiaoshuangqiao 小雙橋, north-west of Zhengzhou, established that the previous finds were not anomalous. This material dates to the late Erligang phase – up to a century before the Anyang period – that is often named for Xiaoshuangqiao or Huanbei 洹北, a capital site across the Huan river (Huanhe 洹河) from the later Yinxu 殷墟 site at Anyang.[32]

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32 Demattè 2022, 246–250 (including potmarks belonging to systems that we do not consider here).
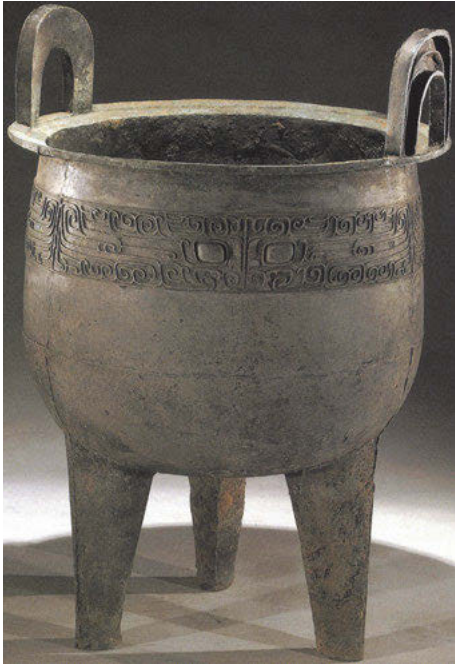
Fig. 11: *Ding* 鼎 discovered in 1982 in a cache of Erligang period bronzes in Zhengzhou; *c.* 1500 BCE. Photographed after conservation. Height *c.* 70 cm. After Tōkyō Kokuritsu Hakubutsukan 1986, 63, no. 32.

The clearest instances of writing from Xiaoshuangqiao were found in ritual deposits. The writing is in red on sherds from large ceramic vessels, and the colour is suggestive of mortuary rituals (Fig. 12a).[33] Writing is also found on jade and bone amulets from Huanbei (Fig. 12b–c). The material shows significant continuity with the subsequent Anyang period, notably in graphs for 'chief' (大, *da* [formerly read *tian*]) and 'deputy' (亞, *ya*). These are attested as levels in elite hierarchies of the Anyang period, and it is most economical to posit that they meant much the same in the predecessor period, when the polity was already very large. The publication of the material includes a table showing equivalences between Xiaoshuangqiao writing and the later forms found at Anyang (Fig. 13). The media are paint on ceramic and incised graphs on hardstone objects, but not ink on organic media, which would not survive in the local terrain but

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33 Song Guoding 2004; Wang Haicheng 2014, 179–180.

may very well have been employed at the same date, as they were in later times. The writing's range of usage is thus unknown. It is also unknown to what extent it notated the syntax of the archaic Chinese language. The earliest inscribed bronzes come from the Zhengzhou area and may date to the Xiaoshuangqiao phase.[34] Their inscriptions are not more than three characters long. Most examples are in the pictorial style discussed below.

a   b   c
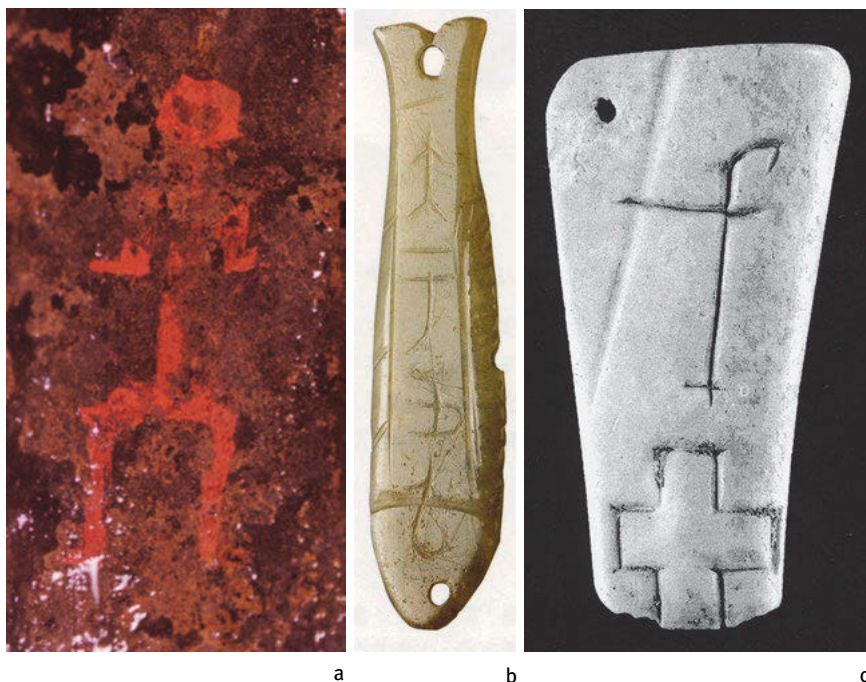
Fig. 12a–c: Sherd from large ceramic vessel with red graph in cinnabar. Excavated at Xiaoshuangqiao; *c.* 1350 BCE. After Song Guoding 2004, 99, fig. 2 (a); jade fish pendant (b) and bone spoon-shaped amulet (c) from Huanbei. Heights 6.7 and 5.5 cm. Fish in collection of Academia Sinica, Taiwan, spoon in collection of Chinese Academy of Social Sciences. After Li Yongdi 2009, 218, no. 205; Yue Hongbin, He Yuling and Yue Zhanwei 2004, pl. 18.3.

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34 Demattè 2022, 266–273.

Fig. 13: Table of equivalences between Xiaoshuangqiao and Anyang sign forms. After Song Guoding 2004, 101, Table 1.

There is probably a gap of some decades in the record between Xiaoshuangqiao and the Anyang sites Yinxu, Xibeigang 西北冈, and related areas that have yielded the most important evidence for the Late Shang phase. Like Erligang, Anyang was a large polity reaching to great distances, for example north-east to

the sea coast in modern Shandong. Writing is attested in the first instance from enormous numbers of oracle bones – cattle scapulas and turtle plastrons – on which were incised notes about the divination carried out with those materials (e.g. Fig. 14). This method of divination was already ancient, but finds from earlier phases are uninscribed. Bone and shell are recalcitrant media for writing, and the forms of Anyang characters are somewhat geometric, neat but not flowing. The writing system is completely formed and fully capable of encoding the language, in what could have been its state of development at that time or a stage inherited from that written in an earlier phase of the script. Elsewhere in the world, writing systems invented from scratch have evolved for centuries before notating a language in full, and the Anyang system is likely to have come near the end of a similar trajectory. It is a matter of guesswork whether its development was contained within the two or three centuries from the beginning of Erligang to Anyang,[35] or whether initial steps were taken earlier, for example in Erlitou times.

Thousands of bronzes have been found at Anyang and other sites of the period;[36] they have also been in collections in China since early imperial times (last centuries BCE). Very large numbers of them are inscribed (e.g. Figs 15–16, with details of inscriptions), but their inscriptions do not strike the eye because they are placed on interior surfaces or in inconspicuous locations on the exterior, such as under a handle. The dominant visual feature of the vessels is their decoration, which proliferated greatly, often covering more of surfaces than in Erligang times and acquiring a sculptural character.[37] The decoration concentrates on pattern rather than image. The patterns relate to a world of largely imaginary animals, neither to human beings nor to depiction of the inhabited world. In the contexts we are discussing, decoration evidently had a higher status than inscription, rather as in many periods in ancient Egypt pictorial images had a higher status than writing. In both traditions of modern scholarship, the dominant position of philology has tended to sideline this rather obvious point. Unlike ancient Egyptian conventions, Xiaoshuangqiao and Anyang decoration and writing of the standard type were very largely incompatible.

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35 As posited by Bagley 2004.

36 Demattè 2022, 258–261.

37 See Bagley 1987.

Fig. 14: Oracle bone on bovid scapula from Anyang, now in the National Museum of History, Beijing. Responses to divining about weekly fortunes are all negative, resulting in a series of disasters. *c*. 1200 BCE. After Pu Maozuo 2014, 256.

Fragmentary evidence shows that Anyang period decoration was not confined to bronzes but was pervasive both on other prestige artefacts and elsewhere in the ordered environment, and its motifs and character appear to have been similar in any context where it was used (Fig. 17). While the meanings that attached to it are largely unknown, its cultural salience is such as to make it seem perhaps a misnomer to call it 'decoration'. The only vessel types to bear writing

on the same surface as decoration are flat water dishes (*pan* 盤) that offer little or no other usable space (not illustrated in this chapter). On such dishes of the Anyang period the signs are small, not of the pictorial style discussed below, and placed so as not to interfere with the decoration, or to blend in and appear almost to be part of it. That usage changed in the Western Zhou period, when some *pan* surfaces bore long inscriptions but little or no decoration.

a   b

Fig. 15a–b: *Fangyi* 方彝 of the Anyang period. Bronze. Twelfth century BCE. Height with lid 30.2 cm. Cambridge, MA, Harvard Art Museums, 1943.52.109. Photo © President and Fellows of Harvard College (a). Inscriptions on the lid and interior of Fig. 15a: title 子蝠 'Prince' and name. Photo by Kyle Steinke (b).

Fig. 16a: *Fanglei* 方罍 of the Anyang period, probably from Anyang. Bronze. *c.* 1100 BCE. Height 53 cm. Shanghai Museum. After Shanghai bowuguan 1964, vol. 1, pl. 13.

Fig. 16b: Inscription on the interior collar of Fig. 16a, reading 亞憲孤竹 *ya xian gu zhu*; translation uncertain (*ya* = 'deputy'). The view shows the complete rim. Photo by Kyle Steinke.
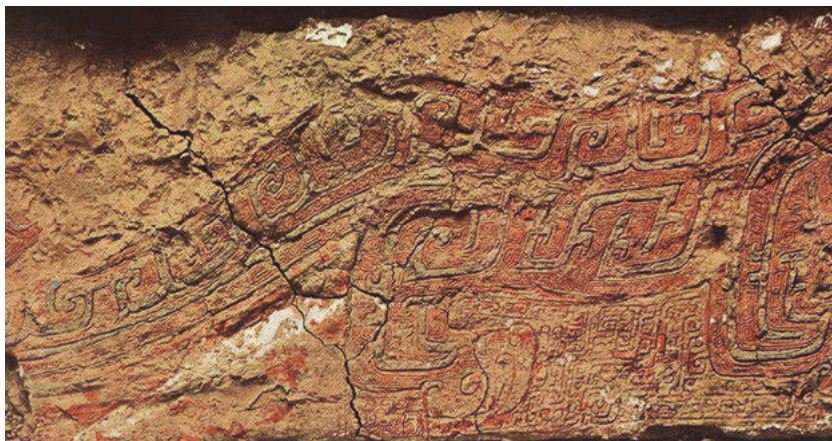
Fig. 17: Decoration of a wall with lacquer showing a tiger. Royal tomb M1001 at Xibeigang 西北岡; *c*. 1200 BCE. After Gao Quxun 1962, colour plate 1 (in supplement issued separately).

Those who handled and used bronzes could have read the inscriptions despite their often awkward locations. The longer inscriptions that began to appear in late Anyang times, and much more during the Western Zhou period, could have been performed, perhaps simply by being read out, on behalf of those present or of the ancestors to whom rituals were addressed, but the elite circles who commissioned the bronzes were presumably those most interested in the content of the texts, which would have been drafted on perishable media with their participation (see also Section 4 below). Performances would have required manipulating the objects themselves. Some containers with lids have duplicate interior inscriptions on the bottom and the lid (Fig. 18a–b, an unusually long inscription for an Anyang bronze),[38] and the copy on a lid could have provided ready access to the text. Despite these possibilities, knowledge of the inscriptions' existence might have mattered as much as having them available to be read; they would also have been available to the spirits of the ancestors for whom the rituals were performed. Comparable considerations of access and reading apply across the world: much writing is inscribed almost without regard to its ever being read. Furthermore, very many Anyang bronzes bear only identifications of their owners, often indicating the names of the ancestors to whom they were addressed but not saying in what contexts they were used. These would not have needed to be read, but they could have been displayed to interested parties.

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38 Škrabal 2022, 148–151, figs 2–5 (Song *gui*, 779 BCE); discussed below, Section 4.

a   b

Fig. 18a–b: *You* 卣, said to be from Anyang. Bronze. Height 23.7 cm. Late Anyang, *c.* 1100–1050 BCE. Beijing Palace Museum. After Bagley 1987, 526, fig. 103.5 (a). Rubbings of the inscriptions on the interior of the lid and body of the *you* in Fig. 18a, which commemorate the gift of a jade to the 'Document Scribe (*zuoce* 乍冊) Zhi Zi'. After Bagley 1987, 526, fig. 103.5 (b).

The writing on the bronzes is in two styles. One is similar to the oracle bone script but more fluently written in the soft clay medium of models for casting. This style, which was evidently adapted from the standard way of writing with a brush on an organic surface,[39] was largely absent from bronzes until the end of

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39 Compare Qiu Xigui 2000, 63–66.

the Anyang period. The other style (Figs 19[40] and 21), which is of greater interest for this chapter, is more pictorial, while quite simple and schematic in its manner of depiction (see collection of examples in Fig. 21). It is typologically and aesthetically unconnected with the main decoration, operating with lines, outlines, and solid areas, but not with the internal patterns which are fundamental to the latter. Signs are often artfully grouped. There seems to have been little concern with creating a consistent visual treatment across the range of signs, and apart from the careful arrangement of groups it does not appear to have been the subject of an aesthetic investment in any way comparable with that devoted to decoration. The pictorial element includes human beings, and in this respect among others it is completely different in content from the decoration. Almost all examples are limited to no more than four or five characters. Toward the end of the Anyang period the standard script began to be used more widely on bronzes. In early Western Zhou times there was some limited fusion of the two styles, but the pictorial one disappeared over a few generations. The content and reading of the signs remained largely the same before and after this graphic transition.

Thus, in the Xiaoshuangqiao and Anyang periods a pictorial style of writing was used in high-status aesthetic contexts, but without very high aesthetic pretensions. Except in aspects of treatment such as patterns of arrangement of signs, the style employed on bronzes used versions of a limited – but still extensive – range of graphs from the same basic repertory as the standard writing, which later gradually replaced it in that context. Perhaps the ritual purpose of bronzes favoured the use of a special style of writing. It cannot well have been adopted as aesthetically more suited to the decorated context because, as already noted, decoration and writing were almost always kept apart.

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40 The rendering of *ge* 戈, the primary meaning of which is 'dagger-axe', as 'infantry officer' is based on the following evidence: oracle bone inscriptions include examples of '*ge* at X (place name)', which is a standard form of titles for officers and would not make sense as referring to a weapon. North, south, west, and east *ge*, which are also attested, have parallels as prefixes with other titles. Again in the oracle bone inscriptions, *ge* are assigned to military tasks; the dagger-axe was the most common weapon of infantry. Similarly, in the warring states period infantry were termed '*ji*-holders'; at that date the *ji* was the standard infantry weapon.

Fig. 19: Two selected titles on bronzes in their Anyang period (upper) and Western Zhou (lower) forms. Left above: *bei dan* 北單 'Northern Ward' (after *Jicheng* 3120); below: *bei dan zuo cong lü yi* 北單乍從旅彝 'Northern Ward commissioned the vessel' (*Jicheng* 2173). Right above: *ge* 戈 'Infantry Officer' (*Jicheng* 3023); below: *ge zuo bao yi* 戈乍寶彝 'the Infantry Officer made this precious vessel' (Zheng Junsheng and Tang Xianhua 2000, 59).

This case is comparable with ancient Egypt in the presence of two styles, one pictorial and more aesthetic (very much more in Egypt) and the other more cursive and of slightly lower status. The salient difference between the two is that the Chinese system was not directly compatible with the dominant artistic forms of Erligang to Western Zhou times, and it was relatively short-lived. One reason for its demise could have been that pictorial representation was largely absent from the wider artistic environment. When sculptural representation began to be included in bronzes, it was almost always of animals (e.g. Fig. 20), not human beings. In Egypt, where there was not just compatibility but integration between image and writing, the pictorial system of writing, including signs depicting elements from many domains of the natural and cultural world, endured for the whole civilisation. In both societies the pictorial style was a tiny proportion of writing as a whole, perhaps still tinier in China – even though widely attested in the surviving record – than in Egypt.

Fig. 20: *Guang* 觥, wine vessel with lid; decoration organised as sculptural images of a tiger and an owl. Two-character inscription on interior floor (not illustrated). Bronze. Height 25 cm. Twelfth century BCE. Cambridge, MA, Harvard Art Museums, 1943.52.103. Photo © President and Fellows of Harvard College.

There must have been a transformation in aesthetic priorities for the inclusion of writing on bronzes around the end of the Anyang period. Standard writing seems to have acquired a higher prestige in that context than before. Over the millennia it has been, and continues to be, a strongly aesthetic medium that has an autonomous character more than it is directly integrated with other elements or media. Another plausible factor in its displacing of the pictorial style is its suitability for recording longer texts. It remained incompatible with the dominant mode of decoration, but the latter's peak of creativity was in Erligang and Anyang times rather than later. Perhaps the slight reduction in the focus on decoration favoured the importance of standard writing.

4 Comparing the Anyang and Egyptian elite contexts

So far, we have left aside the content of the Xiaoshuangqiao and Anyang pictorial writing, the signs in which are generally termed 'clan signs/emblems' (族徽 *zuhui* – or 徽記 *huiji* / 徽號 *huihao* 'emblem graphs').[41] They have mostly been understood as signifying clan names and personal names. This approach sees the society of the later Shang dynasty as court-focused but very strongly lineage-based, with a dominant ancestor cult, and lacking a developed administration. For some time, however, appreciable numbers of the signs have been identified as official titles. Cao Dazhi has expanded this approach to argue that the majority of them represent official titles rather than clan names.[42] About 25 of perhaps 140 graphs among the thousands of inscriptions had previously been identified as titles. To these can be added between 70 and 80 further titles, so that at least two thirds of the repertory of well-attested signs (Fig. 21) can be interpreted in this way. As remarked above, the titles are notated with very few characters, hardly ever more than six. Interpretation of their meaning is aided by occurrences of some of them in oracle bone inscriptions. In speech titles might have had more elaborate forms.

A continuing system of titles with hierarchical qualifiers (Fig. 22), of which two were mentioned above for Xiaoshuangqiao times, could have been developed further from an older oral-performative, and non-literate or marginally literate, court context; around a dozen of the total number of titles are attested from the earlier period.[43] Fixed designations of roles are common in ruler-focused societies of any scale. People of high status and power need to have tasks that place them close to the ruler. Ruling groups often maintain titles designating such roles that come over time to signify different functions from what their literal meaning may suggest. It is also normal for court titles to be paired with quite different administrative duties, either on a customary basis or through a ruler's selection of an individual. Court titles, administrative functions, or both can be associated with an income derived from central sources, with awards of signs of honour, estates and other resources, or both.

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41 Demattè 2022, 261–276.
42 Cao Dazhi 2018; Cao Dazhi 2019; Cao Dazhi and Zhang Jianwei 2022. Short exposition in English of an early stage of this research: Wang Haicheng 2016, 142–145.
43 There is no reason to suppose that notation of these titles was a major driver in the initial development of writing.

Fig. 21: Rubbings of the large majority of types of pictorial-style characters (official titles or 'clan names/emblem graphs') found on Anyang period bronzes. Excerpted and assembled by Cao Dazhi from the volumes of *Jicheng*, with some instances from other publications.

The examples in Fig. 21 are from the Anyang period. Each of the pictorial characters selected for analysis occurs on ten or more bronzes; the underlying dataset is thus very large. Most occurrences are isolated or accompanied by just a few further characters. Consequently they are difficult to date within the Anyang period. The titles appear on bronzes from high- and middle-level elite tomb. Only low-ranking elite tombs (containing between one and four bronzes) may yield bronzes that bear no titles. Thus, a high proportion of the thousands of known Anyang period bronzes is inscribed. That proportion decreases with the Western Zhou period, when access to these prestige goods became wider.

Fig. 22: Selected rubbings of title names with hierarchical elements. Left above: *da ce* 大冊 'Chief Scribe' (after *Jicheng* 1822, see also Fig. 23); left below: *ya ce* 亞冊 'Deputy Scribe' (*Jicheng* 6483). Right above: *da ge* 大戈 'Chief Infantry (Officer?)' (Zhang Tian'en 2016, 1371); below: *ya ge* 亞戈 'Deputy Infantry (Officer?)' (*Jicheng* 3327).

Rulers manipulate their elites by requiring their presence (or by banishing them), and when they are present by rewarding them with privileges that can be made visually salient in the court setting. Such practices are compatible with the crucial role of ancestors, lineages, and their maintenance that is generally attributed to ancient Chinese society. Formalities of court life and ceremonial among lineage elites could have been comparable. In any complex hierarchical society there is an uneasy tension between holding an office that is answerable to a higher authority, on the one hand, and the obligations of kinship on the other hand, but neither excludes the other. Prominent naming of titles can make sense both in relation to the king, who might originally not have been mentioned, either out of deference or through avoidance of a type that surrounds rulers in many societies. Moreover, the royal point of reference for a title would have been known to all who were interested. Inscription of title and name on a bronze would be a centripetal and unproblematic form of display, as well as being meaningful to an elite group, either of other officials or of kin, and it would remain valid in a lineage context after its award in the royal setting.

We believe that the interpretation of Xiaoshuangqiao and Anyang 'emblem graphs' as official titles offers a more coherent picture than that of 'clan emblems'. It is worth exploring briefly implications for the possible background of administration and writing. It is now widely accepted that writing was invented before the Anyang period, and the interpretation of a number of titles as relating to scribal materials and activities points in the same direction because it implies the presence of an administrative apparatus of appreciable scale, very plausibly conducting many tasks on lost organic writing media. Paola Demattè makes a similar argument, but we would not follow her in extrapolating it quite as far back as around 2000 BCE, which she does mainly on the basis of very much later traditional texts.[44] The presence of hierarchies of titles in the earliest intelligible material, however, is telling, because they include 'chief' and 'deputy' ('deputy' often forming a monogram enclosing the title it qualifies), demonstrating a structuring among members of the elite who were high-ranking enough to have inscribed bronzes. The king, as the apex of society, is above the hierarchy, although he is very much present in the oracle bone texts, where he sometimes speaks in person, and of course in the archaeology of Anyang, with its royal precinct and the enormous royal tombs at Xibeigang.[45]

The inscribed oracle bones (Fig. 14), some of which were rendered into more clearly aesthetic objects by pigment inlays, are perhaps intermediate in status

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44 Demattè 2022, 357–363.

45 Wang Haicheng 2015, 136–150.

among categories of objects bearing writing (see also below, Section 5). Around a third of the perhaps 200,000 known oracle bones are inscribed. Very high-status artefacts include bronzes and other display pieces, such as the bone of a tiger that bears an inscription, inlaid in turquoise, stating that the king had killed the animal in a hunt.[46] Normal administrative uses, which surely constituted the overwhelming majority of writing, are in general too ephemeral and low in status to leave archaeologically recoverable traces. Only indirect evidence is available for writing on bundles of strips, most likely made of bamboo, of which the oldest currently known physical examples are from a waterlogged tomb of the fifth century BCE.[47] Such evidence comes instead from graphs for 'document, scribe (*ce* 冊, *zuoce* 乍冊)' (Fig. 23), from surviving brush writing on some oracle bones,[48] or from data recorded in oracle bone texts that are suggestive of book-keeping:[49]

> 1. *Raising an army*
> Crack-making on *dingyou* (day 34), Que divined: 'This season, if the king raises 5,000 men to campaign against the Tufang, he will receive assistance in this case.' (*HJ* 6409)
>
> 2. *War booty*
> Junior Servitor Qiang followed (the king) to attack. Mei [enemy leader] of the Wei [enemy state] was captured, persons 24 ... persons 570; *xi* (?) 100 ... chariots 2; shields 183; quivers 50; arrows. (*HJ* 36481)
>
> 3. *Game taken on a hunt*
> On *renzi* (day 49) the king made cracks and divined: 'Hunting at Zhi, going and coming back there will be no harm.' The king read the cracks and said: 'Prolonged auspiciousness.' This was used (?). (We) caught foxes 41; *mi*-deer 8; rhinoceros 1. (*HJ* 37380)
>
> 4. *Tribute*
> Wo brought in 1,000 (shells); Lady Jing ritually prepared 40 (of them). (Recorded by the diviner) Bin. (*HJ* 116b)
>
> 5. *Animal sacrifice*
> Crack-making on *jimao* (day 16), Que divined: 'In performing an exorcism for [Lady] Hao to Father Yi, cleave a sheep, offer a pig, pledge ten penned sheep.' (*HJ* 271)
>
> 6. *Human sacrifice*
> On the eighth day, decapitate 2,656 persons. (*HJ* 7771)

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46 Bagley 1987, 525.

47 See conveniently Škrabal 2022, 144–147.

48 Bagley 2004, 213–220.

49 Material in oracle bone texts that is likely derived from book-keeping sources, after Wang Haicheng 2014, 182.

Fig. 23: Rubbings of scribal title characters, left *ce* 'Scribe' (*Jicheng* 9147), right *yin* 尹 'Officer' (*Jicheng* 6040).

Indirect arguments for a widespread presence of writing that relate to the administrative requirements of a large-scale state can also be made from the official hierarchies, as attested by the pictorial signs, which name administrative roles in domains such as storage, probably of grain, animal husbandry, and the maintenance of long-distance routes.[50] These, which can be paralleled from ancient Mesopotamia and Egypt, may not appear to be intrinsically prestigious, but they are vital for a large agricultural state, and they would offer economic potential to their holders. Among the pictorial signs, offices like these seem to be more prominent than in the Egyptian material, where for those in the inner elite designations that conveyed status but had no associated function or displayed proximity to the king are more salient.

Possible interpretations of this difference can only be sketched here, but the significance of titles for their holders should be emphasised. Elites care about their status and rank relative to other members of their group, which they typically display through events where the ruler rewards them. Western Zhou period bronze inscriptions offer explicit examples (see below). Rulers cannot avoid having matching concerns. The Egyptian king had a more strongly divine role than his Shang or Western Zhou counterpart, but this difference may not have had a direct effect on his need to control his elites. Conventions of visual display in the two societies were very different. The near-absence of pictorial representation in early China gives a greater role to texts than to images, but it does not necessarily follow that verbal display was more important in the lived world of the elites in one culture than in the other.

A convenient example of differences in display is royal hunting, which is a vital role of rulers across the world.[51] Images of the Egyptian king hunting are potent both in themselves and in foregrounding his relations with the court and high officials. A caption accompanying a large relief of bird trapping that is the longest

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50 Cao Dazhi 2019; Cao Dazhi and Zhang Jianwei 2022; see already Wang Haicheng 2016.
51 Compare Allsen 2006.

third millennium royal inscription so far published exemplifies the maintenance of tales of royal prowess.[52] Hunting is equally prominent among the Anyang oracle bone texts, but apart from trophies like the tiger bone cited above, it leaves less trace than can be found in Egypt.[53] As Wang Haicheng has noted, typically brief Anyang titles naming 'dog' or 'horse' may relate to the same crucial sphere of kingly action.[54] In Egypt, the very high official Metjen, the owner of the earliest known extensively inscribed and decorated non-royal tomb (early fourth dynasty, *c.* 2600 BCE), displayed his title and role of overseer of royal hunting through an exceptionally large hieroglyph of a man controlling a dog (Fig. 24).[55]

Anyang bronzes, and Erligang ones before them, are thought to have been made in foundries that were under royal control, so that the pictorial signs that wrote titles would have been known to the ruling group, whether they used writing themselves or delegated that task to scribes. The setting of production near king and court and may have favoured the selection of official titles for inscription over other possibilities. The titles on Anyang period bronzes never name the king, who is nonetheless a pervasive presence. Just a few bronzes have been found in the heavily looted royal tombs, but they too do not carry kings' names. The court context and the enormous significance of bronzes for elites guarantee that what was inscribed on them would be of great interest to the actors, as well as to the king and those through whom he exerted control. The change to longer inscriptions at the end of the Anyang period would surely have been with royal consent or participation. Such developments are normally negotiated between the interested parties, and the impetus could have come from the officials rather than the king.

Here, Egypt offers a larger range and more diverse evidence, over a period from the earliest longer inscriptions at the end of the first dynasty to the vast proliferation of titles and narrative texts in the sixth dynasty (a span of eight hundred years, see Table 1). For the third millennium more than 3700 titles and combinations of titles are attested.[56] Scholars understand the titles as being of two broad types, 'ranking' and 'functional'. Ranking titles, which are a small minority of the total, are nearly pure status indicators, and the highest ones occur in a fairly fixed sequence. Functional titles signify something relating to associated duties, but

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52 Baines 2013, 187–234. Mohamed Ismail Khaled is preparing to publish a longer inscription, from the same monument, that is not about hunting.

53 Fiskesjö 2001.

54 Wang Haicheng 2016, 142.

55 Gödecken 1976, 81–82, fig. 1 (following p. 168).

56 Jones 2000.

often not in a straightforward way because the system retained terminology while realities changed. A good example is ḫtmtj nṯr, literally 'Seal-Bearer of the God', which by the sixth dynasty designated an expedition leader.[57]
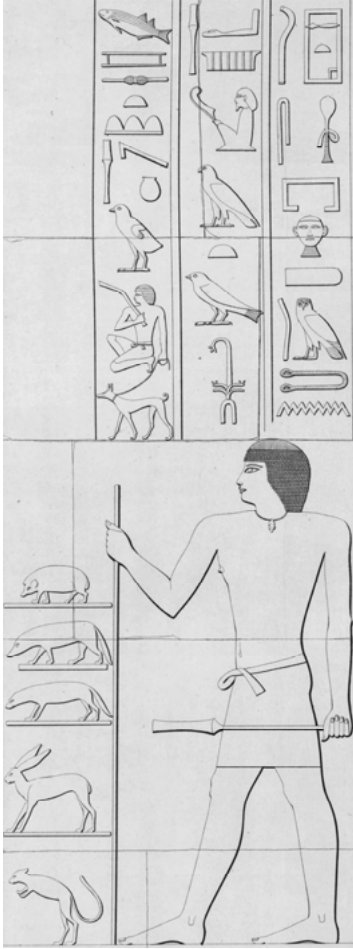
Fig. 24: Metjen as overseer of hunters. Relief from his tomb at Saqqara. The titles in three columns above his figure can be rendered: '[1]Administrator of the Low Desert; Controller of Hunting; [2]Controller of Scouts; Great one of the Ten of Upper Egypt; [3]Leader of an Estate; Supervisor of the Distribution Centre; Metjen'. Neues Museum, Berlin. After Lepsius *s.a.*, pl. 3. Digitization kindly made available by the Berlin-Brandenburgische Akademie der Wissenschaften.

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57 Jones 2000, vol. 2, 767–772, nos 2791–2803 (not all relating to expeditions).

Elites inscribed their titles in their monumental tombs, in selected arrangements that were constrained by available space and aesthetic considerations (Figs 25 and 27). In a strongly structured example, the high-ranking official Ptahshepses listed the offices he held under eight kings of the fourth and fifth dynasties in columns of inscription on niche surrounds in the offering place of his tomb (Fig. 26). The interiors of tombs were not open to a wide public, so that the primary audience of this display was the owners' peers, priestly personnel, and dependants. By the sixth dynasty, however, some inscriptions giving titles and other content were carved on tomb exteriors, later followed by extensive, very carefully laid out narrative texts.[58] This major shift toward a more public and extensive use of hieroglyphs happened early in a new dynasty and could have been connected with the change in regime.

Klaus Baer showed that the order in which titles were ranked changed in a patterned way in the fifth and sixth dynasties (evidence is insufficient to say whether this was the case earlier).[59] Typically, at the beginning of a reign a new sequencing would appear; during a long reign there might be one or two further re-orderings. This manipulation of the expectations of elites was probably aimed at maintaining royal control against pressures of expansion and desires for promotion. Not just individuals but whole groups would need to show that they were worthy of their status. Manipulation of sequences would have worked together with competition among elites, of which we give an example in a narrative text below.

In a parallel development during the same period, narrative biographical inscriptions of elites appeared, slowly increasing in length.[60] These give clear evidence of the importance of court ceremonial and of the significance of titles to elites' sense of self, as well as instances of people stating that they were assigned roles that were above their nominal status, hence claiming – not always truthfully – that their selection was based on ability rather than descent. The cross-culturally prevalent phenomenon of grade inflation is also attested, as is the posthumous award of a title as a mark of honour that enhances the standing of the son who requests it.[61]

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[58] Detailed analysis of an example: Stauder-Porchet 2020.

[59] Baer 1960.

[60] Collections of material with translations: Lichtheim 1988; Strudwick 2005; Kloth 2018; study of the text genre: Stauder-Porchet 2017.

[61] Djau of Deir el-Gebrawi: Strudwick 2005, 365–366, no. 266.
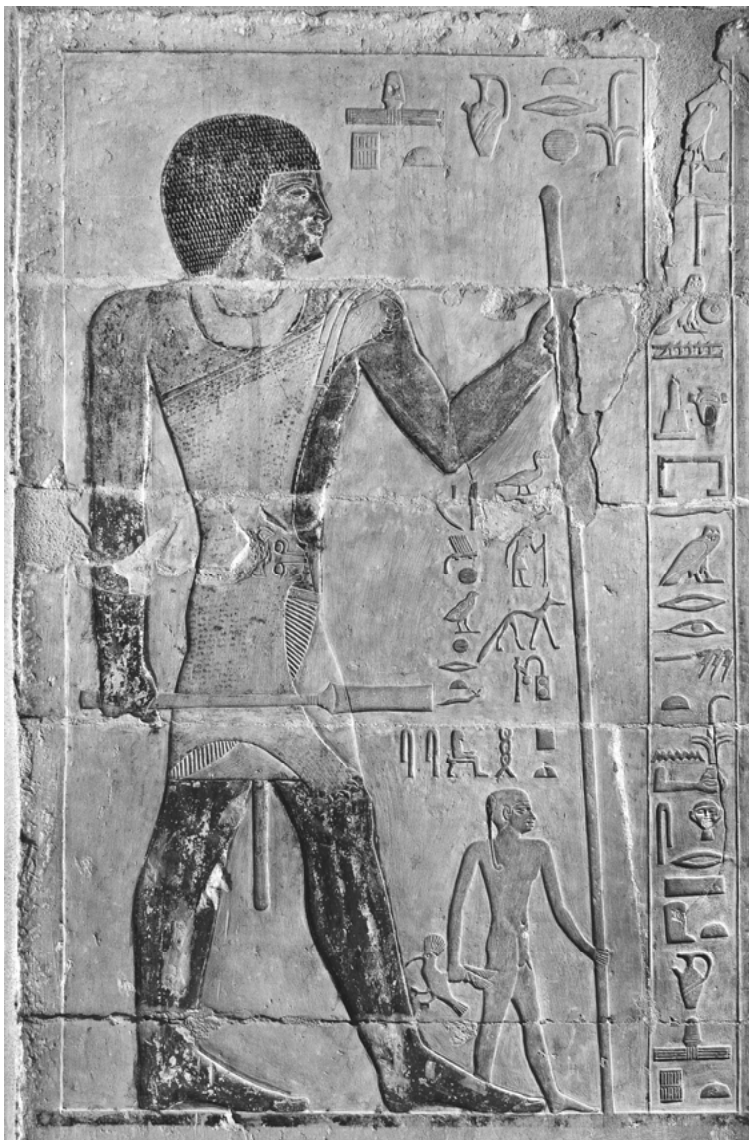
Fig. 25: Khnumhotep and his son Ptahshepses; relief facing the entrance to the inner tomb of Niankhkhnum and Khnumhotep at Saqqara. Khnumhotep's titles are 'King's Acquaintance/Dependant' (immediately before his name); priest of an earlier king's solar temple; 'Overseer of the Manicurists of the Palace'; 'One Rewarded by the King'; 'Keeper of Secrets'. His son is 'his eldest son, the Gentleman Scribe, one provided for by his father, Ptahshepses'. Late fifth dynasty, *c*. 2400 BCE. Photo by Paolo Scremin, by kind permission of Yvonne Harpur and Paolo Scremin.
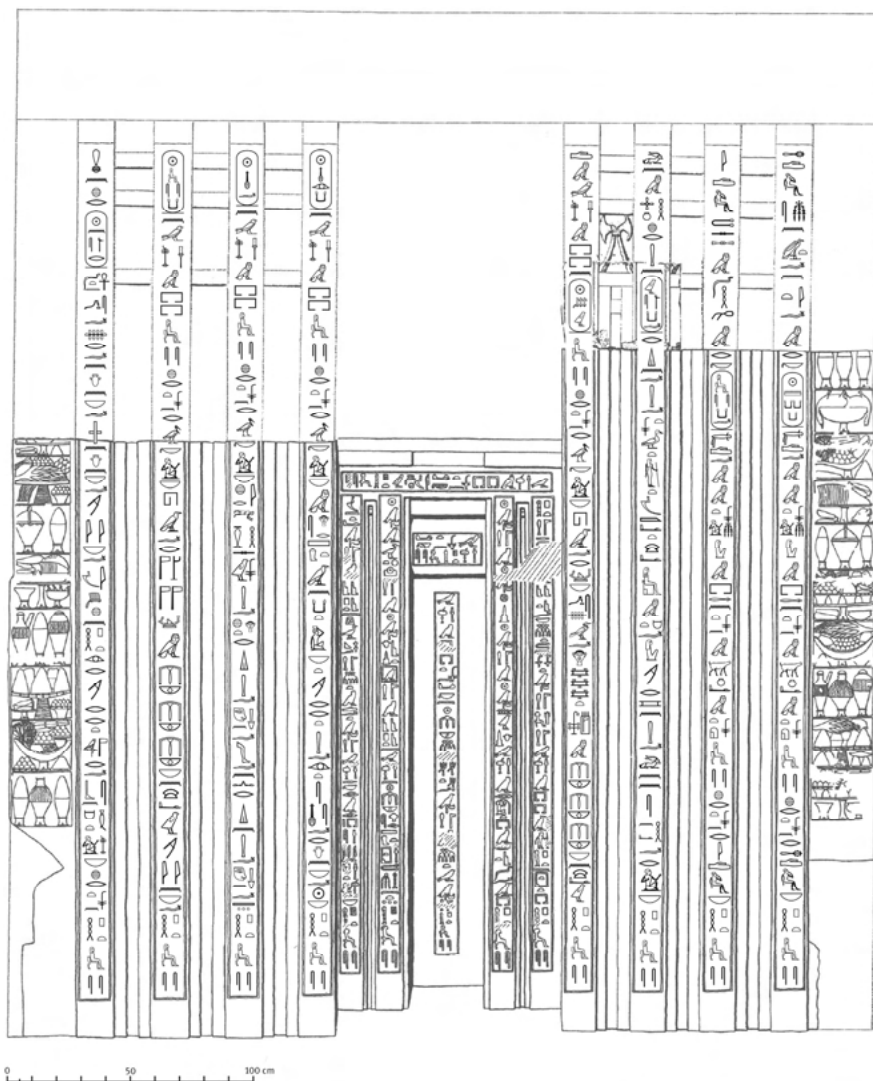
Fig. 26: Ornamental offering place ('false door') from the tomb of Ptahshepses at Saqqara. Fifth dynasty, *c.* 2400 BCE. London, British Museum, EA 682; Chicago, Institute for the Study of Ancient Cultures Museum, ISACM E11048. Original height with lost architrave *c.* 4.2 m. After Gundacker 2015, 96–97, figs 1–2, with kind permission.

Fig. 27: Caption to a large-scale figure of the Vizier (highest state official) Ptahhotep on the east wall of his tomb at Saqqara. Column 1 (left) describes the scene: 'Seeing all sorts of perfect delights which are done in the entire land'. Columns 2–4 are headed by 'Overseer of the City', from the vizier's title string, with beneath 'Supervisor of Priests of Nefer-Izezi (royal foundation); King's Subordinate; Staff of the Subject People; Pillar of *knmt*(?); Supervisor of *wab*-Priests of Enduring-of-Places-of-Neuserre (pyramid complex); Administrator of the Foremost Throne(?); Supervisor of Priests of Divine-of-Places-of-Menkauhor; the Revered One Ptahhotep (off picture)'. Photo by Paolo Scremin, by kind permission of Yvonne Harpur and Paolo Scremin.

Several of these elements of self-presentation are found in one of the three inscriptions in the tomb of Hezy from the early sixth dynasty (*c.* 2300 BCE), including claims to have exceeded the duties and expectations of a particular status, to have been rewarded with promotion to a higher-ranking status, and to have caught the king's personal attention and participated regularly in court ceremonial (Fig. 28; titles are capitalised):[62]

Fig. 28: Inscription on the west reveal of the entrance to the cult room of the tomb of Hezy at north Saqqara. Early sixth dynasty (*c.* 2300 BCE). Drawing by Jennifer Houser-Wegner, reproduced by kind permission.

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62 Baines 2015, 523–524 (my translation; following Egyptological practice, parentheses in the translation give supplements and clarifications to the text, which is completely preserved). Independent treatment from the same year: Stauder-Porchet 2015.

I was a Gentleman Scribe in the reign of Izezi;
I was a Gentleman Supervisor of Scribes in the reign of Wenis.

It was Teti, my lord,
who appointed me as Gentleman Administrator,
who appointed me as King's Subordinate.

His Person had (it) done for me
because His Person knew my reputation
in taking a scribe for his task without any deficiency.

He remembered me and he said he was satisfied.
I acted as scribe
before His Person at the head of scribes.

I acted as an Official (*sr*, a higher grade)
before His Person at the head of Officials.

His Person used to cause
that I go down to the Great Barque of the Royal Tour of Duty;

that I come to the ways (of the king);
that largesse be granted to me;

as if (I) were a King's Subordinate,
although I was a Gentleman Administrator,
whereas the like had not been done for any peer of mine.

His Person used to consult
with me as if I were among the Officials,

although I was a Gentleman Supervisor of Scribes,
because His Person knew that my reputation
was more distinguished than that of any Servant (a broad designation of status).

This interplay between ruler and elites can be compared with examples on Western Zhou period bronzes, which offer a most illuminating parallel for the setting of the court and high officials. Bronze inscriptions recording gifts from the king first appear at the end of the Anyang period and became increasingly elaborate over the following two centuries. The inclusion of such material on bronzes must have been a major change, and it was later followed by the significant development of narrating the ceremonial exchanges of king and elite official. The content of the inscriptions would have been sanctioned by delegation from the king and presumably transmitted on lost organic media. The Zhou king was slightly less distanced from humanity than the king of Egypt, but the record

of an official's reception at court is more formalised. As on oracle bones, the exact date is crucial, whereas Egyptian sources give much less attention to such matters. The award and display of status markers, as well as the practice of inserting the physical document attesting to the reward that the protagonist receives into a ceremonial belt, make a very public statement, which is desirable also for the long term because the conferring of a position is involved.[63] We cite here the Song *gui* 簋, as translated and discussed by Ondřej Škrabal (Fig. 29):[64]

Fig. 29: Inscription in the interior of the bronze *gui* of Song. 825 or 779 BCE. Height 29.53 cm, width 43.82 cm. New Haven, CT, Yale University Art Gallery, 1952.51.11a−b. Public domain.

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63 For relationships between such documents and the inscriptions on Western Zhou bronzes, including longer and shorter versions of the same text, see e.g. Falkenhausen 1993, 156–163.
64 Škrabal 2022, 148–150, dating the vessel to 779 BCE. It has also been dated to 825 BCE. Compare the very similar text on the Song *ding*, Li Feng 2013, 149; see further Kern 2007, 133–140; Falkenhausen 2011, 273–276. For the process of drafting and inscribing from manuscript to casting in the vessel, see Škrabal 2019.

It was the third year, fifth month, [the period] after the dying brightness (of the moon), [day] *jiaxu* (11/60). The King was in Zhou, in the palace [dedicated to Kings] Kang and Zhao. At dawn, the King arrived at the Grand Hall and assumed [his] position. Superintendent Yĭn accompanied Song, entering the gate and standing in the centre of the courtyard. Sir Yin passed the command document (*ling shu*) to the King. The King called out to the Secretary Guosheng to command Song by means of the manuscript roll (*ce ling*):

'The King says: "Song! [I] command you to take office in charge of merchants in Chengzhou, and to supervise as an overseer the newly arrived merchants, in order to supply the palace. [I] award you a black jacket with embroidered hem, a red apron, a scarlet girdle, a banner with jingles, [and] a bronze-studded bridle. Use them in [your] service!"'

[I,] Song, did obeisance, bowed and prostrated myself, received the roll with the command (*shou ling ce*), hung it [on my belt] and came out [of the courtyard]. [I then] returned to present a jade tablet.

[I,] Song, take the liberty to extol in response the Son of Heaven's illustrious [and] blessed beneficence, [and] take this occasion to make [for] my august deceased father Middleborn Gong ('the Respectful') and august mother Gong ('the Respectful') Si [this] treasured sacrificial *gui* tureen.

[I, Song shall] use it to pursue filial service, to pray for abundant ..., pure [divine] protection, pervading wealth, and eternal mandate. For ten thousand years of abundant longevity without limits, relentlessly serving the Son of Heaven until the sprightly end, [I,] Song shall for generations of descendants eternally use [this vessel] as a treasure.

The inscription of Hezy was set up in a public place, whereas Song's text was cast within a food vessel that was to be used in rituals of an elite descent group. Despite these salient differences in material context, the two texts place the king at the centre of their narratives, evoking comparable court settings and concerns of their protagonists to celebrate their achievements for an audience that could have included a wider group who were interested in the reputation of their peers. However significant Song's ancestors were, they cannot have been his only audience, as is confirmed by his text's description of the setting of the king's grant of favour.

Two further types of contrast between these examples should be mentioned. First, the social structures in the background to the texts differ. The Egyptian text says nothing about anyone apart from the king, the elite protagonist, and indirectly the other high officials with whom Hezy competes. The only element of the physical setting is the king's ceremonial barque. Hezy does not mention family or ancestors.[65] In general, however, and despite the vast households

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65 Kanawati and Abder-Raziq 1999.

implied by the layout and decoration of major tombs, Old Kingdom monuments give little information about families, in particular almost always omitting generations previous to the tomb owner. Egyptian kinship terminology is of minimal complexity, and although families were vital to the structure and networking of the elite, they are not emphasised.[66] Mortuary cults in tombs seem to have lasted at best around a century after their owner's death. By contrast, in the Chinese case the final sections of the text focus on its protagonist's ancestor cult and on aspirations for an indefinite future of the lineage in which he seems almost to blend himself with his descendants. Lineage is fundamental to the social context. The wishes, which are conventional, belong in a long-established realm of discourse.

Second, the physical settings of the two inscriptions differ greatly. Hezy's text is carved in the doorway thickness of the entrance into his tomb and could be read by any literate person who entered the portico, in a necropolis that contained hundreds of inscribed tombs. The tomb of Hezy was in a close-packed 'street' of tombs.[67] By the time he commissioned it, inscriptions commonly addressed passers-by, inviting them to read and pronounce an offering formula for the deceased's benefit. Hezy's inscriptions happen not to include a direct address of this type, but the content of the formulas is fairly standard. A sense of the location is instead conveyed by his other thickness inscription (not translated here), which uses direct and threatening language to discourage people from entering the interior in an improper state. Perhaps this outspokenness was one reason for his end: he fell from favour, and all images of him, as well as all but one occurrence of his name, were erased, with the tomb being assigned 'by royal funerary gift' to another man.

Song had been an officer at the Western Zhou capital Zongzhou and was later stationed at the eastern capital Chengzhou. His *gui*, however, is unprovenanced and its context cannot be reconstructed in a similar way to the inscription of Hezy, but the piece dates either to fifty years or to just a few years before the fall of the Western Zhou dynasty. The aspirations for a continuing cult of the ancestors and memory of himself that it invokes might not have been even minimally realised; in other cases, evidence of hoards suggests that some family temples were in operation for most of the Western Zhou period. What comes alive from Song's text is especially the ceremonial court setting, with detailed statements of the time of day, the location, and the movements and bodily ges-

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66 Here is valuable to contrast the very different setting of Egypt in the eighteenth dynasty (fifteenth century BCE) that Andréas Stauder presents in his chapter in this volume.
67 Betbeze 2023.

tures of the actors. The resulting inscription was cast into the tureen and taken to the residence and ancestral temple of Song, where its presence, and in principle reading, would reactivate it as part of ritual meals.[68] Portable but monumental texts as long as this that are contained within significant and usable objects are cross-culturally unusual. For the Chinese case, something of the layout of a palace context can additionally be recovered from excavations of complexes from Huanbei and Anyang (Yinxu) to Western Zhou.[69] In this respect, and more particularly in its narration, the Chinese case is far more evocative than the Egyptian. The latter can instead contribute its remarkably well-preserved location in the necropolis, as well as a stronger sense of the ambitions and tensions, and in this case the individuality, of the elites who served rulers and whom the rulers sought to control.

5 Conclusion

For both Egypt and China, the long inscriptions we discuss immediately above date more than half a millennium after the initial appearance of writing. The development of inscribed texts which exploit a writing system that notates full syntax opened up new possibilities, more rapidly in China than in Egypt. These stood out from most mundane writing, as well as from its high-cultural and religious uses on perishable media, both of which tended in Egypt to favour tabular and list formats, as is likely also to have been the case in China, from which no such media survive.[70] The pattern of usage and of change was different there, with the evidence of oracle bones central to what can be known about the Anyang period. These exhibit several types of spatial organisation while sometimes notating full syntax and discourse. Thus, they fit in a setting where uses of writing would have been diverse.[71] Oracle bones, however, are difficult to assess because they form a special case that had no clear successors. Although they deal with matters of the greatest importance, they are not 'sacred' as a sacred book might be; when they were buried in pits after ceasing to be needed, this seems to have been in an orderly fashion but not reverentially. After the early Western Zhou period the practice of inscribing them disappeared. In looking for the range of what might have been written in the Anyang

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68 Several other vessels from his ritual set are known.
69 See Thorp 2006, 133, fig. 3.6: Huanbei; Rawson 1999, 392–394, figs 6.9 and 6.10: Western Zhou.
70 For Egypt: Baines 2004; for China: Wang Haicheng 2014, 180–198.
71 See Thorp 2006, 172–182.

period, it is therefore best to seek evidence in other sources, among which ora-cle bones and titles primarily inscribed on bronzes are very informative; our discussions in this chapter attempt to do that.

For Egypt perishable materials are just a little more accessible, and genres such as daybooks and letters are attested from the mid-third millennium.[72] For a more convincing picture of the spread of writing, however, indirect evidence and arguments are again crucial. The *Pyramid Texts*, spells inscribed on the walls of the burial apartments of late third-millennium kings and some queens, provide a window onto vast corpora of ritual texts from which they were select-ed and adapted in complex processes of editing both of their wording and of the signs and sign-forms with which they were inscribed.[73] Their location inside large stone monuments leads to their being uniquely well preserved, despite the later use of those pyramids as quarries for lime and limestone. If they had not survived, scholars might not have imagined the extent of the textual corpora that were transmitted, as well the traditions of working with inherited texts that can be modelled. Genres that are not attested for the same period, such as mathematical and medical texts, may or may not have existed, but contexts that might have provided indirect evidence for them, as the *Pyramid Texts* do for ritual corpora, are far less likely to survive, so that no reasonable basis for spec-ulation may be available.

To return to the discussion at the beginning of this chapter, it may be equal-ly hazardous to address the point of departure for the appearance of writing in different traditions. It is natural to think that writing will grow out of marking practices on a variety of media and that perishable surfaces for larger-scale usages will follow later.[74] Anyang oracle bones suggest that almost the opposite could have happened in Shang China: perishable forms most plausibly had precedence, with writing on bamboo or wood – for compositions of entirely unknown length – preceding its specialised application to the more durable bones and plastrons used for divination. Similarly, in Egypt, papyrus is attested as a medium at an earlier date than has been posited for any long compositions (the surviving physical example is uninscribed), whether or not these would have been formulated in continuous syntax.

The comparison of Egypt and China – or of other pairs or groups of cases – is invaluable for developing broader hypotheses about the development of writ-

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72 Tallet 2017; Tallet 2021; general and contextual presentation: Tallet and Lehner 2021; Wente 1990, 17–21, 54–58.

73 See Alvarez 2022, with literature cited there.

74 Maiocchi 2019 gives an excellent presentation of related issues for Mesopotamia.

ing in the millennium after its first introduction. Qiu Xigui 裘錫圭 used a similar comparative approach in his landmark work *Chinese Writing* 文字學概要.[75] For the topics of this chapter, implications of the presence of both standard and pictorial script styles on Xiaoshuangqiao and Anyang materials might not have been explored without the analogy of the very different Egyptian case of duality, which in its case endured for millennia. In addition to the material context, investigating the meaning of what was written with the pictorial signs involves thinking about the shape of the elite group and the polity in which they were used. Here too, a comparative approach is extremely helpful. Research in all the areas we have sketched continues.

Acknowledgements

Abbreviations

HJ = Guo Moruo 郭沫若 (1978–1983) (ed.), *Jiaguwen heji* 甲骨文合集, 13 vols, Beijing: Zhonghua Shuju 中華書局.

Jicheng = Zhongguo shehuikexueyuan kaogu yanjiusuo 中國社會科學院考古研究所 (1984–1994) (ed.), *Yin Zhou jinwen jicheng* 殷周金文集成, 18 vols, Beijing: Zhonghua Shuju 中華書局.

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75 See Qiu Xigui 2000, 2–4, 10, 44; for comparisons with Egyptian writing, see Qiu Xigui 2000, 7, 10–13, 28. The author also includes Mesopotamian writing in his comparisons.

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Ingo Strauch
Aśoka and the Use of Writing in Ancient India

Abstract: Starting with a brief summary of the recent discussion on the introduction of writing in India, the article examines the material contexts of the written texts produced during the reign of the Indian emperor Aśoka (r. 268–232 BCE). Even if these inscriptions on rocks and rock pillars may not have been the first written evidence, they represent the most extensive and diverse corpus of written texts from the early phase of writing in South Asia. Although this corpus only covers a period of less than twenty years, it shows a fairly quick development and improvement in various material aspects of writing, including writing materials, techniques, surfaces and text transmission. At the same time, the variety of inscribed texts – from royal edicts to short label inscriptions and personal texts – illustrates the rather rapid spread of writing. Moreover, the texts shed light on the practical use of written documents in the dissemination of the emblematic *dharma* teachings of Aśoka.

1 Introduction: The never-ending quest for the origin of Indian scripts

The early history of writing in India has been subject to scholarly debate from nearly the beginning of Indian studies and it seems that this debate will not end in the near future.

While the pioneers of the study of ancient India could not imagine a highly developed civilisation without the art of writing, the twentieth century mainly paved the way for another perspective.[1] German scholars, particularly Oskar von Hinüber and Harry Falk,[2] provided strong arguments that Indian culture was, for a long time, based on oral practices – both in the transmission of literary compositions and the administrative sphere. One of their main points was the fact that no material remains of writing prior to the period of the early Indian emperor Aśoka (third century BCE) could be identified. The Indian ruler Aśoka was an outstanding historical figure. As heir of the vast Mauryan empire created by his predecessors Candragupta Maurya and Bindusāra, he initially continued

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1 Falk 1993b. A useful updated summary of the main arguments is found in Falk 2018.
2 Von Hinüber 1989 and Falk 1993b.

the policy of warfare in order to extend the empire's boundaries. But soon, facing the cruelty of war and apparently strongly influenced by the current Buddhist communities, he turned towards a policy of peace and tolerance. This remarkable change is documented in his numerous royal and personal edicts that cover almost the entire subcontinent. The king propagated a unique ethical code – called *dharma* – in the edicts, based on values such as religious tolerance, non-violence and justice.

According to this approach, the production of Aśoka's numerous edicts, written on rock surfaces or pillars across the entire subcontinent, from Gandhara in the extreme north-west to Orissa in the north-east, from modern Nepal in the north to modern Tamil Nadu in the south, were the main reason to have script widely introduced in India. Only a very few examples of written artefacts other than these royal edicts survived,[3] and their dating before Aśoka cannot be proven.

From the very beginning, the art of writing in India was characterised by the existence of two different scripts – Kharoṣṭhī and Brāhmī. They share certain features, such as the abugida character, i.e. consonant signs that include a short vowel *a* and diacritic vowel signs that change the quality or quantity of the inherent vowel. On the other hand, both scripts are distinctively different: Kharoṣṭhī is written from right to left and was exclusively used in the north-western regions, i.e. present-day north-west Pakistan and the adjacent regions. As Harry Falk showed, it was developed based on the Aramaic script used during the Achaemenid and Seleucid rule in this region.[4] It is, therefore, possible that this new Indian script was already extant when the second Indian script, Brāhmī, was designed and introduced in the rest of the subcontinent. Brāhmī is written from left to right, it shares the abugida character of the Kharoṣṭhī, but introduces additional vowel signs that allow one to designate different vowel quantities (such as *ā* versus *a*, or *ī* versus *i*), a capacity that the Kharoṣṭhī was lacking but which is necessary in order to represent an Indic language. There has been no convincing theory so far that would explain the origin of the Brāhmī script; its different writing direction as well as the rather square and monumental shape of its characters make a certain influence of the Greek script (especially in its majuscule shape) probable. But the forms of the letters and the internal rela-

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3 Examples are the copper plate from Sohgaura, or the stone plate from Mahasthangarh. For these objects, see Falk 1993b, 177–181. I abstain from using diacritics here and in all other geographical designations mentioned in this chapter, and give – if attested – the English form of the name or a simplified variant, e.g. Sanchi for Sāñcī, and Mirath for Mirāṭh.
4 Falk 1996.

tionship of phonetically related signs (such as aspirates and non-aspirates of the same class) seem to point to an ad hoc creation in India, without strong relations to any other writing system. The evidence available seems, thus, to speak in favour of a pre-existence of Kharoṣṭhī in the north-west and a subsequent introduction of Brāhmī in the rest of the subcontinent during the reign of Aśoka and mainly designed in order to put his edicts into writing. This could explain the fact that Aśoka's edicts were written in a different script only in the north-west, whereas the Brāhmī script was used anywhere else.

This perspective was widely accepted[5] and seemed to speak in favour of an introduction of script in India 'from above', i.e. by royal order and with the primary purpose of propagating the royal ideology on the vast territory of the Mauryan empire.

This perspective has been recently challenged by radiocarbon data from archaeological excavations in south India and Sri Lanka. These data seem to indicate that the Brāhmī script was in use much earlier, i.e. as far back as the fifth century BCE, in a completely different material and geographical context than that suggested by the Aśokan inscriptions. All of these early inscriptions appear on pots or potsherds, mostly as personal names that probably indicate the ownership of the vessel.[6]

The inscriptions from south India, or more precisely Tamil Nadu, are composed in the Tamil language and written in a variety of the Brāhmī alphabet that was adjusted to this language and is, therefore, called Tamil Brāhmī. Objects inscribed with this script were often found together with potsherds that bear signs of a still unclear character, often called graffiti.[7] They most probably fulfilled the same function as the readable texts: they designated the object as personal property. The shape of these unreadable signs reveals no relation to the Tamil Brāhmī script. Moreover, objects with these signs do not necessarily predate objects with inscriptions. It seems that both sign systems – the Tamil Brāhmī script and the unreadable symbols – were used side by side. The use of the so-called graffiti was not limited to potsherds. The occurrence of these signs on numerous so-called megalith sites shows that this sign system was in a far wider use all over the Indian south. It is possible that it predates the occurrence of the Brāhmī alphabet in the south and was finally replaced by the latter after a

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5 Cf. e.g. Salomon 1995.

6 For the different types of pottery inscriptions, mainly in Buddhist archaeological contexts, see Strauch forthcoming a.

