

*Hieroglyphs 1 (2023)*

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# Hieroglyphs: Studies in Ancient Hieroglyphic Writing

## Introduction

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Dedicated to J.-Fr. Champollion,  
the founder of hieroglyphic studies

With this first issue we are very pleased to introduce *Hieroglyphs*, an internationally peer-reviewed e-journal that aims to promote the academic study of hieroglyphs from both an Egyptological and a comparative perspective.

As we celebrate the 200-year anniversary of Champollion's decipherment of Egyptian hieroglyphs, studies of hieroglyphs continue to appear in scattered publications. This dispersion is paradoxical, given the centrality of hieroglyphic writing to both the high culture of ancient Egyptian and Egyptology. It is also highly unfortunate in view of the diverse research currently taking place in relation to many different aspects of hieroglyphic writing. *Hieroglyphs* aims to address these shortfalls by providing a dedicated home for studies of hieroglyphs in all their semiotic, linguistic, aesthetic, cultural, and material dimensions. In doing so, it will help intensify discussion, emphasize the manifold nature of the study of hieroglyphs, and establish this study as a field of its own.

Hieroglyphic scripts reflect a major cultural investment on the part of the societies that developed and used them. They served for thousands of years as an advanced experimental laboratory

for the relations between the spoken and written words and images. Hieroglyphic writing systems embrace a variety of different scripts, including Mesoamerican scripts and Anatolian hieroglyphs. These scripts span time and space, and we intend *Hieroglyphs* to function as a forum for the study of Egyptian hieroglyphs alongside these and other similar scripts. We are further interested in the iconic aspects of Cuneiform and Chinese writing in their earlier stages. We hope that the interdisciplinary analysis of these different forms of writing will highlight the relevance of pictorial scripts to such disciplines as anthropology, cognitive linguistics, neuroscience, and communication studies.

*Hieroglyphs* invites academic studies on the following, non-exclusive list of subjects in Egyptology and other hieroglyphic or related traditions:

- the linguistic and semiotic dimensions of hieroglyphic writing systems
- the categorization and representation of knowledge in hieroglyphic repertoires
- individual signs and repertoires of signs, including their forms, visual and cultural referents, and “biographies” (their diachronic development)
- the relation of hieroglyphic systems to iconography and visual/aesthetic culture, including extended practices of hieroglyphic writing such as enigmatic writing, visual poetry, etc.
- the graphic ideologies behind hieroglyphic writing, including issues of ontology; the power of hieroglyphs; hieroglyphs in society; hieroglyphs and authority; hieroglyphs and materiality
- the reception of hieroglyphs, both ancient (including pseudo-hieroglyphs) and modern; history of research
- the relation of Egyptian hieroglyphs to other varieties of Egyptian writing (hieratic, demotic), including influences and hybrid registers.

In addition to traditional articles, *Hieroglyphs* invites the submission of “essays and notes.” We intend these essays and notes as an alternative mode of academic conversation and dissemination: an experimental way of presenting ideas in the making and/or in formats that differ from those of the traditional academic article. For instance, an author might make use of the format to experiment with an idea and submit it for discussion before elaborating on it further.

*Hieroglyphs* will be an entirely digital venue. This will allow us to publish images and other visual content without any restriction on their number or the use of color. It will allow for the detailed presentation of original hieroglyphic inscriptions that are not reducible to fonts; inscribed artifacts and monuments; computerized color visualizations of networks of signs, etc.

The digital format and a fast-tracked editorial process will also permit the rapid publication of articles (within three months of the date of initial submission for articles that do not require major changes). Articles and essays will be published individually as soon as they are ready and collected in an annual e-volume. In the spirit of broad dissemination, *Hieroglyphs* is fully Open Access.

Finally, we are very grateful to the ULiège Press, and especially to Baudouin Stasse for his help and support throughout the entire editorial process; to Jorke Grotenhuis, who pre-formatted and copyedited the papers; and to Dmitry Nikolaev, who installed and parametrized [OJS](#) for *Hieroglyphs*.