7 For the somewhat unsystematic use of the term graffiti in Indian epigraphy, see Strauch forthcoming b.

certain period of coexistence. However, it is not possible to state any relationship of the Brāhmī writing to this supposedly pre-existing sign system. Far less is it possible to regard the latter as a possible source for the creation of Brāhmī.

The Indian archaeologist K. Rajan investigated the entire corpus of Tamil Brāhmī and 'graffiti' potsherds from Tamil Nadu.[8] Out of the nearly eight hundred objects with Tamil Brāhmī inscriptions, more than five hundred originate from the archaeological site Kodumanal (Erode district). Radiocarbon dating of organic material from these excavations resulted in dates that would attribute the earliest Tamil Brāhmī inscriptions to a period before 500 BCE. Such an early date would, of course, be of tremendous significance for the discussions about the origin and introduction of script in India. It would place its origin in the Indian south and within a clearly non-royal, possibly commercial context. However, these dates are not completely beyond doubt, and scholars have expressed their scepticism, in particular Harry Falk.[9]

Harry Falk took the same sceptical attitude towards the radiocarbon dated inscription sherds from Tissamaharama (Sri Lanka), which he edited and published himself.[10] During excavations at the Buddhist site a number of inscribed sherds were discovered, inscribed with an early variety of Brāhmī that is largely identical with the script type used in numerous Buddhist caves for dedication inscriptions.[11] The language used is a variety of Middle Indic (Prakrit) that is typical for early Sri Lankan epigraphy, with some features that point to an influence of the phonology of south Indian languages, such as Tamil. However, the language is clearly an Indo-Aryan and not a Dravidian language.

According to the chronology of the Tissamaharama ceramics – based on radiocarbon dating – at least some of these inscribed potsherds would belong to the period between 500 and 300 BCE.

Both the evidence of the caves and the contents of many of the inscribed potsherds point to the Buddhist background of these objects. The sherds mention explicit Buddhist terms, such as *upāsaka* ('lay follower'), or *bhikṣu*/*bhikṣuṇī*(*saṃgha*) ('[community of] monks/nuns'). The chronology based on the early radiocarbon dating is, therefore, problematic on an additional level: the dating would shift the introduction of Buddhism to Sri Lanka to a time before Aśoka, against the tradition of the Sri Lankan chronicles and everything we believe to

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8 Rajan 2015.

9 Falk 2014.

10 Falk 2014.

11 Paranavitana 1970.

know about the early history of Buddhism in South Asia (although there is much more which we do *not* know).

At the time being, there is no possibility to clearly decide on one of these theories. Only a reassessment of the archaeological and epigraphical data, and an attempt of scholars to mediate between them may help to get a more reliable picture. On the other hand, even if we were to dismiss the pre-Aśokan dating of inscribed objects from south India and Sri Lanka, they clearly convey an important message: surprisingly soon, script became integrated in these areas in completely new social contexts that are not directly related to the ruling elites. At the same time, the inscriptions of Aśoka remain a remarkable witness for the use of script, and their character and technical perfection will always characterise them as outstanding products of the art of writing in ancient India. Even if the Brāhmī script was extant before the time of Aśoka, the way in which this ruler implemented literacy in the administrative practice and political landscape of his empire clearly marks a revolutionary shift in the cultural history of ancient India.

In this chapter, I will, therefore, try to subsume what Aśoka's inscriptions can tell us about the early use of script in the historical and cultural context of the Mauryan empire, particularly regarding the material contexts of the early inscriptions and the information that the inscribed texts give us about the function of writing and written artefacts in the transmission and promulgation of the royal edicts.

My survey is largely based on the discoveries and studies by Harry Falk, who visited all the Aśokan sites in the framework of a long-lasting project that resulted in his 2006 publication *Aśokan Sites and Artefacts* – an invaluable source for everybody interested in the legacy of this extraordinary Indian emperor. Falk was especially interested in the material aspects of the Aśokan objects; he investigated the geographical and historical contexts of the inscribed sites and paid special attention to the techniques that were applied in order to inscribe rocks and pillars, including the treatment of the surfaces, the orientation of inscribed surfaces, and the production, transport and erection of pillars. Based on his observations, it is possible to highlight some issues that help to understand the material contexts of these early Aśokan inscriptions better.

2 The material contexts of Aśoka's inscriptions: Places and practices

Among the texts issued on behalf of Aśoka we have to distinguish two major groups: official edicts where Aśoka addresses his subjects in his capacity as king, and Buddhist edicts that are directed to the members of the Buddhist community. In addition, and often in direct relation to inscriptions of these two major groups, a few smaller inscriptions of different types are found.[12]

Aśoka's official inscriptions can be divided into three major groups that are clearly distinguished not only according to their texts, but also regarding the characteristics of their location.

The Minor Rock Edicts (MREs) are usually located in remote places that are hard to access. In many cases, the inscriptions are incised on a rock surface within a cave or below another rock; the surface is usually not prepared for inscribing (see Fig. 1). The MREs are mostly found in the core area of the Mauryan empire (along the Ganges valley), with a remarkable concentration of sites in the far south. The script is often not very carefully executed. The texts are composed in the language of the empire's capital, i.e. the so-called *Kanzleisprache* or Old Ārdhamāgadhī, although many southern texts tend to *normalise* the language by replacing the Old Ārdhamāgadhī *l-* forms with *r*-forms (i.e. *ācariya* instead of *ācaliya* ['teacher']).[13]

The Major Rock Edicts (REs) are found near urban centres or trade routes, generally on the edges of the empire. The inscriptions are written on rocks that are usually well exposed and whose surface is mostly flat and well-suited for inscribing, even without any special pretreatment (see Fig. 2). In a few cases, the surfaces have been prepared for inscribing (Mansehra, Kalsi). According to Falk, the sites of the REs can be identified as 'sacred places of major cities'.[14] The character of these sacred sites was probably similar to those of the MREs, the audience, however, was different: urban people were apparently addressed by REs.

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12 A comprehensive survey of all epigraphical material related to Aśoka is found in the appendix, which will also help in orientation throughout this chapter.

13 Cf. Falk 2009, 7.

14 Falk 2006, 111.

Fig. 1: The MRE edict at Sahasram, courtesy of Harry Falk, cf. Falk 2006, 96, fig. 4.

While the majority of these edicts are inscribed on natural rock boulders, two sets were published on stone slabs (Sannati, Sopara), whose original location can no longer be determined. With the exception of the inscriptions in the far south (Erragudi, Sannati) and in present-day Orissa (Dhauli, Jaugada), the texts have been transformed from the eastern language of Pataliputra into the local dialects, not always without mistakes.

Fig. 2: The Girnar rock with RE inscriptions divided in separate compartments, courtesy of Harry Falk.

The Pillar Edicts (PEs) are inscribed into the highly polished surface of large, free standing, monolith pillars of about ten-metre height that were generally erected at Buddhist sites, either *stūpa*s and/or monasteries (see Fig. 3). These pillars are made of sandstone, which is relatively easy to work. Even if no archaeological remains can be identified close to a pillar, their location along Buddhist pilgrimage routes indicates their Buddhist context. As in the case of the earlier MREs, the texts are again composed in the language of the empire's capital. Pillar sites are concentrated in the wider area of the Ganges/Yamuna valley.

Fig. 3: The Buddhist site at Vesali with Aśokan pillar, courtesy of Harry Falk, cf. Falk 2006, 221, fig. 2.

These three groups of official inscriptions[15] represent written copies of texts issued from the capital Pataliputra. Significantly, these texts are not addressed directly to the people but to the royal officers who are responsible for the distribution and enforcement of Aśoka's *dharma*. The texts of each group are identical, with some significant differences that help us to understand the transmission of these edict texts to the different locations.

Since many of the texts contain dates, these groups also represent a chronological sequence, with the MREs written first (regnal year 10,[16] thus, 258 BCE),

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15 Among the official inscriptions, there are a number of smaller texts that stand apart: mainly translations of official edicts or parts thereof into other languages, such as Greek or Aramaic, that were found in the extreme north-west, usually on rocks. See Falk 2006, 241–253 and Falk 2009, 5–6, on their different relationship to original Aśokan texts. Due to their rather different character, these inscriptions are not discussed in the present paper.

16 Since Aśoka is referring in this edict to his capacity as Buddhist lay follower (*upāsaka*), the date is not given in regnal years but in years elapsed after he joined the Buddhist community. For the calculation of the resulting regnal year, see Hultzsch 1925, xlvi. Also see Schneider 1978, 163, n. 1. For the sake of convenience, I refer in the following exclusively to elapsed regnal years.

followed by the REs (regnal years 12–18, thus, 266–250 BCE), and concluded by the PEs (regnal years 26 and 27, thus, 242 and 241 BCE).

However, it has been argued that some inscriptions may have been written long after the edict was issued and its date. Therefore, it is imperative to distinguish between the text of an edict and the material form of this text, i.e. the inscription carved in stone.[17]

The character of the second large group, the Buddhist edicts, is rather heterogeneous: either they contain instructions to the Buddhist community (e.g. Calcutta-Bairat, *Schism Edict*, in three copies at Sarnath, Sanchi and Kausambi-Allahabad), or they refer to donations of the emperor or members of his family to the Buddhist *saṃgha* (Lumbini, Nigliva, *Queen's Edict* at Kausambi-Allahabad). The majority of them are found on pillars, which can easily be explained by their relation to Buddhist sites. Only one of these texts, the so-called Calcutta-Bairat edict, was written on a stone slab. The original location of this edict, the Buddhist site of Bairat,[18] is located in Rajasthan, far away from the Ganges/Yamuna valley, and possibly the transportation of a large monolith pillar was beyond the capacities of the time. Before inscribing, the surface of the rock was polished, and the writing is very carefully executed – this puts the inscriptions close to the Pillar Edicts. The inscription is clearly later than the MRE found at the same site.

The inscriptions in the remarkable artificial caves at Barabar, close to the Mauryan capital, Pataliputra, stand somewhat apart: these texts refer to Aśoka's donation of these caves to the Ājīvika religious community in the twelfth and nineteenth years of his reign. This tradition was continued by his son Daśaratha immediately after his consecration in the nearby caves on Nagarjuni hill. It is probable that the work on these caves was started under Aśoka and his son simply completed this task. The inscriptions were executed on specially prepared and sometimes polished surfaces at the entrances of these caves – immediately visible to anyone entering them (Fig. 4).

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17 For the recently discovered MRE at Ratanpurva as a later inscription, see Falk 2013. For the influence of the later MRE and PE texts on some of the MRE versions, particularly those in the south, see Gaál and Tóth 2018. The evidence cited by them would indicate that even the text of the edict could be altered when inscribed at a later period. Although Tieken 2002 rightly emphasises the need to distinguish between texts and inscriptions, his conclusions are questionable, suggesting that the production of Aśokan edicts took up to three centuries. Also see Tieken 2023, which I could not consult. For a similar suggestion regarding the Girnar REs – based on their study on population density in Mauryan time India – see Smith et al. 2016, 387.

18 For the archaeological remains of Bairat that probably go back to Mauryan times, see Fogelin 2015.

Fig. 4: The entrance of Nagarjuni cave N1, the Mauryan inscription above the entrance, a later Maukharī inscription in doorway.

Moreover, there are few small inscriptions that were added to one of the types mentioned above: in Kalsi, a drawing of an elephant is accompanied by the label *gajatame* ('the best of elephants'), probably referring to the Buddha (Fig. 5).[19]

Fig. 5: The Kalsi elephant with the label inscription, courtesy of Harry Falk, cf. Falk 2006, 126, fig. 7.

An inscription from Panguraria, one of the MRE sites, is of particular importance among these smaller texts. The official MRE text here is accompanied by a kind of personal note recalling an earlier visit of Aśoka. The connection with the MRE is unclear. Due to the different writing techniques and locations, both texts were conceived as separate entities, but could have been written by

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19 Representations of elephants are also found at Girnar and Dhauli, but without accompanying inscriptions.

the same scribe at about the same time.[20] This short text is reminiscent of the later graffiti inscriptions, which have a more personal and private character.[21] Together with the Buddhist edicts, in which Aśoka speaks less as a king than as a Buddhist, I would suggest categorizing these smaller texts as non-official inscriptions, although the Buddhist edicts contain some elements of an official character (e.g. by addressing the royal officials).

Not all of these non-official inscriptions – including the Buddhist ones – are dated, so it is difficult to establish a relative chronology. Based on the dates given, the following relationship can be established between official edicts and 'personal' inscriptions:

Table 1: Relationship between official edicts and 'personal' inscriptions.

Official edicts	Non-official inscriptions
MRE: Year 10	
RE: Years 12–18	Barabar: Year 12
	Barabar: Year 19
	Nigliva: Year 20[22]
	Lumbini: Year 20
PE: Years 26–27	

It is not possible to establish a clear chronology for the undated inscriptions. The rather poor quality of the versions of the *Schism Edict* at Sanchi, Sarnath and Allahabad-Kausambi compared to the PEs points to an earlier date than the PEs. If the erection of the Nigliva and Lumbini pillars in Aśoka's twentieth year of reign can be regarded as the initial phase of pillar production, the 'personal' inscriptions at Sanchi, Sarnath and Allahabad-Kausambi could be dated to roughly the same period. As has already been argued, the Buddhist inscription from Calcutta-Bairat should also be placed in the period of pillar inscription production, i.e. between 20 and 27.

The non-official inscriptions at the Buddhist and Ājīvika sites are clearly addressed to the followers (and visitors) of the respective religious communities and the officials dealing with them. The picture in the case of the official in-

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20 On the different writing techniques, a reliable reading and interpretation of this text, see Falk 1997.

21 For graffiti in Indian epigraphy, see Strauch forthcoming b.

22 The text refers to the enlargement of the *stūpa* in the fourteenth regnal year, but was made after a visit by the emperor in his twentieth year, when the pillar was erected.

scriptions meant to convey the emperor's *dharma* (and the small texts related to them) is more complex. If we consider their different local contexts, it seems that the three groups were made accessible to different kinds of audiences: the visitors of religious festivals in the core land of the Mauryan empire (MREs), people living in or travelling to urban centres in the frontier areas of the empire and assembling at certain times at the sites of the edicts (REs), and people frequenting the newly emerging religious Buddhist centres, spread all over the empire, probably with the exception of the far south (PEs).[23]

This shift of audiences is related to an increasing visibility of the inscriptions. The MREs are hard to access, and they rarely occupy a prominent position even on the spot. As the text of the MRE 1 shows, Aśoka here addresses people gathering at places where religious festivals involving animal sacrifices and the consumption of alcohol and other substances took place. Identifying himself as a Buddhist convert who aims at establishing the basic moral codes of Buddhism in the broader society (particularly non-violence, Sanskrit *ahiṃsā*), the king apparently wishes to demonstrate his presence at these sites in the form of his inscriptions, but there is no visible intention to dominate the place.

In the case of the REs, this attitude seems to have changed: the inscriptions are now on large, prominent rocks, the sheer size of the inscribed area attracting attention. Yet, as Falk notes, 'they were not expected to be seen every day. Only when the townspeople went to the sacred sites did they encounter the texts, either on a privately chosen date or on festive occasions'.[24]

However, the greatest visibility is clearly achieved with the PEs. The pillars alone are remarkable monuments, unique in ancient India. There is no doubt that these objects impressed contemporary visitors with their size and technical perfection. Thus, of course, these pillars were the perfect 'advertisement' for the newly emerging Buddhist *stūpa*s and monasteries. The act of placing an inscription on these pillars meant a mutual benefit: the monastery benefited from the presence of a royal, official decree on an exceptional object; the king could demonstrate his power by having these objects erected and inscribed. Moreover, the highly polished surface presented the ideal conditions for the inscriptions: the letters are clearly visible, they could be executed in perfection and the height of the pillar allowed the attachment of the inscription where it could be seen from far away. The pillars are usually inscribed in the upper portion – it is

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23 The only exception is perhaps Amaravati, but, so far, there has been no clear evidence for a Mauryan occupation of this site or any other site in the south (Shimada 2013). For the probably post-Aśokan stone inscription from Amaravati, see Falk 2006, 226.
24 Falk 2006, 111.

nearly impossible to read the inscription from below, but apparently that was not the intention of these inscriptions: they had to be *seen*, not *read*. The advanced visibility and prestigious status of pillars are also confirmed by the numerous secondary inscriptions, including graffiti, that were added to the Aśokan texts in the course of history.[25]

The three kinds of edicts do not only differ from each other regarding their locations and expected audiences, but also concerning the technical execution of the inscriptions. As shown, the general development is from rather rough, not always well visible surfaces, often within the reach of the *reader* (MRE, see Fig. 6) to partially prepared, better visible surfaces (RE, see Fig. 7), to highly polished surfaces, mostly beyond the reach of *readers* (PE, see Fig. 8). The quality of the inscriptions generally improves considerably regarding the arrangement of the texts on the surface and the execution of the writing. While the MRE inscriptions display a number of mistakes, miswritings and misrepresentations of the texts, the PEs are nearly perfect and very homogeneous.
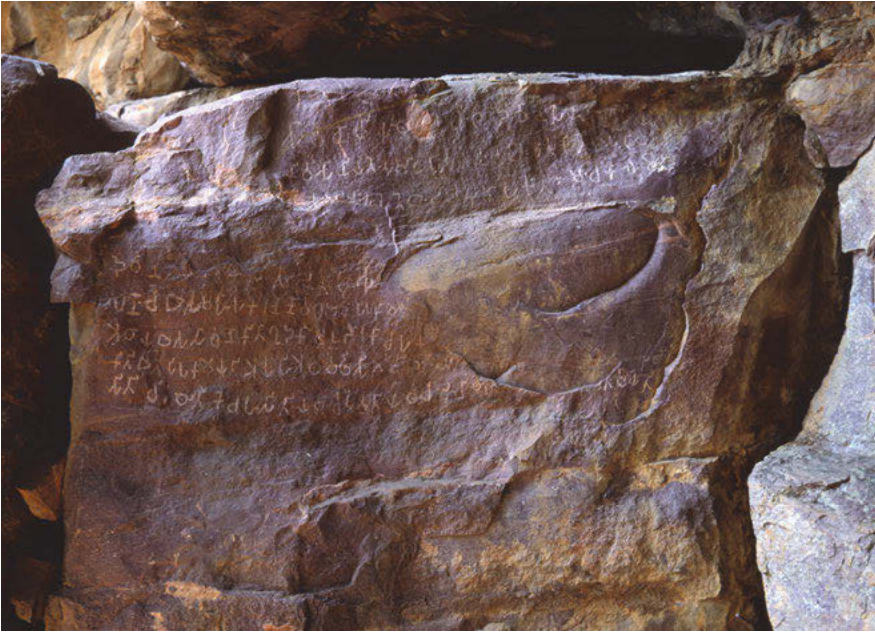
Fig. 6: The MRE at Panguraria, courtesy of Harry Falk, cf. Falk 2006, 90, fig. 7.

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25 See Strauch forthcoming b.

Fig. 7: The RE at Dhauli, courtesy of Harry Falk, cf. Falk 2006, 115, fig. 7.

Fig. 8: The PE on the Topra pillar in Delhi, courtesy of Harry Falk.

These differences can partially be explained by the different modes of transmission of the edict text from the capital, Pataliputra, to the various sites. As Harry Falk showed, the production of the first two groups, i.e. the MREs and the REs, was carried out based on written copies of the emperor's announcements. The differences between the individual inscriptions of the MREs and REs reveal[26] that different sets of written copies existed that were dispatched to the various sites and copied by stonemasons into the rock surfaces. The rather large corpus of REs that were issued over a period of six years were usually dispatched in several batches. The stonemasons could not know how many texts would follow, thus, they sometimes had difficulties to plan the arrangement of texts on the rock surface exactly.

In some cases, however, the entire set was sent at once, naturally after the announcement of the last edict in the eighteenth regnal year. In these cases, the texts were carefully arranged on the rock (Girnar, Dhauli, Jaugada).[27]

Kenneth Roy Norman suggested for the first time that these written copies were probably accompanied by 'covering letters' that contained some instructions concerning the correct transmission of the texts and their use (see below for more on these assumed 'covering letters').[28] In the earliest set of inscriptions, the MREs, some stonemasons (and perhaps intermediary officials who were responsible for the production of the inscriptions) were not able to correctly distinguish between the edict text meant for publication and the cover letter that was actually not meant to be inscribed. That is why we find remnants of these letters in some places, especially in the south. The entire text of what is usually called MRE 2 is probably nothing more than (part of) such a cover letter, mistakenly copied onto the stone in some places.[29] As Falk observed, it was meant to 'clarify the meaning of MRE 1 with additional instructions'.[30] The text itself makes it clear that these instructions concern the propagation of the key elements of Aśoka's ethics in an oral form. We can, therefore, be sure that the whole enterprise of covering the entire territory under the control of the Mau-

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26 For synoptic editions of the available versions, see for the REs – including a stemma – Schneider 1978, and for the MREs, Andersen 1990.

27 See the detailed discussion in Falk 2006, 111–112.

28 Norman 1983 and Norman 1984. Also see for these cover letters and their possible Western models, von Hinüber 2010.

29 See the careful comparison of the different versions of MRE 2 in Falk 2006, 57–58 and Falk 2009, 6–8. Falk argues that the entire text of MRE 2 should be regarded as 'an addition by one of his clerks, formulated with best intentions, but possibly not meant to be inscribed anywhere' (Falk 2009, 6).

30 Falk 2006, 58.

ryas through rock and pillar edicts was accompanied by an extensive campaign in which royal officials (*mahāmātra*) were supposed to proclaim and explain these edicts, either based on written copies in their archives or – more likely – because they knew them by heart. This somewhat unintentional 'publication' of an internal communication could even contain the signature of the official responsible. Thus, the MRE 2 is published in Brahmagiri, Siddapur and Jatinga-Ramesvara together with the signatures of the *lipikara* ('clerk') Capaḍa. In all three instances, the word *lipikareṇa* ('by the clerk') is written in Kharoṣṭhī, the script of the north-west. Falk rightly observed that the three inscriptions were written by different hands – the *lipikara* Capaḍa is, therefore, the clerk responsible for the written template rather than the executing stonemason.[31] The relation of the Kharoṣṭhī addition *lipikareṇa* to the main text and the concluding signature remains unclear. Heather Walders rightly points out in her interesting study of the carving techniques and writing tools used to engrave the Aśokan inscriptions that

> the addition of *lipikarena*, might have been done as a 'signature' from a different carver or foreign scribe using a distinct toolkit. This could have taken place either contemporary with the carving of the Brahmi text, or at another point in time.[32]

The erroneous 'publication' of cover letters is not the only feature that seems to point to rather unexperienced stonemasons and to a not yet ideally organized system of the transmission of royal orders and the production of their inscribed versions. At Erragudi, the scribe arranged all the REs in a rather arbitrary way, without paying too much attention to their correct order, which he probably did not even know. It seems here that the space was used as it was available (Fig. 9). His probable ignorance of Brāhmī writing is still more apparent in the case of the MREs, where the scribe/stonemason

> was of the opinion that every line on his exemplar should be turned into one unbroken line on the rock. However, the rock was too narrow to allow an exact copy. So, wherever he ran out of space at the right border, he incised the rest running backwards to the left above or below the first part of the line. The resulting mixture of right and left running pieces would never have been deciphered, if the correctly written parallels at other places were not done.[33]

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31 Falk 2006, 58 and Falk 2009, 7–8.

32 Walders 2018, 618.

33 Falk 2013, 44.

Fig. 9: The edict site in Erragudi with the marking of the locations of the REs, courtesy of Harry Falk.

It is certainly no coincidence that many of the 'irregularities' in terms of text representation occur at the sites in the south. The majority of the inscriptions there belong to the group of MREs, only two sites – Sannati and Erragudi – were inscribed with the texts of the later REs. No inscribed pillar has been found in

the south. Contrary to all the other sites where Aśokan inscriptions have been found, the southern versions were embedded in a completely different linguistic environment. There can be no doubt that the people living in these areas spoke a Dravidian language and reading or even proclaiming the edicts in the official chancery language of Pataliputra would certainly not have had much effect there. It seems that during the time of Aśoka, not even the slightest attempt was made to translate his edicts into the language(s) of the south. Instead, they were written entirely in the language of the north-east, including the southern versions of the REs that are otherwise translated into the local dialects. It is possible that the entire administration was formed by officials imported from the north. However, in order to propagate the edicts, these northern officials were certainly supported by locals who mastered the local languages. These multipliers of the edicts needed the written versions as inscribed on the stone far less than in the north. It is possible that they used translated versions that were never written down and kept by heart. The fact that probably few (if any) people in the south were able to read the texts written in a foreign language could explain the much more careless execution and the many irregularities of the southern inscriptions.

It seems that even the emperor himself became worried about the varying quality of his inscribed edicts based on this unsatisfactory mode of transmission and production. In his very last RE 14 issued in his eighteenth regnal year, he explicitly refers to faulty versions of this edict and explains them, inter alia, by the locality (*deśa*) and by the fault of clerks (*lipikarāparādha*).

It may, therefore, have been decided to change the method of transmission. The set of the first six PEs seems to have been written down all at once, probably not based on a written copy but directly from the oral recitation of the edicts. The various versions are remarkably coherent and have only a few mistakes that indicate errors in transmission. In the case of the MREs and REs, copying errors were quite common and often led to later corrections when the inscribed texts proved to be erroneous.

According to Falk,[34] the actual production of the inscription was now centralised: they were all produced in the quarry (either Cunar or Prabhosa) from where the inscribed pillars were transported to their destinations. Such a centralisation would, of course, favour the employment of highly experienced and trained stonemasons. The arrangement of most of the PEs in columns on different sides of the pillar suggests that they were inscribed before the pillars were erected. After the stonemason had finished his work on one side, the pillar was

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34 The main arguments are given by Falk 1993a, with some updates by Falk 2018.

turned and he continued his work. There are, however, differences in how this technique was applied.[35] In one group, the pillars were turned 180°, resulting in the inscriptions facing two opposite sides of the pillars. This type is found in the extreme north, close to the modern Nepal–India border: Rampurva, Araraj and Nandangarh (Fig. 10).

Fig. 10: PE text on the Nandangarh pillar covering one half of the surface, courtesy of Harry Falk, cf. Falk 2006, 185, fig. 4.

In the other group, the pillar was turned 90° each time, thus, the inscriptions form four narrow columns. This different technique was applied at the Delhi-Topra (Fig. 11) and Delhi-Mirath pillars which both originate from places north of modern Delhi. According to Falk,[36] the inscriptions of both groups can be attributed to two individual handwritings. Moreover, the arrangement of the edicts is identical in both groups, which clearly supports Falk's idea of a centralised endeavour.

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35 See Norman 1987a; Falk 1993a.
36 Falk 1993a.

Fig. 11: PEs on the Topra pillar: PE 1–6 on the top forming columns, PE 7 below, courtesy of Harry Falk, cf. Falk 2006, 216, fig. 4.

Apparently, after all these pillars had been inscribed and erected, the emperor issued a seventh, last edict that found its way only to one of them: in Delhi-Topra, the stonemason added this seventh PE under the previous six in continuous lines while the pillar was standing (see Fig. 11).

There are other cases where pillars were clearly inscribed while already standing on the spot: the Allahabad-Kausambi pillar probably already carried two other minor edicts – a version of the so-called Buddhist *Schism Edict* and the *Queen's Edict* – before the PEs were added. Apparently, the writing was done with the help of a large scaffolding surrounding the pillar. The text of the PEs goes more than halfway around the pillar in continuous lines, well above the two smaller inscriptions. Such a technique would have been quite impractical if the column had still been on the floor.

It appears that the *Schism Edicts* at Sanchi and Sarnath were also added when the pillar had already been erected at these Buddhist sites.

This evidence clearly shows that the free-standing monolith pillars with highly polished surfaces were not created with the purpose of supporting the royal edicts. Instead, they probably represent another form of testimony to the presence and support of the king. Their royal character is evident in the iconography of their capitals, which depict animals, such as lions, bulls and elephants, closely associated with kingship and supremacy.

In the case of the two pillars at the birth places of the Buddhas Śākyamuni and Kanakamuni/Koṇāgamana, at Lumbini and Nigliva, respectively, the text of the inscriptions clearly refers to the erection of *śilāstambha*s ('rock pillars'), a term to be distinguished from the later term *dharmastambha*, i.e. pillars conveying the emperor's moral code.[37] It is evident that the erection of pillars at Buddhist sites – with or without dedicatory texts – precedes the tradition of *dharma* pillars. In their origin, Sanchi, Sarnath and Allahabad-Kausambi belong to this category of *śilāstambha*s, which have a symbolic meaning of their own. Falk rightly remarks that 'all those three pillars [...] were inscribed when they were already erected'.[38]

By using these pillars as support for his last set of royal edicts, the king combined the symbolic values of pillars and written edicts.

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37 See Norman 1984, 224–232.
38 Falk 1993a, 87.

3 Aśokan texts on the purpose and the use of the written edicts

What was the purpose of writing the edicts, and what role did these written texts play in the broader context of the dissemination of Aśoka's *dharma*? How were they used in the environments mentioned above? It is not easy to answer these questions, but some valuable information about the purpose of the edicts emerges from the presumed remains of the accompanying letters that probably accompanied the written copies of the MREs. The identification of parts of such accompanying letters is usually based on the fact that the text occurs only in a few places and, therefore, does not seem to belong to the basic text of the edicts, which is common to all versions. It speaks for the advanced mode of transmission and the grown experience that such miscopied texts do not seem to occur in the later groups of REs and PEs.[39]

Some southern versions of the MRE 1 add an introductory formula to the text of the edict, showing that the template of both inscriptions was sent from a place called Suvaṃnagiri to the royal officials (*mahāmātā*) at Isila. The formula is that of a letter addressed to these local officials wishing them health (*ārogiyaṃ vataviyā*).[40] As the other versions of this edict clearly show, this text was not part of the edict itself, but gives important information about the intermediate stages of transmission from the capital to the actual spot. Apparently, this transmission was made through regional officers, including a *ayaputa* (Skt. *āryaputra*; 'prince').

As Norman suggested,[41] the final portion of MRE 1 from Rupnath, Sahasram, Panguraria and Ratanpurva,[42] belongs to another cover letter. This portion contains the command to inscribe the edict text on rocks (Skt. *parvata*) or – if available – on stone pillars (Skt. *śilāstambha*).[43] Norman seems to believe that this

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39 A doubtful case is the final portion of PE 7, see von Hinüber 2010, 264, and the discussion below.
40 This portion is part of the MRE inscriptions at Brahmagiri, Siddapur and Jatinga-Ramesvara. For the identification and discussion of this cover letter, see Norman 1984, 227–228 and von Hinüber 2010. The synoptic text is accessible in Andersen 1990, 112.
41 Norman 1984.
42 The Ratanpurva inscription was not yet known to Norman. Parts of a very similar covering letter are also reproduced in Panguraria, apparently unnoticed by Norman. But see Norman 1983, 259.
43 Rupnath version (reconstructed text after Anderson 1990, 90, without text-critical marks): '*iyaṃ ca athe pavatisu lekhāpetiye ti. hidha ca athi silāthambhe silāthaṃbhasi likhāpetaviye ti*'.

phrase of the cover letter refers to existing stone pillars at the time of the proc-lamation of the edict, i.e. the tenth regnal year. This cannot be excluded, but we should also consider the possibility that the actual production of the inscrip-tions at Sahasram, Rupnath, Panguraria and Ratanpurva took place at a much later time, when many of the inscribed pillars had already been erected (see above). At least in the case of Ratanpurva, Falk has identified a number of fea-tures that speak for such a late date.[44] According to this, the cover letter would refer to a situation that clearly post-dates the period of the initial composition of the early MREs.

While the Sahasram and Ratanpurva texts are nearly identical and were probably even written by the same scribe, the Rupnath version adds another phrase that should be attributed to the same (or a similar) cover letter:

etenā ca vayaṃjanenā yāvatake tuphākaṃ ahāle savata vivasetivye[45]

And true to the letter (Skt. *etena vyañjanena*)[46] [this edict] must be distributed everywhere, as far as your district [extends].

This Rupnath addition to MRE 1 is nearly identical with a phrase that is found in the Sarnath version of the *Schism Edict*.[47] The other two versions of the *Schism Edict* preserved at the pillars at Sanchi and Kausambi-Allahabad are much shorter and contain only the text of the edict itself, in slightly diverging ver-sions.[48] The Sarnath text, however, is much more extended and contains many practical instructions which seem to reproduce a similar type of covering letter to those discussed above. Similar to the other versions of the *Schism edict*, the

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For a synoptical view of the other versions, see Andersen 1990, 118. For the Ratanpurva ver-sion, see Falk 2013.

44 Falk 2013.

45 Reconstructed text after Andersen 1990, 90, without text-critical marks.

46 The exact meaning of this expression is not beyond dispute. It should be related to the Buddhist term *vyañjana*, where it seems to indicate 'letter', in contrast to *artha* ('meaning'). See the frequently attested Buddhist phrase *arthato vā vyañjanato vā* ('according to the meaning and letter') (Edgerton 1953, s.v. *vyañjana*). See the closely related phrase from RE 3 *hetuto ca vyaṃjanato ca*, probably with a similar meaning: 'by [indicating] the reasons and true to the letter'. For an extensive discussion of this phrase, see Lüders 1914, 836–839. For a different, but less satisfactory interpretation (*vyañjanato* = 'schriftlich') and a re-evaluation of the available arguments, see Schneider 1978, 122.

47 For a discussion of this phrase and its relation to the Sarnath variant, see Norman 1983, 259–262.

48 For a detailed discussion of the three versions and the final part of Sarnath as part of a covering letter, see also Norman 1987b, 200–204.

text was probably addressed to the king's officials (*mahāmātra*) and tells us that this order (*iyaṃ sāsane*, Skt. *idaṃ śāsanaṃ*) is to be made known to the monks and nuns. It also prescribes that individual copies of such edicts (*hedisā ca ikalipi*, lit. 'and identical individual copies') are to be deposited both in a place called *saṃsalaṇa* and with the lay-people. Although the exact meaning of *saṃsalaṇa* remains unclear,[49] the term seems to refer to an institution related to the royal officials (*mahāmātra*) who are to be understood as the addressees of this cover letter. Similar to the case of the Rupnath version of the MRE 1 cited above, the cover letter at Sarnath concludes with the phrase that prescribes the wide distribution of the edict, true to its letter, as far as the district (under the governance of the officials) extends:

> *āvate ca tuphākaṃ āhāle savata vivāsayātha tuphe etena viyaṃjanena hemeva savesu koṭaviṣavesu etena viyaṃjanena vivāsāpayāthā*[50]

> And as far as your district [extends], dispatch [this edict] everywhere, true to the letter. In the same way cause (it) to be dispatched – true to the letter – in all territories [protected by a] fort.

Since the wording of this phrase is largely identical with that from Rupnath, it seems to represent a typical instruction found in the cover letters that accompanied the transmission of the Aśokan edicts.

It is possible that the very last known Aśokan inscription, PE 7, which is inscribed only at Delhi-Topra, also contains (part of) a covering letter. It was probably dispatched as a written copy to Topra, where the clerk or stonemason was unsure of the actual shape of the text. In this PE and its covering letter, the king seems to sum up his *dharma*-related activities and explicitly addresses their character and purpose. The king emphasises his manifold proclamations of *dharma* and the activities of his officials in order to distribute and to explain it, including instruction in the *dharma* (*dhaṃmānusathi*, Skt. *dharmānuśāsti*). In this context, the text also refers to the appointment of special officers responsible for the *dharma* (Skt. *dharmamahāmātra*). The text of the RE 3 shows that these activities and *dharma* instructions (Skt. *dharmānuśāsti*) included inspection tours of officials that took place every five years.[51]

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49 Hultzsch 1925, 163: 'office'; Norman 1987b, 201: 'meeting place or office'; Bloch 1950, 153: 'la salle de réunion'.

50 Cited from Hultzsch 1925, 162.

51 See the synoptic text in Schneider 1978, 28. Ulrich Schneider's reconstructed version in the language of Pataliputra: '*savata vijitasi mama yutā lājūke ca pādesike ca paṃcasu paṃcasu vasesu anusaṃyānaṃ nikhamaṃtu etāye vā aṭhāye imāye dhaṃmānusathiye athā aṃnāye pi*

We learn more about these tours from RE 8, which seems to refer to similar events called *dharma* tours (Skt. *dharmayātrā*). It also mentions instructions in the *dharma* (Skt. *dharmānuśāsti*) and interrogations regarding the *dharma* (Skt. *dharmaparipṛcchā*) as activities during these tours.[52]

In the context of these dissemination activities, the text of PE 7 refers to the erection of *dharma* pillars (Skt. *dharmastambha*), which should, thus, be understood as one of the means that accompanied Aśoka's *dharma* campaign. However, the main activities were realised through oral dissemination and enforcement by state officials.

If read together with the final phrase of PE 7, it becomes clear what these *dharmastambha*s are apparently the act of inscribing a royal *dharma* edict transformed a 'rock pillar' (*śilāstambha*) into a *dharmastambha*. This final phrase of PE 7 is probably part of the covering letter that accompanied the dispatch of this edict. Its contents and wording are strongly reminiscent of the MRE 1 from Rupnath, Sahasram, Panguraria and Ratanpurva discussed above:

> *iyaṃ dhaṃmalibi ata athi silāthaṃbhāni vā silāphalakāni vā tata kaṭaviyā ena esa cilaṭhitike siyā*

> This *dharma* scripture must be made wherever rock pillars or rock plates [= flat rocks?] are. Thus this may be of long duration.

This final phrase introduces another important aspect to our discussion. Here, the king expresses the wish that his *dharma* be of long (if not eternal) duration. This wish is also repeatedly referred to in other edicts (e.g. RE 4, RE 5, RE 6, PE 2). In this context, the king sometimes addresses his successors directly, for example, in the phrase:

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kaṃmane' ('Everywhere in the country my [officials, namely] the *yuktas*, the *rājūka* and the *prādeśika* shall go out on a tour every five years for this purpose, [namely] for the instruction in the *dharma* and also for other work') These inspection tours in a five-years cycle are also referred to in the SepE 2 from Kalinga (see Schneider 1978, 93–94).

52 See the synoptic text in Schneider 1978, 53–54. Schneider's reconstructed version in the language of Pataliputra: '*tenatā dhaṃmayātā. heta iyaṃ hoti: samanabaṃbhanānaṃ dasane ca dāne ca vuḍhānaṃ dasane ca hilaṃnapaṭividhāne ca jānapadasa janasa dasane dhaṃmānusathi ca dhaṃmapalipuchā ca tadopayā*' ('Therefore *dharma* tours [were introduced]. Here this [following] takes place: visiting and offering to *śramaṇas* [i.e. ascetics] and Brahmins, visiting of old people and supporting [them] with gold, visiting the people of the countryside, and [providing them with] instruction in the *dharma*, and a corresponding interrogation about the *dharma*').

*etāye aṭhāye iyaṃ dhaṃmalipī likhitā kiṃti cilaṭhitīkā hotu iti tathā ca putā papotā me pa-
lakamaṃtū savalokahitāya* (RE 6, Dhauli version).[53]

For this reason this *dharma* scripture was written: that it may stay long and that my sons
and grandsons strive in the same way for the welfare of all people.

One could conclude from this that the decision to publish these royal orders in
the form of stone inscriptions was also motivated by the desire to preserve them
in a material form for as long as possible. What better material for this purpose
than stone?

Additionally, in some of the Buddhist and Ājīvika inscriptions of Aśoka
(and his son Daśaratha), writing in stone was linked to the desire for longevity
of communities and donations.[54]

However, at least some edicts also indicate a more practical use of the ob-
jects inscribed. The separate rock edicts published only in Kalinga (Dhauli,
Jaugada) and in Sannati in the south are of particular interest here. On these,
the king orders that this written edict (*lipi*) be heard (*sotaviyā*) regularly on cer-
tain days.[55] Whether the edict is read or recited by heart is left open by the text.
However, it seems likely that the inscribed places where people gathered on
certain occasions were used in this way: to proclaim the *dharma* aloud.

4 Conclusions

Although we cannot be certain that the Aśokan inscriptions truly represent the
initial state of writing on the Indian subcontinent, there can be no doubt that
the reign of this emperor marks a turning point in the history of writing. For the
first time, an impressive variety of writings are used – from inscriptions of royal
edicts on ethical and political issues, to messages to the Buddhist community,
donative inscriptions to other religious groups, personal commemorative texts
and label inscriptions. Even if we assume that the Brāhmī script, at least, was

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53 Cited from Schneider 1978, 47–48, without text-critical marks.
54 *Schism Edict* (Sanchi version): *putapapotike caṃdamasūriyike* ('[as long as my] sons and
grandsons [will reign, as long as] moon and sun [will last]') (ed. Hultzsch 1925, 160–161, with-
out text-critical marks); Nagarjuni cave inscriptions: *ācaṃdamaṣūliyaṃ* ('as long as moon and
sun [will last]') (ed. Falk 2006, 276).
55 Cited from Hultzsch 1925, 99 (without text-critical marks). For a synoptic view of the Kalin-
ga versions, see Schneider 1978, 92–93. The incomplete Sannati text was edited and discussed
by Norman 1991.

created primarily to record the royal edicts, the written artefacts testify to the very rapid diversification of genres and the use of the script even beyond this supposed initial purpose. The way these different types of inscriptions were produced and inserted into a broader natural and architectural landscape is evidence of a creative search for ways to address various audiences in different spatial settings. This search clearly shows a direction of improvement in terms of technical execution, the placement of the inscriptions on different surfaces, the treatment of the surfaces before the inscription and the way the texts were transferred from the place of their composition to the places of the inscription.

It is difficult to determine the exact role of these inscriptions in their various settings, but it is probable that their material presence alone was considered an important aspect: in close association with symbols of royal power (such as pillars and figurative representations of royal animals), they represent the presence and influence of the king. In the case of the official edicts, it can be assumed that their presence also motivated the regular promulgation and explanation of the royal edicts and ensured that these rules were remembered and followed by the king's officials and people. The material chosen – stone – was also associated with the explicit connotation of longevity.

As far as we know, Aśoka's *dharma* was soon forgotten after his death. His successors were neither able to continue his policies nor to ensure the continuity of the Mauryan empire. But many of the inscribed sites remained important places for further political and religious activities. In particular, the better exposed sites of the REs and PEs served for secondary inscriptions: by successive rulers for their own imperial inscriptions and by visitors from different social classes for their personal inscriptions (graffiti).[56]

Abbreviations

MRE = Minor Rock Edict
PE = Pillar Edict
RE = Rock Edict
SepE = Separate Edict
Skt. = Sanskrit

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56 See for secondary inscriptions on pillars, Strauch forthcoming b.

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Appendix 1

Table 2: Aśokan sites and related inscriptions and figural representations (with the exception of Greek and Aramaic inscriptions from the north-west).

Sites	Official edicts (with parts of covering letter = C)	Buddhist inscriptions	Other Aśokan inscriptions or figural decorations (only the capital animal for pillars)
Minor Rock Edict Sites			
North and central India			
Ahraura	MRE 1		
Bairat	MRE 1	Calcutta-Bairat edict	
Gujarra	MRE 1		
Delhi	MRE 1		
Panguraria	MRE 1 (C)		Commemorative text ('preamble')
Ratanpurva	MRE 1 (C)		
Rupnath	MRE 1 (C)		
Sahasram	MRE 1 (C)		
South India			
"South-western group" (Chitaldrug district)			
Brahmagiri	MRE 1 + 2 (C)		
Jatinga-Ramesvara	MRE 1 + 2 (C)		
Siddapur	MRE 1 + 2 (C)		
"Eastern group" (Kurnool district)			
Erragudi	MRE 1 + 2		REs (see below)
Rajula-Mandagiri	MRE 1 + 2		
Raichur district			
Gavimath	MRE 1		
Maski	MRE 1		
Palkigundu	MRE 1		
"North-western group" (Bellary district)			
Nittur	MRE 1 + 2		
Udegolam	MRE 1 + 2		

Sites	Official edicts (with parts of covering letter = C)	Buddhist inscriptions	Other Aśokan inscriptions or figural decorations (only the capital animal for pillars)
Major Rock Edict Sites			
Dhauli	RE 1–10, 14, SepE 1 + 2		Elephant sculpture
Erragudi	RE 1–14		MREs (see above)
Girnar	RE 1–14		Elephant drawing
Jaugada	RE 1–10, 14, SepE 1 + 2		
Kalsi	RE 1–14		Elephant drawing, label inscription
Mansehra	RE 1–14		
Sannati	RE 12 + 14, SepE 1 + 2		
Shahbazgarhi	RE 1–14		
Sopara	RE 8 + 9		
Aśokan Pillars			
Araraj	PE 1–6		missing
Fatehabad-Hisar	PE chiselled out ?		missing
Kausambi	No Aśokan texts		missing
Allahabad-Kausambi	PE 1–6	*Schism Edict Queen's Edict*	missing
Bansi	Pillar not preserved, only parts of the capital		lion
Gotihava	No Aśokan texts preserved		missing
Lumbini		Lumbinī inscription	missing
Mirath (Delhi)	PE 1–6		missing
Nandangarh	PE 1–6		lion
Nigliva		Niglīvā inscription	missing
Pataliputra	No Aśokan texts		missing
Rampurva, lion pillar	PE 1–6		lion
Rampurva, bull pillar	No Aśokan texts		bull
Sanchi		*Schism Edict*	lions
Sankisa	Pillar not preserved, only capital		elephant
Sarnath		*Schism Edict*	lions
Topra-Delhi	PE 1–7 (C)		missing
Vesali	No Aśokan texts		lion

Sites	Official edicts (with parts of covering letter = C)	Buddhist inscriptions	Other Aśokan inscriptions or figural decorations (only the capital animal for pillars)
Cave Sites			
Barabar caves (B1–B4)			Ājīvika donative inscriptions by Aśoka (B1, B2, B4)
Nagarjuni caves (N1–N3)			Ājīvika donative inscriptions by Daśaratha (N1–N3)

Appendix 2

Fig. 12: Map of the area discussed here drawn by Sauvage and Strauch.

Material Features

Michele Cammarosano

Writing on Wood in Hittite Anatolia

Abstract: This chapter deals with the role of wood as a writing support in Hittite Anatolia. It takes a holistic approach, involving an integrated study of textual, iconographic and archaeological sources, as well as a consideration of the material and social contexts, detailed philological analysis of relevant passages and comparative evidence. Key issues discussed in the study are the complex relationship between scripts and script carriers, and the difficult interpretation of the Sumerogram GIŠ.ḪUR and related terms. These are shown to refer unambiguously to wooden writing boards in the Hittite sources, with a newly reconstructed process of semantic adaptation of the Mesopotamian usage. The appearance and technology of the wooden writing boards are also discussed, and the question of whether boards inscribed with ink may have existed alongside the wax boards. The final section examines the various and multifaceted contexts in which the writing boards were used. Overall, the results of the study suggest that wood was a widely used material as a writing support in Hittite Anatolia, with important implications for the reconstruction of many aspects of administration, economy and cult practices.

1 Words of clay, metal, stone, ink and wax: The Hittite written legacy

1.1 Clay ~ Cuneiform

The principal source of information on the Hittite kingdom, which flourished in Anatolia between the seventeenth and thirteenth century BCE, are the riches of its tablet collections.[1] These amount to *c*. thirty thousand clay tablets (and frag-

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1 This chapter expands on research that was carried out within the projects 'Critical edition, digital publication, and systematic analysis of the Hittite cult-inventories' (German Research Foundation project no. 298302760) and 'WoW! Writing On Wax' (Universitätsbund Würzburg, AZ 18-33; see <https://osf.io/urpuf/wiki/>, accessed on 4 January 2023), and is deeply intertwined with my previous work on the subject: I beg the reader's pardon for the horrendous number of self-citations contained in the following pages. Abbreviations follow the *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* (<https://rla.badw.de/reallexikon/abkuer zungslisten.html>, accessed on 4 January 2023). All dates are BCE. The customary subdivision

ments) inscribed in cuneiform script and in several languages (Hittite, Luwian, Palaic, Hattian, Hurrian, Akkadian and Sumerian). Most have been recovered at the site of the capital city Hattuša (modern Boğazköy, today Boğazkale in the district of Çorum), with smaller collections and scattered fragments coming from several other sites (Fig. 1).[2] Importantly, virtually all of them originate from the royal bureaucracy, with only a very few examples of private records. This means that the texts available reflect, either directly or mediately, the interests and outlook of the central administration, a fact which makes it very difficult to grasp the views of other sectors of the society. Some cuneiform tablets of special importance, for example, in the case of a state treaty, were made of metal, but only a single example, the so-called Bronze Tablet containing the treaty between Tudhaliya IV and Kuruntiya (Bo 86/99),[3] has been recovered so far. Of course, the wedges could not be impressed on metal tablets but were, instead, incised.

The extant texts are customarily subdivided into modern categories, or 'genres', according to their content. The following breakdown derives basically from the *Catalogue des Textes Hittites* (*CTH*) initiated by Emmanuel Laroche and includes festival instructions (6735 = 28.6%), ritual instructions (3972 = 16.9%), texts in the Hattian, Luwian, Palaic and Hurrian languages (1770 = 7.5%), mantic texts (1587 = 6.7%), historical texts (1572 = 6.7%), administrative texts (697 = 3.0%), cult inventories (638 = 2.7%), myths (522 = 2.2%), Sumerian and Akkadian literature (326 = 1.4%), hymns and prayers (233 = 1.0%), scholarly texts (161 = 0.7%), juridical texts (135 = 0.6%), and, finally, a consistent number of texts of indeterminate and miscellaneous character (5211 = 22.1%), for a total of 23,559 fragments.[4]

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into Old Kingdom (seventeenth–sixteenth century), early New Kingdom (fifteenth century) and Empire period (fourteenth–thirteenth century) is used when referring to Hittite historical phases (for a complete chart of the Hittite kings and synchronisms with Egypt and Assyria, see 'The Hittite Royal House' at <https://osf.io/j7b3x>, accessed on 4 January 2023). As is customary in Hittitological literature, Sumerograms in Hittite contexts are transcribed in capital letters.

2 For an overview and previous literature, see Klinger 2022a; an interactive map by Dario Fossati is available at <http://www.hittiteepigraphs.com> (accessed on 4 January 2023).

3 See Otten 1988.

4 According to Miller 2017, 69, drawing on data from Silvin Košak's *Konkordanz der hethitischen Keilschrifttafeln* (www.hethport.uni-wuerzburg.de/hetkonk/, accessed on 12 October 2023); the texts may be grouped differently, depending on the modern categories chosen for creating the breakdown.

Fig. 1: Map of the sites mentioned in the article. Modern names are in cursive.

The Hittite royal administration elaborated its own principles concerning the production and management of written records. The Hittite tablet collections seem to have been informed by pragmatic principles, which have been intensely investigated by Theo van den Hout in recent years:

> The roots of Hittite scholarship and probably most of the actual process of knowledge collecting were practical in nature. Just as the Hittite state maintained a well-trained army for its military needs, a priesthood for its religious functions, or a kitchen staff for the daily sustenance of its ruling class and retainers, just so it maintained a relatively small research department staffed by what we would call learned men who were charged with gathering and maintaining information that might be of use to solve problems that were difficult to address by any other means or where such means had not worked.[5]

Thus, the criterion for the selective reception of foreign compositions, such as ritual and medical texts, seems to have been their potential applicability (e.g. in the case of the king's illness), while the bulk of the extant tablets, consisting of

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5 Van den Hout 2015, 222–223.

incantation rituals, festival instructions and mantic texts, served primarily the fulfilment of cult regulations, first and foremost, the appropriate celebration of both regular and ad hoc religious rites as well as the correct decipherment of the gods' will.[6] A practical function can also be recognised in the other attested genres, particularly administrative (including letters and palace inventories), juridical and even historical texts.[7] Thus, according to Theo van den Hout, the Hittite written legacy may best be characterised as an 'archival library' (German *Dienstbibliothek*), i.e. a collection of documents 'assembled to better perform the task of the administration', thus, to better serve the state and its ruling class.[8] Such a collection presented elements of both an archive and a library, insofar as it included tablets which were automatically kept and stored after being produced (which is a defining feature of archives) as well as tablets that were actively selected by the personnel (which is a defining feature of libraries).[9] The collections, distributed across multiple locations in the Hittite capital, included both longer-term and ephemeral records, the former category usually consisting of texts which had been recopied over time and often had a complex tradition.[10] A basic distinction can be advocated among the personnel that produced the Hittite tablet collections: that between scribal craftsmen and scholar-scribes.[11] The latter class was constituted by elite scribes, supervising the work of the scribal craftsmen and being devoted to scholarly activity besides the production of tablets.[12]

1.2 Metal, stone and ink ~ Hieroglyphs

Despite their pre-eminence in the extant record, however, clay tablets were not the only type of inscribed artefacts or cuneiform the only script in use in Hittite Anatolia. One relevant class of inscribed artefacts in addition to clay tablets is represented by seals and sealings. Seals made of metal or stone and in different shapes represented the prime strategy for securing and authenticating, and were, therefore, at the core of legal and administrative processes.

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6 Schwemer 2013, 164; van den Hout 2015, 223.

7 Van den Hout 2011, 77–78.

8 Van den Hout 2015, 224.

9 Van den Hout 2011, 77.

10 Van den Hout 2002; van den Hout 2015, 205.

11 Van den Hout 2015.

12 Gordin 2015 presents a thorough study of two of these scribal circles.

The most widespread type of seal in Anatolia was the stamp seal, a circumstance that is nicely reflected in the Hittite word for 'seal', *šiyatar*, literally 'pressing'.[13] Two types of sealing are of special relevance for the analysis of the Hittite material (Fig. 2). The first type is conical *cretulae* formed around the knot of a cord. Examination of original tablets shows that sealings of this kind were suspended from official documents, such as contracts or royal grants, having been sealed by the contracting parties or the witnesses. Other applications are possible, including using them for sealing doors and gates. The second type of sealing attested in the Hittite material is clay lumps which were applied directly to the objects to be sealed, for example, chests, boxes and door bolts, in order to authenticate their content and guarantee their integrity and privacy.[14] An appropriate label for this type of sealings is 'clay stoppers'.[15] Importantly, sealings were sometimes combined with written documents: the discussion in Section 2 will provide several examples of this practice. Mark Weeden counts more than seven thousand extant Hittite seals and sealings.[16]
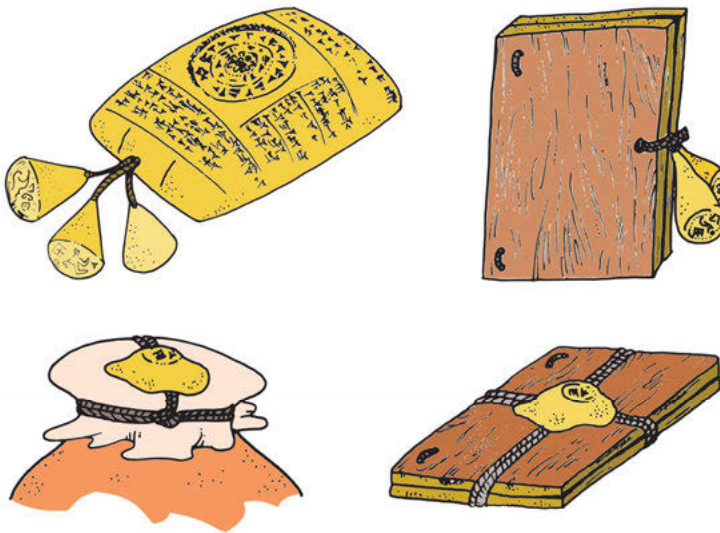
Fig. 2: Reconstructed sealing contexts, involving conical *cretulae* and clay stoppers. For the tentative reconstruction of sealing practices involving clay tablets and wooden boards, see §2.10.

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[13] Güterbock 1980.

[14] Otto 2011.

[15] German *Tonverschlüsse*; the term 'clay stopper' follows Weeden 2018.

[16] Weeden 2018, 51, 66.

Only cuneiform script and isolated symbols with auspicious meaning were employed on seals in the period up to Arnuwanda I (fifteenth century), however, starting with Tudhaliya I, a second script begins to appear on seals, also subsequently in inscriptions on stone: the so-called Anatolian hieroglyphs, a linear script which was invented in Anatolia, probably in the context of the mixed Hittite-Luwian royal chancery, and is characterised by highly iconic signs, employed in a logosyllabic writing system.[17] All hieroglyphic inscriptions that can be attributed with certainty to a specific language are written in Luwian and date from the thirteenth century onwards (note that short inscriptions, notably on seals, mostly consisting of names and logographically written titles, lack any evidence for the language of reading).[18] The bulk of the extant Bronze Age hieroglyphic inscriptions comes from seal impressions.[19] Royal seals of the Empire period have digraphic, cuneiform and hieroglyphic legends, and non-royal seals have only hieroglyphic legends. In addition to these, hieroglyphic inscriptions are attested on stone (notably on rock reliefs, from Muwattalli II onwards) and metal vessels and tools (of which only a few survive). Another technique attested for writing hieroglyphs is painting with a brush. This technique is attested in short inscriptions painted in a reddish colour on the inner walls of Building A at Kayalıpınar (of ephemeral character, predating the fourteenth century) and in the Yerkapı tunnel at Boğazköy, and may have been used on clay and possibly wooden boards as well (see below, Section 2.11). It is currently assumed that the stage of development of the system up to the late Empire period (thirteenth century) did not allow writing texts with a complex syntax and was, therefore, only suitable for syntactically non-demanding texts, such as names, titles, short dedicatory inscriptions and simple lists.[20]

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17 For an overview and previous literature, see van den Hout 2020, 120–134.

18 Hawkins 2003, 140–141.

19 Hawkins 2003, 138–146.

20 Yakubovich 2008; lastly Melchert 2020b, 240–241 with literature. Waal 2012; Waal 2022, 134, 142, argues differently for the existence of a hieroglyphic writing system capable of expressing complex texts in the Old Hittite period at the latest, and possibly even already in the Old Assyrian period (twentieth to eighteenth century). However, Waal (2022, 134) concedes that there are no hieroglyphic texts that can be read phonetically and are convincingly dated to the Old Hittite period. The theory, then, relies on a single scribble on an Old Assyrian vase, which allegedly conveys a personal name by means of logosyllabic signs (Poetto 2019), but there is strong disagreement on whether those marks can be interpreted as 'writing' at all (see Simon 2020, 50–51 and Hawkins forthcoming, who also stresses how a note published under his name in Kulakoğlu and Kangal 2010, 96, was neither intended or submitted for publication nor reflects his view on them). Therefore, to argue that a proper hieroglyphic writing system was already in use in that period is very conjectural, to say the least.

1.3 On writing and a 'wooden guest'

The duality represented by the two scripts in use in Hittite Anatolia, with the inherently different writing techniques associated with them, is mirrored in two of the attested verbs for 'writing', GUL-š- (/*kwans*-/) and *ḫazziye/a*-. As has already been argued by Massimiliano Marazzi,[21] their use correlates primarily with the different biomechanical acts of 'drawing furrows' (GUL-š-) and 'piercing, striking' (*ḫazziye/a*-). Thus, *ḫazziye/a*- is associated primarily with the idea of writing in cuneiform, since wedges are produced by repeatedly impressing a squared tip in a malleable material, whereas GUL-š- is associated principally with linear scripts, where the signs are produced by 'drawing' with a pointed tip (or a brush) on the writing surface. However, both verbs can also be used in a non-specific way, i.e. with no necessary implications regarding the use of a particular kind of script. To conclude that *all* attestations of GUL-š- always refer to hieroglyphic script while those with *ḫazziye/a*- always refer to cuneiform is, therefore, unwarranted.[22]

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21 Marazzi 1994.

22 Cammarosano et al. 2019, 144. Waal 2022, 144, maintains differently that the distribution of the occurrences of the verb GUL-š-, and particularly the fact that it is never attested in relation to *tuppi*, DUB and *TUPPUM* 'tablet', should be taken as a strong argument for concluding that GUL-š- refers invariably to hieroglyphic writing. However, while it is true that the occurrences of *tuppi*, DUB and *TUPPUM* are numerous, the related verbs are, in all but two cases, 'neutral' verbs such as *iya*- 'to make, to write', not *ḫazziye/a*- (see Waal 2011, 24). Therefore, the fact that no occurrence of GUL-š- is related explicitly to *tuppi*, DUB or *TUPPUM* (against two occurrences of *ḫazziye/a*- with *tuppi*) hardly has a statistical relevance when assessing the semantics of the verb. Additionally and most importantly, not only the type of script (hieroglyphic vs cuneiform) but also the materiality of the script carrier (clay vs wood/wax) can be a factor impacting on the semantics and usage of this verb, and this is precisely what the evidence suggests happened. In the scenario I proposed in 2019, the verb GUL-š-, which is etymologically related to the act of 'drawing' lines, would have been originally associated with wooden boards since this was the medium used for 'drawing' (marks, and, from some point on, hieroglyphic writing proper), while clay tablets were only used for cuneiform. If this is a plausible scenario, then it is perfectly natural to assume that GUL-š- happened to be primarily associated with wooden boards independently of the script employed on them in specific instances; thus, it may well have been used in relation to wax boards written in cuneiform as well (cf. e.g. the word 'pen', which betrays its early connection to feathers while being used today to refer to implements for which no bird has to be plucked ...). This general and abstract conclusion, i.e. that GUL-š- does not always necessarily refer to hieroglyphic writing, must be kept in mind when we encounter references to manuscripts that, based on independent (particularly linguistic and palaeographic) arguments, were most likely written in cuneiform not hieroglyphic script. This is the case, for example, of the *ambašši* offering ritual, which, on a tablet dating to the early New Kingdom, is said to be 'inscribed' on a wax board (*IŠTU* ᴳᴵˢ*LE-E-EḪ* GUL-*šan*, KUB 15.34+ iv 56–57, dis-

The overview presented so far does not exhaust the arsenal of writing technologies used by the Hittites. Indeed, a veritable 'wooden guest' is missing from the catalogue, namely, wooden writing boards, of which not a single example has been recovered so far. This paper is devoted to them. The evidence about Hittite wooden writing boards is particularly intricate, but precisely this makes the analysis so relevant and rewarding. As will be shown in the following sections, Hittite wooden writing boards involved both cuneiform and hieroglyphic script and were deeply intertwined with clay tablets and other media. Most importantly, however, they interacted in complex and sometimes unexpected ways with the surrounding 'material world': precisely this interaction, which has far-reaching implications for our understanding of fundamental aspects of Hittite literacy, scribal culture and administration, will be at the core of the investigation.

2 Wax boards

2.1 Prologue: Wax boards in Mesopotamia

It is conducive to start our journey by briefly recapitulating the earliest history of a particular kind of wooden writing board, namely, wax boards.[23] The writing technology that is conventionally labelled here as 'wax board' was invented in the cuneiform scribal tradition of the Ur III state at the end of the third millennium, and spread increasingly across all cuneiform cultures. Wax boards consisted either of a single leaf or of multi-leaf board books (including 'concertinas'), generally made of wood or ivory, where each leaf was provided with a recessed frame accommodating a beeswax-based layer to be inscribed either in cuneiform with a squared-tip stylus or in a linear script (e.g. Aramaic) with a pointed-tip stylus. Since the signs are produced by impression or incision, re-

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cussed in Cammarosano et al. 2019, 138, with n. 169). That GUL-*š*- is explicitly connected with wooden boards in this and similar occurrences seems to be no chance, and fits well with the scenario sketched above on independent grounds (see Cammarosano et al. 2019, 138–139, 143–144). On the contrary, those who stick to the unnecessary assumption that GUL-*š*- always refers to hieroglyphic writing must posit the existence of a developed hieroglyphic writing system already in the pre-Imperial period, which is most unlikely at the current state of our knowledge (see above, n. 20). For the reading of GUL-*š*- as /*kwans*-/, see below, Section 2.6, n. 69.

23 For the use and writing technology of wax boards in Mesopotamia, see Cammarosano et al. 2019 with further literature; now also Michalowski 2021, 77–82 (general overview); Zimmermann 2022 (use of wax boards in relation to Middle Babylonian *kudurru* stones).

spectively, they could be easily erased and rewritten *ad libitum* simply by flattening the surface and reinscribing it anew, a feature that made them especially appreciated for writing accounts that needed to be periodically updated and texts that had to be transported over long distances. Similar to later periods, however, wax boards were also used for long-lived texts, including literary, scholarly and legal texts. The standard terms for a wax board in Mesopotamia are Akkadian *lēʾum* and Sumerian ᵍⁱˢda.
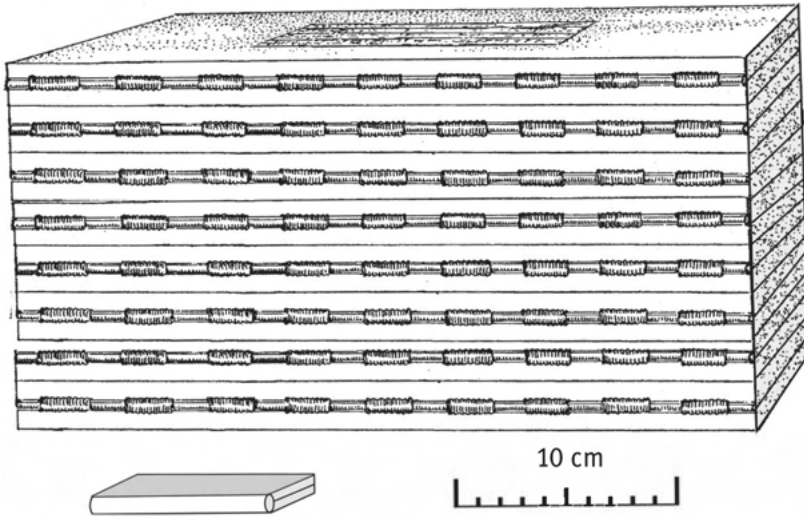
Fig. 3: Reconstruction of the set resulting from the wax polyptych from Nimrud (assuming that it was constituted by sixteen leaves, drawing by Howard 1955), compared to the smaller ivory diptych from Aššur, reconstructed based on the ivory leaf VA Ass 3541 of the Vorderasiatisches Museum, Berlin. For more details, see Cammarosano et al. 2019.

A high degree of variability and a trial-and-error approach have to be assumed for the 'technology of wax paste' in ancient West Asia, similar to what is observed for later periods. The wax paste was plausibly composed of beeswax and ochre in many if not most contexts, with orpiment (arsenic sulphide, imitating gold) reserved for luxury boards. Oil and other substances may have occasionally been used as well. Since any squared edge is suitable for impressing wedges, styli which were used for writing cuneiform on clay could also be used to write on wax boards. However, under certain conditions of temperature and composition of the wax paste, the use of an oil-based release agent is necessary in order

to prevent the stylus from sticking to the wax surface and, thus, disrupting the contours of the wedges (Fig. 4).[24]

Fig. 4: Top left: reconstruction of a Neo-Assyrian diptych (reconstruction of leaves and hinge: Gert Jendritzki; wax layer: Michele Cammarosano and Katja Weirauch) based on the ivory leaf VA Ass 3541 (Vorderasiatisches Museum, Berlin); top right: detail of a Neo-Assyrian scribe holding a wax diptych and a 'grooved stylus' from a wall panel from Nineveh (BM 124956, © The Trustees of the British Museum). Bottom: close-ups of experimental wax boards containing beeswax and yellow ochre (first and third snapshot: 7% yellow ochre; second and fourth snapshot: 50% yellow ochre) and inscribed with styli of reed, wood, bone and brass, showing the difference in the appearance of the wedges depending on whether a release agent made of date syrup, ghee and sesame oil is used (first and second snapshots) or not (third and fourth snapshots, arrows mark imperfections). For more details, see Cammarosano et al. 2019.

2.2 The *lēʾu*-boards

Since wax boards were present in the Old Assyrian scribal tradition, it stands to reason that knowledge of this medium already existed in Anatolia in that period

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24 Cammarosano et al. 2019, 153–168.

(twentieth to eighteenth century), but it is currently impossible to state with certainty whether and to which extent they may have been used by Anatolians at that time.[25] But, at the latest, when King Hattušili I passed the Taurus with his army and reached the cities of Syria and Mesopotamia in the seventeenth century, the Hittites must have encountered wax boards.[26] Their knowledge, if not actual tables, was then imported into Anatolia together with the art of cuneiform writing and related Mesopotamian cultural products, to be advantageously adapted and employed in the newly founded chancery at Hattuša.

Although no archaeological example has been recovered so far, the assumption that wax boards were used in Hittite Anatolia is undisputed. Straightforward evidence for this is the use of the Akkadian term *lēʾu* in Hittite texts (in the Akkadographic spellings ^{GIŠ}*LE-E-EḪ* and ^{GIŠ}*LE-EḪ-E*, from the early New Kingdom, as well as in the pseudo-Sumerographic spelling ^{GIŠ}LE.U$_5$ in the late Empire).[27] The contexts are cult protocols and rituals being written on, or copied from, a *LĒʾU* board, of *LĒʾU* boards used as inventories of goods, of a diplomatic agreement written on a *LĒʾU* board,[28] and of *LĒʾU* boards which officials travelling on state business used for validating operations of the withdrawal of state commodities.[29] The record of depositions given in the court case promoted by Queen Puduḫepa against the officer Ura-Tarḫunta and his father Ukkura (*CTH* 293)

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25 For the still unclear question related to the Old Assyrian *iṣurtum* documents, see Veenhof 1995; Waal 2012; Cammarosano et al. 2019, 134–136; Veenhof 2020, 141–143; and Michel 2022, 85–87. Waal (2022, 142) recalls that cuneiform wax boards are referred to as 'tablets of wax' (*tuppu ša iškurim*) in the Old Assyrian sources, so, the use of *iṣurtum* in addition to *tuppu ša iškurim* must imply a difference between the two types of documents. However, apart from the consideration that only two instances of *tuppu ša iškurim* are known and none of them co-occurs with *iṣurtum* (therefore, at least in principle, they might be synonyms), nothing forces us to assume that the difference must pertain to the writing system used on them. Instead, it may pertain, for example, to a different format, aspect or other property of the 'hardware' (see the tentative scenario proposed in Cammarosano et al. 2019, 135–136, which also takes into account that the *iṣurtum* documents occur in contexts involving Anatolians).

26 Importantly, the use of wax boards is attested at Alalakh VII, see ATaB 43.12 (=ATT 82/9) obv. 4: Dietrich and Loretz 2006, 121. Lauinger 2015, 44, observes that 'This evidence for the use of wooden writing boards at Old Babylonian Alalaḫ raises important questions as to the scope of the administrative material that is preserved on clay'. Interestingly, the interplay between wax board and clay tablet is here similar to that attested in IBoT 1.31, on which see below, Section 2.4.

27 For the use of AḪ for Akkadian ʾ*a*, ʾ*e*, ʾ*i*, ʾ*u*, see HZL no. 332, with literature.

28 KBo 4.14 i 25 (a late Empire treaty or diplomatic agreement with an unknown partner), referring to a previous text, presumably a forerunner of the agreement itself, which was written (GUL-*š*-) on a ^{GIŠ}LE.U$_5$.

29 Cammarosano et al. 2019, 138–139; van den Hout 2020, 207–209.

are especially remarkable. Ura-Tarḫunta is charged with the failure to keep a proper documentation of his activities while receiving and distributing commodities entrusted to him by the crown. The declarations made by Ukkura imply that the standards of good practice expected from state officials involved the use of sealed written documents, namely, receipts and wooden writing boards, and that accounting procedures consisted of a combined usage of sealing practices and boards:

> For the horses and mules in my custody I had *LĒʾU* boards and a receipt, sealed. They sent me to Babylonia. [...] When they sent me to Babylonia, I sealed the *LĒʾU* boards that I had concerning the horses and mules. But while I was going to Babylonia and back, I did not seal them any further. The receipt, too, was not sealed. For that very reason I did not pay close attention. As soon as the horses and mules arrive, I will seal them in the same way. It was presumptuous of me, but it was not a deliberate offence.[30]

The combination of writing boards and sealing is a very important aspect. It shows that writing boards, once sealed, were considered to be 'secured' and safe from manipulation, thus, perfectly suitable to be used for confidential content and as legally binding, authoritative documents.[31]

2.3 Hieroglyphic styli

Both cuneiform and hieroglyphic script were in use in Anatolia, thus, an interesting question is whether both of them were used on wax boards. The answer must be in the affirmative. The use of cuneiform is virtually assured from the fact that many passages referring to wax boards pertain to texts of higher syntactic complexity, which, according to the present model of the development of Anatolian hieroglyphic writing, could hardly have been expressed other than in cuneiform at that time.[32]

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30 KUB 13.35+ i 15–17 (§2) and iv 35–44 (§28), Werner 1967, 4–5, 14–15; translation after Hoffner 2003, 57, 60, with modifications.
31 For tentative reconstructions of these sealing practices, see Fig. 2 above. This aspect, which can be also observed in later civilisations using wax boards (e.g. Greece and Rome), is often imperfectly recognised in literature, with the option of erasing and rewriting signs on the wax layer taken as an element that makes wax boards inherently 'insecure'.
32 As has been seen in §1.2, we observe a development from the use of isolated signs as auspicious marks (from the Old Hittite period) to simple text strings for names and lists (from the early New Kingdom) and, finally, syntactically complex inscriptions in the Empire period.

Fig. 5: Left: detail from the stela of Tarḫupiya, Maraş, eighth century (Louvre AO 19222, CHLI MARAŞ 9); right: bronze stylus from the Upper Town of Boğazköy, Empire period, length 16.45 cm (Bo 84/531).[33]

But hieroglyphs were also used on wax boards. Indeed, a piece of immediate evidence for the use of this medium are several bronze implements recovered at multiple Hittite sites (Boğazköy, Alaca Höyük, Kuşaklı and Ortaköy), typically in contexts where cuneiform tablets have also been found. These implements have a pointed tip and a spatula-like flattened end at the back, are between 8.5 and 23.6 cm long, and often decorated at the juncture of shaft and spatula. In my opinion, the only plausible interpretation is that they are styli used for writing Anatolian hieroglyphs (because of the pointed tip, which is not suitable for impressing wedges) on wax boards (because of the back-end spatula, arguably

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33 Herbordt and von Wickede 2021, pl. 78.5.

used for erasing signs in case a correction was needed). This interpretation is corroborated by iconographic evidence from the Neo-Hittite kingdom of Gurgum (modern Maraş), showing scribes holding wax boards and styluses that are identical to the tools under discussion (Fig. 5), and has relevant implications for the appraisal of the diffusion of the hieroglyphic script as well as for the study of administrative procedures.[34]

2.4 Conflicting views on the Sumerogram GIŠ.ḪUR

Having established that wax boards were present and that they were used for writing in both cuneiform and hieroglyphic script, we can move on to examine a much discussed term that bears a great relevance for the analysis of writing practices in Hittite Anatolia, i.e. the Sumerogram GIŠ.ḪUR (Sumerian ĝeš-ḫur). Similar to *LĒʾU*, this term is attested from the early New Kingdom, with the majority of occurrences found in late Empire texts. Like most other logograms used by Hittite scribes, GIŠ.ḪUR was also imported from the Mesopotamian cuneiform tradition. Its Anatolian semantics, however, do not entirely correspond to the Mesopotamian usage. While GIŠ.ḪUR and the corresponding Akkadian noun *uṣurtum* had the meaning 'drawing, design, plan, regulations ordinance' in Mesopotamia,[35] the contexts in which GIŠ.ḪUR is used in Hittite texts show that it denoted a particular kind of written document. Two hypotheses exist in the current debate: one, championed by Theo van den Hout, considers that GIŠ.ḪUR in Hittite texts denotes an 'authoritative' document in diplomatic terms (i.e. from the perspective of diplomatics),

> an official, state-issued, and legally authentic document that could have different formats and functions depending on the situation. It could be a list, an order, legal evidence – sometimes sealed but not always – but the bottom-line was its authoritative status.[36]

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34 Cammarosano et al. 2019, 133–134, 141–142; for a detailed study, see Cammarosano forthcoming. New examples from the Upper City of Hattuša have been published in Herbordt and von Wickede 2021, 223–224. Van den Hout 2020, 211, suggests that they may be surgical instruments instead, but their number and contexts of recovery speak against this interpretation. Note that a stylus identical to these is also found on the stone panel from the ʿAna Island IM 132177, dating to the reign of Ninurta-kudurrī-uṣur (eighth century) or possibly his father Šamaš-rēša-uṣur, which depicts a scribe who is writing in Aramaic on a wax board in the context of a battle scene, see Cammarosano et al. 2019, 134–135.

35 For the important question of the semantics of Sumerian ĝeš-ḫur, see below, Section 2.6.

36 Van den Hout 2020, 189 with literature.

The second one, to which the present author adheres, views GIŠ.ḪUR as a term denoting wooden – and arguably waxed – writing boards.[37]

It is interesting to note how reluctant scholars are to decide between the two interpretations. Clelia Mora and Jörg Klinger, in their contributions on 'Anatolian Hieroglyphic Documentation' and 'The Hittite Writing Traditions of Cuneiform Documents', respectively, within the newly published *Handbook Hittite Empire*, devote very few words to the issue of wooden writing boards.[38] Mora, in particular, has shifted from an endorsement of Marazzi's thesis (viewing GIŠ.ḪUR as a term denoting both a draft or programme and a wooden writing board)[39] to an endorsement of the thesis of van den Hout,[40] ultimately resulting in an agnostic stance about the materiality of the objects on which the documents referred to in the relevant passages were written.[41] In the most recent treatment of this issue, James Burgin explicitly refrains from adjudicating between the two interpretations.[42]

Settling the interpretation of GIŠ.ḪUR is very important for assessing the diffusion of wooden writing boards within Hittite literacy and administration, not only because of the number of occurrences involved (much more than for *LĒʾU*), but also because it bears upon the interpretation of several words for which GIŠ.ḪUR functions as a determinative (see below, Section 2.7). It seems

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37 Cammarosano et al. 2019, 136–138 with literature.

38 Mora 2022, 62 with n. 49–50; Klinger 2022a, 120 ('Unsurprisingly, no material proof of such wooden tablets has been discovered so far, so that their existence, their possible form, or the function of these 'wooden tablet scribes' are all controversially discussed'), with reference to studies by van den Hout and Waal in n. 100.

39 Marazzi 1994.

40 Van den Hout 2020.

41 See Mora 2007, 538–539, with n. 10 (with GIŠ.ḪUR left untranslated in the discussed passages); Mora 2022, 62, states that 'The possibility that Anatolian hieroglyphic writing was also used on (waxed) wooden tablets has long been debated. [...] I personally do not believe that there is currently sufficient data to support such a hypothesis, but a discussion here would be difficult (it would even take up too many pages). I therefore limit myself to referring to the recent book by van den Hout (2020), Ch. 10 (pp. 184–217), where the long discussion on "The Wooden Writing Boards" (with reference to the AH writing) ends with the following words: "All three materials" (i.e. clay tablets, wooden writing boards, metal tablets, mentioned just before) "were inscribed with cuneiform script although the occasional use of hieroglyphs on wood can be neither excluded nor proven". This opinion, which is very well argued by the author in his discussion, seems to be fully acceptable'. This implies, importantly, that Clelia Mora implicitly considers that the bronze implements discussed above are not writing styli (otherwise, at least the 'occasional' use of hieroglyphs on wood should have been regarded as proven).

42 Burgin 2022a, 388–392.

appropriate, therefore, to examine the issue anew and address the objections that have been raised in detail.

A first observation is that the hypothesis according to which GIŠ.ḪUR denotes an 'authoritative document', irrespective of its materiality, can hardly be disproved. Since virtually all Hittite tablets emanate from the royal administration, they configure, per definition, 'official, state-issued, and legally authentic document(s)'. Thus, there will always be a particular perspective from which a tablet can be considered 'authoritative' in diplomatic terms.[43] A telling example is found in the ritual KUB 17.18 iii 14–18 // KUB 60.161 ii 36–40 (*CTH* 448), where the 'portion' of cult offerings of the ritual patron is noted on two GIŠ.ḪUR-documents, which are subsequently hung on a sheep and a billy goat to be buried in a pit.[44] The fact that wooden tags arguably fit the context here better than clay tablets bears little significance upon the issue of the authoritativeness of the documents, since they have an authoritative nature in the logic of the ritual procedure, and authoritativeness is not necessarily dependent on the material. The two arguments, therefore, pertain to different levels, and neither can prove or disprove the other.

At this juncture it has to be stressed that, on the one hand, all passages involving GIŠ.ḪUR documents refer to situations which have historically been typical contexts for wax boards, but, on the other hand, these GIŠ.ḪUR documents do not seem to have a particularly 'authoritative' status compared to those denoted with the term *tuppi*, i.e. the loanword from Sumerian dub and Akkadian *tuppum* meaning, by default, 'clay tablet'. A particularly telling example is found in the palace inventory IBoT 1.31. The text refers to two chests with luxury items. Each one has been inventoried on a GIŠ.ḪUR and, upon arri-

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43 Burgin 2022a, 388–389, warns that 'one must be very clear about what is understood by "authoritative" in a diplomatic context. An incautious reading could confuse the term with "official". [...] Only sealed tablets such as the land-grants, the Bronze Tablet, and other tablets preserving evidence of once having sealed bullae attached can confidently be placed into the "authoritative" category'. On p. 391, however, he considers the GUL-*zattar* documents cited in KUB 42.100+ in the context of an archival crosscheck to be authoritative documents, although nothing hints at the presence of sealings, and observes that the *gurta* documents from the reign of Muwattalli II cited in the same passage, being earlier records, 'had presumably the greater authority due to their antiquity'. The problem is that it is impossible to clearly discriminate between authoritative and non-authoritative documents in a strictly diplomatic sense, simply because we are not aware of the criteria by which the Hittites did so (assuming they ever did).

44 Van den Hout 2020, 193, with literature (but see Melchert forthcoming, cited in Cammarosano et al. 2019, 137, n. 154, for the interpretation of *latti-* as 'portion' instead of 'tribe').

val into the royal storehouse, their contents (or, at the very least, their arrival) are to be registered on a *tuppi*:[45]

> One large red (reed) container (on) lion feet, tribute; in (it) are linen textiles from the land of Amurru; inscribed (*gulaššan*) on a GIŠ.ḪUR. [...] One large red (reed) container (on) lion feet, tax from the town of Ankuwa; a number of textile(s), inscribed on a GIŠ.ḪUR. Thus (orders) the queen: 'When I will put it in the storehouse, they will record it on a (clay) tablet (*tuppiaz anianzi*)'.[46]

Here, once again, it is only natural to interpret the use of GIŠ.ḪUR vs *tuppi* in the light of a duality of wooden boards (used for the provisional inventories travelling together with the chests) vis-à-vis clay tablets (used for the final record made upon arrival). Not quite so, in my opinion, if we try to connect the choice of GIŠ.ḪUR vs *tuppi* with an alleged perception of different levels of authoritativeness. In this scenario, why should the provisional inventories have had a more authoritative status than the final record? One would rather expect the opposite.[47] Van den Hout tentatively explains it with the notion that *tuppi* is a more general term than GIŠ.ḪUR, so that 'every GIŠ.ḪUR is a *tuppi* but not every *tuppi* a GIŠ.ḪUR', thus, resulting in the already noted impossibility of identifying any apparent ratio for the use of these terms in the passages at stake.[48]

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45 Van den Hout 2020, 182, 192; lastly, Burgin 2022b, 37–47.

46 IBoT 1.31 obv. 2–3, 12–15, palace inventory, translation by van den Hout 2020, 192, with modifications. The context suggests that *tuppi* refers here to a clay tablet, although the term can, in principle, refer to tablets of other materials as well (see the discussion below).

47 An interesting case among many possible parallels is that of the shorthand notes used in the process of recording the sessions of German parliaments in the nineteenth and twentieth century, currently being investigated in the research project 'Parliamentary Shorthand Writing as Material and Political Practice' led by Markus Friedrich at the CSMC in Hamburg. The project presentation notes that 'this study of shorthand writing tackles the competition between immediate shorthand records and longhand versions for the status of the original. While the material object that resulted from shorthand protocolling – a shorthand manuscript – was undoubtedly the most direct (and, one might think, most "original") material trace of the oral debate, officials did not consider it the original. *What came to be known as "original" protocols of Parliamentary debates were the longhand versions based on shorthand records revised, compiled, and altered into an authoritative record*' (emphasis mine; <https://www.csmc.uni-hamburg.de/written-artefacts/research-fields/field-c/rfc05.html> [accessed on 24 September 2022]).

48 Van den Hout 2020, 192, discussing the use of the two terms in KUB 21.38 (see below), a case to which IBoT 1.31 'may be similar'. That the content of the *tuppi* drafted when the chests arrive cannot be precisely reconstructed, is irrelevant to our question. Admittedly, the fact that *tuppi* can occasionally be used to refer to tablets made of materials other than clay (see pres-

The correct observation that *tuppi* is a more general term than GIŠ.ḪUR implies that, while in most cases it doubtless referred to clay tablets, it could also be used as a loose reference to other kinds of written documents (such as in Mesopotamia: CAD Ṭ 147–148). This circumstance should prevent us from considering the fact that GIŠ.ḪUR documents are later recalled as *tuppi* in a letter by Queen Puduḫepa to Ramses II as evidence against the hypothesis according to which the former were wooden boards.[49] It is hardly necessary to recall the role of Sumerian dub '(clay) tablet' (and of the correspondent loanwords) as *the* word for 'written document' *par excellence* in the cuneiform world. Precisely the broader semantics of *tuppi* make it absolutely plausible that it was used in a number of instances to refer to documents made of materials other than clay.[50]

2.5 The formula 'aligned with the GIŠ.ḪUR'

Among the contexts in which GIŠ.ḪUR is attested is an archival remark found in the colophons of a group of Empire period tablets containing so-called festival texts.[51] Indeed, most attestations of the term come from this formula. It reads *ANA* GIŠ.ḪUR≠*kan ḫandan* 'aligned with the GIŠ.ḪUR', see, for example, KUB 2.6 vi 1–4 (festival for the sun goddess of Arinna, *CTH* 598): 'Tablet 6, of the Sun deity of the Winter. Not complete. Aligned with the GIŠ.ḪUR'.

While dozens of such state-sponsored festivals are known, Jürgen Lorenz argued that the colophons containing the formula all pertain to festivals of the

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ently) makes it impossible to establish with absolute certainty the materiality of any *tuppi* referred to in a text. However, in my opinion, the context of this particular passage clearly indicates a deliberate distinction between the documents referred to as GIŠ.HUR and *tuppi*, with the latter term used in its default meaning of 'clay tablet'.

49 Contra van den Hout 2020, 192; see Cammarosano et al. 2019, 137.

50 It is unclear to me why the absence of attestations of an hypothetical phrase *ṬUPPU DUḪ.LÀL in Hittite texts should represent a reason for skepticism towards the assumption that *tuppi* could be occasionally used for a wooden board, as advocated in Burgin 2022a, 389. It is true that there are attestations of *ṬUPPU* ZABAR/KÙ.SI$_{22}$/KÙ.BABBAR but not of *ṬUPPU DUḪ.LÀL, but the latter are not expected precisely because there were dedicated terms for that (^{GIŠ}LE.U$_5$/^{GIŠ}*LĒʾU*, and arguably more). Note that the few instances of *ṭuppu ša* DUḪ.LÀL/*iškūrim* 'tablet of wax' (Cammarosano et al. 2019, 131; Burgin 2022a, 389) come from a letter recovered in Ugarit and from Old Assyrian tablets, i.e. precisely a corpus in which the term *lēʾu* does not seem to be attested at all.

51 Festival texts (German *Festrituale*) are protocols detailing the schedule and offerings of cultic festivals in which the king took part, see Schwemer 2016; Rieken and Schwemer 2022. The formula is found in tablets catalogued in *CTH* 592, 595, 612, 615, 626, 627, 631, 634, 670, and 682, see Lorenz 2014, 479–480.

living cult practice, i.e. festivals that were actually celebrated at the time (as opposed to festivals that were copied but no longer actively performed).[52] Within the entire corpus of the festival texts, the term GIŠ.ḪUR appears only in this formula and in one passage from the enthronement festival *CTH* 659 which will be discussed below.

The semantics of the verb *ḫandāe-* has been recently investigated by H. Craig Melchert,[53] who demonstrated that its basic meaning is 'to align', arguably originating from Proto-Indo-European weaving terminology. Importantly, there is no inherent hierarchy in the 'aligned' elements: the sense is to put two (or more) objects on a line, just like planets or, indeed, warp threads. All other meanings of *ḫandāe-*, namely, 'to equate/compare with', 'to match up' and, finally, with moral connotation, 'to be just, righteous', can be derived from the fundamental sense of 'aligning'. As for the use of the participle in the archival remark *ANA* GIŠ.ḪUR⸗*kan ḫandan*, Melchert translates the formula 'true to/corresponding with an archetype'.[54] However, nothing requires or even hints at the GIŠ.ḪUR, with which the tablet is 'aligned', to represent a model or archetype of the composition (although this is, of course, entirely possible in principle). Precisely because the meaning of GIŠ.ḪUR is debated, it is safe to first take *ḫandan* not in the 'morally' loaded sense of 'true to/collated against' but rather in its neutral sense of 'aligned with', regardless of whether the alignment is with a 'plan/schedule',[55] an 'original'[56] or a wooden writing board,[57] all of which are plausible meanings in this context.

While the question of the nature of GIŠ.ḪUR cannot be settled by examining this formula, it is worth adding some observations apropos the last of the possible options just listed. As is well known, written documents were also used, at least to some extent, during the celebrations to support the management and supervision of the rites. This is evident in a passage from a tablet detailing day 29 of the AN.DAḪ.ŠUM spring festival: 'He brings offerings to all the gods, one after another while a scribe reads out from a *tuppi* (i.e. by default, a clay tablet) to which deities the sheep are to be offered'.[58] This passage can be compared to an analogous one from an outline tablet with prescriptions concerning the daily

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52 Lorenz 2014.

53 Melchert 2020a.

54 Melchert 2020a, 170.

55 Marazzi 1994, 146–147.

56 Van den Hout 2020, 195.

57 Singer 1983, 42; Waal 2011, 26; Cammarosano et al. 2019, 138.

58 *nu* DINGIR^MEŠ *ḫūmanti*[*š*] *kalutitti ḫalz*[*išš*]*ai⸗ma⸗aš⸗kan* ^LÚDUB.SAR *tuppiy*[*az*] UDU^ḪI.A⸗*kan kue*[*d*]*aš ANA* DINGIR[^MEŠ] *šipanz*[*aka*]*nta*: KUB 20.59 rev. v 2–6 (*CTH* 616), after Schwemer 2016, 20.

offerings to be made within the ritual for the king's enthronement, although here the text does not necessarily imply that the GIŠ.ḪUR which is referred to as being available at the scribes' office was also held by one of them during the rite: 'But the wood-scribes have a GIŠ.ḪUR (detailing) how the king brings offerings on each day'.[59]

Now, the more difficult information is to memorise, the more welcome the support of a written memo: and, indeed, both passages refer specifically to lists of offerings, arguably the least memorisable component of festival protocols. Thus, it is entirely plausible to assume that the archival remark 'aligned with the GIŠ.ḪUR' refers to such kind of memos. The existence of several parallel versions of a festival was normal in the Empire period: because of both the process of scribal tradition, with festival protocols being copied and recopied over decades or even centuries, and slight changes, for example, in the quantity of offerings, arising over time. The remark in the colophon would then emphasise how that particular tablet was 'aligned' with the memos – arguably drafted on wooden boards – which were currently in use for assistance in the performance of the festival.

That wax boards have distinct advantages over clay tablets in such a context, namely, transportability, light weight, possibility of binding together several leaves, and ease of making corrections or changes over time, including when working in the open air, hardly needs to be stressed.[60] The argument can even be taken one step further. Assuming that such memos would have contained no more than lists of offerings, the possibility arises that they may have been written in hieroglyphic script, thus, offering one of the plausible application scenarios for the bronze styli discussed above.

2.6 A shift in semantics, and its good reasons

An objection which is sometimes made to the interpretation of GIŠ.ḪUR as a wooden board is the alleged implausibility or idiosyncrasy of the process of semantic shift that is to be assumed for the Sumerogram on its way from Mesopotamia to Anatolia.[61] In my opinion, this objection is unfounded.

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59 LUGAL-*uš⸗ma⸗kan maḫḫan* UD-*tili šipanzakezzi nu* GIŠ.ḪUR ᴸᵁ̇·ᴹᴱˢDUB.SAR.GIŠ *ḫarkanzi*: KUB 10.45 rev. iii 12′–14′ (*CTH* 659), after Schwemer 2016, 20.

60 See e.g. Büll 1977, 785–894; for ancient West Asia, see Cammarosano et al. 2019. For the 'wood-scribe' (ᴸᵁ̇DUB.SAR.GIŠ), see Cammarosano et al. 2019, 145, and van den Hout 2020, 294–296, with literature.

61 Van den Hout 2020, 188–189; Burgin 2022a: 390.

Theo van den Hout[62] follows Gertrud Farber-Flügge[63] in assuming that 'from a Sumerian point of view the elements GIŠ and ḪUR did not have their own semantic values, "wood" and "to carve, draw"' respectively, but had to be understood as phonetic only', and Yoram Cohen in the view that 'GIŠ.ḪUR never really was a living Sumerian combination but rather functioned as a pseudo-Sumerogram', in which 'both signs have their common Akkadian sign values *iṣ* and *ur₅* standing for an abbreviated Akkadian *iṣur(tu)*'.[64] Neither claim, however, seems convincing to me. Indeed, the term ĝeš-ḫur is well attested in Sumerian tablets with the meaning 'rule, ordinance, plan, model, sketch', including in phonetic spelling.[65] The sense of 'rule, ordinance' is clearly derived from the basic meaning of the Sumerian verb ḫur, namely, 'to scratch, to draw'.[66] The underlying semantic process is 'drawing' > 'plan' > 'model' > 'rule', given that ground plans (produced by drawing on a surface)[67] typically serve as (normative) models for the construction of buildings. In second millennium Mesopotamia, ĝeš-ḫur and the corresponding Akkadian noun *uṣurtum* (< *eṣērum* 'to draw') retained the basic sense of 'drawing, plan' besides the derived one of 'regulation, ordinance' (CAD U 290–293). That the Hittite scribes were aware of the correspondence GIŠ.ḪUR: *uṣurtum* is confirmed by the spelling GIŠ.ḪUR-*TE* in IBoT 2.1 vi 13′–14′. They obviously knew of the Mesopotamian semantics of GIŠ.ḪUR.[68] Why, then, was a deviating sense chosen for the usage of the Sumerogram in Hittite texts? The answer is very simple.

As is well-known, the Hittite texts witness the use of a particular kind of written document which was called *kwanzattar* (spelled GUL-*zattar*; neuter gender).[69] The word GUL-*zattar* means 'drawing' (Hittite /*kwans-*/, spelled GUL-*š-*,

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62 Van den Hout 2020, 188–189.

63 Farber-Flügge 1973, 182–183.

64 *Apud* van den Hout 2020, 188.

65 Attinger 2021, 494.

66 Attinger 2021, 539, note, importantly, the occurrences of ĝeš-ḫur ḫur 'to mark, to draw a model'.

67 Bagg 2011.

68 See the bilingual tablet KBo 12.128, containing Akkadian proverbs and the corresponding Hittite translation, with an occurrence of GIŠ.ḪUR with the meaning 'ordinance' (line 14′, see Cohen 2013, 202).

69 Previously, the accepted spelling was *gulzattar*. The reading depends on whether one interprets the sign GUL as a logogram (thus, GUL-*zattar*, corresponding to /kwanzattar/, with Waal 2014; Waal 2019) or not. The issue is not yet conclusively proven, however, the current consensus tends towards the logographic interpretation, which is, therefore, adopted here (see Bauer, Payne and Sasseville 2022, with literature). Note that the spelling of this term and the

Luwian *kwanza(i)-*, PIE *kʷels- 'to draw, to trace a furrow'),[70] thus, corresponding exactly to Akkadian *uṣurtum*. It is, therefore, only natural for a Hittite speaker looking for an appropriate logographic spelling of GUL-*zattar* to adopt the Sumerogram that corresponds to *uṣurtum*, namely GIŠ.ḪUR.[71] And indeed, the long held view that GIŠ.ḪUR represents the logographic spelling of GUL-*zattar* is now fully confirmed by James Burgin's new interpretation of the only passage in which GIŠ.ḪUR seemed to conceal a common gender noun. By showing that GIŠ.ḪUR in IBoT 2.131 obv. 21′ is to be taken as determinative of *šiyanteš* 'the sealed ones' instead of an independent noun, he disposes of the only argument against the assumption of a 1:1 equivalence between GIŠ.ḪUR and GUL-*zattar* (all other gendered attestations showing neuter agreement).[72] The process of adoption and semantic adaptation is, thus, perfectly plausible, and the deviation in respect of the Mesopotamian usage fully unproblematic, insofar as both Akkadian *uṣurtum* (together with Sumerian ĝeš-ḫur) and Hittite GUL-*zattar* retain their basic sense of 'drawing' besides the derivatives 'plan, ordinance' (for Akkadian *uṣurtum*) and 'GUL-*zattar*-document' (for Hittite GUL-*zattar*), respectively.[73]

What kind of document a GUL-*zattar* is, of course, raises another question: but let it be stressed here that assuming it denotes a particular kind of wooden writing board, the deviation from the Mesopotamian usage is in no way more troubling than from 'plan, ordinance' to 'original',[74] and that the availability of *LĒʾU* 'wax board' cannot constitute a counterargument (it suffices to assume that different kinds of wooden boards existed, for example, hypothetically, single leaves vs board books, or waxed vs inked; cf. also the existence of multiple terms denoting specific kinds of documents discussed below).[75]

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materiality of the corresponding kind of document (see below, Section 2.7) are, in principle, irrelevant to the issue discussed here.

70 See Bauer, Payne and Sasseville 2022.

71 This argument (see Cammarosano et al. 2019, 136) is not taken into consideration in the critical discussion of Burgin 2022a, 389–390. It is also independent of possible developments in the pre-Hittite period (cf. Burgin 2022a, 390).

72 Burgin 2022a, 390, correcting an erroneous assumption by Cammarosano et al. 2019, 140; van den Hout 2020, 198; and others.

73 The question of which kind of documents the Old Assyrian *iṣurtum* are (see above, Section 2.2, n. 25) does not impact the interpretation advocated presently. What is at stake here is the question of whether the hypothesis that GIŠ.ḪUR and GUL-*zattar* denote a specific kind of written document in the Hittite sources is problematic or not on linguistic and semantic grounds.

74 Contra Burgin 2022a, 392.

75 *Pace* Burgin 2022a, 389. Multiple writings and words denoting wooden boards also existed in Mesopotamia, and were, at least in some scribal traditions, coherently used for specific

Finally, neither the 'creative' handling of Mesopotamian logograms nor the use of GIŠ.ḪUR as a determinative (unparalleled in Mesopotamia) are in any way problematic. On the contrary: compare, for example, the 'invention' of the pseudo-Sumerogram ᴺᴬ₄ZI.KIN 'cult stela' (which, like GIŠ.ḪUR, is first attested in the early Empire period),[76] the use of SI 'horn' and ḪUR.SAG 'mountain' as determinatives, which constitutes an innovation regarding the Mesopotamian usage,[77] and the attribution of new meanings to Mesopotamian logograms in the process of adoption, as in the case of ᵁᶻᵁNÍG.GIG for 'liver'.[78]

2.7 GIŠ.ḪUR as determinative: The related words

Up to this point, the objections against the interpretation of GIŠ.ḪUR as a wooden writing board have been addressed, and still no conclusive evidence either in favour of this hypothesis or disproving the interpretation as 'plan' or 'original' has been found. A look at the usage of GIŠ.ḪUR as determinative provides strong arguments against the latter analysis, while, at the same time, hinting to the former as the most likely one.

The terms for which GIŠ.ḪUR is attested as a determinative are GUL-*zattar* (lit. 'drawing'), *ḫatiwi* 'inventory', *kaštarḫaida* (a Luwian term for a specific kind of document), *parzaki* 'packing list', *kurta* (a specific kind of document, etymologically a 'cut off (piece of wood)') and *šiyant-* 'sealed (object)'.[79] As noted by

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kinds of such media (Cammarosano et al. 2019, 130, with n. 84–86 and literature). It is also plausible in a multicultural environment that the exact same object may be referred to by different words, including indigenous terms and loanwords.

76 Cammarosano 2019a, 308, with literature.

77 Burgin 2022a, 392; cf. also e.g. the consistent use of a determinative, either LÚ or MUNUS, with SANGA 'priest', differently from the Mesopotamian usage (kindly pointed out by Detlev Groddek; for a rare exception in an Old Script tablet, see Hoffner 2010, 138).

78 Kindly pointed out by Detlev Groddek; see Weeden 2011, 312–314.

79 For the participle *šiyant-*, see the passage of IBoT 2.131 discussed above, Section 2.6. In the case of *kurta-*, this hinges on the passage IBoT 2.102+ iv 5′ (Cammarosano et al. 2019, 140, with n. 195). According to van den Hout 2020, 205, with n. 94 (reversing his earlier view, cf. van den Hout 2016, 434, n. 34), GIŠ.ḪUR is not to be taken as a determinative here. There is indeed a minimal spacing between GIŠ.ḪUR and the following signs, but this is perfectly in line with the quite incoherent spacing usage on this tablet (cf. e.g. ᴰᵁᴳ*ḫaršiyalli* in KUB 38.19+ obv. 17′, ᴸᵁ·ᴹᴱˢZABAR.DAB ibid. 22′, with spacing, against e.g. ZAG-*aš* GÙB-*la-aš*, ibid. 24′, without spacing between words). Also note that otherwise this would be the only attestation of *kurta-* without a determinative, and that the context of the passage also favours the analysis as determinative. Conversely, I prefer not to follow van den Hout 2020, 206–207, in taking GIŠ.ḪUR as a determinative of *tuppi* in KUB 13.2 iii 21–22 (see van den Hout 2020, 206–207, n. 101 for previous

Theo van den Hout,[80] all of them except *kurta* are of Luwian origin; the terms GUL-*zattar*, *gaštarḫaida* and *parzaki* are attested both with and without gloss wedge(s).[81] The noun *ḫatiwi* 'inventory' is attested five times without any determinative and twice in a fragmentary context determined by GIŠ.ḪUR; the participle *ḫatiwitant-* is once preceded by GIŠ, the determinative for wooden objects. The noun *parzaki*, probably 'packing list', is attested twice in two parallel passages of a palace inventory, in one instance determined by GIŠ.ḪUR. The other nouns listed above are all attested in analogous contexts, namely, the process of checking documents (sometimes said to be 'old') in the frame of inventorying, crosschecking and managing cult practices and provisions. Two examples will suffice to exemplify:

> The staff of the Palace of Hattuša regularly supply (them, i.e. the offerings listed before). [They] are copied (*arḫa* GUL-*š-*) from an old ᴳᴵˢ·ᴴᵁᴿGUL-*zattar*.[82]

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literature and interpretations). In that passage, GIŠ.ḪUR *tuppiaz* 'on a GIŠ.ḪUR (or a tablet' can be easily taken as an asyndetic expression, but admittedly the absence of any case marker on GIŠ.ḪUR and the absence of a clear clue from spacing make it difficult to reach a conclusive interpretation (for GIŠ.ḪUR *tuppi* as a possible endyadys for 'written documents', see KUB 58.7 obv. ii 23′ and below, Section 2.9). For GIŠ.ḪUR.ḪI.A as a determinative of GUL-*zattar* in the prayer of Muwattalli II, KBo 11.1 obv. 21–22 (with van den Hout 2020, 200, with n. 62, and others), see Cammarosano et al. 2019, 139, n. 178 (cf. Burgin 2022a, 391–392), where the following reconstruction is proposed: *n⸗a*[*t pu-nu-uš-mi* ᴳᴵˢ·ᴴᵁ]ᴿ·ᴴᴵ·ᴬ: GUL-*zattanazz*[*i⸗y*]*a kwit* ᵈUTU-*ŠI kinu*[*n*] *wemiškemi n⸗at ēššaḫḫi* '(The people who are still there and who were there with my father and [my grandfather, I will ask (them) what] does not fulfil the requirements of the gods). And I, My Majesty, will carry out whatever I will discover now in the GUL-*zattar*-boards'. The minimal spacing between ḪI.A and the gloss wedge does not prevent the interpretation as determinative, cf. e.g. the analogous spacing between the determinative and noun a few lines later in obv. 28. Also note that GIŠ.ḪUR is undoubtedly determinative of GUL-*zattar* later on (obv. 41). In the alternative reconstruction proposed by Burgin: GUL-*zattanazz*[*i⸗y*]*a* could be taken as a gloss to the preceding [... *nu IŠTU*(?) GIŠ.ḪU]Rᴴᴵ·ᴬ: thus, this passage does not constitute evidence that GIŠ.ḪUR and GUL-*zattar* could refer to different objects.

80 Van den Hout 2020, 211.

81 An up-to-date, detailed discussion of the relevant occurrences is presented in Cammarosano et al. 2019, 139–141, and van den Hout 2020, 195–206.

82 KUB 42.103 obv. iii⁷ 13′–15′ (*CTH* 698): LÚᴹᴱˢ É.GAL ᵁᴿᵁḪATTI *peškanzi annalaza⸗at⸗kan* ¹⁴ᴳᴵˢ·ᴴᵁᴿGUL-*za-da-na-za* ⌜*ar*⌝-*ḫa gul-ša-an-*[*za*], differently van den Hout 2016, 434 (*arḫa* GUL-*šan*[?] 'they are(?) copied'); van den Hout 2020, 199, with n. 58 (*arḫa gulšan*[*zi*] 'th[ey will] copy'). I prefer to read GUL-*šan*[*za*] and take it as a Luwian neuter singular participle, fully parallel to the passage in KUB 38.19 + IBoT 2.102 discussed presently (n. 83); similarly Starke 1990, 458, (*ar-ḫa gul-ša-an-*[*da*] '(sind) sie [...] ausgewie*sen*'). The occurrence of a Luwian participle neuter in a Hittite sentence has parallels in other cult inventories, particularly in the form

> They (i.e. the offerings listed before) are copied (*arḫa* GUL-*š*-) from an old ᴳᴵˢ˙ᴴᵁᴿ*kurta*.[83]

The relevant passages and their contexts make it clear that these terms refer to written documents. Again, the attested contexts fit the hypothesis that they refer to wooden writing boards well, especially when usage on travel and in the open air far from *scriptoria* are involved; on the other hand, again, this judgement is subject to some degree of arbitrariness, and, in any case, does not disprove the hypothesis that GIŠ.ḪUR denotes 'originals/authoritative documents', irrespective of materiality issues in the actual cases. A crucial circumstance, however, is that GUL-*zattar*, *kaštarḫaida* and *kurta* are attested not only with GIŠ.ḪUR as determinative, but also with GIŠ alone, the determinative for wooden objects (the phenomenon also applies to *ḫatiwi/ḫatiwitant-* if we group noun and participle together).[84] The evidence is especially striking in the case of GUL-*zattar*, the most widely attested of these terms. Van den Hout cites two attestations determined with simple GIŠ from DAAM 1.36,[85] but, meanwhile, six are known, from five different tablets (against eight tablets attesting the word determined by GIŠ.ḪUR).[86] The contexts of attestation of ᴳᴵˢGUL-*zattar* are en-

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ḫupida(wa)nza 'veiled' referred to the antecedent ALAM (Hittite *ešri* 'cult image'), see KBo 26.147 2; KUB 38.1 i 11, 16. 20, iv 2, 9; KUB 38.2 iii 13; KUB 38.3 iii 13; KUB 38.26 obv. 31′; KUB 38.36 4′ (with van den Hout 1984, 66–67, against Cammarosano 2018, 46–47; Cammarosano 2021, 29–30 with tab. 2.6; kindly pointed out by H. Craig Melchert).

83 KUB 38.19 rev. iv 1′–2′ + IBoT 2.102 4′–5′ (*CTH* 527): [*k*]*a-ru-*⸢*ú*⸣*-*[*i*]*-*⸢*li*⸣*-ia-za-at-kán* ᴳᴵˢ˙ᴴᵁᴿ*gur-*⸢*da*⸣*-*[*za*] ²′/⁵′*ar-ḫa* GUL-*aš-ša-an-za* [(*vacat*)ˢⁱᶜ], *CTH* 527.56, see https://www.hethport.uni-wuerzburg.de/txhet_kultinv/intro.php?xst=CTH%20527.56&lg=%20%E2%96%A0%20&ed=M.%20Cammarosano, accessed on 10 November 2023). For the interpretation of GIŠ.ḪUR as a determinative, see above, n. 79. Cf. Starke 1990, 458 (who emends into *gul-aš-ša-an-*≪*za*≫*-t*[*e-eš*]); van den Hout 2016, 434, with n. 34; van den Hout 2020, 205, with n. 94 (*arḫa* GUL-*aššanza* x[?]). Van den Hout rightly observes that 'whether the traces in the handcopy of an alleged *-t*[*e-* are really there remains doubtful in my opinion when looking at the photos' (van den Hout 2020, 205, n. 94). I would go one step further: the photo shows that there is no sign at all at the end of the line after GUL-*šanza*, against the copy. The emendation proposed by Frank Starke is, therefore, unnecessary. The passage is entirely parallel to the previously discussed one from KUB 42.103 (q.v.).

84 Note that while the occasional omission of (simple or composite) determinatives is indeed attested for certain terms in Hittite texts, the omission of a single component of a composite determinative is not. Thus, it is very problematic to interpret the alternance between GIŠ and GIŠ.HUR by viewing the former as an abbreviated writing of the latter: instead, Hittite orthographic habits suggest that GIŠ has to be taken at face value in these instances as well, i.e. as determinative of wooden objects.

85 Van den Hout 2020, 197–198.

86 DAAM 1.36 i 25, i 33; DAAM 1.39 i 41; DAAM 1.41 i 15, see Cammarosano 2019b, furthermore KBo 55.181 6′, quoted below (Section 2.9, n. 102), and Bo 3289 iv 1 (reading not entirely certain,

tirely analogous to those of ^{GIŠ.ḪUR}GUL-*zattar*, namely, procedures of the 'quality control' of rites and cult provisions. Particularly in the occurrences from the tablets from Kayalıpınar, GUL-*zattar* boards 'of the (local) temple' in Šamuha are checked against GUL-*zattar* boards that have been brought from the capital, Hattuša, by the officer Ukkura. Compare the following passages with those cited above:

> On a ^{GIŠ}GUL-*zattar* of the temple, the monthly festival for them is fixed as follows: 2 sheep, 3 BÁN-measures of flour, (etc.) [...] Now, as to the ^{GIŠ}GUL-*zattar* that the Commander of Ten [brought] from Hattuša: he fixed the monthly festival as follows: 1 ox, 2 sheep, (etc.) [...] This was fixed by Muwattalli, but they have not yet regularly supplied it. [It is up to] the Palace to investigate the (preceding) matter.[87]

> On a ^{GIŠ}*kurta* of Muwattalli 12 monthly festivals (and) 1 spring festival [are recorded], but the autumn festival is not recorded. As to the GUL-*zattar* of the storehouse: the spring festival is recorded but the autumn festival [is not].[88]

Similar pairs of examples can be made for ^{GIŠ(.ḪUR)}*gaštarḫaida*.[89] The alternation between GIŠ and GIŠ.ḪUR in the determination of GUL-*zattar*, *kaštarḫaida*, *kurta* and *ḫatiwi/ḫatiwitant-* makes perfect sense if one takes these terms as denoting specific kinds of wooden boards: the latter being a particular type of wooden objects, the scribes sometimes used the 'looser' determination instead of the more specific one. But how does one explain this if GIŠ.ḪUR is taken to mean 'authoritative document'? Van den Hout is forced to assume that 'the terms in question [...] were probably technical designations of different kinds of administrative documents, each serving a particular purpose. Only when de-

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see Lamante and Lorenz 2015, 250, n. 18; this fragment may (Lamante and Lorenz 2015, 245, n. 3) or may not (Cammarosano 2018, 335) indirectly join KUB 42.100+. The texts DAAM 1.36 and 1.41 had already been published in Cammarosano 2018, 384–400, 401–415, but van den Hout cites only those from DAAM 1.36, and one of them is quoted after a previous, partial edition by Elisabeth Rieken. The reading 'the *decurio* (of the town of) Pa-x [... issued(?)] just now' (van den Hout 2020, 199, with n. 60) is to be read as 'the Commander of Ten [brought] from Hattuša', see Cammarosano 2018, 388–389. In Table 10.2, van den Hout 2020, 198, correctly notes that the attestation from Kp. 15/8+ i 25 has only GIŠ, but the transliteration erroneously has GIŠ.ḪUR; conversely, he states on p. 199 that the quoted attestation from KUB 42.103 'admittedly [...] only has GIŠ', but actually it has GIŠ.ḪUR (as correctly transliterated in his Table 10.2 and n. 58).

87 DAAM 1.36 obv. i 25–50 (*CTH* 529), from Kayalıpınar, ancient Šamuha, translation adapted after Cammarosano 2018, 389.

88 KUB 42.100 obv. i 17′–19′ + KBo 26.181 1′–3′ (*CTH* 526), ed. Cammarosano 2018, 342–343 (§10); van den Hout 2020, 205 with n. 90.

89 Van den Hout 2020, 196; for an edition of KUB 38.12, see Cammarosano 2018, 416–432.

termined by GIŠ alone […] are we possibly dealing with wooden writing boards'.[90] In my opinion, this view is hardly tenable (and van den Hout himself does not seem entirely convinced if he admits elsewhere the possibility that GIŠ may be used as an abbreviation for GIŠ.ḪUR instead).[91] Abbreviating a composite determinative on a regular basis by using a sign with a different value as determinative in its own right would be totally unparalleled. The passages cited (which could be multiplied) clearly show that the situations in which GIŠ, on the one hand, and GIŠ.ḪUR, on the other hand, are employed are entirely analogous. Moreover, it is undisputed that a great number – better: virtually all – of the *tuppi*-s cited in Hittite texts can be viewed as authoritative documents in the diplomatic terms advocated by van den Hout. The view that the scribes would have marked authoritative documents with the determinative GIŠ.ḪUR and not-so-authoritative (possibly wooden) documents with GIŠ, while scores of authoritative documents would have been referred to as *tuppi* depending on the scribe's personal feeling, seems to me both unnecessarily complicated and unconvincing. Finally, it is worth noting that there are many examples of extant clay tablets declaring themselves (in colophons or within the text) to be a '*tuppi*', but not a single one declaring itself to be a GIŠ.ḪUR, a GUL-*zattar*, a *kaštarḫaida* or a *kurta*. This is exactly the outcome expected if these are terms for wooden writing boards, but a statistically surprising situation if these were to be particular kinds of authoritative documents irrespective of their materiality. In sum, the evidence reviewed above seems to me to strongly suggest that GIŠ.ḪUR and related terms refer to wooden writing boards. One last context, examined in the following section, provides yet another clue in this direction.

2.8 Selling a royal gift

The *Instructions for Priest and Temple Personnel* (*CTH* 264), one of the most significant and well-preserved Hittite compositions, contains a section that regulates the procedures to be followed in managing the valuables of the temples, particularly regarding royal gifts.[92] Firstly, it is stressed that valuables ('silver, gold, clothing, (and) bronze utensils of the deities') belong to the deities alone, to the point that temple personnel must regard them as if they were not at all

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90 Van den Hout 2020, 209.

91 Van den Hout 2020, 199. As has been seen above, however, Hittite spelling conventions speak against this hypothesis.

92 Edited in Miller 2013, 252–255; see, for discussion, also Güterbock 1939, 30 with n. 13 and Neu 1980, 79.

existent. The text then prohibits temple functionaries from owning valuables ('No silver (or) gold whatsoever shall belong to a temple functionary!') and from processing or passing them down to their family: a measure understandably aimed at minimising attempts of misappropriation. Finally, an elaborate procedure is detailed for the case that temple personnel receive valuables as gifts 'from the Palace', i.e. from the king. First of all, a record is to be prepared (*iya-* 'to make, to write') with the information about who made the gift, on which occasion and how much it weighs; the gift must also take place in the presence of witnesses, whose names (and, arguably, seal impressions) are to be recorded too. Most importantly, the beneficiaries, not being entitled to own them, cannot keep the gifts at home, but must sell them off:

> If, however, they give him silver, gold, clothing, or bronze utensils from the Palace as a gift, then let it be designated (as such): 'This king gave it to him'. How much it weighs must also be ascertained, and further, it shall be recorded like this, too: 'They gave it to him at this festival'. The (names of) the witnesses shall also be appended (thus): 'This and that person were present when they gave it to him'. Further, in no case shall he leave it inside his own house. He must sell (it) off.[93]

The sale must take place in the presence of dignitaries (the 'lords of Hattuša'), who must record (*iya-*) the item(s) on a GIŠ.ḪUR and seal it 'in front' (or perhaps 'in advance', *peran šiya-*).[94] Finally, on the first occasion the king comes to Hattuša (contemplating, then, the case that he was out of town when the item was sold off), that very same document must be presented at the palace, and the dignitaries must seal it again, this time arguably with the royal seal:

> When he sells it, though, he shall not sell it in secret. The lords of Hattuša shall be present, and they shall watch. They shall record what he (i.e. the buyer) buys on a GIŠ.ḪUR, and they shall seal it in front. As soon as the king comes up to Hattuša, though, he (the seller) shall present it in the palace, and they shall seal it for him.[95]

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93 KUB 13.4 obv. ii 32″–39″, translation adapted after Miller 2013, 255.
94 The expression *peran šiya-* is interpreted as '*vorläufig(?) siegeln*' by Güterbock 1939, 30, with n. 13, followed by CHD Š 16a 'let them seal it provisionally' and Miller 2013, 255, with n. 538 'they shall pre-seal it'. However, Melchert observes (*apud* Cammarosano et al. 2019, 137, n. 158) that the presence of enclitic ⸗*kan* points rather to the locative interpretation, since the use of *peran* to mean 'in advance, ahead of time' does not seem to take a local particle (thus, Neu 1980, 79, '*vorn siegeln*').
95 KUB 13.4 obv. ii 40″–44″, translation adapted after Miller 2013, 255. The recording will have arguably be performed by scribes, at the order of the dignitaries.

The GIŠ.ḪUR which serves as a legal witness of the sale of a royal gift is, thus, sealed twice, firstly at the moment of the transaction and secondly by the king (or his representatives). The necessity of the second, royal sealing is apparently motivated by the importance that was attached to controlling the whereabouts of precious objects, and particularly royal gifts, which, as specified by the text immediately thereafter, as a rule were engraved with the name of the king. That the royal seal was impressed at a separate moment than that of the transaction is understandable: the king was frequently out of the capital and it would have been hardly possible or desirable for him to be present at every instance of sale, and use of the royal seal seemingly could not be delegated to third parties, at least in this case.[96]

The circumstance that the GIŠ.ḪUR is sealed twice at two different times fits well with the hypothesis that the passage refers to a wax board. Precisely the possibility of modifying text over time as well as opening and resealing them indefinitely constituted, together with transportability, the main advantage of wax boards over clay tablets (cf. the passage from the court case against Ukkura cited above, Section 2.2). Admittedly, however, this passage alone is no proof that GIŠ.ḪUR denotes a wax board, since it is also conceivable that the GIŠ.HUR was wrapped, for example, in a bag, and this would have been the object to be actually sealed and resealed.[97]

2.9 Conclusions on GIŠ.ḪUR

The evidence reviewed above shows – in my opinion – beyond any reasonable doubt that not only the Akkadogram *LĒʾU* but also GIŠ.ḪUR (corresponding to Hittite GUL-*zattar*) and the nouns for which it serves as determinative refer to wooden writing boards. The juxtaposition of *tuppi* and GIŠ.ḪUR, thus, becomes an hendiadys for 'written documents',[98] clay and wood being the two prime script carriers: 'If someone brings a lawsuit, sealed, using a wooden board (or) a clay tablet'.[99]

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96 Cf. a letter by Tuthaliya IV to Niqmaddu III of Ugarit, in which the king justifies the absence of the royal seal by the circumstance that he was at that time at the 'house of the rites' (RS 94.2363 rev. 19–23, quoted in Schwemer 2022, 361, n. 27).

97 Kindly suggested by Cécile Michel.

98 Waal 2011, 27, n. 6 apropos KUB 13.2 rev. iii 22 quoted presently.

99 KUB 13.2 rev. iii 22 // KUB 31.86 rev. iv 7, *Instructions for the Frontier Post Governors*, *CTH* 261: *mān DINU≠ma kuiš* GIŠ.ḪUR *tuppiaz šiyan udai*. Differently van den Hout 2020, 206–207 (with literature in n. 101), who suggests taking GIŠ.ḪUR as a (otherwise unattested) determina-

The acknowledgment that GIŠ.ḪUR denotes a wooden writing board has important implications for our understanding of Hittite literacy, administration and economy. It is stated in the *Instructions for the Frontier Post Governors* (*CTH* 261) that this officer has to keep track of 'whether someone has broken into a granary [...] or whether someone has consumed the grain stores then illicitly destroyed the GIŠ.ḪUR^ḤI.A^', and keep track of it.[100] The passage proves, on the one hand, that running accounts of royal granaries existed (an assumption that possibly applies to analogous structures, such as royal palaces and store-houses), on the other hand, that such accounts were (or at least could be) draft-ed on wooden boards. The latter point is particularly important for the assess-ment of aspects of the Hittite economy and administration. Wooden boards, if not provided with parts made of hard materials, would hardly leave behind traces in the archaeological record under the climatic conditions of central Ana-tolia (see below, Section 2.10); therefore, the hypothesis that economic records of this kind were written on wooden boards could explain their absence from the extant collections of Hittite clay tablets.[101]

2.10 Appearance and technology

Apart from the bronze styli discussed above, there is no direct evidence regard-ing the appearance and technology of Hittite wooden writing boards. Based on comparative evidence, the 'pages' of wax boards will have had a recessed por-tion for accommodating the wax layer. It stands to reason that, similar to in Mesopotamia, both single boards (consisting of one leaf only) and multi-page board books existed.[102] Single boards would have been used, for example, in the case of sketch pads, packing slips and inventories which, by their very nature,

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tive of *tuppi*, with the function of highlighting 'the importance of the situation if somebody produces written evidence that, moreover, carries the imprint of a seal'. Analogous passages are found in KUB 58.7 ii 22–23: TUPPA^ḤI.A^=ma=aš *GUL-*zattar**^ḤI.˹A˺^[...] (see van den Hout 2020, 200, with n. 63, who, in accordance with his interpretation, translates 'the tablets, that is, the lists (*vel sim.*).') and KBo 55.181 6′: TUPPA^ḤI.A^=ma ^GIŠ^GUL-*zattarri*^ḤI.A^ (Burgin 2022a, 391; *CTH* 530.66, see https://www.hethport.uni-wuerzburg.de/txhet_kultinv/intro.php?xst=CTH%20530.66 &lg=%20E2%96%A0%20&ed=M.%20Cammarosano, accessed on 10 November 2023, com-mentary on line 6′).

100 *CTH* 261 §54, see Miller 2013, 234–235.

101 I am not sustaining here that this was the case, but rather merely arguing that this possi-bility exists. For the complex topic of the reconstruction of a model of Hittite economy, see most recently Klinger 2022b and the thorough study of Burgin 2022a.

102 For the extant evidence, see Cammarosano et al. 2019, 146–153.

needed to be immediately readable, whereas multi-page board books would have been used particularly when the content had to be protected from manipulation or unauthorised access and, therefore, the document had to be sealed (see e.g. the passage from the deposition of Ukkura, Section 2.2).[103] The seal would have been impressed on a clay lump fixed to the board book's fastening mechanism, for example, a loop and hook system or simply a knot.[104] The reference to a GIŠ.ḪUR being 'sealed in front' (see above, Section 2.8) suggests that, at least in some cases, the sealing may have been placed on the 'cover' of the board book (see Fig. 2 in Section 1.2, but, as observed above, the possibility must be considered that when texts refer to tablets or boards being sealed, it may have been, in some cases, a bag or other container that was actually sealed and not the tablet/board itself). Contrary to what is sometimes stated, wooden boards do allow for the option of taking notice of the content without destroying the seal, as the case of contracts in the Roman age demonstrates: the desired information can be written on an extra, non-sealed leaf (or alternatively on the front or back cover).[105]

The assumption of a widespread use of board books in Hittite Anatolia advocated here poses the question of why no archaeological finds are known that may be interpreted as remains of hinge mechanisms. Cylindrical elements of metal, bone and ivory with holes and tenons can typically be persuasively interpreted as such, and several examples are known from Mesopotamia and the Levant.[106] Among the factors that may account for this state of things are the possibility that Hittite hinges may have been made only of wood and leather and/or that the mechanisms for joining the leaves consisted simply of holes drilled through the border of adjacent leaves, through which leather bands, cords, thongs or rings passed. Such simple systems are amply attested for the classical world as well as for later periods, but not for ancient West Asia. Since, however, it stands to reason that they may also have been used in Mesopotamia,

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103 Cf. Mora 2007, 541: 'in generale si suppone che le tavolette di legno utilizzate nel Vicino Oriente antico avessero la forma di dittico, con due parti legate da una cerniera e richiudibili. È invece molto più probabile, a mio parere, che le tavolette utilizzate nei magazzini per rendere evidente il contenuto dei sacchi/ceste/contenitori di legno chiusi e sigillati fossero ad una sola facciata'. Contrary to what Clelia Mora suggests, however, the existence of single boards in the Hittite administration does not configure a novelty or a divergence in respect to the Mesopotamian.

104 Cammarosano et al. 2019, 148, with Fig. 10, and here Section 2.1 Fig. 2.

105 Cammarosano et al. 2019, 124, with n. 25.

106 Cammarosano et al. 2019, 147, with Fig. 9.

the absence of evidence is most probably due to their perishable character.[107] In the case of wax boards, additionally, the high inflammability of wax must be taken into consideration. It is to be expected especially in contexts where many boards were gathered together and destroyed by fire that the intensity of the latter completely destroyed not only the wooden parts but also those which might have been made of bone.[108]

2.11 Non-waxed boards?

One last question to be addressed here is whether in addition to waxed boards inscribed in cuneiform and hieroglyphs, unwaxed boards inscribed in hieroglyphs with ink and brush also existed, as recently advocated by Willemijn Waal.[109] Obviously, the more easily signs can be erased and the writing surface prepared for being reinscribed, the greater the advantage of a wooden board over a clay tablet. Wax boards, therefore, in principle, are arguably more desirable than wooden boards inscribed with ink in the context of running accounts that need to be corrected and updated over time, although the use of pigment ink and an appropriate coating can mitigate the effort required for washing out text from a wooden board.

The spectacular find of hundreds of short hieroglyphic inscriptions painted with reddish-brown paint on the roughly worked stones of the walls in the Yerkapı tunnel at Boğazköy,[110] together with further examples from Kayalıpınar (Sivas),[111] demonstrates that ink was used for writing hieroglyphic script, and it is well-known that ink was occasionally used on clay tablets in Mesopotamia,

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107 Cammarosano et al. 2019, 146, with Fig. 8.

108 Kindly pointed out by Andreas Müller-Karpe. This may have been the case, for example, at the Nişantepe complex in Hattuša.

109 Waal 2011, 28–29; Waal 2022, 130–140.

110 The news was circulated by Andreas Schachner on 11 September 2022 via Jack M. Sasson's mailing list AGADE ('REPORTS: New Anatolian Hieroglyphs from Bogazköy'). No scientific report was available when this paper was written, but the press release circulated by Schachner contains links to multiple Turkish media web pages that also provide pictures of several of these inscriptions, e.g. <https://www.aa.com.tr/tr/kultur/hattusada-bulunan-249-hiyeroglif-hitit-donemine-isik-tutacak/2682308> (accessed on 4 January 2023). Photographs of some of them have been also made available on Wikimedia Commons, see <https://de.wikipedia.org/wiki/%E1%B8%AAattu%C5%A1a> (accessed on 4 January 2023).

111 Müller-Karpe 2017, 73–77; these are also painted in a reddish colour similar to the examples from Yerkapı. Importantly, according to Müller-Karpe, they predate the fourteenth century based on stratigraphic grounds.

sometimes to reproduce cuneiform in two-dimensions and more extensively for Aramaic.[112] One Hittite tablet has some scribbles painted at the end of the reverse beneath the colophon (Bo 2617 = KUB 56.41, *CTH* 701, late Empire, see Fig. 6),[113] a fact that makes the hypothetical use of ink for writing certainly plausible, and we know that the Hittites made use of painting in architecture.[114] However, positive evidence for its employment on wooden boards (or clay tablets) for proper writing is still lacking, as are hints regarding coating techniques which might have been used in this context.[115] Therefore, while the bronze styli discussed above prove the use of hieroglyphic script on wax boards, the existence of non-waxed boards inscribed with ink must remain speculative for now. Their existence, if confirmed, may well have implications for the characterisation of some of the terms that have been argued above to refer to wooden writing boards.

112 Taylor 2011, 16–18, with literature.

113 Noted by Košak 1988, 147; the scribbles, clearly visible on the old photograph of the Vorderasiatisches Museum but hardly visible as of today (collated), are not reproduced in the hand copy. Forrer 1926, 1, mentions the existence of a scribal signature made with stylus and ink ('*der mit Schreibrohr und Tinte aufgemalte Name des Schreibers*') on the tablet Bo 2400 (= KBo 3.9), but based on the photo, the signs, which imitate wedges by tracing their outer contours, are scratched with a pointed tool and not painted.

114 See, most recently, von Rüden and Jungfleisch 2017. For preliminary results of an investigation of the rock reliefs of Yazilikaya, suggesting that the rock surface was probably worked on after being hewn, possibly as a preliminary step before plastering and/or painting, see Morra and Grifa 2019, 103–106 (erroneously abbreviated as 'V. M. – C. Gr. – C. Ge.' on p. 107, information kindly provided by Andreas Schachner).

115 Cammarosano et al. 2019, 143–145. Differently, Willemijn Waal argues for a widespread use of wooden boards inscribed in Anatolian hieroglyphs with ink and brush (Waal 2011, 28–29; Waal 2022, 130–140). While Waal makes a good case for this possibility and the theory is entirely plausible, in the absence of any positive evidence of the existence of inked writing boards it must remain conjectural. Presenting a gallery of inked wooden writing boards from other periods and cultures (Waal 2022, 135–137) is certainly a useful reminder of the varied contexts in which they have been used historically, but does not make the hypothesis of their existence in Hittite Anatolia any more likely. The evolution towards cursive forms cannot be taken in itself as a hint pointing to inked wooden boards rather than wax boards, as it applies equally well to writing on wax (Cammarosano et al. 2019, 145, *pace* Waal 2011, 28–30; Waal 2022, 132). Note, finally, that the evidence represented by the bronze implements with pointed tips and spatula-shaped flattened ends (see above, §2.3) is quite misrepresented in Waal 2022, 138: they are not 'three' and not only from Hattuša, but rather dozens and from several sites; their identification as writing styli is not only and not so much supported by their resemblance to Roman era styli but rather by Neo-Hittite and Mesopotamian iconographic evidence that is much closer both chronologically and culturally (Cammarosano et al. 2019, 133–135, 141–142).
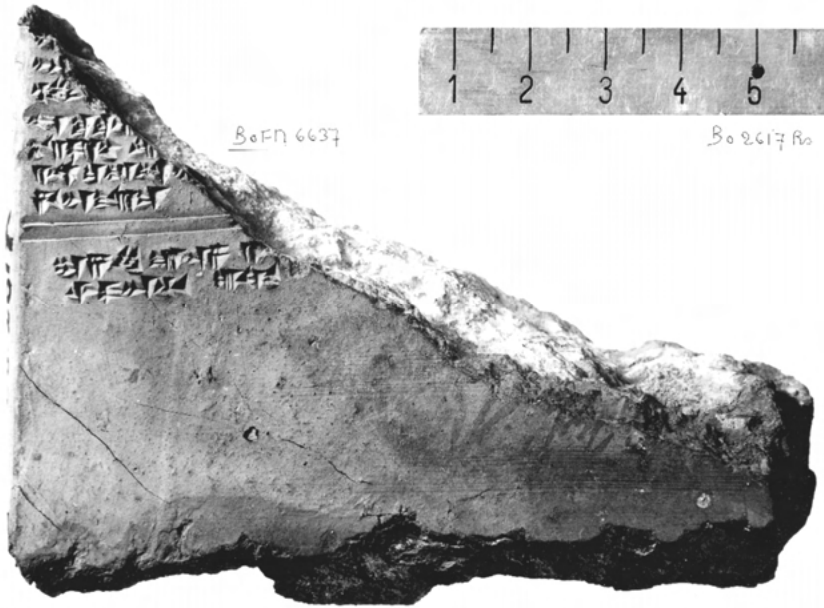
Fig. 6: Reverse of the tablet Bo 2617 = KUB 56.41, with painted scribbles; photograph BoFN06637 of the Vorderasiatisches Museum, Berlin, which was taken shortly after excavation (courtesy Vorderasiatisches Museum and Hethitologie Portal Mainz, see hethiter.net/: fotarch BoFN06637).

3 Contexts

The sections above have provided ample evidence of the variety of contexts in which wooden boards were employed in Hittite Anatolia. These contexts exemplify different fields of application of these writing media and, therefore, distinct ways of interaction between them and the material world that surrounded them from time to time. The attested usages may be functionally grouped into three macro-contexts: (1) cult and ritual protocols, treaties; (2) aide-memoires and paraphernalia in cult activities; and (3) running accounts, inventories and packing slips. Contrary to what one may expect, a context in which wooden boards are rather scarcely attested is that of oracular procedures, despite the fact that Hittite divination techniques often envisaged prolonged observation of

omina, working in the open air, and an opportunity of correcting and updating text over time, all circumstances that would favour the use of wooden boards.[116]

3.1 Cult and ritual protocols, treaties

The use of wooden boards as carriers of cult and ritual protocols (which would be called liturgical texts in other traditions) is by far the most widely attested context. Based on the extant references, such protocols pertained to festival texts,[117] incantation rituals[118] and cult inventories (which is, in turn, the most frequently attested subcontext).[119] These boards, therefore, were essentially analogous in content and function to the festival texts, incantation rituals and cult inventories that were written on clay tablets. Additionally, the passage KBo 4.14 i 25 (see above, Section 2.2) hints at the use of wooden boards for drafting a diplomatic agreement. Based on the nature and syntactic complexity expected for these kinds of texts, it is reasonable to assume that these wooden boards configure wax boards written in cuneiform script.

3.2 Aide-memoires and manipulated objects in cult activities

Evidence reviewed above in Sections 2.5 and 2.7 hint at the use of wooden boards as aide-memoires in the frame of cult activities. In this case, the boards would be used not in a 'library' context but rather in the open air, directly at the scene of the cult performance. As has been discussed above, this scenario is dependent particularly on the interpretation given to the formula 'aligned with the GIŠ.ḪUR', which is found in the colophons of a number of clay tablets with festival protocols. The interpretation proposed suggests that wooden boards employed in this way were concerned primarily with content which was simultaneously essential to the performance, not easily memorisable and arguably in need of periodic adjustment in particular lists of offerings.

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116 This circumstance is striking, especially if we take into account the vastness of the corpus available (*CTH* 561–582), and requires further investigation.

117 See e.g. KUB 42.103 obv. iii? 13′–15′, *CTH* 698, see above, Section 2.7.

118 See e.g. KBo 17.65+ obv. 37–39 // rev. 45–46, *CTH* 489, see https://www.hethport.uni-wuerzburg.de/txhet_besrit/exemplar.php?xst=CTH%20489&expl=&lg=IT&ed=F.%20Fuscagni (accessed on 10 November 2023).

119 See e.g. DAAM 1.36 obv. i 25–50, *CTH* 529, see above, Section 2.7.

A similar, yet not entirely analogous context is documented in a purification ritual where the 'portion' allotted to the ritual patron is noted on boards that are to be hung on animals (see above, Section 2.4). In this case, they do not serve as an aide-memoire assisting in the rite – or not only as that – but instead play a part in it as manipulated objects, bearing a magical force.

Differently than in the preceding macro-context, these situations may well involve wooden boards that were written in hieroglyphic script and, in these cases, that may not have been waxed (see above, Section 2.11).

3.3 Running accounts, inventories and packing slips

The *Instructions for the Frontier Post Governors* witness the use of wooden boards as running accounts of royal granaries (see above, Section 2.9). The importance of this passage can hardly be overestimated, given the implications it has for the appraisal of staple management and more broadly of the Hittite economy.

A similar function is taken by boards used as packing slips and inventories of goods. The most straightforward example comes from a tablet recalling how shipments of luxury items were recorded provisionally on wooden boards travelling together with chests, and subsequently noted on a clay tablet upon arrival at the final destination (see above, Section 2.4). Another telling example is provided by the court case of an official, Ukkura, who was sent abroad travelling on state business with sealed wooden boards used for validating operations of withdrawal of commodities (see above, Section 2.2).

4 Conclusions

The 'gallery' of contexts in which wooden writing boards were used provides us with a glimpse into the varied, lively and sometimes adventurous life of this kind of manuscript in Hittite Anatolia. The complex interactions it had both with other kinds of manuscripts and other objects of the material world are a reminder of the importance which a holistic appraisal bears for our understanding of their nature and history. In the case of Hittite wooden writing boards, this is all the more evident in view of the fact that no single example of this medium has yet been recovered, due to the perishable character of its material. Rather than frustrating our investigation, this circumstance enables us to focus on a more in-depth and indeed holistic analysis of the indirect evidence available, as

well as on a wider appraisal of those elements – people, objects, settings – with which they intertwined. The complexity of the issues at stake and the remarkable degree of detail that can be attained bear witness to the fruitfulness of this approach and call for an even broader extension of perspective: indeed, the contexts of applications of Hittite wooden writing boards display non-trivial parallelisms with those attested in other periods and cultures, and, thus, call for a comparative investigation well beyond the kingdom of Hattuša.

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Stefano de Martino

The Mittanian Cuneiform Documents: The Interplay between Content, Language, Material, Format, and Sealing Practices

Abstract: The corpus of cuneiform tablets from the kingdom of Mittani is very meagre in comparison with the written evidence from the contemporary West Asiatic states. Nevertheless, an overview of the formal features of these documents yields information on the production of texts by the Mittanian royal chancery.

1 The kingdom of Mittani

Mittani was one of the most powerful West Asiatic kingdoms at the zenith of its power from the beginning of the fifteenth century BCE until the Hittite conquest, around the middle of the fourteenth century BCE. The results of the German archaeological excavations at Tell Fekheriye support the assumption that the capital of Mittani, Waššukkanni, was located there.[1] Although the heartland of the country was the Upper Khabur region, Mittani controlled the middle Tigris region up to the territory of Aššur and Arrapḫe, as well as the middle Euphrates, since Terqa was for a time under Mittanian sovereignty. Furthermore, several polities in western Syria were under Mittanian control, and even Kizzuwatna, in south-eastern Anatolia, was subordinated to Mittani until it was annexed to the Hittite kingdom.[2]

The earliest known king of Mittani is Kirta, who is only documented from the seal of his son Šuttarna I. Parattarna I, probably the successor of Šuttarna I, was the overlord of Idrimi of Alalaḫ, as the inscription on Idrimi's statue records, as well as of Pilliya of Kizzuwatna, as the tablet AlT 14 states (see *ultra*). We argue that part of Parattarna's reign overlapped with that of Pharaoh Thutmose III, who ruled from 1479 until 1425 BCE.[3] Thutmose III led several military

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1 Bonatz 2014.

2 De Martino 2018; von Dassow 2022.

3 Hornung, Krauss and Warburton 2006.

expeditions in the Levantine and Syrian territories and confronted a coalition of rulers who were vassals of Mittani at Megiddo.
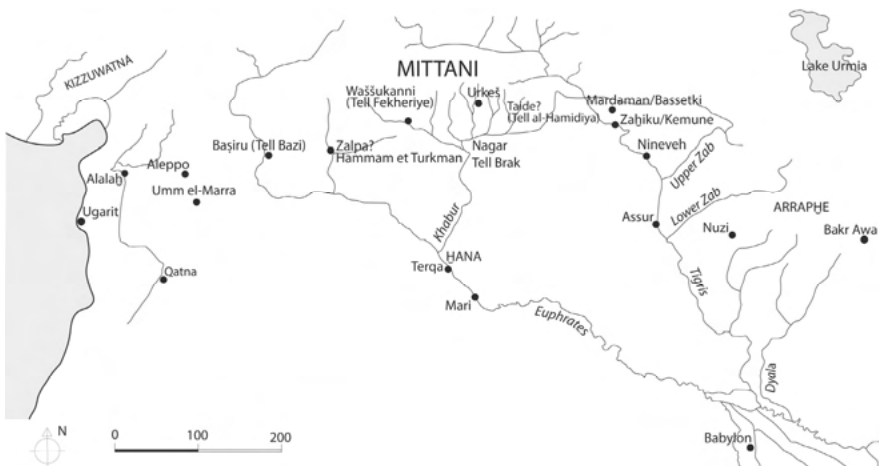
Fig. 1: Map of the kingdom of Mittani, drawn by Claudio Fossati, Department of History, University of Torino.

The period of Mittani's maximal expansion dates to the reign of King Sauštatar. Under his rule, the kingdom of Mittani comprised Syria, Upper Mesopotamia and south-eastern Anatolia, although the emergence of the powerful kingdom of Ḫatti, under King Tuḫaliya I, led to the loss of Kizzuwatna, which came under Hittite rule.

The threat posed by the Hittite expansion obliged the Mittanian kings to forge an alliance with Egypt, which was sealed by an inter-dynastic marriage. Thus, one of the daughters of the Mittanian King Artatama I married Pharaoh Thutmose IV. Another wedding was concluded in the following generation, and Artatama I's successor, Šuttarna II, gave his daughter, Kelu-Ḫeba, in marriage to Pharaoh Amenhotep III.

Mittani entered a phase of crisis a few years later. Artašumara, Šuttarna II's successor, was killed by a certain Pirḫi, who ruled the country until Tušratta, one of Artašumara's brothers, took the throne. Tušratta reinforced the alliance with Egypt and gave his daughter, Tadu-Ḫeba, in marriage to Amenhotep III. The Mittanian princess eventually became one of Amenhotep IV's wives after the death of Amenhotep III.

During the reign of Tušratta, Mittani was attacked and conquered by the Hittite King Šuppiluliuma I. Mittani become subordinated to Ḫatti, and Šuppiluliuma I gave the throne of Mittani to Šattiwaza, one of Tušratta's brothers, who had allied himself with the Hittite king and married his daughter. Thus, Mittani ceased to exist as an independent kingdom in the middle of the thirteenth century BCE.[4]

2 The Mittanian tablets and their contents

Although Mittani remained a powerful kingdom for about a century and half, written evidence from the centres inside its territory is scant. Indeed, Mittani is the most poorly documented political entity of the ancient Near East in the second millennium BCE. The interruption of archaeological research at the site of Tell Fekheriye, which was due to the political destabilization of Syria, prevented the German expedition active there from excavating the Mittanian layers, and, thus, there is not a single tablet from the capital Waššukkanni that can be dated to the period when Mittani was an independent state. Paradoxically, the main corpus of documents issued by the royal chancery of Mittani does not come from Syria, but from the Egyptian site of Tell el Amarna/Akhetaten, which was the royal residence of Akhenaten, and consists mostly of letters sent by Tušratta to the pharaoh.

We list here the documents issued by the Mittanian kings as well as administrative texts discovered in sites located inside the core of Mittani.

The oldest tablet recovered that may have been issued by a Mittanian king comes from the Syrian site of Tell Hammām et-Turkmān (HMM 86-O14). Its archaeological context and a stylistic analysis of its seal impression suggest that the document was produced around 1500 BCE.[5] The tablet preserves a letter written by a king whose name is not given, but who was probably a Mittanian sovereign, to a certain Šatuwatri, presumably either a state official or the local ruler of the polity of Hammām et-Turkmān, possibly the ancient city of Zalpa.[6]

No documents issued by Kirta, Šuttarna I or Parattarna I are extant. The earliest dated tablets stem from the reign of Sauštatar. They comprise three texts that come from Alalaḫ (AlT 13 and 14)[7] and from Tell Bazi, the ancient town of

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4 For an overview of the history of Mittani, see von Dassow 2022; de Martino forthcoming.

5 van Soldt 1995, 277.

6 von Dassow 2022, 462–463 and n. 14.

7 von Dassow 2008, 46–49.

Baṣīru (Bz 51).[8] Text AlT 13 is a letter written by Sauštatar that records the results of a legal decision. The case was argued in the presence of the king. A judgement of Sauštatar on the dispute between Niqmepa of Alalaḫ and Šunaššura of Kizzuwatna is preserved in tablet AlT 14. Text Bz 51 contains a royal grant issued by Sauštatar, who gave a town by the name of Baidali to the people of Baṣīru.

Another tablet discovered at Tell Bazi (Bz 50) preserves a royal grant issued by King Artatama I.[9] A tablet from the site of Tell Umm el-Marra (UEM T 1) dates to the reign of Šuttarna II.[10] It records a legal act that was executed in the presence of the Mittanian king. Furthermore, an act validated by Artašumara was discovered at Tell Brak (TB 6002).[11]

Fourteen tablets belong to the Mittanian dossier preserved at Akhetaten/Tell el Amarna. They vary in content and typology: ten of them are letters sent by the Mittanian King Tušratta to the pharaoh: EA 17, 18, 19, 20, 21, 23, 24, 27, 28 and 29. One letter, EA 26, was addressed by Tušratta to Tiye, Amenhotep III's wife. Two tablets (EA 25 and 22) list the gifts sent by the Mittanian king to the Egyptian court. Finally, tablet EA 30, the so-called 'passport', preserves a message that Tušratta addressed to the rulers of polities under Egyptian sovereignty, requesting that they grant safe passage to his envoy on the journey to Egypt.[12] Its presence at Amarna probably indicates that it was valid only for the messenger who carried it, and for only one trip. Thus, it could not be reused and was kept by the Egyptians.[13]

The only other text that was issued by Tušratta is TB 8001, a legal act validated by this king.[14] It does not come from Egypt but from Tell Brak, a centre not far from the Mittanian capital, Waššukkanni.

We mention here two more documents that were issued by a Mittanian king whose name remains unknown and, thus, cannot be dated. One of these texts comes from Alalaḫ (AlT 108)[15] and preserves a letter sent by a Mittanian king to a certain Utti. The other text comes from Nuzi, a centre in the kingdom of Arrapḫe that was subordinated to Mittani (HSS 9.1).[16] It is a letter sent by the Mittanian king to Itḫi-Teššob, ruler of Arrapḫe.

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8 Sallaberger, Einwag and Otto 2006.

9 Sallaberger, Einwag and Otto 2006.

10 Cooper, Schwartz and Westbrook 2005.

11 Finkel 1985, 191–194.

12 Rainey 2015.

13 Gestoso Singer 2017, 148.

14 Illingworth 1988.

15 See von Dassow 2008, 54.

16 See Homan 2020, 55–56 for bibliographical references on this letter.

Administrative records were discovered at two sites inside the core of Mittani: Tell Brak/Nagar and Tell al-Ḥamīdīya/Taide. Three tablets came from Tell Brak: TB 11021, a letter sent by a state official to a dignitary superior to him;[17] TB 6001, an administrative record that lists the names of workmen;[18] and TB 8002, another administrative document.[19] A collection of fifty-one administrative records from Taide has recently been published.[20]

A number of tablets were recently discovered at Bassetki/Mardaman and Kemune/Zaḫiku (?). Both sites are in the middle Tigris region, and we argue that they were under the direct control of the kings of Mittani.[21] Two tablets come from a building of Mittanian date in Bassetki/Mardaman: BAS 17A-i166 and BAS 17A-i167; one of them preserves a memorandum concerning three business trips.[22] Ten tablets have been found in a building dating to the Mittanian phase at the site of Kemune, probably the ancient town of Zaḫiku.[23] According to the preliminary report,[24] some of these tablets preserve administrative records,[25] one collects three different lists of people and donkeys,[26] and another one contains a letter that mentions copper and other goods.[27] The content of another text, KEM18A-i0060, is uncertain.

Finally, two tablets in the Schøyen Collection have recently been published:[28] MS 1848/1 and MS 1848/2. Both are letters, and the first one was sent by a certain Waššu, whose name also occurs in the tablet from Tell Brak TB 7035.

3 Language and writing

The core of the kingdom of Mittani was in a region of Syria that had been inhabited by Hurrian peoples since the last century of the third millennium BCE, and

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17 See Wilhelm 2018, 159–173.

18 See Finkel 1985, 194–198.

19 See Illingworth 1988, 105.

20 Kessler 2020.

21 See de Martino forthcoming.

22 Pfälzner and Qasim 2018, 68–69; Pfälzner and Faist 2020, 372.

23 Puljiz et al. 2019.

24 Betina Faist in Puljiz et al. 2019, 33–34.

25 See tablets KEM18A-i0009, KEM18A-i0023, KEM18A-i0047, KEM 18A-i0059, KEM18A-i0068, KEM18A-i0069, and KEM18A-i0080.

26 KEM18A-i01013 + KEM18A-i0105 + KEM18A-i0106.

27 KEM18A-i0077.

28 George 2017.

Hurrian was the main language of the Mittanian royal house.[29] Nevertheless, all of the texts examined here were written in Akkadian, the only exceptions being EA 24, which was sent by King Tušratta to the pharaoh, and the letter TB 11021, which was discovered at Tell Brak and sent by a Mittanian official, both written in Hurrian.

The use of Akkadian for the letters sent to the Egyptian court is not surprising because this language was usually adopted by the chanceries of all the West Asiatic polities for their international correspondence in the Late Bronze Age. The letter EA 24, however, is in Hurrian. As is well-known, this document was composed on the occasion of the inter-dynastic marriage between a Mittanian princess and the pharaoh and preserves a long narrative on relations between Egypt and Mittani.

This tablet was intended to be an assertion of the Mittanian tradition and identity, and, hence, it had to be written in the Hurrian language. The size of the tablet (43 cm high) is exceptional, and this was probably not simply determined by the length of the text; in fact, the tablet itself was presumably intended to be a precious object to be preserved and displayed.[30] Thus, although we argue that no one at the Egyptian court could understand it without the assistance of an interpreter, this tablet affirmed the Hurrian ethnolinguistic origin of the Mittanian princess and her family.

The royal chancery of Mittani also wrote in Akkadian when the king issued acts in favour of Syrian polities, whose rulers probably did not speak any Hurrian; these include the aforementioned texts from Tell Bazi (Bz 50 and 51), Umm el-Marra (UEM T 1) and Alalaḫ (AlT 13 and 14). Letters to officials and subordinate kings, such as texts HMM 86-O14, AlT 108 and HSS 9.1, were also composed in Akkadian.

Furthermore, the use of Akkadian for administrative purposes seems to have been common throughout the kingdom. We argue that Hurrian-speaking peoples and Amorrean communities lived next to each other in the Khabur region. Moreover, the weight of the Mesopotamian literary tradition was surely strong in Upper Mesopotamia and northern Syria. Thus, the royal family of Mittani did not mandate the use of the Hurrian language in the administration of its territories, and Akkadian was also commonly used for internal affairs.

Nevertheless, there were officials who used Hurrian for administrative purposes, as documented by the letter TB 11021, which was sent by a Mittanian official to his superior. The letters discovered at Qatna, which are written in

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29 See von Dassow 2022, 457.

30 Homan 2020, 45.

Akkadian with several inserted Hurrian words, are a clear example of the multilingual reality of some regions of the Mittanian kingdom.[31] Obviously, the discovery of archives or collections of texts from Waššukkanni could provide further support for the assumption that bilingualism, though probably reflecting varying degrees of linguistic competence, was common among some of the Mittanian officers and dignitaries.

Both groups of Mittanian texts – those written in Akkadian and those in Hurrian – show very similar features in their use of cuneiform. The recent book by Zenobia Homan, *Mittani Palaeography*,[32] is devoted to a statistical analysis of the shapes of the cuneiform signs that are documented in the Mittanian texts. She reaches the conclusion that Mittanian, Assyro-Mittanian and Early Middle Assyrian texts belong to the same overarching script group, although various distinguishing features can be recognised in some of the tablets analysed.

By way of example, the Hurrian letter from Tell Brak TB 11021 is palaeographically close to the Mittani letter EA 24.[33] Jerrold Cooper, Glenn Schwartz and Raymond Westbrook[34] argued that the tablet from Umm el-Marra also shows palaeographical features that are closer to the Mittanian Amarna tablets than to the Syrian documents. Furthermore, palaeographical analysis of the two tablets from Tell Bazi supports the hypothesis that all these documents were written by scribes of the Mittanian chancery.[35]

The assumption that all these texts were produced by the central chancery is bolstered by the fact that some of the aforementioned documents are said to have been executed in the presence of the king of Mittani (AlT 13, 14; UEM T 1; TB 6002; TB 8001), and we argue that this statement should be taken literally. Hence, even documents that refer to the subordinate polities might have been written either in the Mittanian capital or the centre where the king resided, together with his scribes.

Homan observed that the two largest tablets in the Amarna corpus,[36] EA 22, the gift list, and EA 24, the Mittani letter, show a higher number of sign-forms and variants. Moreover, these two documents share common palaeographic

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31 See Richter and Lange 2012; van de Mieroop 2023, 89.

32 Homan 2020.

33 Wilhelm 2018, 160, 173.

34 Cooper, Schwartz and Westbrook 2005, 52.

35 Sallaberger, Einwag and Otto 2006, 83–84.

36 Homan 2020, 110–111.

traits, and, hence, Homan assumed that EA 22 and 24 may have been the product of learned scribes who wanted to show their erudition.[37]

4 Material and format

Data on the chemical and physical nature of the clay of the Mittanian tablets are only available for the documents discovered at Tell el Amarna. An in-depth analysis of the clay of the Mittanian Amarna tablets was first conducted by Allen Dobel, Frank Asaro and Helen V. Michel, who identified two different chemical profiles among the tablets.[38] Yuval Goren and his team examined the tablets more recently and reached the similar conclusion that 'two distinctive clay types were used by the Mittani scribes: a marly type (including EA 17, 20, 22, 23, 24, 25, 26, 28, 29 and 30) and a clayey type (including EA 18, 19, 21, and 27).'[39]

Tablet EA 27 bears a note written in hieratic; it states that the tablet is the 'copy of the Naharina letter that the envoy Pirissi and the envoy [Tulubri] brought'.[40] Nevertheless, the mineralogical features of this tablet match those of other letters in the correspondence of Tušratta, such as EA 23. Hence, EA 27 is the product of Mittanian scribes.[41]

Therefore, two different types of clay were in use contemporaneously in the reign of Tušratta; in fact, out of the four tablets of a clayey type, three letters: EA 18, 19 and 21, were sent to Amenhotep III, and the fourth one, EA 27, to Amenhotep IV. Both of these pharaohs also received letters written on tablets made from a marly clay.

Despite the differences in the texture of the clay, the 'two fabrics include similar types of clastic components (silt and sand), indicating a very similar depositional environment', and, hence, 'the environs of Waššukkanni apparently included two types of workable clay that were occasionally alternated by the scribes of Tušratta's court', as Goren and his colleagues argued.[42]

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37 By way of comparison, we mention here that some Hittite scribes 'liked to show off their learnedness by using archaic non-standard and foreign cuneiform signs in regular Hittite-language compositions', van den Hout 2020, 325–326.

38 Dobel, Asaro and Michel 1977.

39 Goren, Finkelstein and Na'aman 2004, 38–44.

40 See Rainey 2015, 294–295.

41 Goren, Finkelstein and Na'aman 2004, 42.

42 Goren, Finkelstein and Na'aman 2004, 42.

The Mittanian tablets appear in two formats: the 'portrait format' and the 'landscape format'. These terms come from painting and photography and refer, respectively, to tablets whose height is greater than the width ('portrait format'), and that have a horizontal orientation ('landscape format').

Although there are some exceptions, administrative tablets generally have a 'landscape format' and are wider than they are high.[43] The adoption of a standard format for administrative tablets written at different sites in Mittani, such as Tell Brak, Taide, Bassetki and Kemune, supports the assumption that the central government of the state controlled the production of texts.

Occasionally, when a larger writing space was required, the 'portrait format' was preferred, as in the case of the tablet from Tell Brak TB 8001 (7.2 cm high and 5.8 cm wide) and the record from Kemune KEM18A-i01013 (8.4 cm. high and 5.2 cm wide). The tablet TB 6002, from Tell Brak, though fragmentary, seems to have been larger than usual; it was divided into two columns and may have contained a list of about one hundred personal names.[44]

The letters sent to the Egyptian rulers are somewhat taller than they are wide, and this agrees with the 'portrait format' standardly used for international correspondence during the Late Bronze Age. The letter sent by Tušratta to the pharaoh and the gift lists stand out for their large size.

Only one of the Mittanian tablets discovered at Amarna, EA 30, shows the same small 'landscape format' as the administrative texts. As mentioned earlier, this tablet preserves a *laissez-passer* that was carried by a Mittanian messenger travelling to Egypt. The brief text did not require a larger tablet, and, indeed, by its very nature, such a document should be easily portable.

5 Sealing practices

Several tablets issued by the Mittanian kings are sealed. The rulers of Mittani sometimes used their personal seal, but very often opted for the seal of one of their predecessors. The use of a dynastic seal, i.e. the personal seal of a former sovereign, was presumably intended to confer an enduring legitimacy on the acts recorded on the tablet and on the tablet itself. In fact, the dynastic seal referred not only to the living king but to the whole ruling dynasty.[45]

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43 See Cooper, Schwartz and Westbrook 2005, 43–45. For the dimensions of Mittanian tablets from Amarna and elsewhere, see Homan 2020, 41–47, 51–56.

44 Finkel 1985, 194.

45 Postgate 2013, 386 and n. 9.

Sauštatar sealed the aforementioned documents AlT 13 and 14 with the seal of Šuttarna I, but he sealed tablet Bz 51 with his personal seal. We argue that this king preferred the seal of his predecessor in the early years of his rule, probably in order to stress his legitimacy as Šuttarna I's successor. When he felt that he had consolidated his power, he used his own seal.

Sauštatar's seal remained in use for about fifty years; it was impressed on documents issued by his successors: Bz 50, which preserves a legal act of Artatama I; UEM T 1, which preserves an act executed in the presence of Šuttarna II; TB 6002, issued by Artašumara; and TB 8001, which records an act validated by Tušratta.

An in-depth study of the impressions of the Sauštatar seal led Walther Sallaberger, Berthold Einwag and Otto Adelheid to argue that although the same seal was used to form them, three different seal caps had encased this seal. The seal cap was probably replaced over the decades when this dynastic seal remained in use.[46]

Since dynastic seals were precious and the exclusive property of the royal family, it is unlikely that a state official would have been allowed to travel with one of them when an important act needed to be validated. Hence, in our opinion, this supports the assumption that texts discovered in western Syrian sites, such as Alalaḫ, Tell Bazi and Umm el-Marra, were written in either Waššukkanni or the city where the king and the court resided at the time when the acts recorded on the tablets were executed.

The letters sent by Tušratta to the pharaoh and the other letters of the international correspondence discovered there are not sealed. Mario Liverani argued that these letters may have been enclosed in sealed envelopes, though none of the envelopes have been found at Amarna.[47]

The only Mittanian tablet from Amarna that bears a seal impression is the 'passport' EA 30, presumably because it had to be shown at the checkpoints of the Levantine polities and the seal proved the authenticity of the document.[48] The seal on the tablet EA 30 may be that of Tušratta, although the impression is not very legible.[49]

As far as the administrative records from Tell Brak, Taide, Bassetki and Kemune are concerned, most of these tablets were not sealed. However, two tablets from Kemune are sealed: KEM18A-i0077, a letter that bears the seal of

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46 Sallaberger, Einwag and Otto 2006, 86–90.
47 Liverani 1998, 50.
48 Liverani 1998, 50.
49 Porada 1974–1977.

the sender,[50] and KEM18A-i0068, which bears the seals of three different people.[51] The seals may have belonged to the witnesses of the act preserved in the tablet, which records the assignment of two people to a man.[52]

6 Summing up

The preserved Mittanian documents date from the reign of Sauštatar until that of Tušratta, approximately from the last decades of the fifteenth century BCE until the first half of the following century. Any enquiries regarding the Mittanian tablets face objective difficulties: the limited number of documents available and the fact that none of them come from the Mittanian capital Waššukkanni; instead, as has been stated, they come from sites either on the Upper Khabur or in Syria, or else in Upper Mesopotamia.

Mittani was a multi-ethnic and multilingual political entity where Amorreans lived close to Hurrian peoples. Although Hurrian was perceived as the identarian language of the royal family and the kingdom, Akkadian was commonly used for official documents issued by the kings and for administrative purposes. The scribes adopted the same inventory of signs regardless of the language of the texts they were writing. Acts issued by the Mittanian kings were probably written by the scribes of the central chancery, even if they concerned Syrian centres.

As far as the results from the chemical and physical features of the Mittanian tablets discovered at Tell el Amarna show, clays from two different sources, both in the environs of Waššukkanni, were used contemporaneously by the scribes of the Mittanian chancery.

The uniformity of the format of the greatest portion of the administrative tablets, regardless of the place where they had presumably been written, leads us to assume that scribes active in different parts of the kingdom were instructed to produce tablets following precise standards of size and shape. However, we are aware that the small number of tablets available prevents any statistical analysis.

Most of the administrative tablets available do not bear any seal impressions; the royal acts, however, were sealed, and Mittanian kings preferred to seal their official documents with a dynastic seal rather than with their personal seal.

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50 See Faist in Puljiz et al. 2019, 34.

51 Puljiz et al. 2019, 29.

52 Faist in Puljiz et al. 2019, 33–34.

Abbreviations

AlT = The Tablets from Alalaḫ
BAS = Bassetki
Bz = Tell Bazi
EA = El Amarna
HMM = Tell Hammām et-Turkmān
ḤT = The Tablets from Tell al-Ḥamīdīya
HSS = Harvard Semitic Series
KEM = Kemune
TB = Tell Brak
UEM = Tell Umm el-Marra

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Susanne Töpfer

Some Turin Papyri Revisited: A Look at Material Features and Scribal Practices

Abstract: The aim of this paper is to discuss the use and function of texts, while considering not only the textual content but also the features of the writing and the material as support itself. What can the choice of recto or verso tell us about the meaning and function of a text copy? How was a reused papyrus with heterogeneous texts actually used and stored? What do we learn about the 'biography of the object' by studying scribal practices and material features? These aspects will be discussed by presenting various papyrus scrolls with hieratic texts from the Papyrus Collection of Museo Egizio, Turin.

1 Introduction

Museo Egizio in Turin holds one of the world's most significant papyrus collections. The latter is comprised of nearly 900 whole or reassembled manuscripts and more than 20,000 papyrus fragments, documenting over 3,000 years of written material culture in seven scripts and eight languages. The collection houses a number of unique manuscripts from Deir el-Medina that are well-known to the Egyptological community and the general public. The vast majority of the papyrus manuscripts in Museo Egizio date from the Ramesside period (*c.* 1300–1070 BCE) and probably originate from the settlement of Deir el-Medina, which housed the families of the workmen who built the royal tombs in the Valley of the Kings and Valley of the Queens in the Theban West. The manuscripts belonged to members of the administration of the royal necropolis. These include the so-called 'Turin King List', also known as the 'Turin Royal Canon': a fragmentary papyrus containing a list of Egyptian kings on the back; the 'Turin Judicial Papyrus': a record of a conspiracy plotted against Pharaoh Ramesses III (*c.* 1187–1157 BCE); the 'Satirical-Erotic Papyrus': giving a glimpse of the humour of the inhabitants of Deir el-Medina; the 'Turin Goldmine Papyrus': the oldest known geological map; and the 'Turin Strike Papyrus', documenting the earliest recorded strikes in world history under Ramesses III.

Precisely these papyrus manuscripts are the most in demand for national and international film documentaries and newspaper reports or non-scientific

publications. Most of the inquiries addressed to the museum for photos or filming contain the expression 'the famous Turin Papyrus', which gives any curator the greatest difficulty as to which papyrus the request could refer. What is fascinating about the non-scientific requests, is the frequent choice of adjectives, such as 'best-known', 'famous', 'special', 'curious' or 'exciting', referring to the text content or decoration. The manuscripts mentioned above are, without doubt, well-known, even from the time of their purchase by Bernardino Drovetti (1776–1852), the French consul in Egypt at the time, and their arrival in Turin in 1824, but it is astonishing that they have hardly ever been studied and that a scientific publication that corresponds to the current philological standard in Egyptology for all the 'famous' papyri mentioned is still a desideratum.[1]

Many aspects of ancient Egyptian scribal culture are still poorly understood; previous research in the field has mostly focused on the content of the texts when striving to reconstruct literary compositions, explain historical events, or describe the administrative and judicial customs. The aim of this paper is to revisit some of the so-called 'famous' Turin papyri from New Kingdom (*c.* 1539–1077 BCE) Deir el-Medina by going beyond their content and philological aspects and instead focusing on their materiality, scribal practice, use/reuse of the manuscripts and the 'biography of the object', in order to discover another side of why these and other Turin manuscripts could be called 'famous', 'special', 'curious' or 'exciting'. The contribution, however, will be condensed without fully exploring the argument. The idea is to provide suggestions and impulses, and to look at the Turin manuscripts from different angles. The in-depth analysis of the individual manuscripts is the subject of ongoing studies.

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1 Which, however, is about to change due to the current studies of several researchers, such as Rob Demarée (Leiden), Andreas Dorn (Uppsala), Fredrik Hagen (Copenhagen), Kim Ryholt (Copenhagen), Renaud Pietri (Liege) and Stéphane Polis (Liege). For an overview of scientific publications mentioning the composition of the papyrus collection see the bibliography on the website: <https://collezionepapiri.museoegizio.it/en-GB/section/Papyrus-Collection/History-and-content/History/> (accessed 14 March 2023).

2 New Kingdom Turin papyri

2.1 'Turin King List'

Inv.-No.: Cat. 1874 verso
TPOP Doc ID: 97[2]
Measurements (L × H): 183 × 42 cm
Date: Ramesses II (*c.* 1279–1213 BCE) and later
Script: Hieratic (recto and verso)

The dynasties of the pharaohs are divided in groups of kings united by kinship or their royal residence. A subdivision into thirty dynasties was adopted in Egyptology based on the written sources of Manetho (*c.* 282–246 BCE), a Greek historian and priest who reconstructed the history of ancient Egypt in his study *Aegyptiaca*. In order to write his work (known to us only thanks to later historians), Manetho consulted ancient Egyptian official documents containing lists of pharaohs. Among the examples of these lists, one of the most important is the 'Papyrus of Kings' – also known as 'Turin King List' or 'Royal Canon' – which came to the Museo Egizio due to a purchase made by the consul Bernardino Drovetti around 1820.

It is a chronological list written in hieratic dating to the twentieth dynasty (*c.* 1190–1077 BCE), preserving eleven columns of Egyptian rulers. It starts from the primordial mythological period, with the divine kingdoms of Geb, Osiris, Horus, Seth and Maat, up to the end of the Second Intermediate period (*c.* 1650 BCE). The title, name and duration of the reign in years, months and sometimes even days are recorded for each sovereign. The list of kings mentions rulers of great importance, such as Menes-Narmer (*c.* 3150–3125 BCE), the first non-divine ruler listed, and Djoser (*c.* 2592–2566 BCE), the pharaoh who erected the first great pyramid in history, but also includes many kings who are otherwise unknown.

However, the list was written later, on the back (verso) of a scroll used previously. The text on the front (recto) was written in the nineteenth dynasty during the reign of Ramesses II (*c.* 1279–1213 BCE) and presents a list of dues or taxes collected by the state or, rather, the domain of the Great Temple of Amun at Karnak. The taxpayers mentioned are groups of people, high authorities, figures of temples and harbours, superintendents of orchards, hunters, fortress super-

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2 Reference to the document in the *Turin Papyrus Online Platform*: <https://papyri.museo egizio.it/Login.aspx> (accessed on 14 March 2023) with metadata and images.

visors in Nubia, controllers of wells in desert regions and oases, and *medjayu* personnel.[3] The list is arranged geographically, starting with Fayum and Memphis in the north, going southwards to Thebes, then Aswan and, finally, ending with Nubia and its desert regions.

According to contemporary scholars, the papyrus was purchased by Drovetti in a complete state but became fragmented subsequently during its transport (Fig. 1). However, it is most probable that it was already a mass of fragments when purchased, similar to most of the Deir el-Medina material in Turin's collection.[4] Despite its fragmentary state, the manuscript attracted immediate attention due to the apparent royal names. Jean-François Champollion studied the fragments and undertook the initial sorting of them in Turin in 1824, identifying forty-seven fragments out of around three hundred. He made facsimiles of the verso of each piece as well as of several columns. In 1826, Gustav Seyffarth identified and arranged nearly two hundred fragments. He undertook the first restoration by mounting the fragments on their front side onto '*papier végétal*' (vegetable fibre paper), with the verso side facing up. In 1842, Richard Lepsius's first nearly complete facsimile of the 'List of Kings' followed Seyffarth's arrangement. In 1851, John G. Wilkinson made a new copy of the verso of the papyrus (containing the list) and, for the first time, copied the recto as well, which bears the taxation text.[5] The 'List of Kings' has been the focus of research and, thus, also attracts the attention of laypeople, however, the taxation text has received little attention.

Fig. 1: 'Turin King List' (Cat. 1874 verso) with back light; photo by Nicola Dell'Aquila and Federico Taverni / Museo Egizio.

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3 *Medjayu* is the ancient Egyptian term for '(desert) policeman' *mḏꜣ* (see Wb II, 186.9–13).
4 For the fragmentary papyrological material in Museo Egizio, see Töpfer 2018.
5 For references, see Wilkinson 1851; Farina 1938; Helck 1956; Gardiner 1959; Ryholt 2000; Ryholt 2004.

It is certain that the text on the back is of Egyptological importance for the study of the history of ancient Egypt. But how important was the text to the Egyptians themselves, given that it was written on recycled papyrus? Instead of using the front of a blank and new papyrus scroll, the back of an administrative manuscript that had lost its fiscal value was used as the writing material. It is not uncommon, though, for New Kingdom manuscripts coming from the highly literate community of Deir el-Medina to bear several texts on the recto and verso belonging to various genres (see Section 2.2),[6] considering the value of papyrus as a writing support. The text on the verso could have served as a template,[7] which was stored in a library or archive to preserve the knowledge of the chronology, as the list itself was probably a copy of an older manuscript.[8] Regarding a template or model text, the material onto which the text is copied is not important; the back of a high-quality papyrus, such as the one in question, is sufficient for the copy of the list. The legibility of the handwriting and the clear delineations made between the columns can be seen as indications of a possible use as a text from which to be copied. Several ancient patches of papyrus on the verso, applied after the taxation text on the recto was written, demonstrate that the scribe took care of the support before copying the 'List of Kings'. The patches (see the dark spots in Fig. 1) are not to fill gaps but rather to reinforce the scroll so it does not break when it is unrolled and rolled up back again, which speaks for a use as a template.

The 'List of Kings' can probably already be considered to have been an important text in ancient times. We could assume that we are dealing with a historical manuscript, which demonstrates the need of the royal or priestly elite to document their own chronology for the purpose of, perhaps, the social and divine affirmation of a king as a legitimate ruler. It might actually be called 'famous' given its possible use as a template; the text might have been used to copy from for similar lists in temples or tombs. However, the text itself was probably copied from a prototype, as indicated by several notations and layout errors.

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6 The study of the so-called 'heterogeneous' or 'multiple-text' manuscripts, which bear several texts belonging to various genres (e.g. accounts, poems, hymns and letters) is part of the project between Liège, Basel, and Turin: 'Crossing Boundaries – Understanding Complex Scribal Practices in Ancient Egypt', cf. the project website http://web.philo.ulg.ac.be/x-bound/ (accessed on 23 January 2023).

7 Other ancient lists of Egyptian kings are the so-called Karnak List (eighteenth dynasty), Abydos and Saqqara Lists (nineteenth dynasty), and Ramesseum and Medinet Habu Lists (twentieth dynasty). For references, see above, n. 5.

8 As already proposed by Helck 1956 and later elaborated by Ryholt 1997, 32.

2.2 'Turin Goldmine Papyrus'

Inv.-No.: Cat. 1879+1969+1899+2083/174+2083/182
TPOP Doc ID: 9
Measurements (L × H): 282 × 41 cm
Date: Ramesses IV (*c.* 1155–1150 BCE; map recto); Ramesses IV–Ramesses VI (*c.* 1155–1139 BCE) (texts and drawings verso)
Script: Map with hieratic notes (recto); hieratic and drawings (verso)

The so-called 'Turin Goldmine Papyrus', also known as the 'Turin mine map', is one of the earliest known geographical maps, dating to the Ramesside period (*c.* 1300–1070 BCE). The mountainous region of Wadi Hammamat (an ancient dried-up riverbed that was connected to the Red Sea) is depicted on the front side (recto; Fig. 2a). The mountains on the left side have a pink colour, which indicated the presence of granite and gold deposits, whereas the dark brown mountains on the right side contained sedimentary rock. The mountains are accessible by the several wadis that run through the valley, which are represented as roads on the papyrus. The large white structure on the top left of the map is a chapel of the god Amun, while the smaller white shape highlights the spot where the stela of King Seti I was located; just above it, four small village houses have been drawn. The spotted white and brown track running through the middle of the papyrus represents alluvial deposits. The drawings on the map are surrounded by twenty-eight captions written in hieratic. Most of the annotations state the names of roads or buildings, while the hieratic texts around the mountains indicate where the gold deposits were.

a

b

Fig. 2a–b: 'Turin Goldmine Papyrus' recto and verso; photo by Nicola Dell'Aquila and Federico Taverni/Museo Egizio.

This manuscript is, without doubt, the best-known papyrus in Turin's collection and represented by numerous images in scientific and non-scientific publications, articles and on social media. It is the colourful geographical map and its fairly realistic rendering of the wadi that makes the recto so famous. Scholarly attention was also captured by the map, however, the back of the papyrus remains rather unknown. Although the verso of the document is equally rich, it has never been properly published or studied, except for the first two columns.

The verso of the papyrus (Fig. 2b) contains well over a dozen texts, such as hymns to the king, religious compositions, administrative accounts, copies of letters to the king and authorities, as well as drawings of gods and animals, written by several scribes over a long period. It is possible to reconstruct the order in which those texts have been written and identify some scribes at work with a fair degree of certainty, such as Amunnakht, who also wrote the annotations on the recto, as is clear by the handwriting.[9] As such, the detailed examination of this heterogeneous papyrus provides a contextualized glimpse of the 'biography of the object' for over fifteen years, as the back was reused from the time of Ramesses IV until Ramesses VI (*c.* 1155–1139 BCE).

Therefore, when the plan on the front was no longer in use as an actual map of the region of Wadi Hammamat used for the campaigns to quarry stones for statues and extract gold, the back of this long high-quality papyrus was used by scribes who resorted to 'recycled' papyri like this in their daily life. The 'Turin Goldmine Papyrus', as such, gives us an idea of the scribal life of the community of Deir el-Medina.

2.3 'Turin Strike Papyrus'

Inv.-No.: Cat. 1880
TPOP Doc ID: 131
Measurements (L × H): 95 × 45 cm
Date: Ramesses III (*c.* 1187–1157 BCE) (recto and verso)
Script: Hieratic (recto and verso)

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9 A complete edition of recto and verso is under preparation by Andreas Dorn (Uppsala) and Stéphane Polis (Liège), see, for now, Dorn and Polis 2017. There is a temptation in research to attribute the drawing of the map to Amunnakht as well, but to be sure, the two authors will examine the 'captions' to the map in particular paleographically in order to make a better statement (personal note by Andreas Dorn).

The so-called 'Strike Papyrus' (Fig. 3) is a hieratic administrative papyrus written by Amunnakht and reports the news of a strike that took place during the last years of the reign of Ramesses III (*c.* 1187–1157 BCE). The political and economic difficulties during this time resulted in the suspension of rations for the workmen, which triggered a lengthy conflict between the villagers of Deir el-Medina and government authorities. The workmen first ceased their work in November and spent several days in the necropolis of Thebes, and later in the temple of Thutmose III (*c.* 1478–1425 BCE) and in that of Ramesses II, while requesting the authorities to deliver the grain rations that had not been paid to them that month. The authorities paid the due amount of grain to the workmen, but several days later they went on strike again, this time seeking refuge in the temple of Seti I. The authorities ordered the return of the workmen to the village, but they refused, saying that they wanted to complain directly to the pharaoh about their poor working conditions.
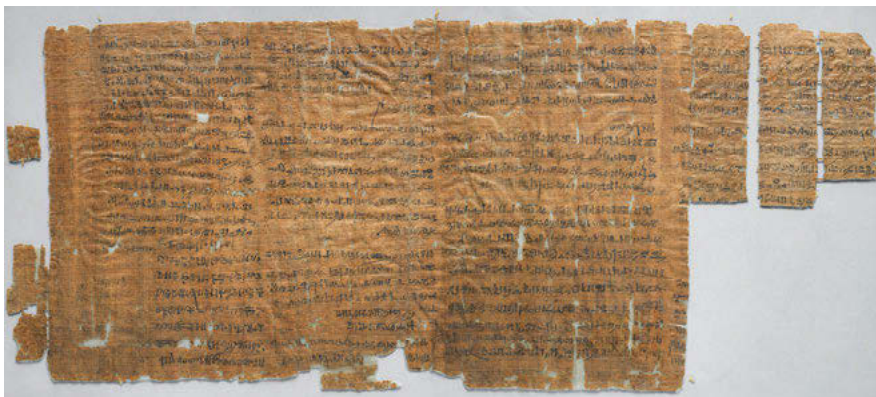
Fig. 3: 'Turin Strike Papyrus' recto; photo by Nicola Dell'Aquila and Federico Taverni/Museo Egizio.

This manuscript is famous for good reason, since it documents one of the first organised strikes in history. It is noteworthy that the text sections describing the events on the recto are not in complete order in terms of the dates of the event, and are instead combined with and 'interrupted' by legal and juridical sections.[10] The verso contains several sections belonging to the report of the strike, such as lists of service personnel and delivery of goods. The rest of the papyrus

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10 For the distribution, see TPOP Doc ID 131 and Gardiner 1958, ix.

records the statement of a workman regarding the crimes of three other work-men, a small memorandum about the death of a scribe from the village, an at-tendance sheet, an account of items given by a man to his former wife, and several oaths. All sections are written by Amunnakht,[11] but he added different notes and texts as they happened in time, and not all are directly linked to the strike. The memorandum about the death of a scribe, for example, is written in one line above the second column on the recto, above the report of the events of the strike which took place in November of year 29, whereas the death of the scribe is dated to February of year 29. The fourth strike event, taking place in November of year 29, is written upside-down at the end of the recto in column four, under the statement of a workman regarding the crimes of three other workmen, which is dated to February of year 29. The list of personnel and deliv-eries on the verso is quite often distributed between columns and 'interrupted' by texts, such as oaths. A report relating to the later stage of the strike is written on the verso at the end of the preserved scroll, after the lists.

It can be assumed that Amunnakht used the papyrus scroll as a kind of notebook, documenting various events, not all related to the strike but as they happened in Deir el-Medina. The 'chaotic' way in which the texts are written might show that the manuscript was only used by Amunnakht (not like the 'Goldmine Papyrus', which was reused later by several scribes), perhaps serving as a source for writing letters with a detailed description of the events to the authorities. However, even if the layout appears a bit confusing, Amunnakht had his own method of clarity, as can be seen by the text written upside-down on the recto at the end of the column and, therefore, the end of the papyrus scroll: the scribe seems to 'finish' the 'page' in that way.

2.4 'Turin Conspiracy Papyrus'

Inv.-No.: Cat. 1875
TPOP Doc ID: 391
Measurements (L × H): 534 × 44 cm
Date: Ramesses III–Ramesses IV (*c.* 1187–1150 BCE)
Script: Hieratic (recto)

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11 The identification is based in palaeography, traces of his name and other manuscripts from that time documenting him as 'Scribe of the Tomb', which means Amunnakht had the highest position a scribe could have, which enabled him to document the strike as an important event.

The history of ancient Egypt has been reconstructed through documents such as the 'Turin King List' (see Section 2.1), enabling scholars to establish a reliable chronology of ancient Egypt. Numerous surviving texts provide information about events that the Egyptian state wanted to remember, such as the 'Turin Strike Papyrus' (see Section 2.3), or the punishment of individuals responsible for an attempt on the pharaoh's life in the 'Turin Conspiracy Papyrus' (Fig. 4).

Fig. 4: 'Turin Conspiracy Papyrus' recto; photo by Nicola Dell'Aquila and Federico Taverni/Museo Egizio.

This manuscript contains a judicial text that recounts a trial that (possibly) took place against a group of conspirators for having attempted to kill Pharaoh Ramesses III (*c.* 1187–1157 BCE). The instigator was Queen Tiye, who, together with other women from the pharaoh's harem and several people with high positions in government, tried to place Tiye's son Pentaweret on the throne instead of the appointed heir. Although the death of Ramesses III is not explicitly mentioned in the papyrus, the assassination seemed to have been successful, as a recent examination of the mummy of Ramesses III proved that a deep cut in the throat was the cause of his death. However, the appointed heir still managed to ascend the throne instead of Pentaweret. He assumed the name Ramesses IV and the culprits were arrested and put on trial. The papyrus describes the crime with which each individual conspirator was charged and the punishment they received. The death sentence was imposed on most of those plotting against the pharaoh, but they were not killed directly by the followers of Ramesses IV. Instead, the accused were allowed to take their own lives.

Unlike the manuscripts mentioned previously, the 'Conspiracy Papyrus' is not a reused papyrus: the documentary text was written in an elegant hand in large calligraphy on the front of a very high-quality papyrus, leaving the reverse blank. A total of six columns are preserved, the beginning is lost but not much of the text is thought to be missing regarding the fact that the entire description

of the crime and court case is preserved. The text has been largely written across the papyrus, each column has a different length and range of lines: the layout here is clearly determined by the contents of the columns, which each document different aspects of the court case. Columns 4 and 5, for example, are the most detailed, giving one line to each criminal who was involved in the conspiracy, introducing him, describing how he was involved and establishing his guilt. A visual subdivision is made by constantly repeating formula, such as *ḥrw ꜥꜣ* 'great criminal NN', and the subdivision of sections by phrases written in red ink, such as *in.tu=f* 'he was brought (to appear)'. The calligraphic handwriting, spacious distribution and clear delineations made between the columns and sections indicate the use of the papyrus scroll as a documentary manuscript with the purpose of being stored in a library or archive to preserve the record of the trials surrounding that historical event. This was not a papyrus that was permitted to be reused, despite the free space on the recto and verso, due to its character as an archival document.

Looking at the condition of the papyrus scroll and how it is preserved today, it becomes clear that it was rolled up from left to right: the manuscript is damaged on the right side, because this part was on the outside of the scroll. The holes/lacunae in the lower half of the first part of the manuscript become smaller from right to left and the distance between them decreases. Those holes were caused by insects when the scroll was rolled up, and having no traces of them on the second part (left) of the manuscript indicates that this section was more protected due to being on the inside of the scroll; the insects have eaten their way in from the outside (right) to about the middle. Furthermore, the larger damaged areas on the first preserved column and the size of the lacunae underline the hypothesis that not much of the text is missing, because the first sheet was almost certainly more damaged as it was more susceptible to such by being exposed on the outside.

2.5 'Ritual of Amenophis I'

Inv.-No.: Suppl. 10125/1
TPOP Doc ID: 296
Measurements (L × H): 344 × 31 cm
Date: Ramesses II (*c.* 1279–1213 BCE)
Script: Hieratic (recto)

This long manuscript (Fig. 5) bears fourteen columns of hieratic text on the recto, which contains the so-called 'Ritual of Amenophis I'. Amenophis I Djeserkara (*c.* 1514–1494 BCE), king of the eighteenth dynasty, founded the vil-

lage of Deir el-Medina, where the workmen who constructed and decorated the royal tombs lived. After his death, he was deified and worshipped by the inhabitants of the village.

Fig. 5: 'Ritual of Amenophis I' recto; scan by Museo Egizio.

The manuscript dates to the period of Ramesses II (*c.* 1279–1213 BCE). Found in 1906 by Ernesto Schiaparelli on-site in Deir el-Medina, the papyrus was apparently stolen shortly afterwards from the excavation and was repurchased by Schiaparelli himself in 1909 at the antiquities market in Cairo. The Turin manuscript is a fragment of the papyrus scroll of which its upper part is currently in the Egyptian Museum in Cairo (CG 58030).[12] It can be assumed that the manuscript had been cut right after it was stolen from the excavation site in order to sell more parts of it at the market.

The text is a kind of ceremonial manual recording a variety of offerings and cultic activities. The ritual's structure is rather complex; it consists of several activities, such as purification, and offering food and different items, which were presented in the temple to statues of deities or the pharaoh by a priest, accompanied by 'magical' formulae. The aim of the ritual was generally to preserve the religious order of Egypt by pacifying the divine ruler.

The offering ritual is addressed to Amun and to the Pharaoh Amenophis I. Depending on the sections, the latter is mentioned as the beneficiary or donor of the offerings. Consequently, an assimilation of the god Amun with the pharaoh seems to be performed within that ritual, resulting in the adjustment of Amun's traditional cult to the local cult of Amenophis I, as deified in Western Thebes.

The text contains a 'famous' offering ritual that is attested in several copies ranging from the Middle Kingdom to the Roman period on papyri, ostraca and

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12 Golénischeff 1927, 134–156, pl. XXIV–XXVII; Bacchi 1942.

temple walls.[13] Regarding the Turin manuscript, the question arises as to whether the papyrus scroll was actually used in ritual processes. It can be assumed that the text is an actually performed temple ritual, but this does not necessarily mean the copy had a practical use in the temple; it could have served as a template or back-up copy for memorising, which was stored in the temple library or archive to preserve the priestly knowledge of the ritual. There is no clear answer to this question as both utilisations are possible; nevertheless, it seems worthwhile to look at the material and the layout more closely with such a question in mind.

The text is written on the recto in a neat hand and filigree calligraphy, leaving the reverse blank,[14] while the beginning of new spells and sections are written in red ink. It would be suitable for recitation due to the legibility and the clear delineations made between the spells. However, compared to parallels, the text has some misspellings, omissions and errors. This might present difficulties in a recitation but could be recognised by an attentive copyist from an archival copy. It is noteworthy that the manuscript has only a few or slightly evident folds, which suggests that the scroll was not rolled up and closed very often, consequently, it could have been used as a template. This theory is reinforced by the fact that the scroll was rolled up from right to left, as can be seen from the destruction at the bottom of the left half of the manuscript. The beginning of the text was, therefore, inside the scroll, which is not exactly handy for the priest in a liturgical recitation – and not for the copyist either – because he would first have to unroll the scroll from the back to start reading.

2.6 'Book of the Dead of Kha'

Inv.-No.: Suppl. 8438
TPOP Doc ID: 439
Measurements (L × H): 138 × 34 cm
Date: Amenhotep III (*c.* 1390–1353 BCE)
Script: Cursive hieroglyphs

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13 Nelson 1949; Tacke 2013.
14 A 'pure' – not reused – papyrus roll is actually essential for the virtue of the spells for some ritual or funerary texts. There is even an Egyptian word *šw* meaning 'blank sheet of papyrus' (Wb IV, 428.5–12) which has an apotropaic use in funerary and religious texts. Another designation for a new papyrus found in Egyptian and Demotic texts would be *ḏmꜣ n mꜣj* (Wb V, 574.3–9; Erichsen 1954, 679–680).

The final single manuscript I would like to focus on is the 'Book of the Dead' manuscript of Kha, who was superintendent of works in the royal necropolis during the reigns of Amenhotep II and Amenhotep III (*c.* 1425–1353 BCE) in the middle of the eighteenth dynasty. In 1906, Schiaparelli opened Tomb 8 (Theban Tomb 8) in the necropolis at Deir el-Medina and found the papyrus in a perfect state of preservation laying on the second/intermediate coffin of Kha, which was almost entirely hidden beneath it.[15] The long papyrus written in cursive hieroglyphs contains – starting from left to right – thirty-three formulae from the so-called 'Book of the Dead',[16] a funerary compilation of several formulae for the guidance, protection and resurrection of the deceased in the afterlife.

The manuscript of Kha is indeed one of the best preserved New Kingdom 'Book of the Dead' copies (Fig. 6), written by a scribe with a neat hand who copied the texts carefully since mistakes are barely recognisable. The individual formulae are easy to identify, even if one cannot read the text: they are separated by double lines filled with yellow, so are the excellently drawn colour vignettes. Traces of red lines are evident beneath the images. Those are guiding lines for the illustrator. Furthermore, there are black dots visible on top of some the images, indicating the beginning of the column lines for the texts.

The name of the owner of the papyrus who is the beneficiary of the spells occurs frequently. He is mentioned usually after the title, introduced by the phrase 'words spoken by' and 'he says', or at the end of the spells. In formulae 13 and 17, however, the space after the titles is empty. Thus, it appears that the 'Book of the Dead of Kha' was pre-manufactured and the space for the name of the subsequent owner has been left blank. When the manuscript was adapted for Kha, his name was inserted, however, not in each space. The fact that the name was added later becomes obvious in the second column of formula 1: the titles and names of Kha and his wife Merit are spaced widely apart, probably because the scribe had to fill in the whole column (Fig. 6). Furthermore, multi-spectral imaging shows that the names are written here over an erased text; some traces of ink and even signs are still visible. Erasures are apparent only in this column. This suggests that the manuscript was intended for somebody else,

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15 Kha was buried in three coffins, which were placed one inside the other (external, intermediate and internal). See furthermore Töpfer 2019.

16 The title 'Book of the Dead' is a modern designation given by the German scholar Richard Lepsius in 1842 to a corpus which is known from the late seventeenth dynasty (*c.* 1550 BCE) to the early Roman period (first century BCE and CE). He chose the title to emphasise the use of the manuscript, which was buried along with the deceased, as a type of 'passport' into the afterlife. The ancient Egyptian title of the corpus, however, is 'Going out in Daylight' or rather 'Beginning of the Spells for Going out in Daylight'.

whose name was initially written but erased later in order to reuse the manuscript for Kha instead.
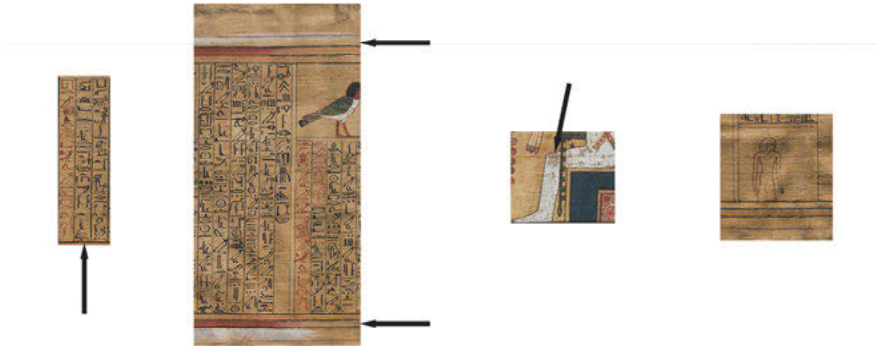
Fig. 6: 'Book of the Dead of Kha' recto, details; photo by Nicola Dell'Aquila and Federico Taverni/Museo Egizio.

Although the Turin 'Book of the Dead of Kha' was probably not specifically written for Kha, it was clearly meant for a high official. The quality of the papyrus material, the writing and the colourful images are evidence of this. That it was subsequently used for an official such as Kha, because of his important position as superintendent of works in the royal necropolis, is hardly surprising. Despite its high quality, the manuscript, or rather its ornamentation, seems to be unfinished. The text columns are framed by three bordering lines filled in with red and white coloured ochre. But the colours were used only for the first half of the manuscript and not for the second (Fig. 6). The middle border was subsequently filled in with ochre and the inner border at the end of the manuscript in yellow. However, it is uncertain what caused that change of style. One

might suggest that the draughtsman ran out of colour and that he or his colleague finished the frame later. Another suggestion might be that the layout was revised when the papyrus was reused for Kha. Revisions are not only visible within the framing but also in the opening illustration.

The opening scene with Osiris depicted in mummiform from the chest downward is common in most of the 'Book of the Dead' papyri from the New Kingdom. However, a closer look reveals a pattern under the white paint: the body of the god was originally covered with feathers (Fig. 6). But why feathers? The underlying concept is the protection of Osiris by his mother the sky goddess Nut or his sisters Isis and Nephthys, all of them having wings instead of arms in several depictions. Therefore, the feathers are an icon of protection and rebirth. It remains unclear why the feathers were covered later with white. A change of taste in connection with the reuse of the papyrus for Kha is highly likely. The illustration to formula 74 is unfinished and was not coloured; only a draft is depicted (Fig. 6). The draughtsman perhaps merely forgot to colour in that vignette because of its position at the bottom. In fact, this is the only illustration beneath the text and the only one without colour.

3 Patchwork papyri

Museo Egizio houses numerous funerary papyri that have been restored in the past, as can be seen by the disparity of their materiality. The papyri in question are mainly 'Amduat' (e.g. Cat. 1786;[17] Fig. 7a) or 'Book of the Dead' manuscripts, which came to Turin in 1824 as part of the Bernardino Drovetti collection and were subsequently mounted on cardboard. Since 2017, a restoration project has been focusing on detaching all funerary papyri from the acidic cardboard material. After the restorers detached the cardboard, inscribed papyrus fragments were revealed (Fig. 7b), used as patches to fill the lacunae. The texts on these fragments are of administrative, literary and magical nature, the majority dating to the Ramesside period. They are quite similar in content and script to the thousands of fragments that were stored in cardboard folders.[18] Therefore, it can be suggested that they are related to the Deir el-Medina manuscripts.

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17 TPOP Doc ID 347.

18 See the report by Töpfer 2018.

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b

Fig. 7a–b: 'Patchwork' papyrus Cat. 1786 recto and verso; scan by Museo Egizio.

It remains rather uncertain whether the patches were attached to the papyri by the antiquity dealers in Luxor in order to increase the value – a complete papyrus roll is easier to sell than a roll full of holes – or if this happened in Italy during the nineteenth century. The second consideration is supported by the fact

that other 'patchwork' papyri such as ours do not exist in the papyrus collections in the British Museum, the Louvre, in Leiden or Berlin. If this 'restoration' happened in Egypt, one would expect to find such papyri in other European collections, since Bernardino Drovetti (1776–1852), Frédéric Cailliaud (1787–1868), Henry Salt (1780–1827), Heinrich Menu von Minutoli (1772–1846) and Giovanni d'Athanasi (1798–1854) all mainly purchased items from the same dealers for the museums mentioned above. Moreover, we can find 'reconstructed' funerary manuscripts with fragments of other papyri among the papyrological material in the Egyptian department of the Vatican Museums.[19] Such data undoubtedly supports the theory that there was a certain 'restoration technique' used on papyri in Italy during the nineteenth century.

So, how should we handle those fragments? Each fragment will be recorded in the museum's database with complete metadata, which will hopefully help in the future to allocate them virtually to original documents. We will not, however, detach the fragments from the funerary papyri for two main reasons: firstly, they are adhesively attached to the manuscript, and we would damage both documents irreversibly; we would lose more than we gain. Secondly, regarding the ethics of conservation practice: museum collections are repositories of communication and cultural memory, and, therefore, conservation is a practice that focuses on the preservation of the cultural knowledge of objects. In the nineteenth century, restorers were being accused of falsification and, therefore, fabrication of truth; either by making old things look beautiful and new, or making new things look old and valuable, according to taste. An aesthetic and philosophical shift of values started to occur in the middle of the twentieth century, resulting in conservators becoming more concerned with not altering the meaning of objects. Conservation, thus, as a 'new' profession developed the aim to preserve and not alter, to secure and not change, and to maintain rather than recreate. Of course, there are a multitude of views coming from the various stakeholders involved (Egyptologists, philologists, conservators, curators and the general public) whether the fragments attached to the manuscripts could or should be removed, stored and displayed separately.

My point of view is that, nearly two hundred years ago, the fragments and the funerary manuscript became one object, which needs to be preserved as such. The database will enable us to recreate the archaeological context, recompose dispersed corpora, preserving the complete biography of the object(s) and adding different layers of Egyptological interpretation. But we also have to

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19 For the Vatican papyri, see Albert 2012; Albert 2017; Albert 2018.

keep evidence of past knowledge and practice for conservation methods at Museo Egizio, and the means by which these maybe transmitted into the future.

4 Conclusion

Most of the visitors to Museo Egizio pass by cursive hieroglyphic and hieratic manuscripts on display on the walls, hardly taking any notice of them. They only stop to look at papyri bearing colour illustrations, or those that are prominently displayed in the middle of the rooms, such as the manuscripts discussed here. These manuscripts are, beyond doubt, among the most important written sources that have come down to us from ancient Egypt about the history, economy and socio-cultural structure of Ramesside Egypt (*c.* 1300–1070 BCE), but their historical significance becomes obvious only in the context in which the manuscript was produced. The study of fragmentary or damaged manuscripts as presented here is a difficult and sometimes discouraging task because it consists mostly of hypotheses. However, one is forced to investigate every detail, whether it concerns the layout, the quality of the hand or the writing material. Hence, one has to look beyond the text content, with a contextualized approach to writing that takes into account the papyrological data and the individual habits of scribes. In doing so, the most interesting features are revealed, which – in the field of philology – would not receive much attention in the case of a complete manuscript but are certainly of importance for the study of material culture. More interpretations regarding the cases of use and reuse described will be the theme of upcoming research monographes on the individual manuscripts.

Abbreviations

Wb = Hermann Grapow and Adolf Erman (eds), *Wörterbuch der Ägyptischen Sprache*, 6 vols, Berlin: Akademie-Verlag, 1926–1961.

TPOP = *Turin Papyrus Online Platform* <https://papyri.museoegizio.it/Login.aspx> (accessed on 23 January 2023).

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Co-presence of Written Artefacts

Andréas Stauder

Experiencing Inscriptions in Space: Extended Inscriptions of the Early New Kingdom (Qenamun – Useramun – Rekhmire)

Abstract: Some major tombs of the early New Kingdom in the Theban necropolis of Sheikh Abd el-Qurna display massive inscriptions. These inscriptions appear to have been set deliberately against a continuous reading. In their vertical and horizontal extensions, they exceed bodily frames and what sight can embrace. They are integrated into broader text-image compositions that extend dynamically over the surface of an entire wall. Their formats can be seen as pointing to the royal sphere or illustrious predecessors, and as massive blocks of text materialising speech and agency emanating from the main figure on the wall (the king, the vizier's father or the vizier). In some cases, opposite walls resonate with one another through extensive parallelism. The inscriptions deploy their effects and significations through their material presence in space and their overwhelming impact on the visitor's senses rather than discursively. Beholders move in an enveloping space, brought about by the pictorial and textual decoration of the walls. Standing in front of a massive textual inscription, they are fascinated by and drawn into the shimmering chromatic surface of a wall of writing.

1 Introduction

The site of Sheikh Abd el-Qurna is located on the west bank of ancient Waset (Arabic: Luxor; Greek: Thebes), the place of origin and first capital of the kings of the time. During the early New Kingdom (*c.* 1550–1350 BCE), the site developed as the place of burial and display of some of the highest officials of the time. The tombs cluster next to each other in artificial terraces on the slope of the hill, inserting themselves between earlier tombs dating to the Middle Kingdom (*c.* 2000–1800 BCE) and partially reusing these, with particular intensity during the reigns of Hatshepsut, Thutmosis III and Amenhotep II (*c.* 1475–1400

BCE).[1] Their architectural layout and decoration (images and inscriptions combined) attest to a spirit of competitive emulation among the tomb owners, a small circle of people who, one generation after the other, knew each other personally. In doing so, they also celebrate the identity and privileged status of an exclusive group.[2]

Some of these tombs include inscriptions that extend over considerable surfaces on the walls. The texts are complex in their verbal composition and rhetoric, yet nearly impossible to read continuously on the walls on which they are displayed. While the texts could, hypothetically, have been performed orally on occasions, their display in inscriptional form must have corresponded to intentions other than verbal communication. This article asks what these intentions could have been and how the inscriptions as material objects in space could have been engaged with in ancient times.

Three tombs in particular present such massive textual inscriptions: those of the vizier Useramun (T(heban) T(omb) 131; reigns of Hatshepsut – early Thutmosis III); his nephew and successor in office, Rekhmire (TT 100; Thutmosis III – early Amenhotep II); and, in a third generation, the 'chief steward in Perunefer', Qenamun (TT 93; later Amenhotep II). For expository reasons, I begin with the last, Qenamun, then move back to Useramun and conclude with Rekhmire. In all cases, the discussion proceeds from a necessarily etic analytic description of features deemed relevant. Based on this, I then attempt an imagined reconstruction of possible ancient experiences associated with the inscriptions. Before doing so, some background information and notes on descriptive conventions are in order.

Studies by Dimitri Laboury have made abundantly clear that ancient Egyptian artists could express their own style and individuality and sign their work either directly or through a portrait in *assistenza*.[3] These more distinguished artists were socially recognised and could achieve and display considerable status.[4] The decoration programme of the tombs of Sheikh Abd el-Qurna, including their inscriptions, were designed by master painters.[5] In addition to knowing the iconographic repertoires, these artists had considerable hiero-

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1 Overview: Kampp 1996, map III. Reproduced here as Fig. 1 with the location of the tombs discussed in this article highlighted. For the historical development of the necropolis with a focus notably on these same tombs, see Shirley 2010, 98–107, with fig. 5 on p. 100.

2 For the notion of 'competitive emulation' in relation to the decoration programme in the central necropolises of the Old Kingdom (*c.* 2700–2150 BCE), see van Walsem 2012–2013.

3 Laboury 2013.

4 Laboury 2016; Laboury 2022, 40–42, with extensive references.

5 Detailed case study: Laboury 2015; see also Laboury 2020, 95; Laboury 2022, 52, 64.

glyphic expertise.[6] They were assisted in the realisation of the tomb by subalterns with only limited hieroglyphic expertise.[7] The inscriptions consist of coloured and internally detailed, painterly hieroglyphs. They are adjacent to scenes to which they relate, and laid out in columns, i.e. vertically, similar to the figures in the scenes. As these and other aspects discussed below make clear, the inscriptions were, thus, conceived to be seen in a direct, intrinsic relation to the scenes. Some if not all of these master painters were able to adapt the layout of scenes and inscriptions on the spot. This is made clear by the comparison between *Vorlagenostraka* (ostraca on which drafts of texts and/or scenes were inscribed) and the final realisation of inscriptions or scenes on a wall;[8] discrepancies between the sketch on the wall and the final realisation when both are observable;[9] and idiosyncratic, virtuosic elaborations of individual focal signs in an inscription.[10] In the following, I use 'designer' to refer to the master painter responsible for conceiving and implementing the decoration and inscriptional programme of the tomb; this should not to be taken to exclude the possibility that, in some cases, more than one person was involved at this level. It is also understood that both the tomb owner and the master painter(s) were probably involved in making decisions relative to the conception of the monument.

The tombs consist of an open courtyard, a funerary chapel dug into the hill and burial spaces below ground where the body rested. The funerary chapels were open to visitors. The decorative programmes and their often ostentatious nature make clear that these were spaces for affirming the social identity of the tomb owner and, by extension, of his kin. In addition to the tomb owner's family, visitors would have included, at a minimum, other members of his social group (some themselves with tombs nearby) and their respective dependents, as well as the artists involved in making these tombs and looking for models in other tombs.[11] Reasons for visiting the tombs included the performance of the

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6 Laboury 2022, 39–49; see also Laboury 2016, 379–381; for an earlier master-sculptor proudly referencing his hieroglyphic expertise and, more broadly his being party of restricted knowledge, Stauder 2018.

7 Laboury 2022, 52–61.

8 Laboury 2022, 43–47 (general discussion of the phenomenon, including a reference to an important, soon to be published *Vorlagenotrakon* found in the forecourt of Amenemope, TT 29); Tallet 2005 and Tallet 2010 (tomb of Rekhmire, TT 100); Lüscher 2013 (tomb of Menkheper-reseneb-Nakhtmin, TT 79).

9 Laboury 2020, 93–94.

10 Laboury 2022, 47–49.

11 Several visitors to early New Kingdom tombs of Sheikh Abd el-Qurna are even known by name through the graffiti they left behind; see Den Doncker 2019b, 73–88.

funerary cult, collective occasions of celebration and interest in the tombs themselves. These reasons varied with time: during construction and decoration, in the decades following the tomb owner's death as the funerary cult was still alive, and later still, in some tombs that were deemed remarkable for their contents, for the historical memory of the tomb owner or for some other reason.[12] Traces of ancient engagements with the tombs and their decoration can be seen in the location and contents of the graffiti left by ancient visitors on the walls, for instance, in association with a particular figure.[13] Another aspect of the reception of the tombs is seen in how certain elements were taken over from one tomb to the next.[14] How various types of visitors might have moved within the funerary chapels is not documented. Any reconstructions in this regard made below should, therefore, be considered schematic and imagined.
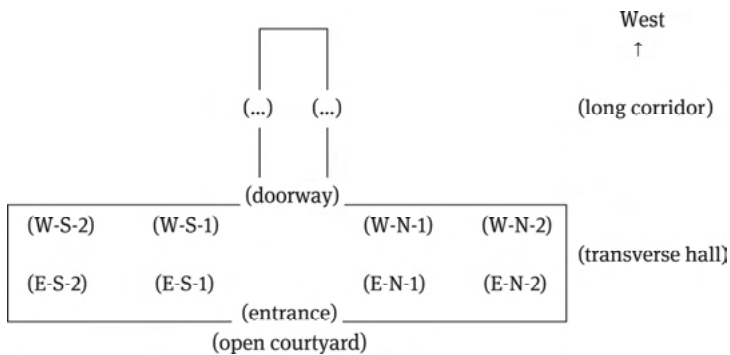
The entrance of the tomb was ideally aligned to the east, where the sun rises. The funerary chapels present a characteristic plan in an 'inverted T' with a transverse hall and a long corridor (see the diagram above and Fig. 1). The transverse hall was the primary space for a public display of the tomb owner's social identity. The long corridor led deeper into the mountain and the west, the realm of the dead, to an offering place, marked by images of the tomb owner with his wife and an offering table; contrasting with that of the transverse hall, the long corridor was typically decorated with scenes with a funerary tenor.

In the following, I am concerned only with the funerary chapels and often use 'tomb' as a shorthand for the funerary chapel. I use ideal co-ordinates – co-

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12 On these aspects as well, see Den Doncker 2019b, with further references.

13 Such graffiti are found in various places throughout Egypt. Focusing on Sheikh Abd el-Qurna, see the detailed study by Den Doncker 2019b, 110–206.

14 Den Doncker 2019b, 207–290; for the case of the early Thutmoside viziers, specifically 252–279.

ordinates corresponding to the ideal orientation of a tomb as just described – even if, according to the local topography and space available, the actual orientation of a tomb deviates from these more or less pronouncedly. The inscriptions discussed below are located on the two long walls of the transverse hall: the one in front of the visitor entering the tomb (the west wall) and the opposite wall, behind the visitor entering the tomb (the east wall). The west wall is divided into two sides by the doorway opening to the long corridor: for the visitor standing in front of that doorway, a right-hand (or northern) side, henceforth 'W(est)-N(orth)'; and a left-hand (or southern) side, henceforth 'W-S'. The opposite (east or back) wall is similarly divided into a northern side (E-N) and a southern one (E-S) by the entrance to the tomb. I generally use 'wall' in the following for one of these materially continuous surfaces of decoration and inscription (thus: W-N, W-S, E-N or E-S). Each 'wall' defined in this way in the tombs discussed below is generally divided into two subparts: one closer to the doorway or entrance, the other farther apart. These are referred to by the sigla W-N-1 and W-N-2, respectively; and similarly for the other walls.

2 Qenamun's Appointment inscription

In Qenamun's monumental tomb at Sheikh Abd el-Qurna (TT 93) a long text tells how the king, Amenhotep II, appointed Qenamun to 'chief steward in Perunefer' (Figs 1–3).[15] While the title itself is not otherwise attested, the place, Perunefer, was a major harbour in the early New Kingdom, associated with either Tell el-Dabʿa or Memphis.[16] Qenamun, who was also an overseer of the cattle of Amun and held important military responsibilities,[17] was part of a small group of men who owed their rise to the highest positions, at least in part, to a personal proximity to the king, Amenhotep II.[18] In Qenamun's case, his own mother, Amenemipet, was a wet-nurse to the future king, Amenhotep II.

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15 Translation and study: Stauder forthcoming. Original publication: Davies 1930, pl. 8; text also in Urk. IV 1385–1390.14, collated with copies by Kurt Sethe.

16 For the former proposal, e.g. Bietak 2017; for the latter, Pasquali 2007, 77–78, n. 37; Förstner-Müller 2014.

17 For the latter, see Gnirs 2013b, 699–700, 710–711; Shirley 2013, 588–589. For lists of Qenamun's titles and epithets, see Davies 1930, 10–16.

18 Late in his reign, the preceding king, Thutmosis III, appears to have surrounded the future Amenhotep II with a group of trusted tutors and nurses whose relatives would become some of Amenhotep II's highest officials, replacing, perhaps gradually, a previous generation of offi-

2.1 A royal type of text in a non-royal context – a local emulation

A little less than half of the textual substance of the inscription is preserved, however, a lot can still be said about it.[19] Qenamun's Appointment inscription is set as a throne session of the king with his officials, specifically an 'appearance' (*ḫꜥt*) of the king.[20] It belongs to a genre, the so-called *Königsnovelle*, that centres around a performative pronouncement of the king: the king speaks in a ceremonial courtly context, with or without the group of court officials intervening, and his words are followed by their immediate effect.[21] Qenamun's Appointment inscription is a particularly developed type of *Königsnovelle*, with the king speaking first to express his intent to appoint a chief steward in Perunefer (cols 2–11); the courtiers eulogizing the king's effectiveness in decision-making and speech (cols 11–16); the king speaking a second time to appoint, then instruct, Qenamun (cols 17–27); the courtiers again eulogizing the king's speech and decision (cols 27–31); and a final narrative describing Qenamun's installation and effective action as chief steward in Perunefer (cols 31–36).

The inscription, in the celebratory space of a non-royal tomb or stela, of shorter or longer stretches of the king's very words is documented in various instances in the Old, Middle and New Kingdom.[22] It represents a remarkable distinction for the official in and of itself, marking his extraordinary proximity to the king. Inscribing a *Königsnovelle* – a quintessentially royal genre – in a non-royal space goes one step further. Only two other instances are known, both from Sheikh Abd el-Qurna and dating to the preceding reign of Thutmosis III: firstly, the Appointment inscription of vizier Useramun (discussed below); then, the

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cials stemming notably from the extended Ineni-Aametju family (on which see the second and third part of this article). See Shirley 2005, 265–282; Shirley 2013, 586–589; Laboury 2007, all with references to previous discussions.

19 The following is a condensed form of what is developed more in depth in Stauder forthcoming.

20 '[His] Person's [appearance] on the thron[e] on the electrum dais (...)' (col. 1, [*ḫꜥt*] *ḥm*[=*f*] *ḥr st-wr*[*t*] *ḥr tꜣntyt n ḏꜥm* (...)). The restoration of *ḫꜥt*, based on parallels and the size of the lacuna, is secure.

21 For this definition of the *Königsnovelle* (the label is an inherited misnomer), see Stauder 2021, with references to other definitions revolving more broadly around notions of royal action. Under the definition above, the *Köngisnovelle* can be viewed as a 'genre' (with this term understood as referring to more or less stabilized textual formats that, through cultural convention, contribute to inform the production and interpretation of texts). Under the broader definitions that are common in Egyptology, the *Königsnovelle* is less a genre but simply a general type of text in which the king acts in specific, typically episodic contexts.

22 Stauder-Porchet 2020a, 78–86; Stauder-Porchet 2020b, 218–219; Stauder-Porchet 2021a; Stauder-Porchet 2021b.

Byblos journey inscription of the treasurer Senneferi.[23] Qenamun's and Senneferi's tombs are located only a few dozen metres away from Useramun's (see Fig. 1). Upon current evidence, the practice of inscribing a *Königsnovelle* in a non-royal space, thus, appears highly confined in time and space.

Fig. 1: Map of Sheikh Abd el-Qurna, after Kampp 1996, map III, with the main tombs discussed in this article highlighted: Useramun (TT 131), in red; Rekhmire (TT 100), in yellow; Qenamun (TT 93), in blue. The tomb of Senneferi (TT 99) is highlighted in green. The map demonstrates the spatial proximity of the three only known instances of *Königsnovellen* in non-royal contexts (Useramun, Senneferi, Qenamun). The tombs in the cluster around Qenamun's (Amenemope, TT 29; Mery, TT 95; Sennefer, TT 96) are marked by thinner black ovals.

Useramun's inscription, a full *Königsnovelle*, probably served as an inspiration for Senneferi's inscription, which consists of a unique combination of features of the *Königsnovelle* with features of the event autobiography. It certainly did for

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23 For the latter, see Strudwick 2016, 98–102, pl. 25–29, colour pl. 15A–16A; Urk. IV 532.12–536.4. Discussion: Eichler 1998; Stauder forthcoming, the final section (sub 'User's inspiration').

Qenamun's inscription. Similar to Useramun's, Qenamun's inscription is a full *Königsnovelle* set as a throne session; centres around the appointment of the official; and consists of two speeches by the king and two by the courtiers, set in a narrative frame and followed by a final narrative section.[24] The designer of Qenamun's Appointment inscription was looking at Useramun's Appointment inscription also at the level of layout: similar to Useramun's inscription, Qenamun's is associated with a pictorial scene featuring officials, among which the appointee, standing in front of the king seated in a kiosk; both inscriptions, moreover, consist of precisely thirty-six columns, both shorter ones and longer ones extending over the full height of the wall.[25]

Through his Appointment inscription, Qenamun, thus, gestures toward Useramun, remembered as the most powerful figure of two generations before. Ancient visitors familiar with Useramun's extraordinary monument located just a few dozen metres away would no doubt have noticed this gesture on Qenamun's part.

2.2 Inscriptional layout

Even with less than half of the inscription surviving, this appears to be carefully laid out on the wall (Fig. 2). The inscription was associated with a now largely destroyed audience scene in which the king in a kiosk sits in front of standing officials, among which, no doubt, Qenamun himself. The Appointment inscrip-

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24 In the case of Useramun's inscription, the courtiers speak first; in Qenamun's inscription, the king speaks first, conforming better with expectations of decorum. It has been suggested that the reverse order in Useramun's inscription could reflect a historical situation in which a royal council or 'diwan' of highest officials around the king could then have played a major role in decision-making (Dziobek 1998, 145–147; Gnirs 2013a, 167–168). Things would have changed by Qenamun's time.

25 On yet another level, Qenamun's Appointment inscription includes a direct quotation from another text inscribed in Useramun's tomb, the Royal Instruction to the Vizier (also found in the tomb of Useramun's successor in office, Rekhmire): Qenamun, 22–24, _mk_ [...[ca. 6 quadrats (23)]...[ca. 17 quadrats] _mk ḏḥr] pw mỉ wdd pw_ _m[k_[?] ... [ca. 2 quadrats (24)]...] 'See, [... [(23)]... See,] it belongs to [bitterness], it is a thing like gall. S[ee(?), ...]'; Royal Instruction to the Vizier, Useramun, 2–3 / Rekhmire, 2–3, _mk smn pw n tꜣ r-ḏr=f mk ỉr ṯꜣtỉ mk nn bnr ỉs pw_ _mk ḏḥr pw mỉ wdd_ _mk bỉꜣ pw mḏrỉ nbw n pr n nb=f_ 'See, it is the mainstay of the entire land. See, as for the (office of the) vizier, see it is not a sweet thing, see, it belongs to bitterness like gall. See, it is metal that walls off the gold for the house of its lord' (the term 'quadrats' refers to the square or rectangular groups into which hieroglyphic signs are usually arranged. Here, they indicate the extension of the lacuna).

tion runs in thirteen shorter columns inscribed above these standing officials, then in twenty-three more columns extending over the full height of the wall. The inscription, thereby, appears to be tightly associated with the scene.
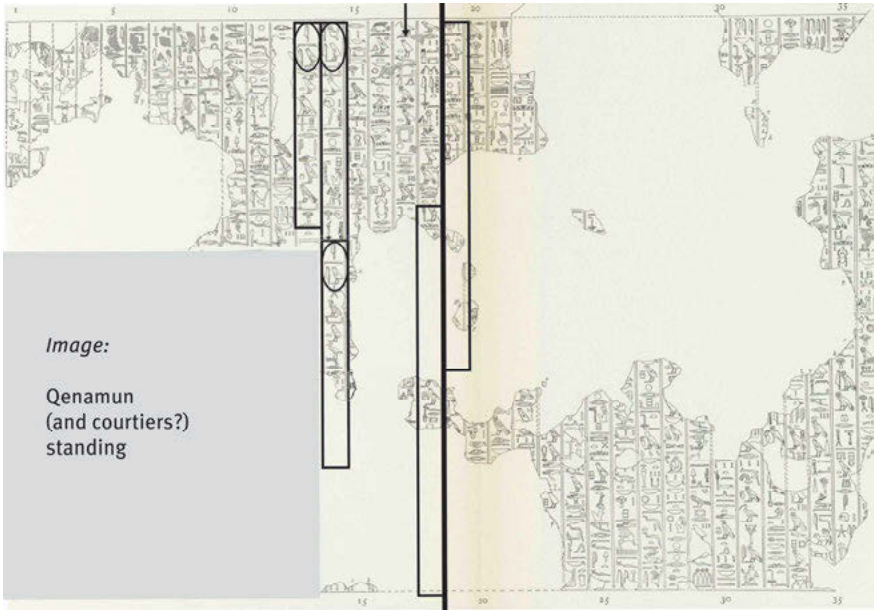
Fig. 2: Qenamun's Appointment inscription (after Davies 1930, pl. 8).

Similar to other inscriptions, the continuous text is laid out in such a way that several textual segments begin at the top of columns.[26] An example is between the two pairs of speeches, the sentence telling of the discovery of the perfect fit for the job, Qenamun (Fig. 2, marked by the arrow): [(17)]*gm.n.tw=f ḥr ꜥḳ m rwt ḫft prrt m rꜣ n nsw* (…) 'He (= Qenamun) was found entering through the doorway in accordance with what came forth from the king's mouth: (…)'. In their preceding speech, the courtiers eulogize the king's wisdom in decision-making with a

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26 For the Old Kingdom (*c.* 2700–2150 BCE), see Stauder-Porchet 2021c, with many examples. In the First Intermediate period and Middle Kingdom (*c.* 2150–1700 BCE), for example, the inscriptions of Hetepi of el-Kab (Stauder 2023a), Hor (Wadi el-Hudi 143; Galán 1994, 66), Khusobek (Manchester 3306; Baines 1987, 54), or Harwerre (IS 90; Stauder 2023b). For a series of other remarkable features of layout in a continuous text, see Nesimontu's stela (Louvre C1; Obsomer 1993).

triple rhetorical question, a literary trope:[27] (13)*ỉn-ỉw sšm.tw ḥr ỉmỉ pt r sḳdwt m ḥrt* (14a)*ỉn-ỉw ḏd.tw tp-rd n rḫ n ptḥ špss ḥr-ỉb ḥmwt* (14b)*ỉn-ỉw sbȝ.tw ḏḥwty r mdwt ...* '(13)Is Horus who is in the sky guided for the navigation in the above? (14a)Is an instruction of knowledge given to Ptah, the eminent one who presides over the crafts? (14b)Is Thoth taught to speak? (...)'. The first question is fitted precisely to column 13, the last of the shorter columns above the image of the officials standing (Fig. 2, with each question boxed; *ỉn-ỉw* marking yes/no questions in an oval). The second question occupies the same vertical extension in the upper part of column 13, the first with full height. The third question, in the lower part of column 14, then borders the pictorial scene vertically. Overall, the three rhetorical questions are set on the boundary between image and inscription in a way that is too precise to be unintentional. Similar effects of layout are found in Useramun's Appointment inscription (see Section 3.1).

As noted, the text is a *Königsnovelle*. Its most central element is the king's performative words appointing Qenamun at the beginning of his second speech: *wḏ.n=ỉ [ḏ.tw ḳn-ỉmn m ỉmỉ-rȝ pr] m prw-nfr [...*ca. 9 quadrats*] (19)ḥr-ntt sw m nḫb* 'I have decreed [that Qenamun be placed as steward] in Perunefer (...) (19)because he is in accordance with the stipulation.' The king's performative act of appointment is also the central element in the surface of the inscription: it is inscribed in the lower part of column 18 and the upper part of column 19,[28] thus, wrapped precisely around a virtual central axis of the thirty-six-column long inscription (see Fig. 2). Given the shorter extension of the initial columns 1 to 13, this is not the exact middle point of the text as a composition of words, but the centre of the inscription as such. Other highly elaborate Egyptian inscriptions are similarly centred on their middle columns and, at times, wrapped around a virtual central axis.[29]

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27 This literary trope is found in Middle Egyptian literary texts of various periods (Eloquent Peasant B1 179–181; Teaching of Amenemhat 9a–d; Teaching of a Man to his Son 3.1–3; Lamentations of Ipuwer 5.8). The same pattern is also found in an earlier Thutmoside *Königsnovelle*, Ahmose's stela for Tetisheri 6–7 (Urk. IV 27.10–12) *sẖȝ.tw nn ḥr sy-ỉšst sḏd.tw mdt tn ḥr ỉḫ pty spr r ḥȝty=k* 'For which-what*sic* do you evoke this? Why is this matter being related? What has reached your heart?' (Stauder 2021, 114–117, specifically 116), with *sy-ỉšst*, literally 'which-what*sic*', itself a Sinuheism (Stauder 2013, 260–264).

28 Notice, incidentally, how the causal clause *ḥr-ntt sw ...* is fitted to the top of column 19.

29 Examples have been noted for the late Old Kingdom, Werre (Stauder-Porchet 2021b), Weni (study in preparation by this author), and Neferkare's letter to Harkhuf (Stauder-Porchet 2020b, 206–208). In the New Kingdom, the Kurkur stela (*c.* 1325 BCE; Darnell and Haddad 2003) has a thirteen-column-long inscription; *pr-ʿȝ*, 'Pharaoh', occurs only once, right on top of the central column 7.

One wonders to what degree the elements of layout just described would have been perceptible to ancient visitors. As they imply a relation between spatial layout and the words of the inscription, only the more limited group of visitors that were literate in hieroglyphs would have been concerned. Among these, ancient beholders might have had ways of engaging with inscriptions differently from ours. Perhaps, standing in front of an inscription, they would, at some point, have moved to its centre (here, cols 18–19)? Perhaps, they would have directed their eye to the interface between image and text (here, cols 13–14)? While such questions are ultimately unanswerable, the fact that such features of layout are found recurrently in elaborate inscriptions of various periods at least speaks to the idea that ancient designers deemed these important in making an inscription such as Qenamun's the sophisticated bidimensional object it is.

2.3 The inscription in its contexts

Qenamun's tomb (TT 93)[30] is part of a cluster of tombs belonging to the highest officials of the reign of Amenhotep II.[31] The time saw the construction of a series of increasingly monumental tombs, next to one another and gradually moving up the slope (Fig. 1, the tombs marked by the thinner black ovals): those of the vizier Amenemope (TT 29) and of the mayor of Thebes Sennefer (TT 96) earlier in the reign of Amenhotep II; those of the High Priest of Amun Mery (TT 95) and of Qenamun later in the reign of the same king. Qenamun's tomb is the most recent one in this restricted group, and the one located highest on the slope. It is also the most monumental, combining and amplifying features of the architecture of the tombs of both Sennefer and Mery, which themselves had already been amplifications of such features in earlier tombs nearby.[32] The interior of the tomb, moreover, had one of the finest decoration programmes of the time with a series of iconographic and technical innovations.[33]

On the west wall of the transverse hall, two images of the king seated in a kiosk flank the doorway to the corridor leading into the mountain. Such focal images of the king,[34] on which light falls through the entrance, attract the visi-

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30 Davies 1930.

31 Bavay 2010, 40; Gnirs 2018, 101, fig. 1 and 109–111.

32 Detailed analysis by Bavay 2010, 38–43.

33 On these, see Den Doncker 2019a, 180 and n. 34–36, with further references.

34 Also known as '*Blickpunktbilder*' or '*images de mire*'; see, further, Hartwig 2004, 55–73, 129–130, n. 66. More generally on representations of the king in tombs of the eighteenth dynasty, see Radwan 1969.

tors' attention and direct them further to the associated compositions. On the left-hand (southern) side of the west wall (W-S), the seated king presides over the ceremonial presentation of the New Year's gifts brought to him under Qenamun's supervision. On the right-hand (northern) side (W-N), the king presides over the audience scene with which the Appointment inscription is associated (W-N-1). Further to the right (W-N-2), a scene with three standing female musicians is identified by its textual caption as an occasion of Merriment in Perunefer. The musicians are oriented towards a canopy under which two officials, Qenamun and Pehsukher, stand in front of the king-to-be, Amenhotep – still a child but already wearing the full royal regalia. The king-to-be sits on the lap of his nurse, Amenemipet, Qenamun's own mother (see Fig. 3).

Fig. 3: Qenamun, the right-hand (northern) side of the west wall (W-N) (after Davies 1930, pl. 8–9).

The right side of the west wall (W-N), thus, falls into two roughly equal halves (W-N-1; W-N-2), also marked visually by the orientation of the seated and standing figures in each. Simultaneously, the wall W-N forms a unity both visually and semantically. It is bracketed symmetrically by the two images of the king in full regalia: seated in the kiosk next to the doorway; and seated on his wet nurse's lap in the canopy at Perunefer at the other end. Officials are seen standing, among them Qenamun, in front of both images of the king and king-to-be. Associated with the royal audience on the left, the Appointment inscription is an instance of a royal 'appearance' (ḫʿ; see Section 2.1); in the scene associated with the canopy on the right, the caption above the lute player, a song addressed to the king-to-be, celebrates the occasion as a 'king's appearance' (ḫʿt-

nsw).[35] In the Appointment inscription, Qenamun is appointed to 'chief steward in Perunefer' by the reigning king, who twice references times past when he was only a 'king-to-be' (*ỉnpw*, cols 8 and 19); the scene associated with the canopy is a scene of Merriment in Perunefer, presided over by the king-to-be.

The right side of the west wall (W-N), thus, expresses the dual source of Qenamun's exalted position: the king's appointment and his mother's proximity to the king-to-be. While most of the overall composition consists of pictorial scenes including their captions, the Appointment inscription is a massive textual inscription, making the king's words ever-present in Qenamun's space of self-celebration.

2.4 Possible ancient experiences

Given the analytic description above, possible modes of ancient engagements with Qenamun's Appointment inscription can be imagined. Visitors walking up the slope to Qenamun's tomb would have passed through a dense landscape of relatively recent monumental tombs, some of which they might have known or entered on their way. The dominant location of Qenamun's tomb and a sense of its increased overall monumentality would have primed any experience. Entering the transverse hall, the visitor would have immediately been drawn to the focal images of the seated king flanking the doorway on either side on the west wall. While light fell on these and their golden background through the entrance, the rest of the transverse hall was comparatively darker, with the ten massive pillars further reducing light. A light shaft was cut on either side of the façade just below the ceiling,[36] and visitors could have carried torches with them, adding a mobile source of flickering light. An innovative feature of the tomb is a protective, scented resin-made varnish covering the images and inscriptions,[37] probably enhancing the visual impact of the chromatic surface of the walls.

Given the conditions of lighting, the sheer extension of the walls and the ten pillars constraining movement, visitors would have been left with a sense that there was always more than the limited parts of the scenes and inscriptions that were fully visible to them at any one time in any one position. Moving along

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35 Davies 1930, pl. 9, the second column counting from the left (= Urk. IV 1396.10), *nfr-w[y] ḥr=k m ẖ'-t-nsw ḥtp.tỉ ḥr st-wrt{t}* 'Ho[w] beautiful is your face in the king's appearance when you rest on the throne!'.

36 Kampp 1996, 355, fig. 230.

37 Den Doncker 2019a, 181.

the wall from the right focal image of the king, they would have spotted the officials, one of them Qenamun and, associated with these, a textual inscription of monumental proportions; then, further to the right, a scene of merriment culminating in an image of the king-to-be seated on his wet nurse's lap in a canopy. Some earlier visitors would have known that the nurse was none other than Qenamun's own mother; all would have noted the symmetry between the two images of the king on the wall: a message regarding the sources of Qenamun's exalted position was, thus, conveyed visually. More fundamentally perhaps, moving through the monumental, colourfully decorated and unevenly lit space of the pillared transverse hall must have been an overwhelming experience: Qenamun's exalted position was, in this way, conveyed directly to the senses.[38]

Fig. 4: Qenamun, Appointment inscription, with the beginning of the scene of Merriment in Perunefer to the right. Note that the colours have not been restored (photograph Dimitri Laboury © Université de Liège).

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38 In studying the façades of funerary chapels in the Old Kingdom central necropolises, Betbèze 2021 very similarly addresses monumentality for its sensorial impact on a visitor.

Reading the Appointment inscription continuously would have been nearly impossible given the vertical extension of the columns, the presence of a pillar impeding movement backwards and the lighting conditions. A visitor literate in hieroglyphs could have spotted individual words or phrases. Longer segments, such as sentences, extend over a large part of a column or, worse, from the bottom of one column to the top of the next: the beholder is forced to move up and down on the unevenly lit wall and would easily loose track when moving from the bottom of one column to the top of the next. A text in columns is easily scanned when the columns are short, such as on a sheet of papyrus; when projected over the height of a wall that exceeds the frame of a human body and with limited space to walk back, columns of text are set against reading.

Visitors would have engaged with the inscription in fundamentally visual ways. They could have been struck by the format itself: the association of the inscription with a royal audience scene, its format largely in full-height columns, and the sheer horizontal and vertical extension of the inscription over the wall, making this a giant block of text. Similar formats are found in the nearby tombs of the viziers of the two preceding generations, Useramun and Rekhmire, and not elsewhere. Visitors who knew these two tombs would have seen Qenamun placing himself, through his inscription, in direct continuity to those viziers. Going further, they could then have sensed an intent on Qenamun's part to even surpass these earlier inscriptions in monumentality, just like the architecture of his tomb surpassed those of his predecessors.[39]

Independently of such indexical significant relations with other inscriptions, Qenamun's Appointment inscription would have been seen as a massive block of text in and of itself. The inscription, which extends vertically and horizontally beyond the visitor's bodily frame, is felt for its material presence in space. The sheer quantity of text inscribed vastly exceeds what is usually inscribed in any non-royal contexts: something extraordinary to an ancient visitor. The eye, moreover, is attracted by the individual, internally detailed and coloured signs and the overall bidimensional, shimmering surface of the inscription: on both levels, fascinated with the visual appearance of the inscrip-

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39 While Useramun's Appointment inscription develops over thirty-six columns, similar to Qenamun's, only five of these extend over the full height of the wall, against twenty-three full-height columns in Qenamun's inscription. The Royal Instruction to the Vizier extends over twenty-four columns in Rekhmire's tomb, twenty-one of which are in full height (the same text has a similar extension in Useramun's tomb, where only fragments survive). The Session of the Vizier extends over thirty-six full-height columns in Rekhmire's tomb, but is associated with a seated figure of the vizier, not of the king, and accordingly located away from the focal image of the king; see Section 3.3.

tion. The inscription is intended to overwhelm the senses and invites the visitor to become immersed in it.

3 The Vizieral Cycle in Useramun's tomb

As just noted, Qenamun's Appointment inscription, through its format, gestures to the inscriptions in the tombs of the viziers of the two preceding generations, Useramun (TT 131) and Rekhmire (TT 100). The vizier's office, which had been discontinued during the Theban seventeenth dynasty,[40] was reintroduced in the early eighteenth dynasty probably during the reign of Thutmosis I.[41] In this historical context, a powerful Theban family was able to retain the office over three generations until the very early reign of Amenhotep II with the viziers Aametju, his son Useramun and the nephew of the latter, Rekhmire.[42] The major part of Useramun's funerary chapel (TT 131)[43] was devoted to the self-celebration of the vizier, including his father, and, in direct relation to this, to the ideological presentation of the newly reintroduced office of the vizier. No less than four major textual compositions, listed below, are inscribed in the space of the transverse hall of TT 131, forming what can be termed a 'Vizierial Cycle'. The Appointment inscription is well preserved, if not entirely; Aametju's Teaching is severely damaged. The Royal Instruction to the Vizier and the Session of the Vizier are largely destroyed in Useramun's tomb, but recur in the tomb of Useramun's successor, Rekhmire, where they are almost entirely preserved. All four inscriptions are tightly associated with pictorial scenes to which they appear to be an expansion. The first three consist mainly of direct speech:

– Useramun's Appointment[44] — associated with an audience scene of the king seated in the kiosk with officials standing in front of him. The text tells of the need to find a successor ('a staff of old age') to the ageing vizier Aamet-

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40 Shirley 2013, 555–556.

41 A first clearly attested vizier is Imhotep, under Thutmosis I. Aametju seems to have been Imhotep's (direct?) successor under the same reign (Shirley 2010, 83; Shirley 2013, 550).

42 Shirley 2010, 83–98, figs 2–4.

43 On the two separated 'tombs' of Useramun, TT 131, the funerary chapel dedicated to public display, and, higher up on the hill, TT 61, the underground structure inscribed with funerary compositions, see Dziobek 1994.

44 Scene and text: Dziobek 1994, 73–75, pl. 17a, 19, 42–43, 72, 81; for the text specifically, Dziobek 1998, 3–21, pl. 1; Urk. IV 1380.9–1383.20; study: Helck 1955. The shorter Ramesside text on P. Turin 1878 vo, also dealing with Useramun's appointment and attesting to the historical memory of the vizier well after the early New Kingdom, is entirely distinct (Frère 2019).

ju, and the king's appointment of Aametju's son, Useramun, to this office. The textual composition is a developed *Königsnovelle*, marked by the characteristic incipit *ḫpr swt ḥmst nsw* (...) 'Occurrence, then, of a throne session of the king (...)'.[45]

– Aametju's Teaching to his son Useramun[46] — associated with an image of the seated vizier Aametju and Useramun standing in front of him. The textual composition is framed as a 'Teaching' (*sbꜣyt*) in the Middle Egyptian literary tradition, an instruction spoken by a father (Aametju) to his son (Useramun).

– The Royal Instruction to the Vizier[47] — associated with an audience scene with the king seated in a kiosk and the newly appointed vizier, Useramun, standing in front of him. The king addresses the vizier in a text beginning with *tp-rd rdy m ḥr n ṯꜣtî* (...) 'Principles laid upon the vizier (...)' (the text is commonly known under the modern label 'Installation of the vizier').

– The Session of the Vizier[48] — associated with an audience scene of the vizier seated in his office in the presence of his standing subordinates. While the three other texts are dominated visually by the figures of the seated king (Appointment, Instruction) or of Useramun's father (Aametju's Teaching), the Session of the Vizier is entirely centred on the vizier himself and does not include any direct speech. Instead, the vizier's function is profiled in the third person. The incipit *tp-rd n ḥmst n îmî-rꜣ nîwt ṯꜣtî* (...) *m ḫꜣ n ṯꜣtî* (...) 'Principles for the sessions of the mayor and vizier (...) in the vizier's office (...)' (the text is commonly known under the modern label 'Duties of the vizier').

3.1 Image–text relations: Useramun's Appointment inscription

As just noted, all four textual inscriptions are explicitly associated with pictorial scenes through their incipits. In addition, Useramun's Appointment inscription presents further elements of layout associating the inscription to the scene

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45 Stauder 2021, 102–104, 125–130.

46 Scene and text: Dziobek 1994, 75–76, pl. 18–19, 72, 82; text specifically: Dziobek 1998, 23–54, pl. 2. For a translation of this highly fragmentary text and a commentary, see Vernus 2010, 59–62, 70–73.

47 Scene and text: Dziobek 1994, 77–78, pl. 17b–c, 74, 84; text specifically, see Dziobek 1998, 55–66, pl. 3b; study: Faulkner 1955.

48 Dziobek 1994, 78–85, pl. 75, 85–86; synoptic text including the better-preserved versions in later tombs, see Davies 1943, pl. 119–122; study: van den Boorn 1988.

(Fig. 5). In the courtiers' second speech, the father–son succession of the viziers is justified rhetorically, notably through a homology with the father–son succession of the kings (and, beyond, with Horus succeeding to Osiris in the mythical sphere): column 24, 'His father was (...) at the time of your father Aakheperkare (= Thutmosis I) (...)'.[49] The succession is also argued for in general, metaphorical terms: column 28, 'It is the son who makes protection around his father; it is the flesh that makes carpentry for the bone (...)'.[50] The placement of both segments of speech are remarkable (see Fig. 5):

– After the shorter columns 1–23, above the audience scene, the passage quoted first is in the lower part of the first full-height column 24. It, thus, borders the audience scene to the left, being inscribed just next to the figure of the last official in that scene, precisely the vizier to be appointed, Useramun (Fig. 6d).

– Before the shorter columns 29–36, which occupy only the lower part of the wall, the second quoted passage is fitted precisely to the top of column 28. It, thus, borders the image of the temple of Amun, to the right, the target of a procession of the newly appointed vizier along with high officials.
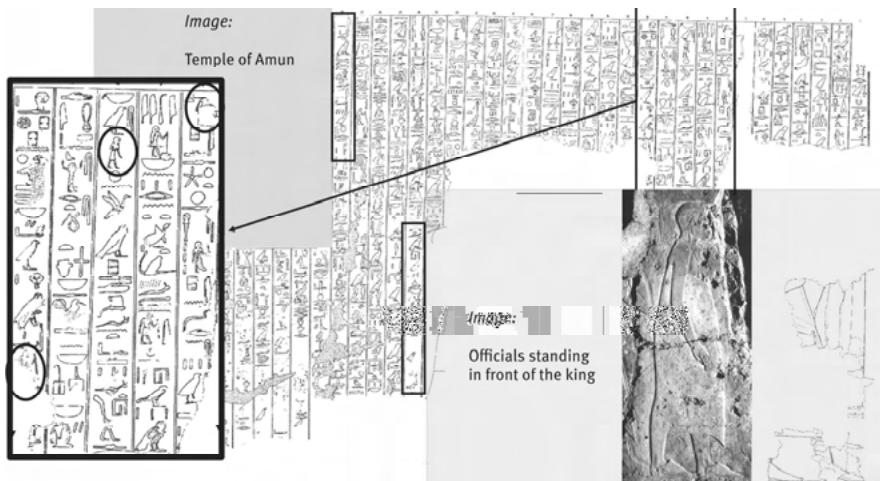
Fig. 5: Useramun's Appointment inscription (after Dziobek 1994, pl. 81 and pl. 43).

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49 In Egyptian: *wn ỉt=f m h̭ȝw ỉt=k ʿȝ-ḫpr-kȝ-rʿ* (...). For the mythical precedent: col. 23, *ḥtp=k ỉwʿt st ỉst ỉt=k pw ḥms.n=k ḥr nst=f* 'You (= Thutmosis III) occupy the inheritance of Isis's son (= Horus); your father is he on whose throne you have sat down'.

50 In Egyptian: *ỉn sȝ mkk h̭ȝ ỉt=f ỉn ḥʿw wḏrỉ n ḳs* (...).

Among the shorter columns above the audience scene (1–23), columns 8–12 describe the grounds for finding a successor to the ageing vizier Aametju in imaged terms: 'Old age (*i̓ꜣwt*) counts its hour (...) A little stoop (*ksw*) has alighted on his back (= Aametju's) (...) It is beneficial <for> your Dual Land that the attention be directed to a staff of old age (*mdw i̓ꜣwt*)'. The last expression, *mdw i̓ꜣwt*, is an overt allusion to the Teaching of Ptahhotep, the culturally most central expression of didactic poetry, dating to half a millennium earlier in the early Middle Kingdom (*c.* 2000–1900 BCE). Through the allusion, the succession of the viziers is inserted into an order sanctioned by tradition and the principle of the Maat.[51] Going further, *i̓ꜣwt* 'old age' plays with *i̓ꜣwt* 'office, function', in reference to the very object of the inscription, an appointment to office. The two occurrences of *i̓ꜣwt* 'old age' are at the beginning of column 8 and the end of column 12, marking a spot of text that sits precisely above the figure of the ageing vizier (Fig. 5). The word *ksw* 'stoop' is in the centre of that spot of text (col. 10; see also Fig. 6b). The two instances of *i̓ꜣwt* have the semantic classifier or determinative 𓀢 . *Ksw* has a similar classifier/determinative, without the staff of authority. All three echo the stoop of Aametju in the scene just underneath (Fig. 5 and 6h).

The designer would have been helped in fitting salient verbal contents to specific places in relation to the associated pictorial scene by the modularity of Egyptian hieroglyphic writing. Signs consist of phonograms (representing sound only), logograms (representing a word or a root, hence, sound and meaning simultaneously), and semantic classifiers or determinatives (representing [a class of] meaning only). This allows for most words both considerable compressions and expansions in spellings relative to the more common spellings.[52] In addition, the textual genre of the *Königsnovelle* is highly flexible; sections can be expanded or contracted, added or suppressed. Given such general possibilities, Useramun's Appointment inscription must have been composed with a view to its layout on the wall. In part, at least, this probably implies adjustments that would have been carried out directly on the spot, physically next to the inscription.

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51 Blumenthal 1987; Shirley 2005, 64–69.

52 An example is Sarenput I's autobiographical text, inscribed in two versions in his tomb at Qubbet el-Hawa (*c.* 1950 BCE), one around the doorway on the façade, another on a wall inside the funerary chapel. Both versions are fitted to the particular spaces of their inscriptions, resulting in a number of variant spellings (Favry 2003).

Figs 6a–h: Useramun's Appointment: impressions of a once magnificent inscription (courtesy Julianna Paksi, Université de Liège): (a) beginning of the inscription (cols 1–2), touching the royal kiosk on the right; (b) col. 10, *ksw* 'stoop'; (c) cols 22–26; (d) col. 24, lower part, with Useramun's back; (e) col. 27, upper part, *mdw iȝwt* 'staff of old age'; (f) cols 15–17, top; (g) col. 15, close-up; (h) the standing Aametju.

One is also led to ask is to what extent such subtle text-image arrangements could have been perceived by ancient visitors. The standing figures of the officials in the scene (Figs 5, 6d, 6h) would have been key for early visitors, the primary audience of the decorative programme of the funerary chapel. These would have formed a small group of people, some direct participants in or witnesses to the no doubt highly public event of Useramun's Appointment; others, having been told about it or party to similar occasions. The figures of the standing officials have roughly human size, making these easy targets of identification: visitors could have projected themselves into the scene to various degrees. Having noticed the stooped back of the ageing vizier, a visitor could then have looked up to the columns of text and spotted some of the hieroglyphic signs with a similar stoop. A visitor literate in hieroglyphs could have been enticed further to read the part of the inscription above the figure of Aametju, almost as

if this were, within the continuous text, a caption to that figure. Such a literate visitor could have been pleased with the various verbal and graphic plays on the terms *ỉꜣwt* 'old age' and 'office', and the associated Ptahhotepian background. Rather than reading the inscription as a continuous text (an unlikely eventuality as already noted in the case of Qenamun's Appointment inscription), a literate visitor could, thus, have engaged with specific spots in the inscription, attention being directed to those by the image of the ageing vizier beneath.

3.2 The inscriptions in space I: The right-hand side (northern half) of the transverse hall

A visitor entering the transverse hall of Useramun's tomb (Fig. 8) would have been drawn to the focal image of the king in the kiosk on the wall facing them (the west wall) to the right of the doorway (W-N-1). The audience scene and the associated Royal Instruction to the Vizier extend to the right over the full height of the wall. The columns of text are inscribed in retrograde writing (Fig. 7). This requires a brief note of explanation.

Animate signs face the beginning of the text in regular hieroglyphic writing (animate signs, thus, face right in a text that reads from right to left). More to the point, they face the reader, as if entering into a conversation with him.[53] This relation is reversed in retrograde writing: animate signs show their back to the reader rather than facing him. Retrograde writing is found mostly in texts written in columns. It is not uncommon in ritual and funerary texts inscribed in linear hieroglyphs (hieroglyphs that are simplified in form but without the distinct abbreviations and ligatures of hieratic), in some cases, at least, pointing to temple manuscripts.[54] Retrograde writing is otherwise motivated by an association with pictorial scenes, often with a kinetic dimension.[55] Signs, for instance, in netherworld books inscribed in royal tombs of the New Kingdom can be oriented like the figures in the sun bark, while the text itself unfolds in the direction in which the sun bark progresses;

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53 This is a general feature of hieroglyphic writing, both in ancient Egypt and in the Maya world, see Houston and Stauder 2020, 22–23.

54 Díaz-Iglesias Llanos 2023.

55 Retrograde writing, for instance, on some copies of a text known as the 'King as Sun-priest', thus, 'allows important sections of the text, especially the names of king and god, to be positioned next to the relevant images' (Simpson 2016, 337).

the signs, thereby, show their backs to where the text begins.[56] The autobiography of Ahmes son of Abana (Elkab 5), a text inscribed in the same decades as Useramun, contains signs which are oriented to the right similar to the standing figure of Ahmes, while the text begins next to the figure of Ahmes. Through the retrograde writing, the text is seen as emanating from Ahmes' figure speaking the text.[57]

A very similar situation is seen in the Royal Instruction to the Vizier in Useramun's tomb. The signs are oriented in the same way as the king seated in the kiosk, facing right. Through its retrograde arrangement, the textual inscription is seen as a materialisation of the king's speech, as if emanating from the king in the kiosk.

Turning to the opposite wall, the one to the visitor's back when entering (the east wall), stands another image of the king in the kiosk (E-N-1). An audience scene and the Appointment inscription, also over the full height of the wall, are associated with this secondary focal image. The writing is not retrograde here, nor could it be: the king speaks, but so do the courtiers addressing him; the inscription, moreover, is set in a narrative frame.
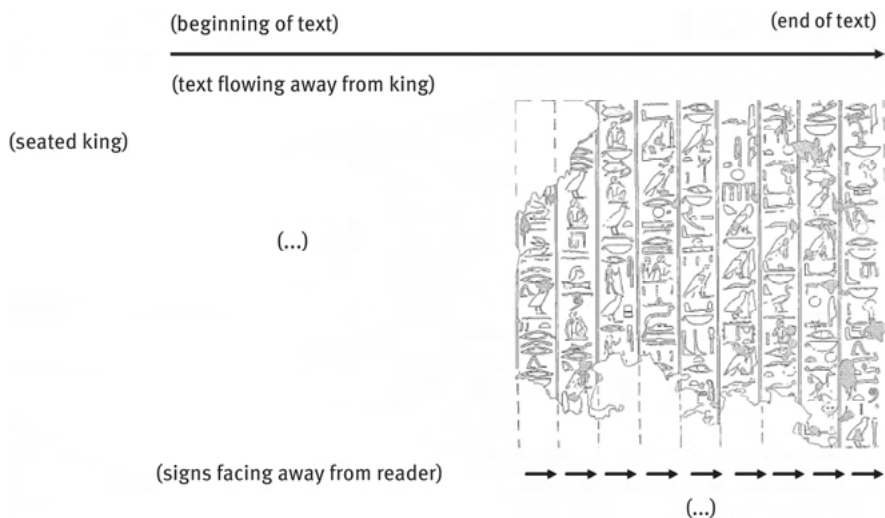
Fig. 7: Retrograde writing: Useramun, Royal Instruction to the Vizier, a larger preserved section in the upper part of columns 13–21 (after Dziobek 1998, pl. 3b).

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56 See further, Mauric-Barberio 2003.
57 Simpson 2016, 344–345.
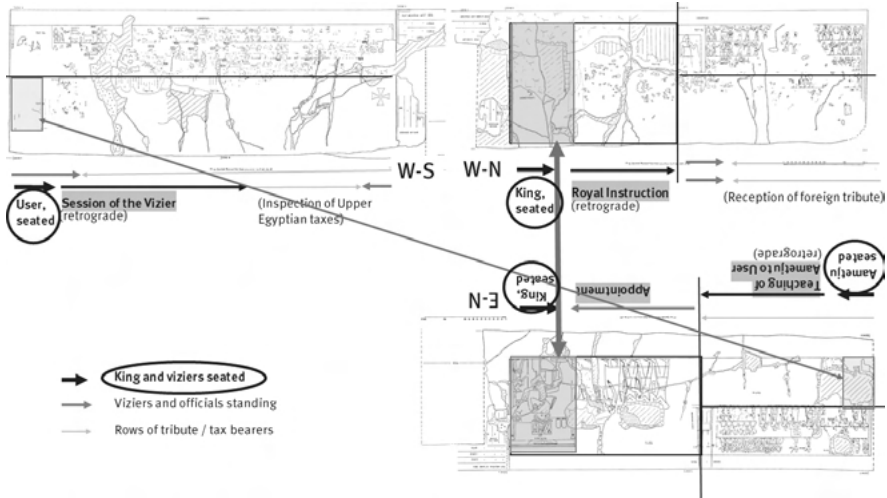
Fig. 8: The transverse hall of Useramun's lower tomb, TT 131 (after Dziobek 1994, pl. 72 + 74 + 75).

Moving further to the right along those two walls, a visitor would have seen further scenes with captions or extended inscriptions. On the rear wall (E-N-2), the newly appointed vizier is seen being instructed by his father, Aametju, on the lower register (E-N-2-low); the Teaching is inscribed in retrograde writing as if emanating from Aametju. On the upper register, the newly appointed vizier is seen leading a procession to the temple of Amun (E-N-2-high). On the opposite wall (W-N-2), the standing vizier is seen twice, in two similar registers, presiding over three rows of tribute bearers in each register (W-N-2-high and W-N-2-low).

Each wall is integrated visually into a whole. On the east wall, the image of the temple of Amun occupies a central position, binding together the three parts: the Appointment scene (E-N-1), the instruction by the old vizier (E-N-2-low) and the procession of the new vizier to the temple of Amun (E-N-2-high). On the west wall, the tribute bearers all move to the left, facing the two standing figures of the vizier (W-N-2 high and low); these are oriented to the right, in the same way as the seated figure of the king and the Instruction text emanating from it (W-N-1). The vizier, in receiving the tributes, is, thus, seen discharging the office he has been royally instructed into in the text. Facing one another, the two walls are symmetrical in their arrangement:

–   A secondary focal image of the king (E-N-1, on the rear wall, flanking the entrance that leads into the tomb) faces the primary focal image of the king (W-N-1, on the front wall, flanking the doorway that leads further into the mountain).

–   Both are associated with an image-text composition that extends over the full height of the wall (W-N-1, E-N-1).
–   The other half of each wall is divided into two superposed registers (W-N-2-high and low; similarly, E-N-2-high and low).

This overall parallelism between the two walls turns the northern half of the transverse hall into a space that envelops the visitor.

3.3 The inscriptions in space II: The transverse hall as a whole

The transverse hall of Useramun's tomb displays one further image-text composition that has something to do directly with the function of the vizier: a scene of the vizier seated in his office before his subordinates, associated with the text 'Principles for the Session of the Vizier', is on the left (southern) side of the west wall (W-S-2-low). The image-text composition is associated with a scene in which taxes from Upper Egypt are brought to the vizier for inspection (W-S-1-low; W-S-high over the whole length). The text of the Session of the Vizier itself is inscribed in retrograde writing: although not spoken by the vizier, it is presented visually as emanating from him, as if a materialisation of his agency.

On one level, there is a symmetry with the right (northern) side of the west wall (W-N): a seated figure (the king in W-N, the vizier in W-S) is associated with a textual inscription in retrograde writing flowing toward a series of tribute or tax bearers. But this symmetry is also broken on two levels. Unlike the seated king and the associated Royal Instruction to the Vizier, the seated vizier and the associated Session of the Vizier occupy only the lower half of the wall. Rather than next to the doorway, similar to the focal image of the king, the seated vizier and the associated inscription are placed at the very end of the wall, at the position farthest away from the doorway. While the Royal Instruction to the Vizier is associated with the primary focal image in the transverse hall, the Session of the Vizier is relegated to a relatively more discrete position.

The vizier stands before a seated figure of authority in the Instruction, the Appointment and the Teaching: the vizier's king, the king again, and the vizier's father, respectively. The vizier is seated, himself heading the scene, only in the Session of the Vizier. This is compensated by spatial separation: the Session is placed on a wall (W-S) on which there is no figure of the king and outside the royal northern space (W-N + E+N) described above. The Session is, in fact, placed at the greatest distance possible from any figure of the king, on the outermost position of that wall (W-S-2-low).

A four-part hierarchy is, thus, expressed through placement and size: Instruction > Appointment > (Father's) Teaching > Session:

– The royal scenes and associated inscriptions (the Instruction and the Appointment) are associated with the primary and secondary focal images, flanking the doorway to the corridor and the entrance, respectively, and occupy the full height of the wall.
– The non-royal scenes and associated inscriptions (the Teaching and the Session) are relegated to the corners of the wall, in the lower halves – with an internal difference: the Teaching is on a royal wall, the Session on a wall with no king.
– While the royal scenes face one another along the main axis of the tomb, the non-royal scenes are diagonally opposed across the transverse hall.

Visitors moving through the transverse hall would have experienced these hierarchies immediately in space, without the analytic mediation above. They would have been struck by the presence of many figures of authority and the remarkable fact that the vizier is visually profiled as one among these, if at the relatively lowest ranking. They would have been struck further by the number of textual inscriptions associated with each of these figures of authority and the sheer amount of continuous text inscribed in the transverse hall. On these combined accounts, the textual inscriptions would have had a strong impact – independently of any attempt at reading their verbal contents.

3.4 Royal inscriptional formats

In addition to their sheer extension and presence in space, the inscriptions present distinctive formats:

– They are associated with audience scenes showing a seated king with officials standing in front of him (Instruction; Appointment) or, in a derived form, with scenes headed by a seated vizier, father or son (Teaching; Session).
– The columns of the textual inscriptions can extend over the full height of the wall (Instruction; Appointment, in part).
– The inscription can be in retrograde writing, as if emanating from the seated figure, materialising his speech and/or agency (Instruction; Teaching; Session).

These combined features are not found elsewhere in non-royal inscriptions of the time. The one that comes closest is perhaps Ahmes son of Abana's autobiog-

raphy, mentioned above. The text is inscribed in retrograde writing, in forty columns over the full height of the wall, and extending horizontally over forty such columns. However, it is not associated with a throne session, and no figure of the king is seen; and it is not a *Königsnovelle*, nor are there any elements of royal speech.[58]

The combined features listed above are found, on the other hand, in Hatshepsut's funerary temple at Deir el-Bahari, located just a few hundred metres to the north of Useramun's tomb. A series of image-text compositions are inscribed on the middle portico of this temple: the Queen's Divine Birth, the Queen's Youth, the Queen's Proclamation and the Punt Expedition. These form a royal cycle, similar to the way in which the image-text compositions in Useramun form a vizierial cycle. The inscription of year 9 in the southern section of the middle portico shows an audience of the queen seated in front of her standing officials.[59] The queen's speech is inscribed in retrograde writing in columns extending over the whole height of the scene. The crowning inscription in the northern section of the same portico is another throne session in which the queen's father, the King Thutmosis I, speaks to present his daughter, the future queen, to the officials.[60] The textual inscription unfolds in full-height columns, in retrograde writing, as if emanating from the king.

The two spatially separate parts of Useramun's funerary complex present a series of royally inspired features. The funerary chapel at the foot of the hill of Sheikh Abd el-Qurna (TT 131) has a buttressed façade crowned by a pyramid, while the tomb proper, higher up on the hill (TT 61), has restricted, royal funerary compositions inscribed in the burial chamber.[61] Perhaps the separation into two parts could itself be seen as emulating the royal model of a separation between the funerary temple and the tomb. The Royal Instruction to the Vizier inside the funerary chapel (TT 131) consists entirely of royal speech addressed to the vizier. The genre of the Appointment inscription

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58 The inscription was made by Pahery, Ahmes's grandson, who could have been close or even party to the inner circle of Hatshepsut considering that his father, also named Pahery, was the preceptor of Wadjmes, a son of Thutmosis I (I thank Dimitri Laboury for discussion on this point.) The inscription, furthermore, includes ḫr-marked forms and constructions used narratively, which are a token of the somewhat artificial language cultivated in royal inscriptions of the time of Hatshepsut and Thutmosis III, and in other high-flown compositions of the time such as the vizier Rekhmire's autobiography (Vernus 1990, 62, n. 9 and 64, n. 28; Stauder 2013, 239–240).

59 Naville 1898, pl. 85–86.

60 Naville 1898, pl. 60–63a.

61 Dziobek 1998, 150 and 152–155, respectively.

itself is royally inspired: at the time of its composition, this is the first and only instance of a *Königsnovelle* focused on a non-royal participant and inscribed in a non-royal space.
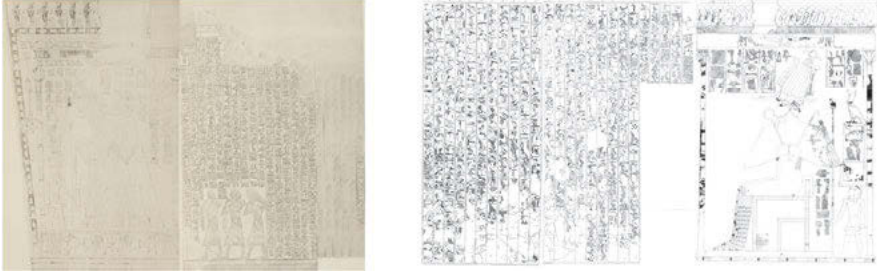
Fig. 9: A royal format: left, Hatshepsut's year nine inscription (after Naville 1898, pl. 85–86); right, the Royal Instruction to the Vizier, here in the better-preserved tomb of Rekhmire (after Davies 1943, pl. 13–15).

The king's presence is, thus, seen in the transverse hall of Useramun's funerary chapel on at least four levels simultaneously:
– through the primary and secondary focal images;
– through the inscription of royal speech, materialised by retrograde writing (the Instruction);
– through the inscription of a *Königsnovelle* (the Appointment), a quintessentially royal genre;
– and through inscriptional formats (the Instruction and the Appointment), pointing to the royal funerary temple at Deir el-Bahari.

Visitors entering Useramun's funerary chapel would already have noticed royal features on the outside. They would then, in the transverse hall, have been struck by the sheer quantity of inscribed text, by the material presence of the inscriptions and further by their format, different from those in other non-royal tombs. Some early visitors from the inner circle, such as Useramun himself, would have been familiar with the inscriptions at Deir el-Bahari, others not; the royal format of the inscriptions would have been clear to all. The textual inscriptions on the accounts discussed above are, thus, themselves images of the king's presence in the tomb, for all to be seen and felt.

4 Rekhmire: A further monumentalizing of the textual inscriptions

Rekhmire had two vizierial compositions inscribed in his tomb (TT 100), located just a few dozen metres to the south of his uncle Useramun's:[62] the Royal Instruction to the Vizier[63] and the Session of the Vizier.[64] The Session of the Vizier is found again in the nearby tomb of Amenemope (TT 29), Rekhmire's successor and one of the 'new men' of the reign of Amenhotep II. The tomb is unfinished, so that it remains open whether the Royal Instruction to the Vizier was intended to be inscribed there as well or not.[65] The Royal Instruction to the Vizier is found one more time in the tomb of Amenemope's successor Hepu (TT 66; reign of Thutmosis IV),[66] while the Session of the Vizier recurs roughly a century later in the tomb of Paser (TT 106; reign of Ramses II) as part of an inscriptional programme that more generally demonstrates an antiquarian interest by the tomb owner.[67] Rekhmire places himself in the continuity of his uncle, Useramun, by inscribing these two compositions; similarly, later viziers would place themselves in this illustrious lineage. The Appointment inscription and Aametju's Teaching are not taken over as both reflect the specific nature and context of the father–son succession: Aametju–Useramun.

The transmission does not concerns the texts in isolation, but the integrated image-text compositions over the space of a wall; thus, from Useramun to Rekhmire:[68]

– Useramun, W-N → Rekhmire, W-S: the king in the kiosk with the Royal Instruction to the Vizier with the associated scene of the vizier receiving foreign tribute on behalf of the king;

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62 Primary publication of the tomb and its inscriptions, see Davies 1943.

63 Scene and text: Davies 1943, 15–17, pl. 13–16. Synoptic text (Useramun, Rekhmire, Hepu) by Davies 1943, pl. 116–118; also Urk. IV 1085–1093 (Rekhmire, with Useramun and Hepu presented as variants). Study: Faulkner 1955.

64 Scene and text: Davies 1943, 30–36, pl. 24–28. Synoptic text (Useramun, Rekhmire, Amenemope) by Davies 1943, pl. 119–122. Study: van den Boorn 1988.

65 The publication of the tomb and its inscriptions is in preparation by the Mission Archéologique de la Nécropole Thébaine (Université de Liège and Université libre de Bruxelles) under the direction of Laurent Bavay (archaeology) and Dimitri Laboury (decoration programme). For the time being, see the synoptic text in Davies 1943, pl. 119–122.

66 See the synoptic text in Davies 1943, pl. 116–118.

67 Dimitri Laboury (personal communication).

68 Den Doncker 2017, 349–351; Den Doncker 2019b, 261–266.

– and Useramun, W-S → Rekhmire, E-S: the vizier in his office with the Session of the Vizier with the associated scene of the inspection of Upper Egyptian taxes.

The placement of the scenes is shifted from one wall to the next by a principle of minimal dissimilation. The Royal Instruction to the Vizier, being associated with a focal image of the king in the kiosk, is moved from the right to the left of the doorway on the west wall (W-N → W-S). The Session of the Vizier is accordingly moved to the opposite east wall (W-S → E-S); the figure of the seated vizier remains at the end of the wall, away from the passage.

4.1 Extending all vizierial compositions over the full height of the wall

One major innovation in Rekhmire's transverse hall relative to Useramun's is that the vizierial image-text compositions are all extended over the full height of the wall in a single register (Figs 9–10). The standing figure of the vizier in the Reception of Foreign Tribute now occupies the whole space below the extended textual caption, contrasting with Useramun's realisation with two superposed, smaller standing figures of the vizier. Even more spectacularly, the seated vizier in his office and the associated inscription of the Session of the Vizier now occupy the whole height of the wall, against Useramun's realisation in the lower half of the wall.

The designer of Rekhmire's tomb pushed the visual integration of the walls even further than in Useramun's tomb by a series of changes. After the text of the Royal Instruction to the Vizier, he added figures of officials, including the vizier, moving out of the audience (W-S-1, left end). These seem to move to a second figure of the same vizier, the one that presides over the Reception of the Foreign Tribute (W-S-2, right end). The dynamic directionalities, already strong in Useramun's realisation, are, thus, pushed even further: flanking the doorway, the king is oriented to the left; so is the flow of his speech in retrograde writing (the Royal Instruction to the Vizier); so are the figures exiting the audience, to the left of the text, as if they were, quite literally, exiting the massive surface of text in front of him (the Instruction); and so is the second standing figure of the vizier, to which all tributes move in the opposite direction.
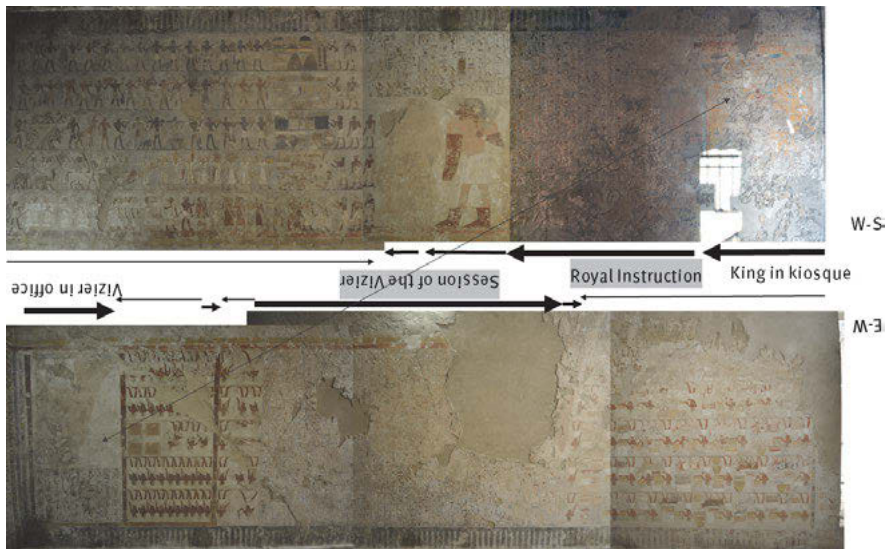
Fig. 10: Rekhmire, the left-hand (southern) part of the transverse hall (photograph Dimitri Laboury © Université de Liège).
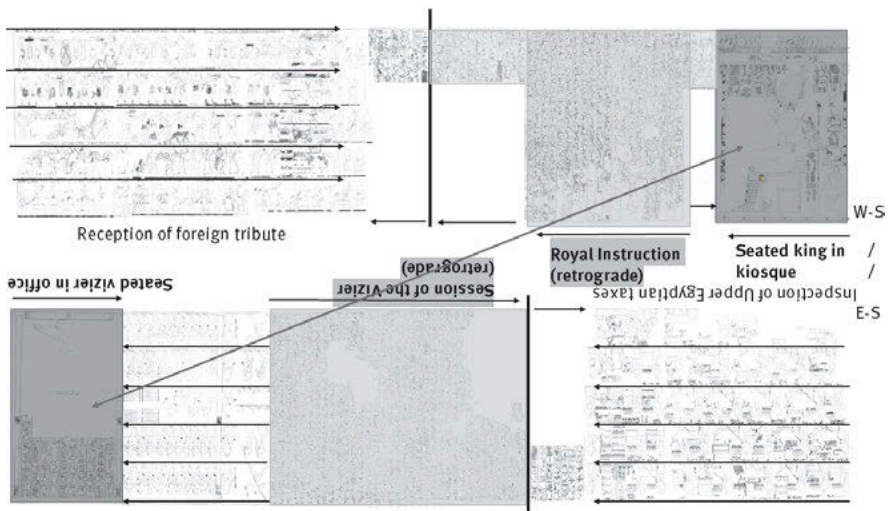
Fig. 11: Rekhmire, the left-hand (southern) part of the transverse hall (after Davies 1943, pl. 13–32).

Five rows of bearers of produce from Upper Egypt are shown on the opposite wall (E-S) (against two times three rows in Useramun, where the equivalent part of the wall W-S was split over two registers), while five rows of subordinates stand before the seated vizier. The rows of marching produce bearers and standing subordinates, all converging towards the seated vizier, are, thus, aligned horizontally, on either side of, and, therefore, as if traversing, the full-height block of textual inscription of the Session of the Vizier. This massive surface of textual inscription, in retrograde writing, is oriented in the opposite direction, similar to the dominant figure of the vizier from which it is seen to emanate. Linguistically, the text consists mainly of focusing constructions expressing that the vizier is the source who sends out people and information or the goal to which these are sent back ('It is he who (...)'; 'It is to him that (...)'). This dynamic centrality of the figure of the vizier, reflected visually by the two opposite directionalities that integrate the whole wall, would have been immediately understood by any visitor, even without reading any part of the textual inscription.

4.2 A vizierial space in the southern half of the transverse hall

The southern part of the transverse hall forms a dynamic space defined by extensive parallelism between the two walls, W-S, E-S. Concentrating on the main elements only:

– W-S shows the seated king in the kiosk and, emanating from him, the inscription of the Royal Instruction to the Vizier in retrograde writing; then five rows of bearers of foreign tribute marching in the opposite direction.
– E-S shows the seated vizier in his office and, emanating from him, the inscription of Session of the Vizier in retrograde writing; then five rows of bearers of Upper Egyptian taxes marching in the opposite direction.

This parallelism between the wall dominated by the king (W-S) and that dominated by the vizier (E-S) creates a space in which the visitor is made to experience how the vizier's agency stands in prolongation to that of the king. The northern space (to the right when entering the tomb) in Useramun's transverse hall consisted of two walls both dominated by the king (W-N, with the Instruction; E-N, with the Appointment). The southern space, to the left, when entering Rekhmire's tomb, shows even more extensive parallelism, here, between the king and the vizier himself. The rules of decorum are teased to the maximum, yet preserved by the spatial separation: while the king is a focal image flanking the doorway, the seated vizier is placed on the other end of his wall, at a maximal distance from the king, and not as a secondary focal image (see Fig. 11).

The vizierial programme in Rekhmire's tomb demonstrates a deliberate intent at increasing monumentality relative to Useramun's tomb.[69] This is not due to the increased size of the transverse hall – which has roughly the same ground plan in both tombs – but the combined effect of a series of changes in Rekhmire's tomb, discussed above: the full height of all scenes and textual inscriptions on both walls; the even stronger directionalities extending over the entirety of both walls; and the higher parallelism between the walls.

5 Conclusion

The very long texts inscribed in the tombs of Useramun, Rekhmire and Qenamun are rhetorically complex configurations of words, deeply embedded in the written and literary culture of their time. As such, they are legitimate and fascinating objects of philological study. But this is not how the inscriptions on the walls of the funerary chapels were primarily meant to be engaged with in ancient times, notwithstanding the possibility that the texts could have been performed verbally on occasions.

The walls on which the extended texts are inscribed are thoroughly integrated, notably through directionalities spanning across the scenes and textual inscriptions, with the often retrograde orientation of writing playing a major role. Symmetries between opposite walls bring about a sense of an enveloping space. The dynamic integration on the walls and the parallelism between these in Rekhmire's tomb are enhanced further relative to Useramun's model, bringing about an even greater sense of monumentality, without the space being any larger.

The inscriptions were intended to be seen to point to other inscriptions through their format: the royal texts in Useramun's tomb (the Royal Instruction to the Vizier and the Appointment) to inscriptions in Queen Hatshepsut's funerary temple nearby; the texts in Rekhmire and Qenamun's tombs to Useramun as a model to be emulated. The sheer quantity of inscribed text – higher than in any other comparable context of the time – would itself have made no small impression on any visitor, and, thus, been a central part

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69 A similar intent is seen in the same tomb in the long corridor, with its ascending ceiling. In relation to Rekhmire surpassing his predecessor Useramun, Alexis Den Doncker speaks of a 'grandeur mannerism' (Den Doncker 2017, 346–349; Den Doncker 2019b, 261–266).

of the message. The inscriptions, often inscribed in retrograde writing, would have been seen as giant surfaces of words emanating from the dominant figure (the king or the vizier) – as materialisations of their speech and/or agency. The royal presence could no doubt be strongly felt in the inscribed spaces.

The inscribed columns of text, in many cases extending over the full height of the wall, exceed the bodily frame of the visitor both vertically and horizontally. The beholder, moreover, is fascinated by the individual, colourful and internally detailed signs (Fig. 12) and drawn into the shimmering tapestry of the overall, bidimensional surfaces of the inscriptions (Fig. 13) – on both accounts, attracted away from the signs as mere surrogates for linguistic meaning. More than through a discursive verbal argument, the inscriptions in the broader decorated spaces speak to the senses, providing an overwhelming expression of the high officials' exalted position. Monumentality, here, is not just a matter of size but an embodied, immersive experience.

Fig. 12: The Session of the Vizier, close up (photograph Dimitri Laboury © Université de Liège).

Fig. 13: The Session of the Vizier (photograph Dimitri Laboury © Université de Liège).

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Philippe Clancier

The Scholar in His House: Scribal Material in Context in Late Uruk Private Houses

Abstract: The excavation of private houses in Uruk has led to the discovery of scholarly tablets in an archaeological context. The sector concerned, named Ue XVIII, shows three different levels of occupation (II, III and IV) with houses belonging to two successive families of exorcists: the descendants of Šangi-Ninurta (end of the fifth century, beginning of the fourth) and Ekur-zakir (fourth to third centuries). The texts and the objects linked to them enable us to understand that these houses were those of master exorcists who taught their knowledge to students, primarily their sons, in their houses. However, the oldest of the two families disappeared at the end of the Achaemenid period. It is possible that this event was contemporary with the destruction of the house on Level III by fire. Although this concomitance cannot be established with certainty, it is possible that this violent fire is to be placed in parallel with a possible revolt of the city of Uruk against the Achaemenid power, which would then have been put down by Darius III.

1 Introduction

Late Babylonia, i.e. the Achaemenid, Hellenistic and Parthian periods from the end of the fifth century[1] to the beginning of the common era, has provided numerous scholarly tablets, notably at Babylon and Uruk. Many of these objects were unearthed by clandestine diggers during the nineteenth and twentieth centuries. They were sold on the antiquities market, and arrived in large numbers in museums around the world. There are approximately 3,500 tablets dated or datable from Babylon and 1,500 from Uruk relating to the very end of the Achaemenid period and the Hellenistic and Parthian periods.[2]

However, few sites have been officially excavated for as long as Uruk. Indeed, German archaeologists began their first official excavations on 14 November 1912. They had to stop in 1913 and resumed only in 1928 for regular excavations until 1939. Excavations resumed again after World War II and have continued to this day under the direction of Margaret van Ess (Deutsches Archäologisches Institut). Tab-

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1 All dates are BCE.

2 Monerie 2018, 6–17.

lets were unearthed at the site of Warka, ancient Uruk, both in sanctuaries and in private houses. This distribution sheds light on the origin and use of private tablet collections.[3] Within the topic of the materiality of texts, I would like to introduce two private houses containing scholarly tablets that constituted some sort of 'libraries'[4] or, at least, private collections of scholarly tablets.[5]

These two sets of tablets were found, stratigraphically, one above the other, the older one dating to the end of the fifth and the beginning of the fourth century and the later one to the end of that century and the third century. These two successive buildings belonged to two families of exorcists, *āšipu* in Akkadian, and document the scribal practices in private houses of people who otherwise worked for the nearby sanctuaries.[6] One of the problems still unsolved is the length of time the house belonged to the oldest family, the descendants of Šangi-Ninurta, which disappeared during the fourth century, before the arrival of Alexander.[7] This issue has been addressed regularly by many authors. However, the lack of documentation does not allow us to answer this question. According to the data of literary and scholarly tablets, the descendants of Šangi-Ninurta were active one generation before Darius II (423–405) and at least one generation after his reign (see Fig. 1a).[8] The descendants of Ekur-zakir are attested without doubt from Philip III Arrhidaeus (323–316) and still in the third century (see Fig. 1b). The administrative and economic texts reinforce this chronological framework.

It is ultimately quite rare to have not one but two collections of scholarly tablets kept in the same place, one following the other. The aim of this article is to find out whether, by working on the tablets and their material context, it is possible to reconstruct the history of these families and, more generally, of Uruk in the fourth century.

After the presentation of the finds themselves, their state of preservation and the problems encountered in reconstructing the different tablet collections, I will address the purpose of these scholarly tablets kept in private houses. Fi-

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3 Frahm 2002, 81–85.

4 For a presentation of what Assyriologists call a 'library', see Robson 2019b.

5 For the excavations in Ue XVIII (the sector of the houses), see Hunger 1972; Hunger 1976; Schmidt 1972a; Schmidt 1972b and Schmidt 1979; Hoh 1979; Sack 1979.

6 While the inhabitants of the second house, the descendants of Ekur-zakir, worked for the Rēš temple, the exact situation of those of the first house, the descendants of Šangi-Ninurta, remains unknown (Robson 2019a, 223 and 232). Indeed, there is a hiatus between the time when the new main temple of Uruk, the Rēš temple attested in the beginning of the third century, and the assured end of the use of the Eanna in the fifth century.

7 Clancier 2009, 52–53.

8 See Frahm 2002, 79, for this family clan.

nally, the transition from one house to another and from one family to another raises the question of the reasons for this development.
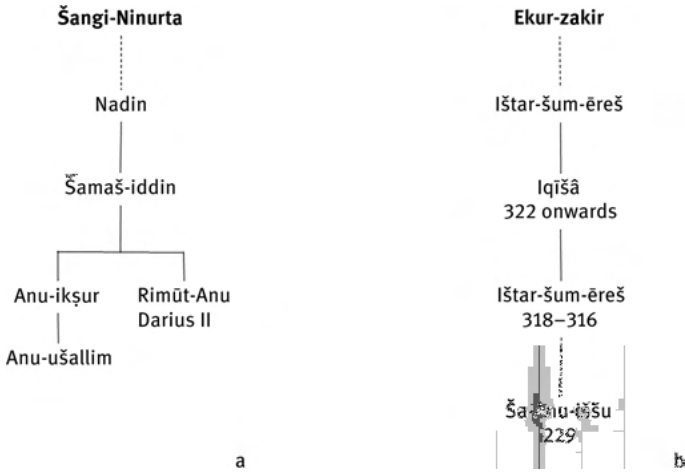
Fig. 1a–b: The descendants of Šangi-Ninurta tree (a). The descendants of Ekur-zakir tree (b).

1.1 The discovery

Random discoveries on the site of Warka has advanced our knowledge of private libraries compared to temple libraries. The archaeological sector of the temple was regularly looted, while the private houses were probably less easy to identify. Indeed, many of the tablets originally preserved in the libraries of the Rēš and Ešgal (also called Irigal) temples were unearthed by illicit excavators and then sold.[9] Therefore, we do not know their initial context of discovery. However, the German excavators brought to light a collection of tablets containing the library of the *kalûs*, the lamentation priest of the Rēš temple.[10] The two best preserved and documented finds were unearthed in another part of the

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9 Thus, tablets belonging to Iqīšâ (Ue XVIII, Level II of the house) or to Anu-bēlšunu (Le XVI3, *kalûs*'s library of the Rēš temple) entered the collections of some museums, such as the Louvre, at the end of the nineteenth century after having been bought from tablet dealers in Baghdad (e.g. TCL 6, 17, 34 and 50). The reconstitution of the Uruk libraries has often been carried out by integrating these tablets with the collections discovered in regular archaeological excavations. These are theoretical reconstitutions and not tangible ones, as the colophon of a tablet does not always indicate its actual place of preservation (see *infra* 3.3 for examples).
10 This library will not be discussed here. See Clancier 2009, 73–80 and 99–101.

city, sector Ue XVIII to the east, south-east of Uruk.[11] Today, it is commonly referred to as the house or houses of the exorcists or *āšipu*. Official excavations were undertaken in this area between 1969 and 1972.[12] They revealed several levels of occupation of which three are relevant here (Fig. 2).

Fig. 2: Hellenistic Uruk, from Lenzen 1965, pl. 27.

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11 Sack 1979, 48–50; Oelsner 1986, 77–97; Pedersén 1998, 207.
12 Schmidt 1972b, 56.

1.2 The three levels of the exorcists' houses

The houses of the exorcists were located in a sector that was occupied for centuries by scholarly families. We will look at the later levels, but earlier phases, less clear due to stratigraphic upheavals, are also attested up to the sixth century. We will, therefore, focus on the following three levels:

<div align="center">

Level IV
Descendants of Šangi-Ninurta
Darius II (423–405) and one generation earlier and one later at least

Level III
Owner unknown
Destroyed by fire, the debris of which marked a clear dividing line with Level II

Level II
Descendants of Ekur-zakir
Philip III Arrhidaeus (323–316) and two generations later and maybe one earlier[13]

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1.2.1 The house of the descendants of Šangi-Ninurta (Level IV)

Level IV, the house of the descendants of Šangi-Ninurta,[14] yielded tablets scattered on the floor, and several jars contained tablets in room 4,[15] measuring 2×1.6 m. Thirty-two of them were intact – or nearly so – with scholarly content and at least twenty-three legal documents.[16] Other tablets were not kept in a container, but were all piled on top of each other directly on the floor.[17] Ovens have been uncovered in this house and it is possible that they were used to bake tablets, as proposed in the later levels.

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13 Oelsner 2001, 485.
14 This family clan is only attested in the texts of the first house (Level IV) and nowhere else in Uruk.
15 Hoh 1979.
16 von Weiher 1979, 95.
17 Sack 1979, 49.

Va XVIII1
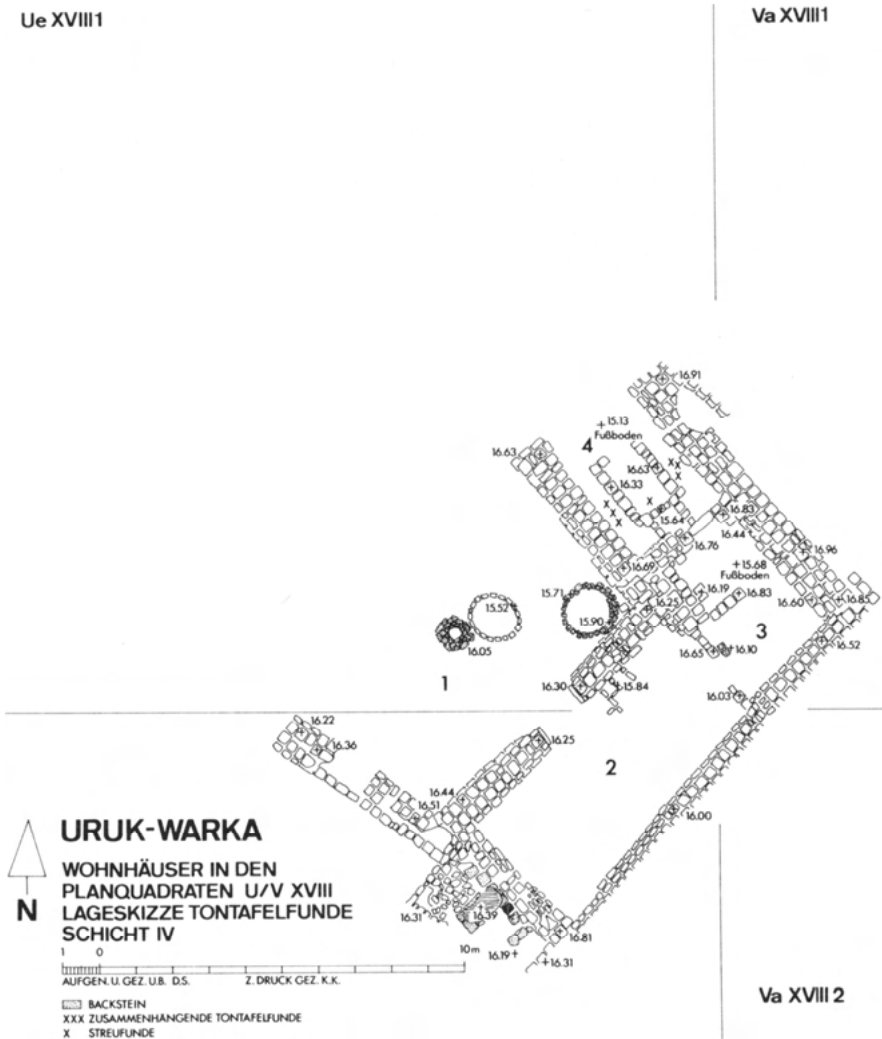
Fig. 3: Ue XVIII, Level IV. House of the Šangi-Ninurta family, from Hoh 1979, pl. 70.

The complete reconstitution of the group of tablets belonging to this level remains complicated due to the intrusions of Parthian tombs, which disturbed the different stratigraphic layers. We can still propose that, at least, 131 tablets belonged to Level IV. The period of use of this house is very difficult to ascertain

because very few scholarly tablets are dated and the attribution of the legal texts to the family is debated.[18] Its use, according to the textual and archaeological data, extends from *c.* 445 until before the Hellenistic period beginning in 331 at Uruk. Anu-ikṣur, son of Šamaš-iddin, is the main owner of this collection, but his father, Šamaš-iddin, brother, Rimūt-Anu and son, Anu-ušallim,[19] are also attested. The generation of Anu-ikṣur dates to the reign of Darius II (423–405).[20]

1.2.2 The house of the descendants of Ekur-zakir (Level II)

Level II contained the best-preserved and most recent stage of the exorcists' houses, but due to erosion, we can only make a very partial picture of this house.[21]

A niche in the north-west wall of room 1 was filled with baked scholarly tablets of various sizes. They were placed edge to edge. To the best of my knowledge, there was no record of the arrangement of the tablets in relation to each other. It seems impossible even today to know which tablets were kept in this niche.[22]

Another group of tablets was found in the filling to the south-west of the room. In addition, fragments of baked tablets were scattered on the floors of other rooms.[23] In its early state, room 3 had an oven with a baked brick base, near which other baked tablets were found.[24] Four roughly shaped tablets and three more carefully shaped ones were also found against its north-west wall. The most likely function of the oven, according to the excavators, was the baking of the tablets.[25] It seems, therefore, that the scribes of the house were involved in all stages of the production, from the shaping of the tablets, their

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18 On the question of archival texts, their dating and attribution in late Babylonian Uruk (and elsewhere), see Joannès 2001; Hackl and Oelsner 2017; Hackl and Oelsner 2018 and *infra* 2.2.3.

19 Anu-ušallim (l. r.56') wrote the first tablet of the series *Šumma izbu* (SpTU 3, 90) for his father Anu-ikṣur.

20 The tablet SpTU 5, 232 shows that Rimūt-Anu, brother of Anu-ikṣur, was active under Darius II.

21 Hoh 1979, 29.

22 Hermann Hunger does not give this data either in the excavation publication (1972) or in the tablets' edition (Hunger 1976, 9–13).

23 Hoh 1979, 30.

24 Hoh 1979, 29.

25 Hoh 1979, 30.

writing and their baking for preservation. There was a 10 cm layer of ashes, perhaps resulting from the cleaning of the oven, in the adjoining room 4.
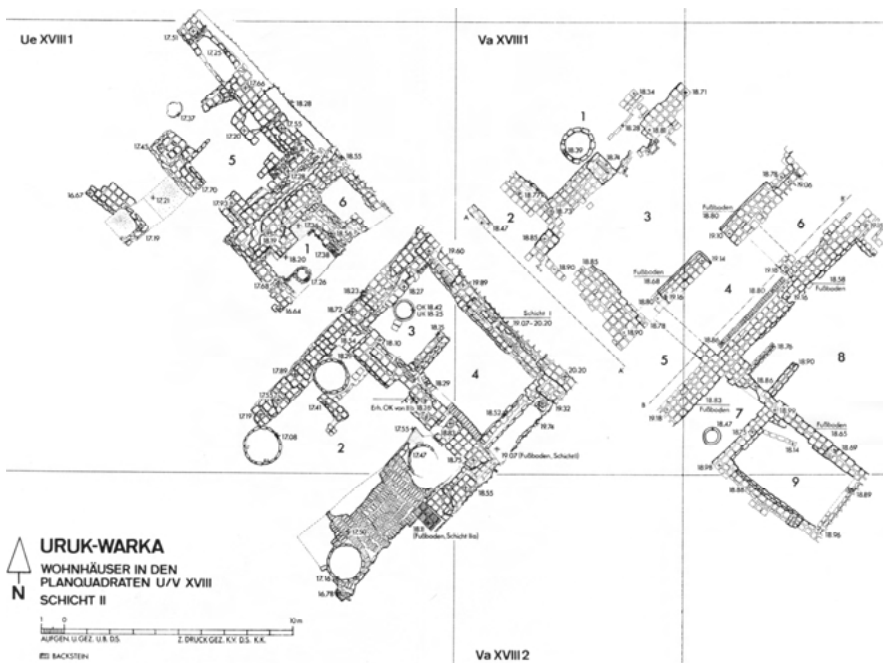
Fig. 4: Ue XVIII, Level II. House of the Ekur-zakir family, from Hoh 1979, pl. 68.

It is possible to assign 157 tablets to Level II.[26] The period of use of this house extends, at most, from the beginning of the Hellenistic period to the end of the third century (229).[27] The main protagonist, Iqīšâ, son of Ištar-šum-ēreš, descendant of Ekur-zakir, is to be dated from the reign of Philip III Arrhidaeus (323–316) to the beginning of Seleucus I (305–281)[28] and the family is attested there until the end of the third century. This family clan was also devoted to exorcism (*āšipūtu*).

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26 Clancier 2009, 84–85 and 400–406. Robson 2019a, 229, proposes 230 tablets for the descendants of Ekur-zakir of the Level II, adding administrative and legal texts. It is quite difficult to assign a tablet without dating or colophon and not discovered in connection with a floor to a specific house due to the disturbance of the later Parthian graves. This situation explains the differences between evaluations from one author to another.

27 SpTU 4, 157.

28 Legal texts SpTU 5, 308, 309–311.

1.2.3 The house of the descendants of Ekur-zakir (Level III)

The older house (Level IV), the one of the descendants of Šangi-Ninurta, was voluntarily levelled and totally rebuilt (Level III). No hiatus has been identified between the two Levels IV and III: the complete reconstruction was probably necessitated by the decayed state of the building.
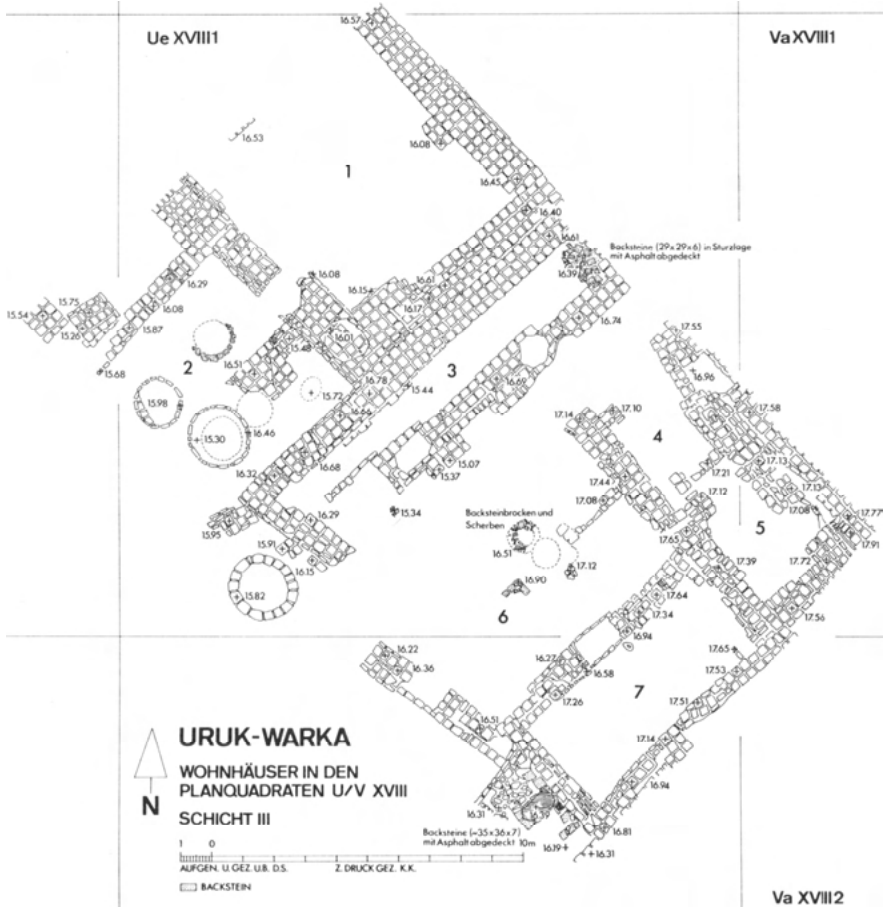
Fig. 5: Ue XVIII, Level III, from Hoh 1979, pl. 69.

Level III separated Levels II and IV. It was very disturbed.[29] An asphalted working surface, built with bricks, was to the south-west of room 7, near a Parthian grave. The excavators uncovered small preformed proto-tablets of fine, dark clay on and around this surface. They also found stylets and flat bone 'needles' as well as unbaked uninscribed tablets with lines already drawn in room 3, without recording their precise location.[30] Level III was generally, and despite the details mentioned above, heavily disturbed by Parthian burials to such an extent that the tablets were scattered there without any order or real context.[31] In addition, the mixes of tablets between the collections of Levels II, III and IV are numerous. This leads to 119 tablets that cannot be attributed to one house or another. Some of them could have come from Level III. Moreover, the house was destroyed by fire, whose debris marked a rupture with Level II.[32] The difficulty of attributing tablets to Level III may be due to the fact that the house was perhaps deliberately set on fire and possibly emptied of valuables and useful items, such as the tablets, it might have contained.

So, the problem is to understand which family occupied Level III. Was it the last generations of the descendants of Šangi-Ninurta (Anu-ušallim and his potential descendants?) or those of Ekur-zakir (maybe the father of Iqīšâ?)? A few dated tablets were found there but apparently without connection to a floor, which would make it possible to be certain that they belonged to this level. Nevertheless, two dated legal tablets have been attributed to Level III: SpTU 5, 307 and SpTU 5, 295. They are from Artaxerxes IV (338–336), year 0,[33] and Darius III (336–330), year 4, respectively. Although this last text could also be dated to Darius II (423–405), the dating by Darius III is proposed by Joachim Oelsner[34] because he considers that the same scribe, Anu-erība, son of Ištar-šum-ēreš, wrote the two texts, which, thus, should be dated within a limited span of time. However, Egbert von Weiher, the editor of the tablets, does not read Anu-erība

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29 Sack 1979, 48–49; Kose 1998, 385–386. Dorothee Sack points out that it was not possible to properly record the architectural remains of Level III due to a lack of time at the end of the thirtieth excavation campaign. Arno Kose has taken up the issue again, but the archaeological data remains difficult to interpret. He reports the existence of fire-reddened Level III walls in room 8 and Sack, before him, spoke of a fire layer, the debris of which marked a dividing line with the later Level II.

30 Hoh 1979, 28.

31 Oelsner 1986, 141–144.

32 Sack 1979, 48–49.

33 The tablet SpTU 5, 307 is dated to the last year of Artaxerxes III's reign (338), year 21, and by the inaugural year (*rēš šarrūti*) of Artaxerxes IV, i.e. his year 0.

34 Oelsner 2001, 485, followed by Hackl and Oelsner 2017, 75.

in SpTU 5, 295, but Bel-erība. The copy unambiguously shows a '[d]en' for 'Bel' and not a '[d]60' for 'Anu'.[35] In order to decide between the two readings, it will be necessary to go and check the tablet in Baghdad. For the time being, it seems reasonable to give some credit to von Weiher's copy and, thus, consider that we have two different scribes.

Joachim Oelsner[36] and Johannes Hackl,[37] following him, have proposed that both tablets were written by a member of the family of the descendants of Ekur-zakir. Indeed, Anu-erība and Bel-erība (whose name has been discarded by the authors) call themselves 'son of Ištar-šum-ēreš'. This name is well-known for the descendants of Ekur-zakir since it is the one of both the father and the son of Iqīšâ, the main protagonist of the Level II house. Therefore, Oelsner proposed potentially identifying Anu-erība as a brother of Iqīšâ.[38] It is quite possible, but Ištar-šum-ēreš is a very common name in Uruk and without the ancestor's name, which is absent, and in the very disturbed archaeological context of Level III, it is risky to attribute these two texts to the last resident family. Indeed, the descendants of Ekur-zakir are only known to have been active in the house (Level II) from Philip III Arrhidaeus (323–316) onwards. In that case, the Ekur-zakir clan would have occupied the sector at least fifteen years earlier (which is not impossible) and they would have lived in the house that belonged to a previous level (Level III) which was destroyed by fire.

The attribution of this Level III house to the descendants of Ekur-zakir is all the more difficult to establish because at least one text, SpTU 2, 56,[39] found with the two tablets is ascribable to the Level IV corpus.[40] SpTU 2, 56 is a contract written in Babylon by Libluṭ, son of Marduk-naṣir, descendant of Gimil-Nanaya, and dated to the beginning of the reign of the Babylonian king Amēl-Marduk (562). This document must be related to the other tablets from descendants of Gimil-Nanaya that were found in Level IV in the group bearing the excavation number W 23293.[41] Scholarly tablets of the descendants of Šangi-Ninurta were

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35 von Weiher 1998, 191.

36 Oelsner 2001, 485.

37 Hackl and Oelsner 2017, 75; Hackl and Oelsner 2018, 700, n. 62.

38 Oelsner 2001, 485.

39 von Weiher 1979, 96–97.

40 This group of tablets registered during the excavation as W 22585 included other scholarly tablets that are not datable (SpTU 4, 194, 202 and SpTU 5, 259).

41 Jursa 2005, 147–148. The tablets of the descendants of Gimil-Nanaya discovered in Level IV and recorded as W 23293 are the following: SpTU 5, 286 (W 23293/06), 287 (W 23293/20), 291 (W 23293/03), 299 (W 23293/09), 300 (W 23293/07) and 312 (W 23293/22).

also found in this group,[42] and the attribution to Level IV is not doubtful due to the direct contact of these objects with the floor. It is not known how the tablets of the descendants of Gimil-Nanaya arrived in the house of the exorcists, but the discovery of texts belonging to this family in the group W 22585 of Level III reveals that the tablets were mixed together. Thus, the SpTU 5, 307 and SpTU 5, 295 contracts may also come from the other levels and, based on these dated tablets, it remains impossible to assign Level III to either of the two families.[43]

2 Origin, use and destination of the tablets of the exorcists' houses

2.1 Private and temple scholarly tablet collections in Uruk

The collections of tablets unearthed in the houses of the exorcists of Uruk were not intended as a reference collection. Indeed, roughly speaking, sanctuaries in the Achaemenid and Hellenistic periods can be considered to have kept tablets that could serve as a local reference collection. It is not clear what form such libraries took, or even whether they existed as a coherent unit, or if they consisted of a series of storage rooms that, over the whole of a temple, constituted the library (*gerginakku*) of the god or goddess.[44] Regarding the Rēš temple, the tablets were said to integrate the 'Properties of the god Anu and the goddess Antu' *(makkūr Anu u Antu)*.[45]

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42 Clancier 2009, 58–59. These are the tablets SpTU 4, 161 (W 23293/14), SpTU 5, 231 (W 23293/4, this text is a copy of the *Exorcist's Handbook* written by Rimūt-Anu, brother of Anu-ikṣur, descendant of Šangi-Ninurta, and dated to Darius II), 243 (W 23293/34), 257 (W 23293/19), 261 (W 23293/5) and 268 (W 23293/13).

43 Robson 2019a, 229, proposes that the house was reinhabited by the descendants of Ekur-zakir family *c.* 400. However, as we saw, following Oelsner (2001, 485), the oldest possible tablet of this family in that house dates to the first year of Artaxerxes IV (338–336) (SpTU 5, 307).

44 For a presentation of the temple collections, see Robson 2019a, 210–216. She wisely says that 'We are used to thinking of temples' scholarly tablet collections as reference "libraries" of some sort. Recent work, however, has begun to challenge that assumption'. Actually, temples seem to have kept the wider collections of scholarly tablets, but the very rare archaeological attestations of such 'libraries' in Babylonia (in Sippar, Uruk or Babylon for our period) show that we should not expect central libraries in the sanctuaries but storage rooms spread all around the buildings.

45 See, for example, SpTU 1, 2.

The private collections documented at Uruk do not tend to completeness, as a reference collection does. Here, on the contrary, they are oriented towards the activities of their owners, i.e. exorcism, medicine and all the other knowledge that they needed, particularly divination.[46] The goal was to be able to move from the observation of the patient to their ailment, whether it was a treatment of the damage to the body or the supernatural origin of this damage, the two being inextricable. One might think that with these private collections, we have writings used by exorcists for their daily tasks. This is not the case, because when we go deeper into the composition of the collections, we realise that even in the disciplines at the heart of their professions, the tablets/series do not cover the basic and more advanced knowledge necessary for a good daily professional routine.[47] Actually, it seems that these sets of tablets were scholarly archives reflecting teaching activities and the learning of the students for which the owners were responsible. These were primarily their sons, but also the sons of other important families.[48]

In the house of the descendants of Šangi-Ninurta, out of seventeen (or eighteen)[49] tablets of the *Sakikkû*, the great reference series for the determination of diagnoses according to the observation of patients, we find that thirteen of them are commentaries[50] and not the text itself.[51] The apprenticeship of the job was indeed done in the house of a master, even if this activity, in the long run, aimed at integrating the professions of the local sanctuaries.[52]

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46 Frahm 2002, 80–85.

47 See Clancier 2014 for the collection of exorcism (*āšipūtu*) tablets in the house of the descendants of Šangi-Ninurta.

48 Clancier 2009, 90–99, Robson 2019a, 229; Frahm 2020.

49 SpTU 1, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42; SpTU 3, 100 and perhaps SpTU 5, 254.

50 SpTU 1, 27, 28, 29, 30, 31, 32, 33, 36, 38, 39, 41, 42; SpTU 3, 100.

51 One of the reasons behind this specific distribution of texts might be that some apprentice scribes did not belong to the exorcist's household and those pupils kept their tablets and, thus, removed them from the house (I would like to thank Szilvia Sövegjártó for this suggestion). On the other hand, this distribution suggests that the owners of the house did not seek to build up a reference library.

52 For the liberal activity (outside the temple) of exorcism of Iqīšâ of the descendants of Ekurzakir, see Frahm 2002, 83–84.

2.2 Teaching and learning activities in the exorcists' *houses*

The commentary texts have been studied by Eckart Frahm[53] and it is not the place here to describe them in detail, but they probably testify for the teaching activities of exorcists in the Achaemenid and Hellenistic periods. Thus, Anu-ikşur, descendant of Šangi-Ninurta, left behind several such commentaries. It is possible to divide them schematically into two broad categories: lexical commentaries, dealing with vocabulary, and scholarly and esoteric commentaries, whose purpose is to explain the logic of the texts and the secret knowledge they contain.[54]

The exact mirror image of this teaching activity is that of students learning. Their essential work consists of copying the canonical series, the reference works used in almost all disciplines. And this activity was already well mastered by the students. The two private collections of the Uruk exorcists, Levels IV and II, offer two examples of students' exercises on a same text revealing different levels of apprenticeship. Tablet 16 of the *Sakikkû*, showed that the medical series was used to establish the diagnoses. At the beginning of the text, it is a matter, through observation, of understanding the health of a patient:

> (If) he is ill for one day and his head hurts him: heat stroke; hand of the god of his father.

This sunstroke is serious and, according to this series, the patient should die. Moreover, the first thirteen entries of the text list hopeless cases. This is what the well-copied reference text preserved in the house of Anu-ikşur (SpTU 1, 37, Level IV, Achaemenid period) says: 'he will die'. On the other hand, as can be seen in SpTU 2, 44 (Level II, Hellenistic period), the patient's fate is less clear since the scribe hesitates between death and survival: 'he will recover (or) he will die'. Moreover, in the reverse of this text, some words are repeated. In short, the copy is not of high quality. The colophon shows that the tablet was written by a certain Anu-ab-uşur, son of Anu-mukīn-apli, descendant of Kurî:

> Tablet of Iqīšâ, son of Ištar-šum-ēreš, descendant of Ekur-zakir, the exorcist. Hand of (i.e. written by) Anu-ab-uşur, son of Anu-mukīn-apli, descendant of Kurî.

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53 See Frahm 2011.
54 Frahm 2011, 28–58. For explanations of words, see Frahm 2011, 59–85. For commentaries on example from this house, see Clancier 2014, 56–61.

The descendants of Kurî are neither part of the families of exorcists not of a scholarly family. Perhaps Anu-ab-uṣur had not been taught as thoroughly and completely as a member of a family of exorcists.

It can be seen from these examples that the collections of tablets discovered in the exorcists' houses were largely oriented toward teaching, as evidenced by the commentaries or the high-level exercises of students signing their works. Moreover, the presence of an oven shows that some tablets were intended for baking to ensure the best possible preservation as the large unbaked clay tablets were very fragile. It is quite probable that this delicate exercise was also taught in the house, which would explain why tablets with very faulty text were baked.

2.3 Storage of the tablets

Some of the best tablets were probably sent to the Rēš temple. Indeed, not all of Iqīšâ's tablets (Level II, Hellenistic period) were discovered in his house, but some were found in the storerooms of the Rēš temple, even though they should have been kept in their owner's house:[55]

> Long tablet of Iqīšâ, son of Ištar-šum-ēreš, descendant of Ekur-zakir, the exorcist. Hand of Ištar-šum-ēreš, his son.
> The one who fears Anu, Enlil, and Ea will not take it away, he will not deliberately let it be lost. On the same evening he should return it to the house of its owner. Whoever takes it away, may Adad and Šala take him away.
> Month of *nisannu*, day 23, year 8 of Philip, king of the lands (18 April 316).

On the contrary, there are mentions of the Rēš temple in the house of the descendants of Ekur-zakir (Level II). The colophon of tablet SpTU 1, 2, a kind of 'chronicle' of the reign of Šulgi, a king of the late third millennium, says:

> Copied, collated and correctly established [according] to its original on wooden board from the Properties of [Anu and Antu.]
> [Tablet of] Anu-ah-ušabši, son of Kidin-Anu, descendant of [Ekur-zakir], ex[orcist of Anu and Antu], [*ahu*] *rabû* of the Rēš temple, the Urukean. Hand of [Anu]-balassu-[iqbi, his son].
> He [wrote] (this tablet) [for] his understanding, lengthening of his days, his physical and moral well-being and the [stability of his position].
> He placed (the tablet) [in] Uruk, inside the Rēš temple, temple of his (Anu) sovereignty.
> [Uruk], month of *abu*, day 21, year 61 (15 August 251), Antiochus (II), king of the lands.

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55 Hunger 1968, 42, no. 97.

We have here the opposite case of the first text, which was found in the Rēš temple, whereas it was intended to be kept in the house of the descendants of Ekur-zakir headed by Iqīšâ. Now, on the contrary, SpTU 1, 2 should have been deposited in the Rēš temple but was discovered in the house of the descendants of Ekur-zakir, then owned by the grandson of Iqīšâ. No tablets of the Šangi-Ninurta family clan were discovered in the Rēš temple. Let us now have a look at the history of the shift from one family to another in the exorcists' houses through textual and archaeological data.

3 The 'libraries' of the exorcists' houses in the recent history of Uruk

As we saw, while the attribution of Levels IV and II is easy, knowing who lived in the Level III house is problematic. The question is, therefore, whether the end of the occupation of Level IV is contemporary with the disappearance of the descendants of Šangi-Ninurta, or is it possible they occupied Level III as well?

This case is really interesting because according to the dating data available, Level III is too recent by at least one generation for the Šangi-Ninurta family and too old by one for the Ekur-zakir family. In this latter case, however, the time difference is less significant. As the level is very disturbed, it is not known whether it was occupied for a long time. The end of Level III is, in any case, to be dated to the very end of the Achaemenid period and one may wonder to what extent to insert this event into a larger story: that of the possible revolts against Persian rule in the south during the years 340–330 could help us to understand it.

3.1 The Rēš temple and the exorcists of the exorcists' houses

The exorcists of Uruk, whether they were descendants of Šangi-Ninurta or of Ekur-zakir, were among the leading urban notables. They were not only scholars whose writings have survived; they were also prompt to intervene in the political destiny of their city through the power of local sanctuaries.

The religious history of Uruk in the fifth and fourth centuries is quite complex and linked to the political history of the city[56] and the region. There is no

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56 Joannès 2001; Joannès 2006; Kessler 2003; Kessler 2004; Kessler 2018; Beaulieu 2018; Krul 2018; Monerie and Clancier 2023.

explicit reference to the Rēš temple before the third century.[57] Until the beginning of the fifth century, Ištar was the main goddess of Uruk and the main temple, her temple, was the Eanna.[58] At a certain point after the suppression of the revolt at the beginning of the reign of Xerxes (486–465),[59] she was replaced by Anu, god of heavens.[60] The Rēš temple, the new main temple of Uruk, devoted to Anu and his consort Antu, was (re)built at the end of the life of Iqīšâ, descendent of Ekur-zakir (house Level II), during the reigns of Seleucus I (305–281) and Antiochus I (280–261).[61] This explains why some of his tablets were unearthed in the temple, whereas no tablets of the descendants of Šangi-Ninurta were. The works on the Rēš temple were led by one of his relatives, Kidin-Anu, also a descendant of Ekur-zakir, under royal patronage, as attested by the tablet YOS 20, 87.[62] Moreover, the tablet SpTU 1, 2, unearthed in Level II, was written by the son of this Kidin-Anu.[63] There is no clear archaeological evidence or textual reference to a Rēš temple before the two first Seleucid kings. Any previous buildings could, therefore, have disappeared due to these works, which seem to have been particularly massive. However, this does not mean that there was no Rēš temple previously, as there are some meagre textual indications that it may have been built between the seventh and fifth centuries.[64]

If this was the case, we do not know the exact connection the inhabitants of the first house, the descendants of Šangi-Ninurta (house Level IV), might have had with it. But it is worth noting that some of their texts were placed under the protection of Anu and Antu, the tutelary deities of the Rēš temple.[65] Therefore, it is rather

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57 Beaulieu 2018, 192, wrote about the question of the cultic landscape before the Seleucids: 'The shift to Anu in personal names reflects not only a change in religious sensibility or preference for a god, but also a restructuring of the civic religion of Uruk and its institutions. This revisionary process led eventually to the creation of new temples, the Rēš and the Irigal (or Ešgal), well documented in sources from the Seleucid era. To which degree these institutional developments had already taken place in the fifth century cannot easily be determined.'

58 For the Eanna during the late Babylonian period, see Kleber 2008.

59 For these revolts, see Waerzeggers 2003–2004; Waerzeggers and Seire 2018.

60 For the fate of the Babylonian sanctuaries, see Robson 2019a, 222.

61 The early Seleucids were also very active in northern Babylonia (Stevens 2014).

62 Text edited and commented in Monerie and Clancier 2023. For the evolution of the support of the Hellenistic monarchs to Babylonian sanctuaries, see Clancier and Monerie 2014.

63 See *supra* 3.3 for its colophon.

64 Kose 1998, 134–135, 187; Kose 2013, 334; Beaulieu 2018, 196; Monerie and Clancier 2023.

65 This is the case of the SpTU 1, 33, l. r.9'–r.12' tablet, the colophon of which states: 'Reading out of Anu-ikṣur, son of Šamaš-iddin, descendant of Šangi-Ninurta, junior exorcist, Urukean (^{lu_2}qaq-qar—^{d}a-nu^{ki}-*u*). The one who reveres Anu and Antu shall not take (this tablet) away'. The

likely that the exorcists of the Šangi-Ninurta family worked for the Rēš temple, whatever form and name it might have had then, as did the descendants of Ekur-zakir thereafter. This remains to be definitively demonstrated, however, as the state of the Urukean sanctuaries after Xerxes and before Seleucus I is largely a matter of debate today.[66] No identified tablets from the descendants of Šangi-Ninurta ever entered the Rēš temple built in the Hellenistic period, but as the family disappeared at the end of the Achaemenid period, it seems logical.

3.2 Temple and revolt in Uruk in the fourth century

The late Achaemenid period seems to have been politically turbulent in southern Babylonia.[67] Indeed, the much-damaged *Urukean Kings List* mentions a non-Achaemenid king of Uruk immediately prior to Darius III (336–330), 'whose second name is Nidin-Bel'. This character has been much discussed,[68] and his historicity sometimes questioned.[69] However, he is present in this list and seems to have been a local usurper either during or at the end of the reign of Artaxerxes IV (338–336).[70]

This reference in the *Urukean Kings List* is not the only evidence for political unrest in the Uruk region in the late 340s and early 330s. Indeed, we can add the existence, still very difficult to understand, of a six-year reign of a certain Ar'a/i/usiuqqa at Larsa.[71] Moreover, a mention in the text YOS 20, 87, exists of the return to Uruk of the cult statues of the Rēš temple that might have been deported at some time before the Hellenistic period. Indeed, the tablet YOS 20, 87, l. 17

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tablet SpTU 1, 126 is placed under the protection of Dari and Duri (r.ii.57: mud ^{d}*du-ri₂ u* ^{d}*da-*[*ri₂ la₃ i₁₁-ta*]*-*⌈*ab₂*⌉*-bal*), mother and father of Anu (Frayne and Stuckey 2021, 71).

66 Beaulieu 2018; Robson 2019a, 187–192.

67 See the short presentation of Safaee 2017.

68 Hackl and Oelsner 2018, 702–703. The authors analyse the possibility of a second name for an Achaemenid ruler but ultimately reject the idea.

69 The *Urukean Kings List* is badly preserved but there is no doubt that Nidin-Bel is present. However, Amélie Kuhrt rejects the existence of this ruler just before Darius III as a scribal error (Kuhrt 2007, 425–426).

70 The last dated tablet discovered at Uruk before the reign of Darius III is from the first full year of Artaxerxes IV. It is VAT 16476 published by Hackl and Oelsner 2017, 67–69 and 92.

71 Tablet BRM 2, 51. See Joannès 2001, 257. Oelsner 2003 proposed understanding the name Ar'a/i/usiuqqa as a form of Arrhidaeus but cannot explain most of the name ('–siuqqa'). Moreover, the appellation of a Hellenistic king (Philip III) by his sole personal name would be a hapax, which means that, according to the data available, it seems difficult to reject the existence of a king unknown to us. Francis Joannès dates it to the end of the Achaemenid period. It is difficult to confirm this hypothesis that contributes to the reflection on the political troubles of the end of the Achaemenid period in southern Babylonia.

refers to the transfer (*abāku*) of divine statues to Uruk as well as the return (*târu*) of something related to the gods towards the city (l. 20). The use of these verbs, which contrasts with the mere 'entry' (*erēbu*) of the divinity into the renovated temple after a temporary sojourn in a nearby temple usually recorded in the cuneiform sources strongly suggests that the cult statues installed in the *cella* of the Rēš after the temple's second building phase were not in Uruk in the first half of the 280s BC.[72]

Another document, TCL 6, 38, refers to tablets related to the cult of Anu and the Urukean goddesses and gods that Kidin-Anu, descendant of Ekur-zakir,[73] brought back from Elam, as said by the copyist Šamaš-eṭir in the colophon:[74]

> Hand of Šamaš-eṭir, son of Ina-qibit-Anu, son of Šibqat-Anu.[75] Writing board of the cultic ordinances of Anu (*paraṣ anūtu*), of the holy purification rites (and) the ritual regulations of kingship, together with the purification rites of the gods of the Rēš temple, the Irigal (Ešgal), the Eanna and the (other) temples of Uruk, the ritual activities of the exorcists, the lamentation-priests, the singers and all the experts, (so) that, later on, everything which the apprentice holds will be available to an expert. (Written) in accordance with the tablets that Nabû-apla-uṣur (Nabopolassar), king of the Sealand, carried off from Uruk and then, Kidin-Anu, Urukean, exorcist of Anu and Antu, descendant of Ekur-zakir, elder brother (*ahu rabû*) of the Rēš temple, saw those tablets in Elam, copied them in the reign of kings Seleucus (I) and Antiochus (I) and brought them to Uruk.

Nabopolassar (626–605) is credited with the transfer of these tablets, but it is problematic since the colophon mentions the rites of purification of the gods of the Rēš temple and the Irigal (Ešgal). Indeed, if these temples already existed, they must not have been very important since the Eanna was the main temple of the city at that time. This potential misattribution may be explained by another text, the chronicle ABC 2 (l. 15–17). It mentions that Nabopolassar, at the beginning of his reign, transferred to Susa the Elamite divine statues that the Assyrians had deported and installed in Uruk. There is no clear reason why this Babylonian king should have deported Urukean cult objects to Elam. Confusion may have occurred in the Hellenistic period between different events that the scribe of TCL 6, 38 attributes to the most famous hated king. Indeed, Nabopolassar was not appreciated in Uruk.[76]

Julien Monerie and I wonder if the return of the cultic statues in Uruk (YOS 20, 87) at the time of Kidin-Anu, the relative of Iqīšâ (Level II), could be

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72 Monerie and Clancier 2023, 77.

73 For Kidin-Anu see *supra* 4.3.

74 Translation slightly adapted from Ossendrijver 2020, 327–328. See Monerie and Clancier 2023.

75 This scribe was active at the beginning of the second century.

76 See Jursa 2007 for the fate of his father at the hands of the Urukeans.

linked with the transfer of the tablets from Elam by the same Kidin-Anu and referred to in TCL 6, 38.[77] It was indeed customary to maintain the worship of deported statues once they had arrived at their destination. The tablets that were moved with them could have served this purpose. These two distinct references to the displacement of goods from the sanctuaries of Uruk could be the consequence of the repression of a revolt whose date is to be determined but which would be under the Achaemenids, given the place of 'deportation'.

With all these clues, it would be possible to propose the following reconstruction of the events:

1. A revolt in Uruk occurred during the reign of Artaxerxes IV (338–336) putting on the throne a personage of whom only the second name is known: Nidin-Bel.
2. At the same period, an independent king might also have ruled in the neighbouring city of Larsa.
3. Darius III then retook Uruk at the beginning of his reign. The Achaemenid king could have deported the gods of Uruk and some of the cultic material to Elam to punish the city and its notables working for the sanctuaries.
4. The house of Level III could have been destroyed during the recapture of the city by Darius III if we assume that its inhabitants, working for the punished sanctuaries, took part in the revolt. Perhaps this could explain the extinction of the descendants of Šangi-Ninurta from Uruk.
5. Later, under the first Seleucid kings, Kidin-Anu, a descendant of Ekur-zakir, then in charge of the Rēš temple, would have been involved in the return of the statues and tablets from Elam and the renovation of the temple under royal patronage.

Conclusion

The dossier under study allows the placing of the tablet, an archaeological object, in its physical, social, religious and political context. It was possible to study the uses of tablets from their shaping to their baking in three houses (Levels IV, III and II). Their inhabitants, exorcists, students and teachers, worked for themselves and for the great local temple. These scholars were not only exorcists but also politicians. The best example is Kidin-Anu, descendant of Ekur-zakir, who, at the end of the fourth and the beginning of the third century, acted

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77 Monerie and Clancier 2023.

directly for the (re)construction of the Rēš temple whose dimensions were seldom reached in Mesopotamian sanctuaries whatever the period. It is quite probable that he enjoyed some direct contacts with the early Seleucid kings.

On the other hand, relations between the local notables serving the sanctuaries and the Achaemenid monarchy seem to have been much more difficult. This is true from the end of the sixth century and reaches a climax with the suppression of the revolts of the beginning of the reign of Xerxes. It is not impossible that the end of the Persian empire was also a violent period for the notables in Uruk. The dossier which has just been presented could be an echo of this through the disappearance of the descendants of Šangi-Ninurta or, at least, the destruction of the house on Level III. It is very unusual to see the extinction of a clan of scholars. It is, to the best of my knowledge, the only example for Uruk. This unusual disappearance invites a search for exceptional causes.

Abbreviations

ABC = Assyrian and Babylonian Chronicles
BRM = Pierpont Morgan Archive
SpTU = Spätbabylonische Texte aus Uruk
SpTU 1 = Hunger 1976
SpTU 2 = von Weiher 1983
SpTU 3 = von Weiher 1988
SpTU 4 = von Weiher 1993
SpTU 5 = von Weiher 1998
TCL = Tablettes Cunéiformes du Louvre
UVB = Vorläufiger Bericht über die Ausgrabungen in Uruk-Warka
VAT = Vorderasiatisches Museum, Staatliche Museen, Berlin
YOS = Yale Oriental Series

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Cultural Encounters

Gianluca Miniaci

Bakhtin, Gramsci, and the Materiality of the Egyptian Hieroglyphs: When the 'Official' Culture Leaks into the 'Folk' Domain

Abstract: The ancient Egyptian hieroglyphic writing is an extremely permeable field (given its materiality and performative character), more prone to introducing material variations in the sign during the 'performance' of its (re)production: some targeted hieroglyphs were deliberately manipulated, modified, and altered. The custom first appeared in the royal sphere (*c.* 2345 BCE) and then slowly moved into the private domain (till *c.* 2000 BCE), being continuously transformed and adapted, becoming increasingly inconsistent, unsystematic, and confused, till complete abandonment (*c.* 1500 BCE). This path can be read in the light of the socio-linguistic ideas of Mikhail Bakhtin and Antonio Gramsci, which see a deep connection between language and society. In its diachronic evolution, the patchy and inconsistent absorption and transformation of mutilation hieroglyph practice from the lower levels of society can be imagined as the 'leak of fragments of hegemonic culture into a folk domain'.

1 Linguistic signs and their materiality

The article moves from a statement by the anthropologist Webb Keane:

> Material objects contrast in several ways to the familiar Saussurean model of the arbitrary sign, which signifies only by virtue of a social convention [...]. The materiality of the objects represents an essential condition for their movement across social and semiotic domains.[1]

An important dichotomy in the study of the human past given by the division between 'texts' and 'objects', which are often associated with two different ontologies is encapsulated in this sentence.[2] The texts are usually connected with an inherent

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1 Keane 2001, 73.

2 Keane 2003.

'immateriality': the arbitrariness[3] of the signs reduces the possibility of 'movement' significantly. Changing the shape and order of the signs will irremediably alter the code represented by the signs themselves, leading the communicative system to crash: the sign cannot move too freely.[4] Contrarily, the objects, given their materiality and non-discursive nature, are less harnessed in a social convention and can move more freely across social, spatial and temporal dimensions.

Nonetheless, materiality is an inherent structure also belonging profoundly to texts and their marking system.[5] The term 'materiality' is usually applied to the objects–people relation perceived as an agent-centred process.[6] People and communities engage with the material world through the actions and creation of an object world (i.e. artefacts/things), which concomitantly shapes and constrains the human experience and behaviour (i.e. capacity of the physical properties of things to modify human perception and action, remodelling ideas and identities).[7] However, the concept of materiality and agency must also be applied to language and its written system. We think of objects in words[8] and materiality is also expressed in/through words.[9] Keane, for instance, noted the role of language in shaping the house types of Sumba, in south-eastern Indonesia. The traditional houses of Sumba partially derive in their physical conformation from traditional ritual speeches, which emphasise the canonical forms that a house should have, including a precise division of the rooms and types of furniture. With the progressive loss of ritual speeches in contemporary times, the houses of Sumba also started changing and transforming, substantially abandoning the forms and divisions promoted by the ritual speech.[10]

The signs themselves show a deep material entanglement with the people, society and surrounding world. The most basic unit of the text, i.e. the linguistic sign,

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3 The links between the signifier and signified (in a Saussurean way), between sound–image and meanings, cannot be found in nature or logic because they are simply based on an arbitrary, conventional tradition, which is valid till the users decide it is not; de Saussure 1986, 73.
4 See recent studies gathered in Cavanaugh and Shankar 2017, esp. Shankar and Cavanaugh 2017, 1–28.
5 See Shankar and Cavanaugh 2012 and recent studies gathered in Quenzer 2021.
6 Knappett 2005; Knappett 2012; Knappett 2014, 4701–4702; Miller 2005b; Ingold 2007; Fahlander 2008; Taylor 2009. For Egyptology, see Kienlin and Bussmann 2022; Miniaci 2023.
7 Appadurai 1986; Miller 1987; Gell 1998; Miller 1998; Miller 2005b; Renfrew and Bahn 2005, 159–163; Meskell 2005; Henare, Holbraad and Wastell 2007; Hodder 2011; Malafouris 2013; Drazin and Küchler 2015. For further bibliographical references, see Joyce 2015; Joyce and Gillespie 2015.
8 Searle 1969.
9 Beetz 2016, 86; Gell 1998, 4: 'Culture has no existence independently from its manifestations in social interactions'.
10 Keane 1995.

has been defined a 'psychological imprint'[11] left by society on the material surfaces of the world. The term 'psychological imprint' aims at encapsulating two different souls enclosed in the sign: the material one, given by the grapheme, a physical mark created to be correlated to a sound or a noun, and the semantic concept (the meaning), the immaterial part of an abstract system expressed through the grapheme or – more frequently – a combination of them.[12] The graphemes must always rely on their material aspect (for their realisation) and find their 'raison d'être' in the people, i.e. a material support and at least one communicator (writer) and one recipient (interpreter). It is only in their *material* and *social* process that the signs liberate their signification. Therefore, as for any type of material production, the sign must also be understood in its dialogic reality[13] and cannot be independent of its social fabric and materialisation,[14] disregarding the number of communicative, metamaterial inputs it encapsulates.[15]

Ancient Egyptian hieroglyphs offer an important case study for measuring the degree of entanglement[16] between the linguistic sign, people and material world, shading lights on the significant role played by society and history in the formation of the materiality of the linguistic sign.

2 The materiality and performativity of the Egyptian hieroglyphs

The hieroglyphic writing system is hybrid, since it employs signs corresponding to phonograms (single or multiple consonants) and logograms (signs which indicate lexical units, i.e. words).[17] In addition, the writing system also integrates a number of signs which serve as classifiers (semantic determinatives) in order to denote the semantic domain of words.[18] The word 'palace', for instance, can be accompanied by a classifier of a 'house', in order to indicate that that word belongs to the seman-

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11 Klages 2006, 35.
12 De Saussure 1986, 66.
13 Bakhtin 1981, 269. See below.
14 DeMarrais 2004.
15 Derrida 1988, 7–8.
16 For the entanglement theory (especially in relations between objects and humans), see Martindale 2009; Stockhammer 2012; Whitley 2013. For its application to Egyptian archaeology, see Miniaci 2019b.
17 Winand 2021.
18 Allen 2014.

tic sphere of the 'human buildings'. The sign does not have any phonetic or logographic value.[19] In addition, Egyptian writing emerged against a background of a non-glottic system (= images used as emblems),[20] existing for a long time before the development of writing and having a strong tradition.[21] Indeed, the hieroglyphic system shows a very strong performative character,[22] greatly emphasising the visibility of the sign itself and its representational part.[23]

The *Pyramid Texts*, for instance, written on the funerary walls of the pyramids, were meant to be more of a material reification of the oral rituals performed in connection with the royal tombs rather than a written communicative act:[24] they have a non-discursive structure; they seem to present only a very limited orthographic nature; and the lack of complex grammar and syntax make it difficult to provide a clear translation.[25] Thus, the *Pyramid Texts* can be seen as an embodiment of the ritual, made in a permanent way by carving part of its key sentences in the stone of the pyramids, a material performance in the funerary architecture, rather than a structured written transposition of a (ritual) communication. In this specific case, the priority of the writing was given by two key elements: the materiality and performativity of the writing, i.e. the specific 'action' – in itself – of writing words (performativity), and how and where they were written (materiality: carved in the stones of the pyramid and following a precise ritual order).[26]

Hence, hieroglyphic writing is an extremely permeable field: a part of the writing system of the Egyptian language, for instance, can be interpreted – to a certain extent – even without fully mastering the complex network of semiotic associations of the signs.[27] Such a nature is more prone to introduce material variations in the sign during the 'performance' of its (re)production,[28] because the iconic nature[29] – and presence of classifiers[30] – could support the understanding of the signified even when significant forms of modification are introduced.

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19 For more recent discussions on the structure of the Egyptian writing system, see Regulski 2022.

20 Stauder 2021. Cf. Woods 2010, 18–20. See Kammerzell 2009.

21 Baines 2004; Stauder 2022, esp. 223–227. See Vernus 2016.

22 Eyre 2018.

23 Stauder 2022; Stauder 2023.

24 Eyre 2018, 6.

25 See Hays 2015. *Contra* Allen 2017.

26 Allen 1994.

27 See discussions in Baines 1989; Andrássy, Budka and Kammerzell 2009; Budka, Kammerzell and Rzepka 2015; Haring 2018; Haring 2021. Also see Regulski 2010, 1.

28 Eyre 2018.

29 Schenkel 2011; Graff 2017; Stauder 2018; Vernus 2019; Thuault 2020; Pries 2023.

30 See Zsolnay 2023.

3 The manipulation of the hieroglyphic signs

The materiality and performativity of hieroglyphic signs are embodied in a practice adopted in various periods of Egyptian history, which consisted of a deliberate manipulation, modification and alteration of selected graphemes, deviating from the standard way of representation.[31] The ancient Egyptians – in the course of their history – decided to arbitrarily manipulate – often mutilating – the signs in texts, spells and formulae related to the deceased, without altering (i.e. making opaque or unintelligible) the communicative 'code', but just acting on the materiality of the sign and the performative act of their carving or inscribing.[32]

The manipulation of the signs often consists of the 'mutilation' of the subjects they were representing or a form of alteration by omitting/substituting specific signs in a semantic unit. Three different types of manipulation applied to a grapheme can be documented throughout Egyptian history: (1) *mutilation*: the body of the sign is divided into separate parts, as though severed; body parts are omitted, cancelled or covered (i.e. by plaster) (see Fig. 1);[33] the sign is directly drawn in an incomplete form (see Fig. 2);[34] (2) *substitution*: some signs or words are represented/spelled with different graphemes, which have equivalent phonetic value[35] (see Fig. 3) or by a 'symbolic' substitute (such as circles or strokes);[36] and (3) *omission*: a sign is simply omitted.[37]

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31 The funerary domain seems to be the reason that prompted such a practice, since it is connected with mortuary contexts in its first forms of appearance. However, it does not appear in a consistent and continuous way throughout Egyptian history. Most scholars believed that the mutilation of certain animated signs (especially in the case of vipers, see below) was intended to avoid any dangerous action against the deceased by the animation of the signs themselves. This explanation is not satisfactory since the manipulation did not affect all the animated signs in a funerary text uniformly; see Nyord forthcoming. The reasons for the manipulation of hieroglyphs are summarised in Miniaci and Thuault forthcoming.

32 The main works on the mutilation of the signs are by Lacau 1913; Lacau 1926; Pierre 1994; Miniaci 2010; Schenkel 2011; Iannarilli 2017; Iannarilli 2018; Iannarilli 2019; Roth 2017; Miniaci and von Pilgrim 2022; Miniaci and Thuault forthcoming.

33 See especially Leclant 1977, 282, 288.

34 See, for instance, Miniaci 2010.

35 Lacau 1913, 24−26

36 Lacau 1913, 17−24.

37 Lacau 1913, 3−16.
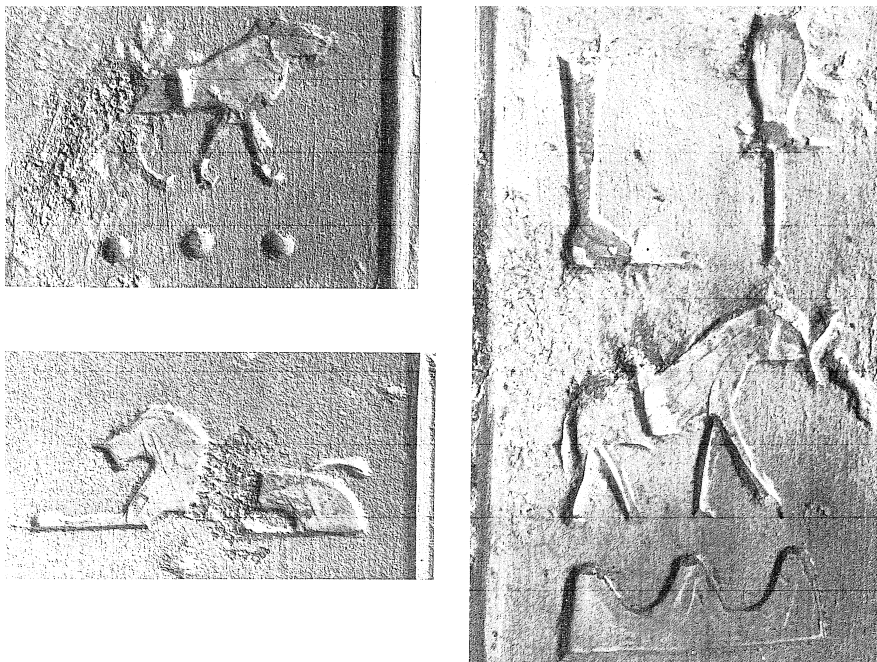
Fig. 1: Mutilated signs covered by plaster from the pyramid of Pepi I; from Pierre 1994, figs 5–7.

COMPLETE FORM	UNIS	TETI/PEPI I	MERENRA/PEPI II	TRANSLITERATION & TRANSLATION
				ḥmsi "to sit"
				twr "to be clean, cleanse"
				ḥsb "to defend"
				wʿb "to purify"
				nis "to summon"
				ʿnḫw "the living beings"

Fig. 2: Example of hieroglyphic signs represented in incomplete way on various inscriptions from the *Pyramid Texts* of the Old Kingdom; from Iannarilli 2018, 39, table 1; courtesy of Francesca Iannarilli.
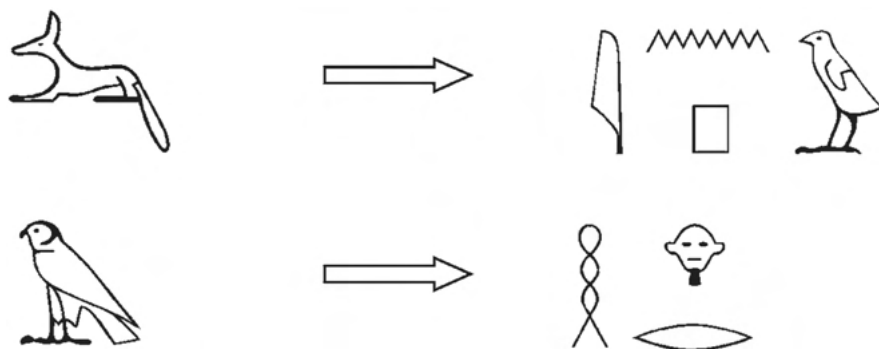
Fig. 3: Examples of substitution of signs with the use of different graphemes for the divine names of Anubis and Horus; redrawn from Roth 2017, 300, fig. 18.5.

4 A diachronic perspective

The manipulation of the signs is not tied to a particular narrow time spot, specific people or documentation, but crosses different epochs, spanning centuries, moving across different layers of society, involving various types of texts and is adopted on different media (writing surfaces). Therefore, it must be analysed in its diachronic perspective. An important premise is that the custom of mutilating hieroglyphs in the funerary domain is not universally adopted and is documented only in specific time frames and a limited number of contexts. Apart from the royal sphere, where it is employed with a certain consistency, it is not clear yet which the bias was for the adoption of this practice.

4.1 The origin: A royal embryo (*c.* 2345–2181 BCE)

The manipulation of hieroglyphic signs appeared for the first time in the *Pyramid Texts* of Unas[38] (end of the fifth dynasty; *c.* 2345–2315 BCE) and, since then, it has been attested with a certain 'regularity' and systematicity in all the inscriptions carved in the known royal pyramids of the sixth dynasty in the Memphite necropolis, i.e. Saqqara (Teti, Pepi I, Merenre, and Pepi II, *c.* 2315–2181 BCE). From the time of Pepi II, the manipulation of hieroglyphs is also documented in the tombs of the

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38 Lacau 1913, 2–3; Roth 2017, 292–293; Thuault 2020.

queens: Neit, Iput and Wedjebten (see Fig. 4)[39] (*c.* 2325–2150 BCE). The manipulation of hieroglyphs is further documented in one of the few pyramids preserved for the kings of the Seventh and Eighth Dynasties, King Ibi[40] (who lived for an indefinite time span between *c.* 2150 and 2055 BCE) at Saqqara. In the current state of our knowledge, the texts in the pyramid of Ibi represent the latest *Pyramid Text* (most recent) found in a royal tomb so far: the manipulation of hieroglyphs documented in the walls of the pyramid of Ibi indicates that such a custom continued with 'consistency' (notwithstanding several variation and exceptions)[41] in the royal sphere since its first appearance.[42]
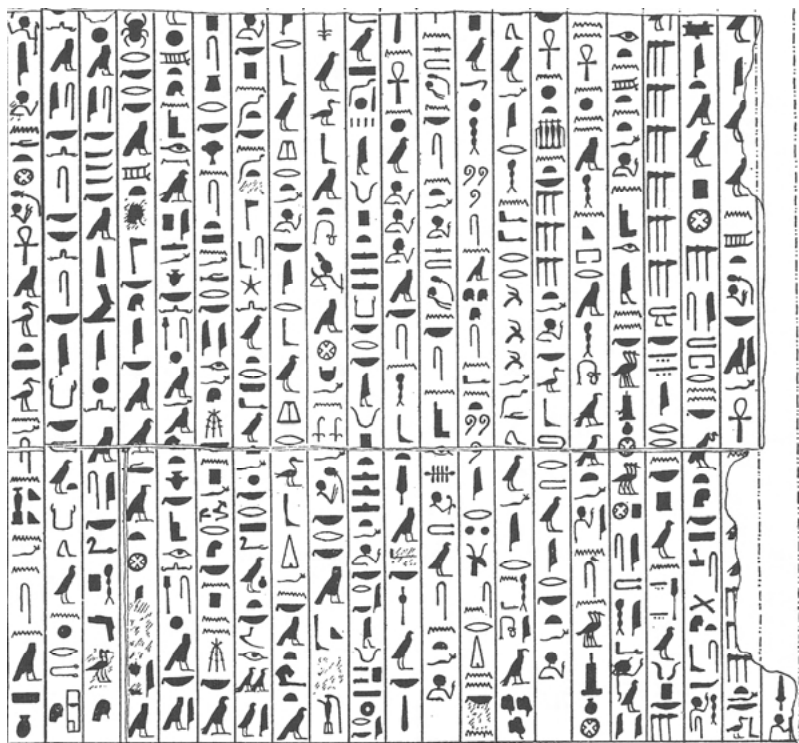
Fig. 4: Excerpt of a *Pyramid Text* from the pyramid of Queen Wedjebten; redrawn from Jéquier 1928, *Paroi Sud II*.

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39 Jéquier 1928; Jéquier 1933.
40 Jéquier 1935.
41 For the consistency/inconsistency, see remarks in Iannarilli 2018.
42 Lehner and Hawass 2017, 311.

The signs involved in the manipulation were uniquely represented by living beings, primarily and consistently focusing on human figures (male and female):[43] they were generally omitted or deprived of a part of their body (see Fig. 5) (less frequently, replaced by abstract symbols, such as a circle or diagonal line).[44] Starting from the time of Pepi I (*c.* 2325–2150 BCE), the manipulation (omission and mutilation) was applied to a wider array of signs representing animals and especially mammals: lions, hares, hartebeests, gazelles, elephants, cows, calves and bulls; with less frequency to hippopotami, donkeys, giraffes and baboons;[45] more rarely jackals, rams, collared goats and goatskins.[46] Scorpions were represented in a form that omitted the tail.[47] No birds, insects, snakes or other reptiles were involved in the process of mutilation at this stage,[48] although the words for snakes and worms were not accompanied by any semantic classifier (which in Egyptian writing would have meant the actual representation of a snake or worm): the horned viper (used for the phoneme *f*) and cobra (used for the phoneme *ḏ*) were regularly spelled and fully represented in the *Pyramid Texts* corpora (see below).[49]

The first evidence of 'mutilated' hieroglyphs shows how this practice generated and remained intimately connected with the royal contexts in the Memphite necropolis: first documented in kings' pyramids and, in a second instance, also reproduced on the walls of queens' pyramids. A clear evolution of the pattern can be documented with a royal sphere, since it started with human figures and was rapidly also extended to other animate beings, i.e. animals (not all but only selected types). Rather unexpectedly, dangerous signs, such as cobras and vipers – probably due to their phonetic role – were not subject to any mutilation or manipulation at this time.

43 Lacau 1913, 42–49. The signs representing fishes were also consistently omitted, Roth 2017, 293.
44 Lacau 1913, 17–24; Roth 2017, 292; Iannarilli 2018, 41.
45 Lacau 1913, 36–41; Roth 2017, 293.
46 Roth 2017, 293.
47 Lacau 1913, 49.
48 Lacau 1913, 41. The pelican is omitted in one instance, see Roth 2017, 294.
49 Leclant 1977, 282.
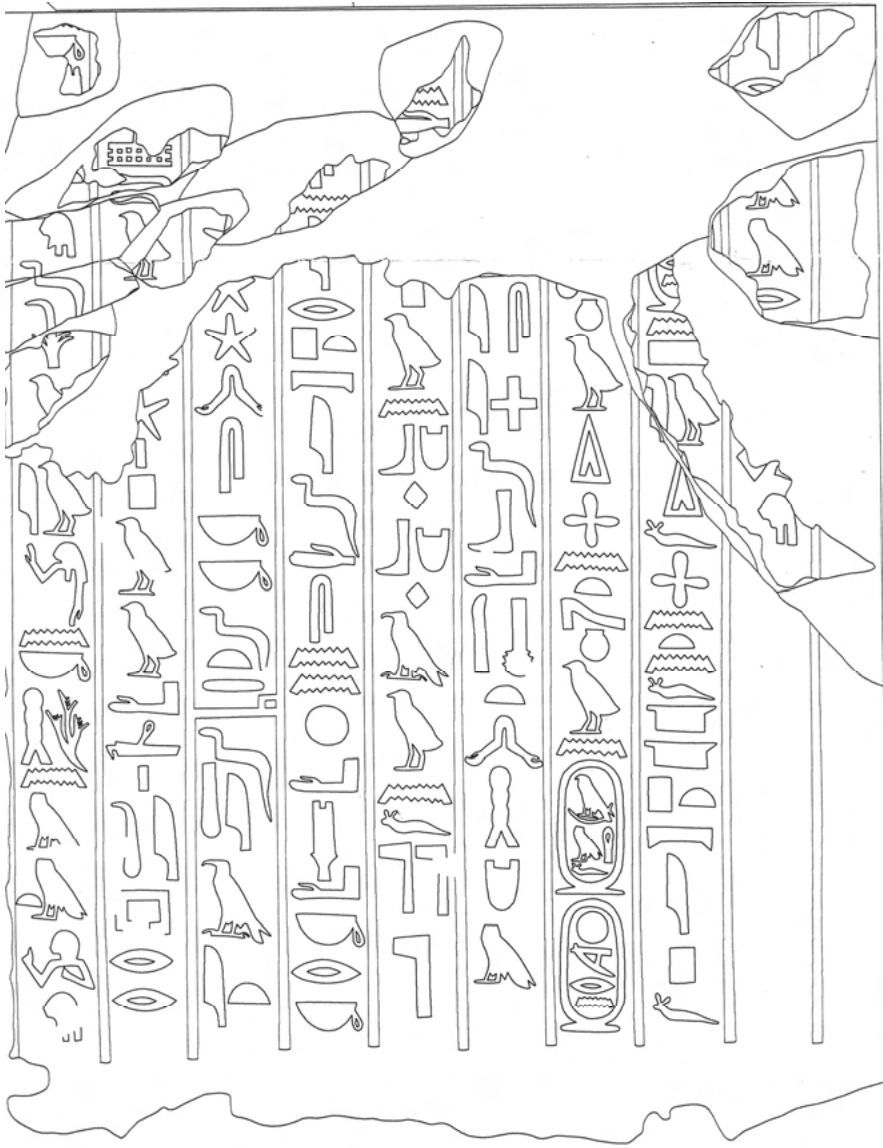
Fig. 5: Excerpt of a *Pyramid Text* from the pyramid of King Merenre; redrawn from Pierre-Croisiau 2019, vol. 2, 463.

4.2 One step below: The incorporation into the private domain (*c.* 2250–2181 BCE)

The practice of manipulating hieroglyphs in funerary contexts passed rapidly from the royal to the private domain, breaking up the documentary isolation of the *Pyramid Texts* corpora.[50] The appearance of the phenomenon in private contexts is first attested in the second half of the sixth dynasty (*c.* 2250 BCE),[51] documented mainly in funerary chambers or coffin inscriptions, all documented in the Memphite necropolis (therefore, close to the origin point – Unas at Saqqara?).[52] The tomb of Ihy at Saqqara may be one of the earliest examples, probably dated to the later sixth dynasty.[53] It is not inconceivable that the manipulation of hieroglyphs passed from the royal to the private sphere in the Memphite necropolis around the end of the sixth dynasty (*c.* 2278–2181 BCE?), because this is also the area and time when the royal tradition of the *Pyramid Texts* moved into the private sphere.[54] The practice of mutilating hieroglyphs was most probably also adopted by the private sphere.

In the private domain, the reptiles – especially vipers and cobras – were mutilated for the first time (see Fig. 6),[55] while, as has been stated previously, this was not the case in royal contexts. The first case of the 'mutilation' of reptiles can be considered in the tomb of Mereruka at Saqqara, where the cobra is avoided in the word Wadjet (the name of the goddess associated as a snake-headed woman or a snake).[56] However, the first non-royal inscriptions with mutilated viper/cobra signs are grouped mainly in a number of tombs at Heliopolis:[57] vipers are cut at the neck, while cobras are omitted.[58]

The passage into the private domain, therefore, is not mechanical, but follows its own path with innovation, change and transformation, as demonstrat-

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50 Iannarilli 2019, 300.

51 Jéquier 1929, 73, 81, 103, pl. 7; Roth 2017, 303.

52 The vipers on an offering table in the tomb of Nesw at south Saqqara show mutilation. The context is dated to after the sixth dynasty, see Berger-El-Naggar 2005.

53 Roth 2017, 299–300.

54 Willems 2014, 168–177; Morales 2017, 1–16. See especially Allen 1976.

55 Lacau 1913, 49. Inanimate signs – such as the emblem of divinity (GSL R8) – are for the first time subjected to the manipulation of signs in private contexts of the late Old Kingdom, cf. Lacau 1926, 80 (suppression).

56 Roth 2017, 301, table 18.1. See Firth and Gunn 1926, vol. 2, 173–174, pl. 2–4; Collombert 2010, 76, no. 133.

57 Daressy and Barsanti 1916 (archaeological context and plan). See comments on the mutilation in Lacau 1926, 77–81.

58 Roth 2017, 303. Lions also continued to be mutilated in these tombs.

ed by the mutilation of the reptiles (especially the horned viper). Once detached from the royal sphere and control, the manipulation phenomenon also assumed traits of higher randomness, distributed across various contexts without the predictability or systematicity documented in the *Pyramid Texts*.

Fig. 6: Coffin inscriptions of Shemayt; redrawn from Jéquier 1929, pl. 11.

4.3 A regional spread: Outside the origin centre (*c.* 2278–2055 BCE)

The practice of manipulating hieroglyphs also spread outside of the Memphite necropolis after it appeared in the private domain by the end of the Old Kingdom.[59] The case of Weni, in the south of Egypt, at Abydos,[60] shows how the manipulation of hieroglyphs in funerary texts also moved from north to south in a non-simultaneous manner, but with a chronological gap. All the inscriptions from the subterranean rooms in the tomb of Weni bear mutilated signs, including the viper and the name of Weni himself.[61] The spelling of Weni's name is 'systematically' mutilated (or the human signs are omitted) only in the subterranean chamber, being written completely in inscriptions in the parts above ground (see Fig. 7). While private people from the northern part of Egypt had already adopted the customs of mutilating hieroglyphics some generations before Weni, none of the texts in the funerary inscriptions of Weni's father, Iuu, vizier during the reign of Pepi I, bear any sign of hieroglyphic manipulation.

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59 See Miniaci 2019b for the changing of burial concepts in the Middle Kingdom.
60 Richards 2002, 85–102.
61 Richards 2002, 98, fig. 23.
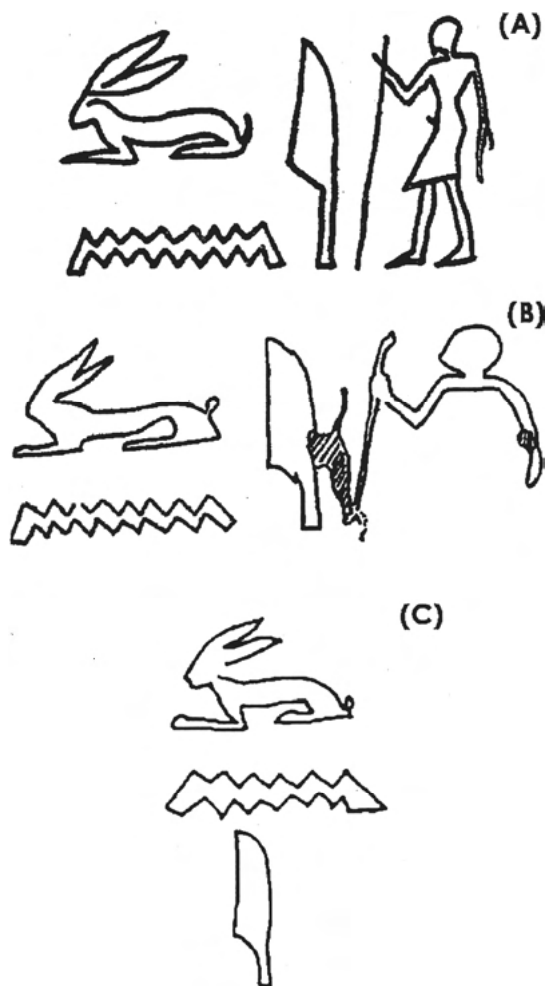
Fig. 7: Spelling of the name of Weni in the inscriptions recorded in the funerary space (B + C) and in the surface monuments (A); redrawn from Richards 2002, fig. 23.

The mutation practice also evolved as it spread outside of the origin centre: at the beginning of the First Intermediate period (*c.* 2181–2055 BCE), the practice of mutilation seems instead to have migrated also to different media, not always intimately connected with the funerary sacred space, such as stelae (see Fig. 8), offering tables and false doors, which were usually located in the chapel, a

public and visible space, therefore, not in close contact with the deceased.[62] The mutilation particularly of the viper – in private contexts – had assumed some peculiar traits, and endured as the most persistent feature even until the end of the First Intermediate period, when the practice of mutilation/omission started to wane (very early Middle Kingdom, i.e. late eleventh dynasty, c. 2155–1991 BCE).

Fig. 8: Stela of Itj from Gebelein, Museo Egizio Torino (S.13114); CC BY 2.0.

The manipulation in the First Intermediate period focused mainly on the viper sign, showing four different types of mutilation inflicted: (1) head separated from the body, as though severed by a cut; (2) head separated from the body and displaced somewhere else in an unnatural position (often placed above the viper's body); (3) viper without the head; and (4) viper without the tail. [63] The late sixth dynasty tomb of Idu at Dendera[64] contains one of the first documented combinations of two different mutilations of the viper sign: most of the vipers are shown headless while two are represented decapitated,[65]

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62 Russo 2010, table 1, nos. 39–55.
63 Pitkin 2017, 107–122, esp. table 5.0.
64 Petrie 1900, 46, pl. Va
65 Roth 2017, 306.

indicating that different types of mutilation coexisted. The removal of the viper tail, documented only sporadically, seems to occur instead only in later times, by the beginning of the eleventh dynasty, and only in provincial contexts.[66] Rune Nyord has raised the question whether the mutilation of the viper, which spread rapidly and became a dominant feature during this phase and the following one (First Intermediate period–early Middle Kingdom) could be due to the vicinity and subjectivity of the people carving/painting or commissioning the inscriptions. Horned vipers were definitely present in the borders of the deserts where the tombs were typically located and they could have been one of the main struggles for people working in or crossing the necropolis (e.g. for the funeral or the funerary ritual).[67] Such a suggestion moves the focus from conceptual part (i.e. the theological/linguistic authors) towards the pragmatical one (the makers and artisans of the inscriptions/inscribed objects). In this time, the manipulation of the other signs – previously targeted – had almost completely vanished.

Additionally, the social target seems to expand during the First Intermediate period, reaching a more modest and peripheral level of the population, as demonstrated by the titles of the owners of some stelae from Nag ed-Deir and Rizeiqat.[68]

The practice of the manipulation of hieroglyphs transformed and changed as it moved across geographical areas, time and society, evolving according to the needs and vision of the different social layers. The horned viper became the focus of the mutilation, while the manipulation of other animate signs started to slowly fall into disuse.

4.4 The interruption: The archaeological traces of a vanishing practice (*c.* 2155–1926 BCE)

The number of signs targeted for mutilation during the First Intermediate period gradually reduced and disappeared at the dawn of the Middle Kingdom, shortly after the reign of Mentuhotep II (*c.* 2060–2009 BCE),[69] although there are a few traces left in the reign of Senwosret I, during the twelfth dyn-

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66 The removal of the tail is a rare feature in the First Intermediate period: see, for instance, Petrie 1909, 3, 16–17, pl. II–III; Clère and Vandier 1948, 14, § 18; Brovarski 2018, 386, fig. 12.9 (stela from Nag ed-Deir, N 4593). See Russo 2010, 252, n. 6.
67 Nyord forthcoming.
68 Pitkin 2023, 133–203.
69 Brovarski 1998, 58.

asty (*c.* 1971–1926 BCE), as documented by a stela found in Elephantine, where the sign of the crocodile is left incomplete,[70] and an inscription of the funerary chamber of Senwosret-akh at Lisht, where a carved bird was originally represented deprived of its legs and only in a second moment were they added in paint.[71]

With the beginning of the second millennium, there is no documentation of this practice in the archaeological records, which visibly had disappeared – unless it went unseen underground.[72]

4.5 The rebirth: Again a new start from the royalty (*c.* 1800–1550 BCE)

By the late Middle Kingdom (*c.* 1800 BCE), the practice of manipulating (by drawing in an incomplete way) some of the signs in the funerary texts reappeared again on inscribed objects in the royal sphere. In this case, the archaeology documents the real first steps of this practice. In a burial, originally conceived for the princess Neferuptah,[73] the hieroglyphs inscribed on her vessels had originally been outlined complete with all the bird signs provided with their legs.[74] Only later were their legs deliberately erased (see Fig. 9). The action of an explicit erasure applied to the initially intact and fully shaped hieroglyphs is followed by a consistent use of mutilated hieroglyphs utilised in the actual burial of Neferuptah found at Hawara south.[75]

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70 Miniaci and von Pilgrim 2022.

71 Hayes 1937, 26, col. 447.

72 Cf. Miniaci forthcoming.

73 Presumably the daughter of King Amenemhat III.

74 Petrie 1890, 8, 17, pl. V; Miniaci 2010.

75 Farag and Iskander 1971, 1–6. See Farag and Iskander 1971, esp. 24, fig. 20 (granite sarcophagus), 48–58, fig. 30–32, pl. XXXVII.a.b (wooden coffin), 14–15, fig. 8–10 (silver vases), 7–10 and pl. VII (offering table).
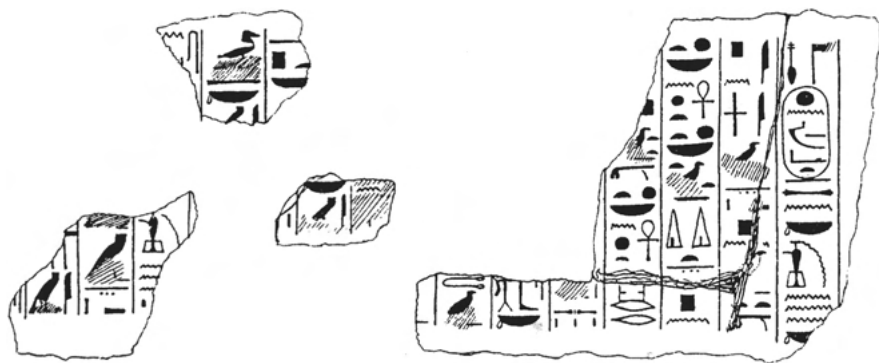
Fig. 9: Vessel fragments belonging to the Neferuptah burial equipment from the burial chamber of King Amenemhat III at Hawara; redrawn from Petrie 1890, 17, pl. 5.

The rise (or readoption) of this practice is again tied to the royal sphere and its inner circle, as documented by the inscriptions of the objects from the burial equipment of King Awibre Hor at Dahshur.[76] All the inscriptions found on the objects equipping the tomb were drawn with incomplete hieroglyphs (see Fig. 10), following a practice inspired by the texts in the *Pyramid Texts* although not faithfully reproducing it. Indeed, the human beings were avoided, such as those documented in the *Pyramid Texts* of the Old Kingdom, but new signs were subject to mutilation (such as birds and snakes).

Although the funerary inscriptions from kings and royal families of the time are rather reduced, there is still evidence that the practice of mutilating hieroglyphs remained in use for royalty for all the late Middle Kingdom and Second Intermediate period (*c.* 1650–1550 BCE). Indeed, the practice is documented for the king's daughter Nubheteptihered (see Fig. 11), King Senebkay,[77] King Intef Sekhemre Wepmaat, King Intef Sekhemre Heruhirmaat and King Intef Nubkheperre (listed in supposed chronological order).[78] In addition, also the coffin of the last king of the seventeenth dynasty, Kamose, employed incomplete hieroglyphs, although a private coffin was used for the king.[79] In fact, royalty seem to have abandoned this practice right at the end of the Second Intermediate period, since the inscriptions on the royal coffins of King Seqenen-

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[76] De Morgan 1895, 101–102 and pl. 36.

[77] Wegner 2017 (burial chamber); Wegner and Cahail 2021, 81–88 (canopic box), esp. 344.

[78] Miniaci 2011, 212, 268–271.

[79] Miniaci 2011, 226–227.

re Tao (predecessor of Kamose) and Queen Ahhotep (contemporary of Kamose)[80] do not present any mutilation of hieroglyphs (see below).
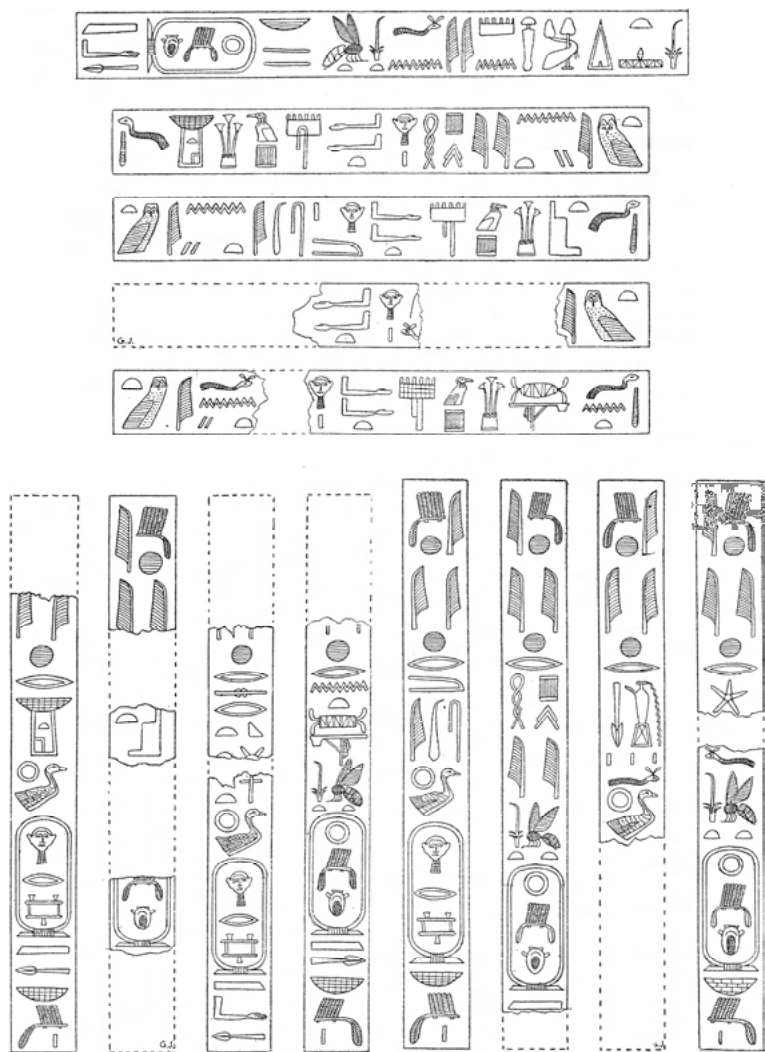
Fig. 10: Inscribed columns and bands from the coffin of King Awibre Hor found at Dahshur; redrawn from De Morgan 1895, 104, fig. 245.

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80 Betrò 2022, 132. For Queen Ahhotep, see Miniaci 2022.
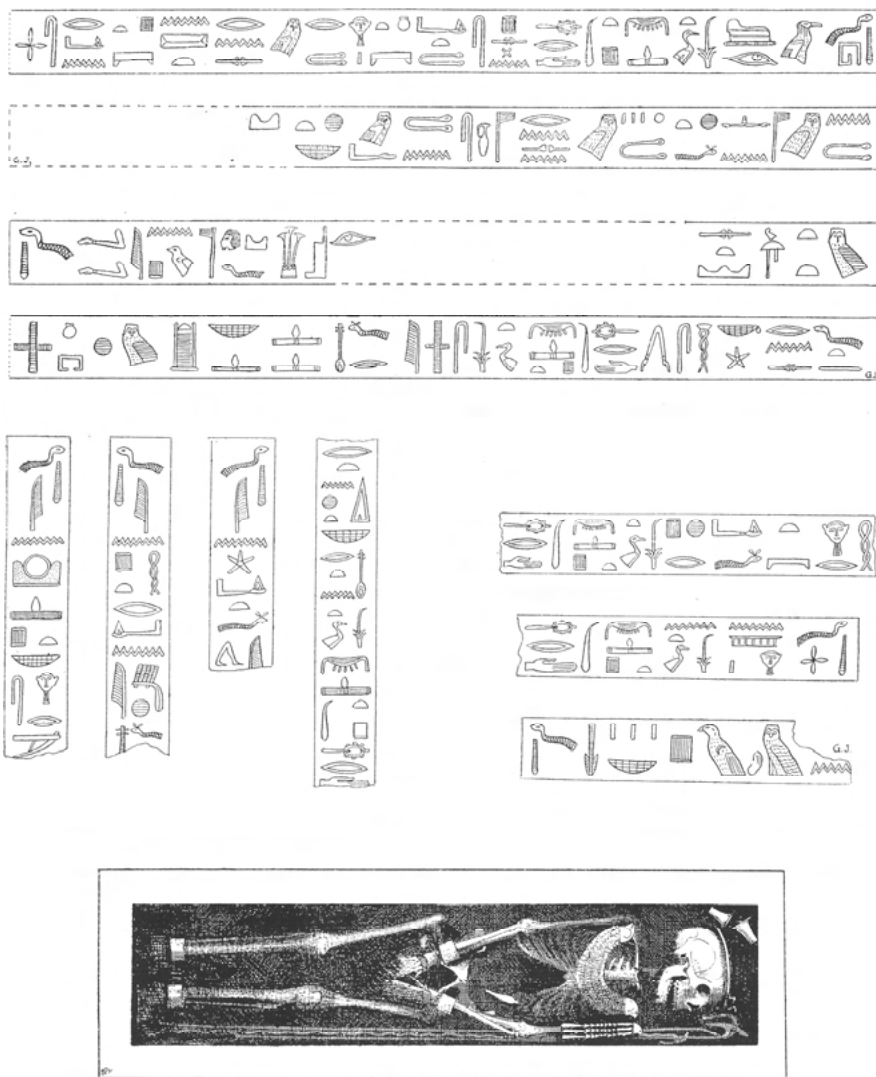
Fig. 11: Inscribed columns and bands from the coffin of king's daughter Nubheteptihered found at Dahshur © redrawn from De Morgan 1895, 111, fig. 264.

Two main categories of hieroglyphic signs were affected by the mutilation in the late Middle Kingdom: birds and snakes, whose legs and tail were removed, respectively; in some instances, their heads were also affected but to a limited extent. Other signs were also included in the practice but in a very patchy and

random mode: in a few instances, other animals, especially quadrupeds, were also deprived of a part of their body (mainly the back). Human beings were generally not mutilated or avoided.

The reemergence of the manipulation of hieroglyphs in funerary contexts was again nested inside the royalty, and – given a certain degree of similarity – it was clearly inspired by the original concept generated within the royal sphere during the Old Kingdom. However, the substantial modifications present in the corpus of the royal inscription of the late Middle Kingdom seem to indicate that the practice was heavily affected by the last evolution documented in the private sphere in the First Intermediate period, where the snakes especially were the object of the mutilation. It was not by chance that the ruling groups of the Middle Kingdom seem to come from a sub-elite substratum raising to the power after the collapse of the reigning groups of the Old Kingdom.[81]

4.6 The 'fall': The spread into the lower layers of society (*c.* 1800–1550 BCE)

Soon after the first reintroduction of the use of incomplete hieroglyphs, the practice moved into a sector of society in close contact with the highest layers, as documented for the 'high steward' Nebankh or the 'lector-priest' Sesenebnef (see Fig. 12), both located around 1800 BCE and 1700 BCE, respectively.[82]

The practice gradually moved from the highest ranking groups to a lower level of officialdom, as documented by some undated examples (still belonging within the time span of *c.* 1800–1650 BCE) deriving from the northern cemeteries of Lisht north, in the cemetery around the pyramid of Amenemhat I: the coffin of the 'overseer of faience workers' Debeheni[83] and the model coffin and shabti[84] of the 'chamber-keeper of the palace' Bener[85] employ incomplete hieroglyphs in their inscriptions.[86]

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81 Willems 2022 (also see the critique of the idea of the emergence of the 'middle class'). See Richards 2005; Miniaci 2019a; Bardonova 2021.
82 The heart scarab of Nebankh, London, British Museum, EA 64378, is published in Quirke 2003.
83 Bourriau 1996, 110; Allen 2021, pl. 26–30.
84 On this type of figurines, representing the workmen for the deceased in the Thereafter, see Miniaci 2014.
85 Arnold 1988, 34–36 and pl. 13; Allen 2021, pl. 20–21.
86 Also from the Lisht cemetery, the 'king's son' Wahneferhotep, probably still a true son of a king and not yet an official, needs to be quoted, see Arnold 1988, 37–40 and pl. 14.
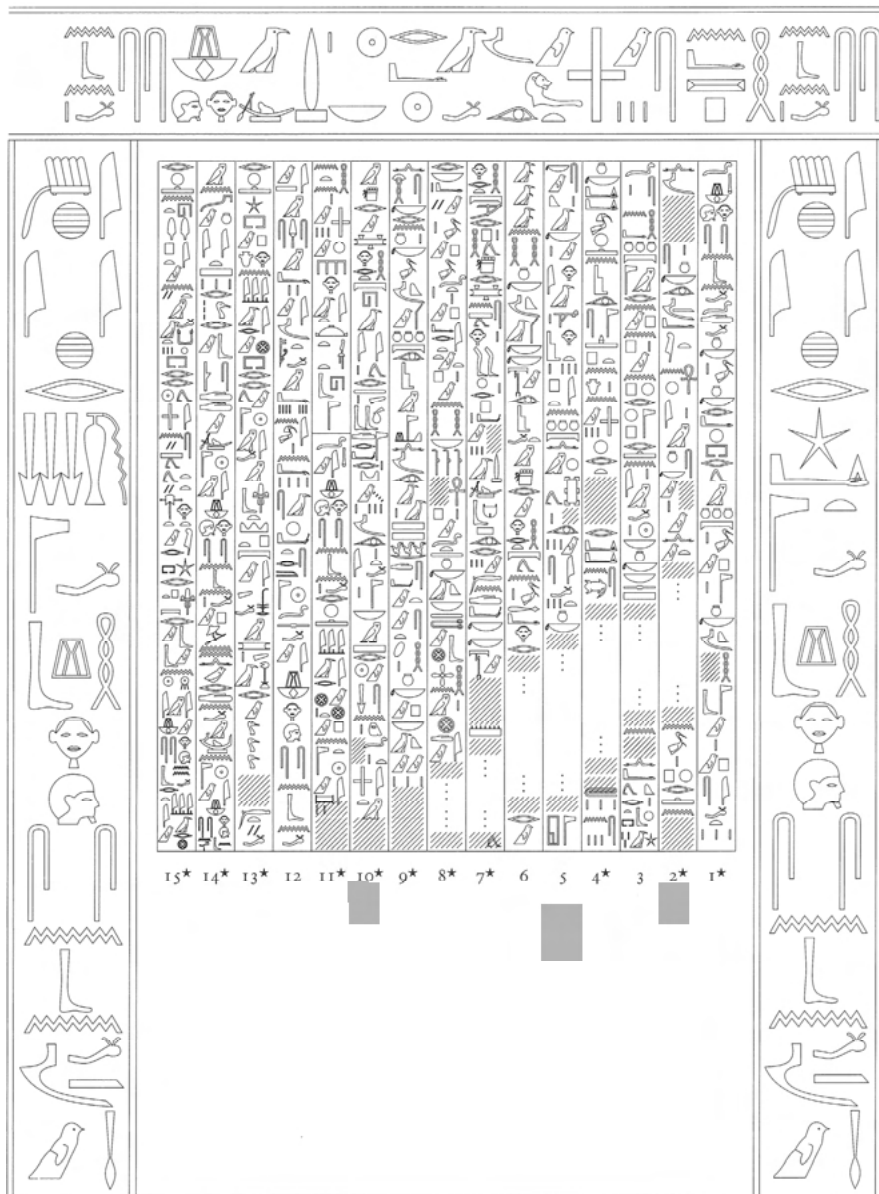
Fig. 12: Inscriptions from the coffin of Sesenebnef from Lisht; redrawn from Allen 2021, pl. 191.

At a certain point during the Second Intermediate period (*c.* 1650–1550 BCE), the proportion of private burials adopting the use of incomplete hieroglyphs at Thebes increased notably, including high as well as low and middle-class officials: the 'overseer of the marshland dwellers' Senebni and the 'king's ornament', perhaps his wife, Khonsw,[87] the 'overseer of the field' Ibia,[88] the 'general of the ruler's crew' Hemenhetep,[89] the 'king's ornaments' Nubherredi[90] and Nefnefert,[91] the 'wab-priests' Nemtyemsaf and Ikhet,[92] to name just a few.[93]

During the Second Intermediate period (*c.* 1650–1550 BCE), the use of incomplete hieroglyphs affected another category of funerary object, which is not strictly connected with the innermost space of the burial: the stelae, and became widespread across a larger sector of society.[94]

4.7 The disuse: Lost in the 'inconsistency' (*c.* 1550–1500 BCE)

The royalty started abandoning this practice, which became increasingly inconsistent, by the later part of the Second Intermediate period (1530 BCE?): in fact, some signs which should have been depicted legless were drafted in a complete form, as attested in the inscription of the canopic box of the King Intef Sekhemre Wepmaat (mid seventeenth dynasty?).[95] The same inconsistency also occurs on the canopic box of a Second Intermediate period king called Sobekemsaf, where birds were simultaneously represented with and without legs.[96] Again, legged birds are depicted besides unlegged ones on a standing

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87 Coffins T10C (Senebni) and T6C (Khonsw), following the attribution list in Willems 2014, 19–40, in Cairo, Egyptian Museum Cairo, Catalogue Général 28029 and Catalogue Général 28028; see Berlev 1974, 106–113 and pl. 26–28 (coffins + canopic chests).

88 Grajetzki 2000, 136, V.18.

89 Coffin T13C (case) in Cairo, Egyptian Museum Cairo, Catalogue Général 28126 + T1Ch (lid) in Chicago, Field Museum, A.105215, unpublished, see Lacau 1904, vol. 2, 144–145, vol. 1, 79–80 and pl. XVI.

90 Coffin T7C, now in Cairo, Egyptian Museum Cairo, Catalogue Général 28030, see Lacau 1904, vol. 1, 79–81 and pl. XVI (coffin), pl. XXIII (mask), vol. 2, 87–88.

91 Coffin T9NY, unpublished, see New York, Metropolitan Museum of Art, 32.3.429.

92 The coffin of Nemtyemsaf, T8NY, is unpublished, see New York, Metropolitan Museum of Art, 32.3.428. The coffin of Ikhet, T6NY, is also unpublished, see New York, Metropolitan Museum of Art, 32.3.430, but known from a photographic picture in Hayes 1959, 347–348 and fig. 228.

93 For the rank of these titles, see Quirke 2004.

94 Fischer 1987, 39.

95 Dodson 1994, 117–118, 150–151. Paris, Musée du Louvre, E 2538.

96 Miniaci 2006. Leiden, Rijksmuseum van Oudheden, AO. 11, see Boeser 1910, 8, no. 70, pl. XVIII.

sandstone Osiris statue of King Amenhotep I, first king of the eighteenth dynasty, buried in a shallow grave at Asasif (see Fig. 13).[97] While the practice was abandoned by the royal family, it continued in the private sphere, as documented in the inscription for several of the feathered (also called *rishi*) coffins and stelae in use at that time (1550–1500 BCE and probably also flowing into the beginning of fifteenth century BCE).[98] However, it became increasingly sporadic and reduced in the number of attestations, until it fell into disuse with time.

Fig. 13: Inscriptions on the Osiris statue of King Amenhotep I; redrawn from Szafranski 1985, 261, fig. 2.1.

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97 Szafranski 1985, 261, fig. 2.1.
98 Examples are in Marée 1993; Marée 2010; Miniaci 2011; Franke 2013.

By the early eighteenth dynasty, the practice had disappeared, and it was no longer attested in Egypt, probably forgotten buried under the centuries of disuse. The abandonment of this use by the eighteenth dynasty (from *c.* 1500 onwards) closes a 'chapter' which included inventions, evolutions and transformations, with acceleration, deceleration, gaps, adaptation, rethinking and rediscovery, passing from one level to another of society, from top to bottom and vice versa, in exactly the same way as other artefacts produced by men do.[99]

5 The materiality of the signs in the social domain

Writing is anchored to language in a glottic system via its phonetic and semantic articulations.[100] Therefore, language and writing often share a common path. Mikhail Bakhtin, a Russian philosopher and literary theorist,[101] brought attention to the social context of language and its semiotic system. The principle followed by Bakhtin is that all the forms of discourse are shot through with social, political and historical forces.[102] A language and its written system cannot be independent from its social context: 'Every word smells of the context and contexts in which it lived its socially intensified life; all words and forms are filled with intentions'.[103] The approach to language and writing systems, with Bakhtin, loses its unitary, arbitrary and systematic nature – as theorised after Ferdinand de Saussure – to become a sort of riven world, fractured in different linguistic forms and habits.[104] The everyday experience is translated in the world of the language and its writing system, embodying social and historical conflicts in it.[105] Therefore, the language and its written system cannot be

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99 Cf. Bourdieu 1991.

100 Stauder 2022, 223.

101 Hirschkop 2021, 32–52, 92. See Hirschkop 1999.

102 Bakhtin 1981.

103 Bakhtin 1981, 293.

104 'All the languages and idioms spoken by different layers of the population, including also group mannerisms, professional jargons, generic languages, the languages of generations and age-groups, the languages of political tendencies and parties, the languages of authorities, the languages of circles and passing fashions, the languages of socio-political days and even hours (every day has its own slogan, its own vocabulary, its own accents)', Bakhtin 1981, 262.

105 'At any given moment of its historical existence, language is heteroglot from top to bottom: it represents the coexistence of socio-ideological contradictions between the present and the past, between differing epochs of the past, between different socio-ideological groups in the present, between tendencies, schools, circles, and so forth, all given a bodily form [...] each

conceived as an arbitrary, asocial and ahistorical system of forms: a reservoir of neutral forms from which individuals decide to pick out words and structures in order to structure the communication.[106] Despite Gramsci's enthusiasm for international languages as a means of communication and growth, he severely criticised the experiment of Esperanto:

> [how] could an international language take root when it is completely artificial and mechanical, completely ahistorical, not fed by great writers, lacking the expressive richness which comes from the variety of dialects, from the variety of forms assumed in different times?[107]

Grigorij Vinokur, a literary author and philologist contemporary of Bakhtin, showed how the control over the language and text served to manipulate ideology, consciousness and culture:[108] the national language has the scope to unify and make a nation, creating citizens and isolating from the others in order to obtain a national, social and political control/unity.[109]

In the footsteps of Bakhtin, the study of hieroglyphs and their materiality cannot be abstractly separated from other parts of the material world, history, politics and – especially – society:[110] the manipulation of the hieroglyphic signs must be also read as a cultural dialectic between different parts of ancient Egyptian society.[111] At first, the practice of the manipulation of the hieroglyphs in funerary contexts seems to be generated inside the inner circle of royalty (only *kings*), subsequently passing to a wider layer of the population, which is still consistently in the higher hegemonic levels (*queens,* and later, *high officials*) and, subsequently, circulates in peripherical areas adopted by a lower social segment (*mid-rank functionaries*). In a second phase, during the late Middle Kingdom, the practice seems to be resumed, if it had ever been abandoned, following a very similar path, first attested in the royalty (*kings*, *queens*, *royal*

[...] requires a methodology very different from the others', Bakhtin 1981, 291. Such a concept has been inherited by Gramsci when he perceives language as 'a living thing and a museum of fossils of life and civilizations. When I use the word "disaster" no one can accuse me of believing in astrology, and when I say, "by Jove!" no one can assume that I am a worshipper of pagan divinities. These expressions are however a proof that modern civilization is also a development of paganism and astrology', Gramsci 1971, 450.

106 Hirschkop 2021, 91. See Vyacheslav 1999

107 Gramsci 1985, 29.

108 Eagleton 1996, 102; Beetz 2016, 94–95.

109 Crowley 2006, 184–185.

110 Cf. Coward and Ellis 1977; Briggs and Bauman 1995. For the Egyptian side, see Morenz 2007.

111 See Stauder 2022, 221, who suggests that the emergence of writing is tied to social and cultural contexts. See also Morenz 2012.

family) and later reproduced in a very unstructured way in lower layers of society (*high*, *mid- and lower rank functionaries*). The practice changes, transforms and becomes adapted to the needs of the specific social sector when passing from one segment of society to another. The passage of time and social forces makes this practice increasingly inconsistent (also because the original input was transformed through the passage of different chronological, spatial and social strands), also reproduced in unconventional places different from the intimate funerary domain (such as stelae in the offering chapels).

6 The passage from high culture to folk domain

The chronological 'movement' of the manipulation of hieroglyphs from royalty to lower layers of society, progressively becoming inconsistent, unsystematic and deviating from the original purposes, reminds one of the mode of absorption of the culture from the subaltern classes sustained by Gramsci in his discussion about folklore.

According to Gramsci's division, the ruling or hegemonic class needs to create consent in order to maintain its dominance over a larger part of the population. The consent is created through the formation of a hegemonic culture, with very precise connotations, in order to be visible, defined and immediately recognisable. The scope of creating a hegemonic culture (distinctive commonly recognised traits) is to promulgate models of power and dominion, being commonly accepted and immediately targeted without the need to constantly reiterate and demonstrate the reasons for power.[112] The writing and a language definitely represent traits of common consent for a hegemonic culture. The centralization and brutal forms of unity engendered by Stalin, for instance, were also realised in a coercive way through the imposition of a standard Russian language.[113] The 'standardisation' of the language was acting as centripetal force against natural (?) centrifugal directions.[114] Gramsci

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112 Hall 1986, 15; Colpani 2021. Cf. Banti 2019.

113 Goodman 1956; Michael G. Smith 1998, esp. 161–173, Chap. 8 'Stalin's linguistic theories as cultural conquest'. The language was an instrument by which a regime could dominate people, consolidate its power and extend its empire also in other cases, see, for instance, Rubin and Jernudd 1971; Gonzalez 1980; Weinstein 1990; Esman 1992.

114 Contemporary foreign people speaking in a perfect British English, for instance, are simply reproducing a dialect from the south of England, which is the mirror of the political, social

also stressed the role played by a language (a 'historical institution that changes continuously')[115] in the formation of cultural hegemony, functioning as a paradigm for the operations of social change and the achievement of hegemony.[116] The spread of any linguistic feature passes from community to community: the more it spreads, the more the culture connected with the linguistic feature becomes dominant.[117]

The hegemonic order – as imagined by Gramsci – is not permanent but is in constant competition with other groups (subalterns?), rising, falling, incorporating and being incorporated by other groups, writing and rewriting its identity and borders. The continuous transformation of the hegemonic class and the absence of an everlasting division between the hegemonic and subaltern sectors of society[118] create a constant leak of high culture into a more popular domain.[119]

Gramsci perceived folklore[120] (to be interpreted as a 'moment of formation' rather than as a permanent aspect) as a repository of dismissed ideas, dispersed fragments from the high culture of the dominant groups, fragments coming from past times, opinions and concepts taken out of context, which are adapted and adjusted to a different reality, and more or less distorted from their original intent:[121]

> it [folklore] is stratified, from the more crude to the less crude – if, indeed, one should not speak of a confused agglomerate of fragments of all the conceptions of the world and of life that have succeeded one another in history. In fact, it is only in folklore that one finds surviving evidence, adulterated and mutilated, of the majority of these conceptions.[122]

Gramsci perceived folk culture as a repository of meanings and attitudes transformed over time, where people selected, chose, manipulated and transformed concepts (i.e. fragments of concepts) fallen from above according to their 'own'

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and historical forces extending the hegemony of the south of England over society, culture and widespread in a tyrannic way over a wider territory, Crowley 2006, 186–192.

115 Ives 2004, 23.

116 Gramsci 1985, 183–184. Also see Dorothy Smith 1990.

117 Kroskrity 2000.

118 Cultures constantly intersect: the pertinent cultural struggles arise at the points of intersection; Hall 1981.

119 Gencarella 2010, 223.

120 Dei 2018; Dei 2020; Cirese 2022. See notes in Hall 1981.

121 Gramsci 1985, 189, 193.

122 Gramsci 1985, 189.

needs and criteria.[123] The movement is not unidirectional (top-down), but circular, because people from below are in contact with the power – often also rising to the power in a cyclical refuelling of it – and also bring fragments from the previous time stratified in folk culture into the hegemonic order.[124]

Viewed in such a light, the phenomenon of the manipulation of the hieroglyphs of the Old Kingdom can also be read in its diachronic evolution as the 'leak of fragments' from the official culture. The custom of manipulating hieroglyphs was certainly generated in the sphere of the high theology/linguistic in order to feature a dominant part of society, i.e. to make the hegemonic culture immediately recognisable (in its performativity and materiality), as documented during the Old Kingdom in the royal pyramids. When the custom leaked into the lower layers of society, it was initially adapted and then distorted, and most probably never fully understood, soon becoming 'non-economic' and then dismissed and abandoned. The second phase of the manipulation of hieroglyphs rose up again inside the hegemonic circuit during the late Middle Kingdom, but not as an original concept as it was already the result of a reshuffling in the 'folk' culture, depending heavily on the previous passages in the non-dominant layers of society. A lower layer of society that, after the collapse of the ruling classes of the Old Kingdom, had become part of the hegemonic sphere of society. Again, in the late Middle Kingdom, the practice of mutilating hieroglyphs passed from the higher into the lower layers, and, again, the passage was not complete and direct but happened in a fragmented way, being badly understood, soon became inconsistent, sporadic and then fell into disuse. A circuit of cultural transmission that reunified hegemonic and subaltern groups in a constant circle of rise, leak, adaptation, transformation and fall.[125]

Acknowledgements

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123 Cirese 2022, 30.
124 Gramsci 1985, 194.
125 The hegemonic group, with the passage of time and historical and social transformations, cannot hold its position and give way to the subaltern classes, becoming itself a subaltern group, and so on.

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Ludwig D. Morenz

The 'He' Tribe from Serabit el Khadim and the Invention of Alphabetic Writing: Can the Subaltern … Write?

Abstract: Alphabetic writing was originally not just a logocentric *evolution of simplicity* but was also combined with *conspicuous communication*. We can detect various cultural elements characteristic for its place of origin: the mining area of Serabit el Khadim in south-west Sinai around 1900 BCE. In a global perspective, this product of an *evolution of simplicity* turned out to be highly attractive for various users with very different cultural backgrounds. The detachment from its original socio-cultural context in south-west Sinai eventually turned alphabetic writing into more of a technical tool for simply encoding language phonetically, but I am going to focus in my paper on its original socio-cultural context and, thus, the combination of an *evolution of simplicity* with *conspicuous communication*.

Analysing the origin of alphabetic writing in a perspective of an archaeology of media, I focus on the fertility of cross-cultural contacts between Egyptians and Canaanites 4000 years ago. This novel way of writing was originally not just a logocentric *evolution of simplicity* but was also combined with *conspicuous communication* within the sphere of visual culture.[1] This new simplicity in the writing system was combined with explorations of the figurativity (the figurative shape of signs and aspects of layout) of writing,[2] while we can also detect an iconic motivation in the choice of some specific alphabetic signs. Accordingly, we can detect various cultural elements characteristic of its place of origin: the mining area of Serabit el Khadim in south-west Sinai around 1900 BCE (Figs 1a–b).

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1 For the concept of 'evolution of simplicity' in archaeology, see Wengrow 2001; and Yoffee 2001. It seems profitable to consider it in the context of an archaeology of media.
2 Morenz 2022, 84–135.

Fig. 1a–b: Mountainous landscape around Serabit el Khadim; photo Morenz, November 2022.

The genesis of alphabetic writing in the early second millennium BCE can be considered the most significant media development of the Near Eastern Middle Bronze Age.[3] What has turned out to be incredibly successful over a period of 4000 years and is used today in all continents of the world might, however, have started simply as a distinctly provincial simplification of the complex Egyptian phono-semantic hieroglyphic writing system. Within a global perspective, this product of an *evolution of simplicity* (*Occam's razor*)[4] turned out to be highly attractive for various users with very different cultural backgrounds. The detachment from its specific use in south-west Sinai eventually turned alphabetic writing into more of a technical tool (and medium) for simply encoding language phonetically,[5] but here I am going to focus on its original socio-cultural context and, thus, the combination of an *evolution of simplicity* with *conspicuous communication.*

In contrast to phono-semantic hieroglyphic writing,[6] alphabetic writing is structurally new, in the sense that its function is purely phonocentric. It is based on the simple graphonetic equation: one sign represents one sound, nothing more, nothing less.

This new type of writing was developed by Canaanites in south-west Sinai around 1900 BCE. The individual names of the inventors are lost to us, but we can pin down the place of origin with a rather surprising precision: the sacrotope (= sacral domain) of the Egyptian goddess Hathor in the mountainous area of the south-west Sinai. Resuming 'international' economic activities after a break of some decades, Egyptian mining expeditions went to Serabit to bring back turquoise and copper from the early twelfth dynasty onwards.[7] That process is documented by various hieroglyphic lists containing titles and names of participants[8] monumentalised on stelae erected in front of the sanctuary of the goddess Hathor (Fig. 2).[9]

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3 Herbert Donner called it 'ein Jahrhundertproblem' (Donner 1967, 273).

4 For the term and its history, see Hübener 1983.

5 However, there always remained a figurative dimension in written communication, Vachek 1973; Vachek and Luelsdorf 1989.

6 Schenkel 2003; Vernus 2003; for the various types of signs used in the Egyptian hieroglyphic system, see Polis and Rosmorduc 2015.

7 Inscriptions in Ayn Soukhna prove that Egyptian expeditions for turquoise had already restarted in the eleventh dynasty under Menthu-hotep II (Abd el-Raziq et al. 2002, 40, 41, fig. 10).

8 Seyfried 1981; Tallet 2016–2017.

9 Valbelle and Bonnet 1996, 95, 96.

Fig. 2: Row of twelfth dynasty stelae in front of the sanctuary; photo Morenz, November 2022.

These stelae express a distinct corporate identity shared by these Egyptian expeditions to the mountains of Sinai, and they imply a certain sacralisation in relation to the goddess Hathor beyond traditional levels of decorum seen in contemporary examples from the Nile Valley.[10]

South-west Sinai was a rather foreign area to the Egyptians, who generally left the Nile Valley only temporarily and for very specific economic reasons. Thus, a multigraphic graffito of the twelfth dynasty in Rod el Air (Fig. 3) shows the Egyptian Gebu in a scene expressing sacralisation (offering of turquoise 'bread'[11]) and dominance (grabbing the horns of the gazelle combined with a hunting scene: dogs).[12]

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10 The concept of decorum was introduced into Egyptology by John Baines, see Baines 1990.

11 Discussion of this Serabitian iconographic motive in Morenz 2019a, 59.

12 Discussion in Morenz 2019a, 58–59, figs 17 and 18. According to Roland Enmarch (personal communication), this is vaguely reminiscent of Hatnub graffito 52 (Anthes 1928, 78–80), now apparently destroyed, which also seems to juxtapose hunting with sacral (mortuary) activity. The inscription was already badly damaged in the early twentieth century.

Fig. 3: Carved multigraphic graffito of the Egyptian Gebu, Rod el Air (image + inscription of Gebu); drawing by David Sabel.

The Middle Kingdom Egyptians transformed what was not home, something which was completely different from the Nile Valley, into an Egyptianising auto-tope (domain of Egyptian cultural identity; this is the opposite to a *heterotope* discussed by Michel Foucault and others) through religious conceptualisation and its monumentalisation in visual culture. Thus, the cultural identity of the Egyptian expeditions was enforced by a new and distinct type of *religion of ex-peditions* focusing on 'Hathor, mistress of turquoise' (ḥw.t-ḥr nb.t mfkȝ.t).[13] This mining area in south-west Sinai was sacralised particularly by Egyptians build-ing the temple of Hathor (Fig. 4).

This rather intensive building activity, although just a side product of the Egyptian's mining activity, was not only a sacral effort but also an economic one. Egyptian expeditions invested quite an amount of workforce and time in stabilising Egyptian cultural identity in the distant mountains of south-west Sinai. By sacralising the area, the Egyptians culturally transformed a foreign, exotic territory into an Egyptian autotope (i.e. a domain of Egyptian cultural identity).[14]

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13 Morenz 2009.
14 The archaeological literature on landscape is vast; for an overview, see e.g. Bender 1999; Tilley and Cameron-Daum 2017.

Fig. 4: Temple of Hathor in Serabit; photo Morenz, November 2022.

This Hathoric 'house of the sistrum' is the largest Egyptian temple outside the Nile Valley, with a building history spanning nearly 1000 years – providing a kind of sacral monumentality, but one that was a work in progress and open to various additions.[15] In architectural semantics, this temple was conceptualized as a turquoise mine (Fig. 5) from which the goddess 'Hathor, mistress of turquoise' appeared precisely as turquoise (*mfkȝt*).[16] This new Egyptian expedition theology of 'Hathor, mistress of turquoise' was specifically designed for the socio-economic situation of the Egyptian expeditions to south-west Sinai.

Compared with the Early Dynastic period or the Old Kingdom, we can detect a remarkable paradigm shift in Egyptian perceptions and depictions of the Canaanites in south-west Sinai, indicating a completely different scenario of socio-cultural interaction.[17] Egyptian monumental representation shifted from the iconic scene of *Smiting the Enemy* to cooperation based on intercultural contacts and contracts during the Middle Kingdom (Fig. 6).[18]

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15 An overview is provided by Valbelle and Bonnet 1996.

16 Morenz 2014, 84–140.

17 Morenz 2011, 75–78.

18 Morenz 2019a, 121–123, 207–215, 249–263, 268–269.
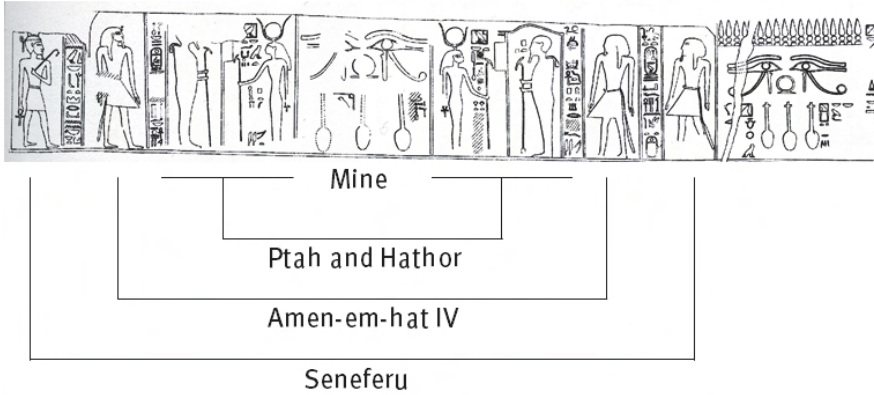
Fig. 5: Relief S 124 showing the Serabitian theology of turquoise.
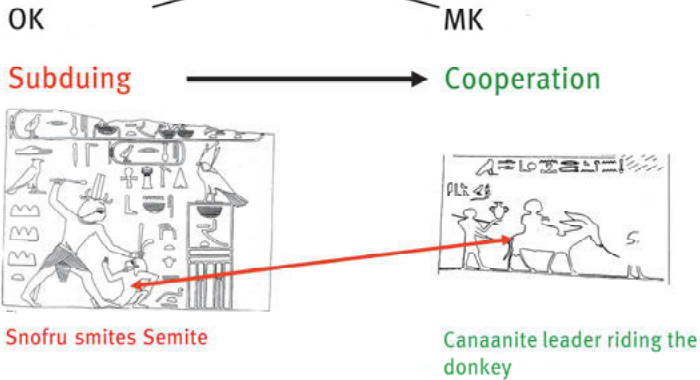
Fig. 6: From subjugation to cooperation, changes in Egyptian depictions of Canaanites in Serabit.

Within this context of a changing political iconography, Canaanite leaders, such as the 'brother of the ruler of Retjenu Khabi-dadum'[19] (Fig. 7), are shown riding the donkey.

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19 Černý 1935.
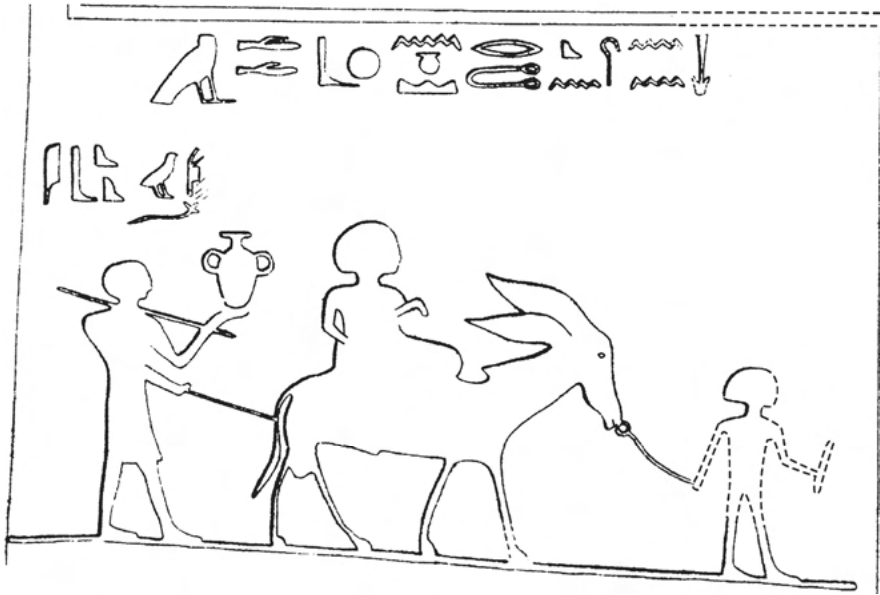
Fig. 7: Khabi-dadum; lower part from the stela S 112; adopted from the drawing IS, vol. 1, pl. XXXVII.

Within a Canaanite and more broadly West-Semitic context, this iconography of riding the donkey implies high social status, specifically respected and honoured by the Egyptians,[20] and points to a scenario of cooperation based on contracts.[21]

Furthermore, the cooperation between the Egyptians and the Canaanites generated intercultural equations of gods, and that is, indeed, a remarkable product of cross-cultural interaction during the early second millennium.[22] These Canaanites living in south-west Sinai equated their god El with the Egyptian god Ptah.[23] A rock stela on the *Canaanite* mine L in the area of Serabit[24] depicts El in the Egyptian iconography of Ptah, while the alphabetic inscription labels him as El (S 351, Fig. 8).

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20 Morenz 2019a, 60–62.

21 For inscriptions reflecting 'contracts', see Morenz 2019a, 248–263.

22 Morenz 2019a.

23 Morenz 2023.

24 This mine is numbered as L = XIII. Here, we find various Canaanite alphabetic inscriptions but no Egyptian ones. So, it seems likely that Canaanites worked here probably alone.

Fig. 8: Rock stela S 351; drawing by David Sabel.

Fig. 9: Fragmentary rock stela S 355; drawing by David Sabel.

The image implies a remarkable knowledge of the Egyptian iconography of the god Ptah, while stylistic analysis shows some rather non-Egyptian features. The figure of the god was probably drawn from memory since there was no Egyptian representation of Ptah visible at mine L or in its vicinity. Thus, the iconography in Canaanite practice on this stela indicates a remarkably high degree of famili-

arity with Egyptian visual culture by this anonymous Canaanite scribe, and that holds true for the Hathoric face on stela S 355 (Fig. 9) too.[25]

We can detect two Egypto-Canaanite equations of gods with the Egyptian god Ptah related to Canaanite El and the Egyptian Hathor related to Canaanite Baʿalat. Religion mattered. Such an intercultural sacral equation concerned the core of cultural identity. It implies significant dynamics in culture. However, these equations seem to have been of relevance only for the Canaanites, while the Egyptians seem to have paid no attention. Imagery and writing on this rock stela at the entrance to the *Canaanite* mine L appears as a fascinating cultural hybrid in-between the Old Canaanite and the Egyptian culture in south-west Sinai. These Canaanites adopted Egyptian prototypes quite closely, but in order to express their own cultural identity.

The equation of the Canaanite goddess Baʿalat with the Egyptian Hathor was of particularly high importance for the relations between the Egyptians and the Canaanites during the Middle Kingdom (respectively the Middle Bronze Age in Levantine terminology) in Serabit. Thus, the bilingual sphinx from the temple of Hathor (Figs 10a–b) mentions in Egyptian hieroglyphs 'Hathor, mistress of turquoise' (*ḥw.t-ḥr nb.t mfkȝ.t*), while the Canaanite alphabetic inscriptions refer to Baʿalat.

a   b

Fig. 10: Canaanised sphinx S 345, BM EA 41748; photos David Sabel.

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25 Morenz 2021, 61–62. Here, we can interpret the two signs below the Hathoric head as alphabetic letters *pe* + *naḥaš* reading *pn* – 'face' – which stands in close intermedial correspondence with the Hathoric face depicted.

We can assume the Egyptian universe of media and especially its visual culture – hieroglyphic writing and images[26] – to have been highly attractive for the Middle Bronze Age Canaanites, who lacked such sophisticated graphic tools of *high culture*. This might be particularly true for the Bedouins in south-west Sinai, in contrast to the Middle Bronze Age Levantine city states, where various images were created[27] and some examples are known of the use of hieroglyphic and hieratic writing.[28] That attraction of Egyptian media-technology and the Egypto-Canaanite process of equating gods,[29] and especially the combination of both, triggered the genesis of alphabetic writing in south-west Sinai around 1900 BCE.

Based on less than thirty letters, alphabetic writing is an enormous simplification of Egyptian hieroglyphic writing. This functional simplification does not mean writing straightforwardly turned into a *cold*[30] media-technology, but that it also generated and expressed cultural identity. The origin of alphabetic writing in the Hathoric sacrotope of Serabit el Khadim left its distinct cultural impression in the letter *alef* – , a cow head – which implies a reference to the Egypto-Canaanite goddess Hathor-Baʿalat who was shown in various temple reliefs and on stelae or at the entrance of mines in the typical Egyptian iconography with the horns of a cow.[31] Thus, the first letter of Canaanite alphabetic writing in its original cultural context shows a strong sacral imprint with a distinct reference to the Egypto-Canaanite goddess Hathor-Baʿalat.

The figurativity of some signs and especially the *alef* mattered for the Canaanite inventors and early users of alphabetic writing in the Serabit area around 1900 BCE. Not only the letters but sometimes even the layout of this early alphabetic writing generated meaning and fostered conspicuous communication. The early alphabetic dichotomy of the purely phonographic usage of letters versus figurative encoding of meaning might seem counterintuitive, but it clearly demonstrates the origin of alphabetic writing not to have been just an economic simplification. We can detect two different trends by contextualization, economic simplification and semiotic encoding of meaning. Indeed, we find not an administrative but a distinctly sacral and commemorative usage of early alphabetic writing.

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26 Baines 2007.

27 For an overview, see Keel and Uehlinger 2010.

28 Na'aman 2020.

29 Morenz 2019b; for further reading, see Assmann 1996.

30 For the dichotomy *cold* versus *hot* cultures, cf. Lévi-Strauss 1964.

31 Morenz 2019b; for the cow head representing esp. the letter *alef*, see Wimmer 2022.

The scribe's interest in expressing cultural meaning had an impact on the layout of these early alphabetic inscriptions. This led to the earliest *carmina figurata*: a highly figurative textual format we know neither from Egyptian hieroglyphs nor Mesopotamian cuneiform, at least not *stricto sensu*.[32] The layout of rock inscription S 358 inside mine L, for instance, is formatted into the shape of a cow's head (Fig. 11), which is, thus, reminiscent of the letter *alef* and the Egypto-Canaanite goddess Hathor-Ba'alat.[33]
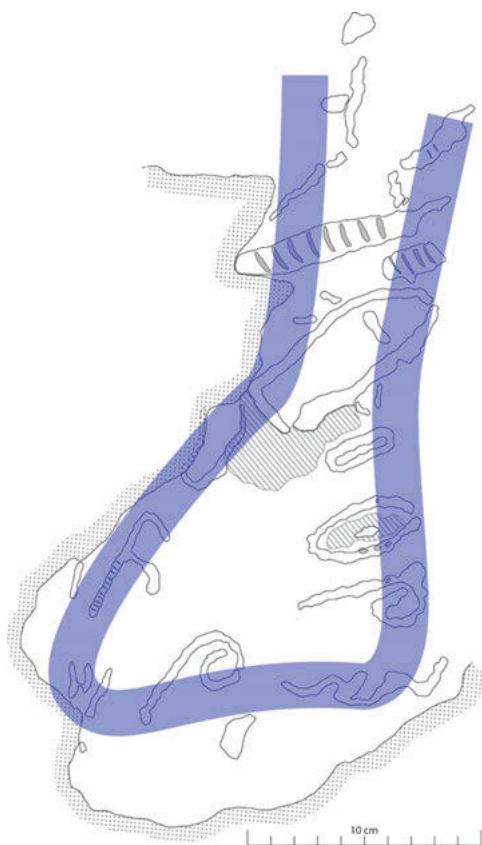
Fig. 11: Alphabetic inscription S 358; drawing by David Sabel.

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32 Morenz 2008.
33 Discussion in Morenz 2022, 48–49. Here, a discussion of the inscription S 377 and its layout in the shape of a cow's head is included.

We find further examples of this sacral poetics generating supplementary meaning to the plain text (especially inscriptions S 345 and S 365) among the early alphabetic inscriptions.[34] We can describe these early Canaanite scribes using alphabetic writing more as *priests* or *poets* than as *merchants*, but these terms are deliberate oversimplifications. These *carmina figurata* are intellectual products of graphic poetry, and they seem to have a distinct affinity to alphabetic writing, probably because the figurative and iconic potential of signs is somehow far too prominent in the hieroglyphic or the cuneiform scripts to allow this other type of figurativity concentrating on the layout.[35]

In their original context of Serabit el Khadim, some of these early alphabetic letters incorporate and express various facets of cultural identity. This figurative motivation works not only for the *alef* and its reference to the Egypto-Canaanite goddess Hathor-Baʿalat but also, among others, for the letter *resh*. Acrophonically derived from the common Semitic word *rash/resh*, the consonant *r* (+ an indistinct vowel)[36] is represented by the image of a human head.[37] There is nothing special about a head, one might think, but our new epigraphic recording show it is rewarding to look at the hairstyle. Some of the early *resh* signs from the Old Canaanite inscriptions in Serabit show a mushroom-shaped head (Figs 12a–c).[38]

The Egyptian depiction of a Canaanite man from Maghara (S 24A) also shows a mushroom-shaped head (Figs 13a–b). Furthermore, he holds an ꜥꜣm stick in his hand. Taken not just as an object but as a hieroglyph, he is, thus, characterised as an ꜥꜣm Asiatic.[39]

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34 Discussion in Morenz 2022, 86–108, 117–135.

35 An inscription of Gudea of Lagash (third millennium) compares the cuneiform signs on a tablet with the stars in the sky. This metaphor implies visual-poetic thinking and we know various examples of poetic elements in cuneiform writing (Cancik-Kirschbaum and Kahl 2017, 322–329) and Egyptian hieroglyphs (Morenz 2008).

36 These vowels might have been clear to the native speakers or have been learned in an oral tradition combined with the written text. Thus, a specific Samaritan tradition of reading is quite well-known for the Hebrew Bible; Schorch 2004. Furthermore, we know of early attempts for encoding vowels, as in the Ugaritic cuneiform alphabet; Loretz 1998.

37 Hamilton 2006, 221–230.

38 For a more detailed discussion, see Morenz 2021, 98–102.

39 Morenz 2021, 98.
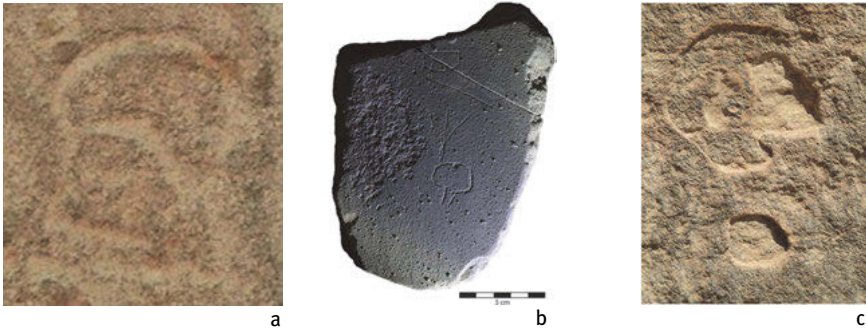
Fig. 12a–c: Early forms of the letter *resh* from inscriptions S 349 (a), 364 (b) and 385 (c); photos by David Sabel.
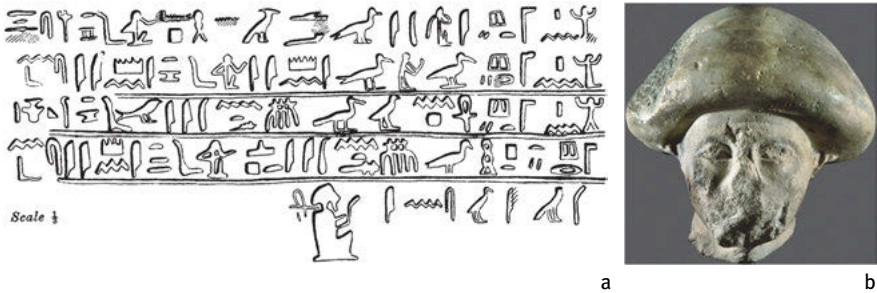
Fig. 13a–b: Depiction of a Canaanite man from Maghara (rock inscription S 24A; from IS, vol. 1, pl. XI.

In Middle Bronze Age iconography, the mushroom-shaped head is a rather distinct iconographic marker of the Canaanite elite, which we know from various pictorial representations including monumental statues from Tell el-Dabʿa in the eastern delta of the Nile.[40] This conspicuous hairstyle is an iconographic marker representing elite-status in the Middle Bronze Age Levantine context.[41] Therefore, the distinctly mushroom-shaped head in the sign of the letter *resh* follows Levantine elite iconography of the Middle Bronze Age with people such as Khabi-dadum mentioned earlier.

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40 Arnold 2010.

41 For an overview, see Burke 2013.

I have spoken so far more generally about Canaanites in the area of Middle Kingdom Serabit, but it seems worthwhile to distinguish between those Levantines coming from afar to cooperate with the Egyptians, such as Khabi-dadum and his people, on the one hand, and more or less local Bedouins, on the other hand. The following discussion is an attempt at media-archaeological rediscovery of the local Canaanite 'He' tribe of the early second millennium BCE.[42] In recovering this 'lost tribe', we can use Egyptian and Canaanite sources from the nineteenth century BCE. The Egyptian material consists of pictorial and written material and allows us to distinguish between local Sinaitic Canaanites and Levantine Canaanites in Middle Kingdom Serabit. Thus, the lower part of the Egyptian Middle Kingdom stela S 87 from the temple of Hathor shows a row of Canaanites also iconographically differentiated by dress and hairstyle (Fig. 14).

Fig. 14: Middle Kingdom stela S 87, lower part.

The last man bears the title 'brother of the ruler of Retjenu' and we might even consider reconstructing the name Khabi-dadum for the damaged part. Similar to the forms of the *resh* sign, he is characterised by his mushroom-shaped head. Each of the three men standing before this 'brother of the ruler of Retjenu' is

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42 More extensive discussion in Morenz 2021, 31–43.

called *ḥrj pr* + semogram STANDING MAN WITH RAISED ARMS. Here and in various other inscriptions from Serabit, this title refers to the local Bedouins.[43] Hence this stela shows local Canaanites (among them a man with the Egyptian name Khenti-khety-hetep) and a Levantine side by side. The same individual *ḥrj pr* + semogram STANDING MAN WITH RAISED ARMS with the Egyptian name Khenti-khety-hetep is also shown on stela S 90[44]. Therefore, we can assume him to have been a leader of the local Sinaitic Bedouins with whom the Egyptian expeditions were in regular contact.

The Egyptian hieroglyph   🖾   is used in these inscriptions as a semogram to designate the local Serabitian tribe 'the highlanders'. More specific information is provided by the stela S 114, similar to S 87, also from the time of King Amenemhet III (Figs 15a–b). This hieroglyphic inscription mentions two *ḥrj pr* + semogram STANDING MAN WITH RAISED ARMS and the lower part provides additional information. That microtext is formatted in imitation of an administrative list.[45] Two different local tribes are distinguished graphically in the second column, the ⟦🖾⟧ versus the ⟦🖾⟧. The specific meaning of the distinction between the two forms STANDING MAN WITH RAISED ARMS versus KNEELING MAN is hard to pin down precisely. The hieroglyphic form 🖾 resembles the hieroglyph *sign-list* A 7 (🖾), and this hieroglyph is used to determine words referring to weakness, subduing or settling down (*wrḏ, bꜣgj, nnj, ḫs, srf*). Thus, we can think of a designation as either 'weak ones', 'subdued ones' or 'the ones who settled down', in the sense of locals. From its context and its use in parallel to 🖾 – 'the highlanders' – I would opt for locals living in the lower areas of south-west Sinai, but this specific guess remains highly speculative.

The Egyptian hieroglyph 🖾 designating the local tribe of Serabit was adopted into alphabetic writing[46] as 🖾 / 🖾 and here, it encodes the sound *h* (*+ unmarked vowel*). Within the set of alphabetic letters, the *he* is the single sign depicting a full human figure.[47] In parallel to the symbolic significance of letters such as the *alef* or the *resh*, we can assume that the letter *he* also implied symbolic significance in the socio-cultural context of Middle Kingdom / Middle Bronze Serabit. It seems to indicate a reference to the local Canaanite tribe in south-west Sinai around 1900 BCE.

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43 Morenz 2021, 35.

44 Morenz 2021, 33, figs 4 and 5.

45 Eyre 2013, 5–13, 43–47.

46 Already suggested in IS, vol. 2, 67, n. 1, furthermore: Goldwasser 2006, 137–138; most recent discussion in Morenz 2021, 31–43.

47 Most recent discussion of the inventory of alphabetic letters in Morenz 2019a, 87–90.
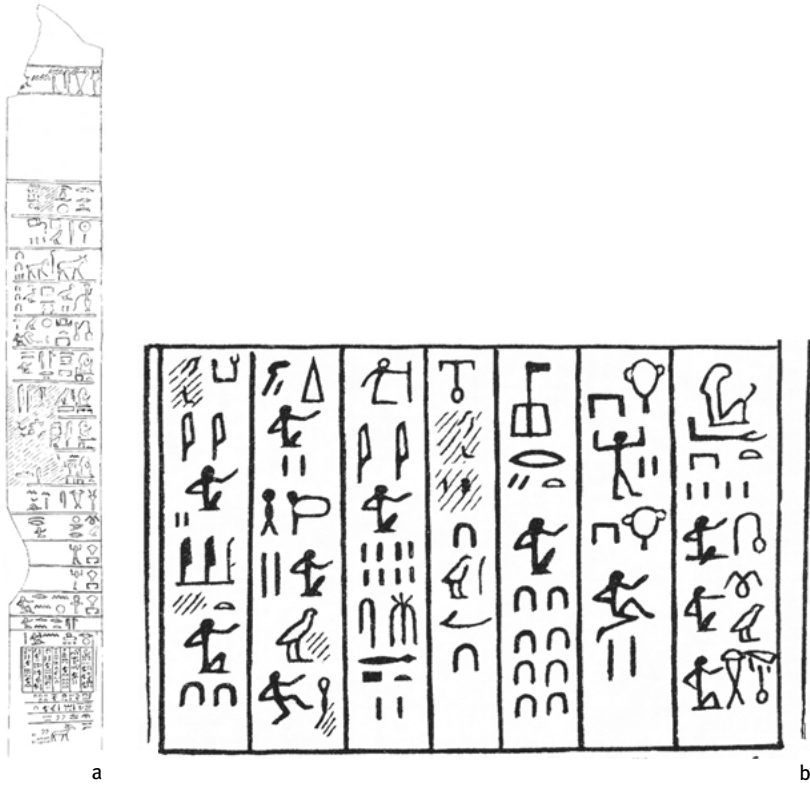
Fig. 15a–b: Stela S 114, south edge; drawing from IS, vol. 2, pl. XXXVIII and XXXVI (a); part of Middle Kingdom stela S 114 (b).

Let us now look at the Egyptian hieroglyphic stela S 100 from the time of King Amenemhet III. It was erected in front of the sanctuary of Hathor. In the lower part, we can recognise a kneeling figure, and below it, is another sign which is much smaller and closely resembles the Canaanite letter *he* (Fig. 16). A Canaanite leader and his followers are depicted on some other Middle Kingdom stelae in Serabit, such as S 112. We can expect a structural analogy, but while the person riding the donkey on the stela S 112 is a Levantine, the kneeling person on the stela S 100 represents a local Canaanite.
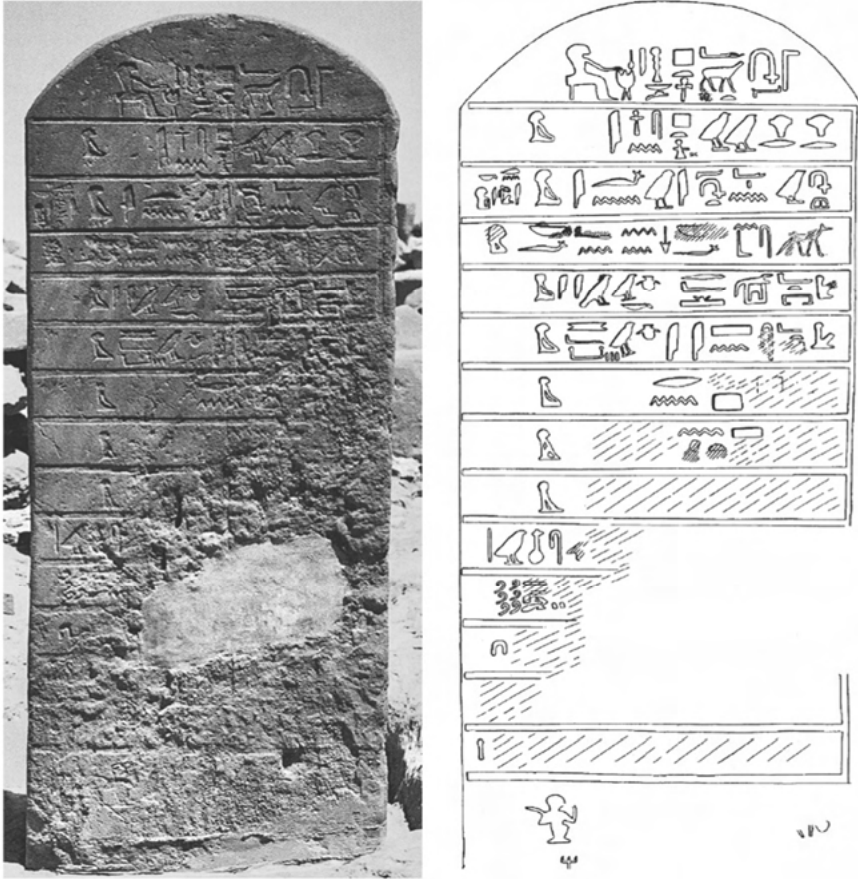
Fig. 16: Middle Kingdom stela S 100, lowest part; photo Morenz, November 2022.

Looking at the layout of the stela, we can imagine a reference to a contract ceremony between the Egyptian expedition and the local Canaanites, represented by the kneeling man. This cross-cultural contact is expressed by the relation of the Egyptian leader of the expedition on top of the stela and the Canaanite representative of the He tribe at the bottom.[48] The small sign below the kneeling figure can be identified as the form of the letter *he*. Furthermore, it closely resembles the Egyptian hieroglyph 🧍, designating the local Canaanite tribe from

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48 Discussion of the evidence and plausibility of contracts between the Egyptians and the Canaanites in Middle Kingdom Serabit: Morenz 2019a, 121–123, 207–215, 248–263, 267–269.

Serabit. However, it depicts the seated and not the standing man and, therefore, we can prefer an understanding as the Canaanite letter *he*. It certainly looks like an alphabetic letter. It is not used here as alphabetic writing proper but more in the sense of a semogram or an icon. This sign specifies the depiction above it and refers to the local tribe in the area of Serabit.

Similar to the goddess Baʿalat in the letter *alef* and the Levantine elite in the letter *resh*, the local Bedouin tribe of the Serabit area is represented in the letter *he* ☥ / Ψ. Alphabetic writing in Serabit was full of cultural meaning in origin and that strong symbolism combined with the purely phonographic usage was specifically expressed by letters such as *alef*, *he* or *resh*. The Canaanites who created this new writing system inscribed themselves into it and that symbolic presence in the alphabet seems highly remarkable.

Against traditional assumptions, these Canaanites are better visible in the sources and they were internally more differentiated. We should consider them not just as 'slaves or uneducated workers' but people deliberately cooperating with the Egyptian expeditions following their own agenda, exploring agency in the cross-cultural contact and, in doing so, created a writing system from which we still benefit today.

Acknowledgements

Abbreviation

IS = Alan Gardiner and Thomas Peet, *The Inscriptions of Sinai*, 2nd edn [revised and augmented by Jaroslav Černý], 2 vols (Memoir of the Egypt Exploration Society, 36, 45), London: Egypt Exploration Fund, 1952, 1955.

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49 Morenz 2019a.

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General Index

This general index contains anthroponyms (whenever possible with function), ancient and modern toponyms, languages, works' titles (in italics), scripts, and materials pertaining to written artefacts. Page numbers with an asterisk refer to illustrations.

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