The editors (July 23, 2023)

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# An Egypto-Grammatology: Why and How<sup>1</sup>

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**ABSTRACT.** Grammatology as a field of study in Egyptology, though having by now quite old roots, remains difficult to define. It is commonly confused with palaeography. The latter, however, is limited to the formal aspects of a hieroglyph and its variations. Setting aside the theories developed by Ignace Gelb and Jacques Derrida, Egypto-grammatology addresses all cultural aspects of the writing system and its components. The present article summarises the main difficulties the grammatological process should address and gives some examples of what one can expect from it. Relying first on philological, lexicographical and palaeographical analyses in a diachronic perspective, the aim of Egypto-grammatology is to recover what was the cultural meaning of a hieroglyph for the ancient Egyptians. To reach this goal, it uses all possible information given by iconography and archaeological remains and, whenever possible, the theological signification embedded in the hieroglyphic image. This approach makes it possible to identify correctly what a hieroglyph represents and thence to give it its proper place in a taxonomic system. Ultimately, Egypto-grammatology brings into the validity of some principles and limitations imposed by the Unicode Standard for the implementation of Egyptian hieroglyphs.

**KEYWORDS:** Hieroglyphs, grammatology, taxonomy, Unicode, typography

## 1. Grammatology

### 1.1. Grammatology. Preliminary remarks

As a discipline, grammatology is a relative newcomer in Egyptology, with important forerunners, however, in Pierre Lacau and Henry G. Fischer.<sup>2</sup> Its practice is in its infancy and generally flawed, as we will see, by an excessive influence of printers' catalogues of hieroglyphic typefaces, compounded by the scarcity of available published monumental, epigraphic sources from which

1 I warmly thank Andréas Stauder and an anonymous reviewer for having read through the article and improved the English.

2 Lacau 1954; among Fischer's abundant publications, one may mention Fischer 1976 and Fischer 1996.

genuine hieroglyphic data could be harvested. Fortunately this situation is evolving quickly and in a positive direction with an increasing amount of monuments published in good-resolution photographs or reliable facsimiles. Palaeographies of monuments from different periods are also being published. However, grammatology is often thought to be more or less akin to palaeography. The latter discipline is, to be sure, a prerequisite for grammatological studies as it provides the basic material for its practice. But palaeography is mainly limited to the formal aspects of signs and their variations, as these can help dating a text or reveal specific habits of a sculptor or a painter. Philological information is usually included in this type of study. This tradition of study is inherited from older palaeographical practices as they applied to ancient or modern handwriting, whether alphabetical or syllabic. But when faced with a mixed, logo-phonetic, and highly pictorial writing system such as Egyptian hieroglyphs, such an approach is extremely limiting. Grammatology, by contrast, aims at a much broader spectrum of what a sign can tell us. Once analysed in context and then singled out, the iconic sign with all known variations, the details it shows in carefully carved examples, possibly even its colours, opens, in most cases, to what is not directly visible: the cultural implications of the sign. To reach these goals different tools must be made to work together, as we will see.

The very term “grammatology” could be seen as ambiguous or misleading since it could be applied to very different objects. In contemporary European languages the term, to the best of my knowledge, first appeared in 1874 in Émile Littré’s *Dictionnaire de la langue française*.<sup>3</sup> The definition given, “traité des lettres, de l’alphabet, de la syllabation, de la lecture et de l’écriture” strictly limits grammatological practice to alphabetic writing systems, in type or handwritten. I have been unable to trace the term in English or German dictionaries from before the twentieth century. However, a forerunner, “grammatography,” was used already in 1861 in the English title of a book on writing translated from a German original which does not use it, as Ignace Gelb reminds us.<sup>4</sup> In his *Study of Writing* (1963; first published in 1952), Gelb defined what he thought grammatology should be as a scientific discipline: “the aim of this study is to lay a foundation for a new science of writing which might be called grammatology... The new science attempts to establish general principles governing the use and evolution of writing on a comparative-typological basis.”<sup>5</sup> So far so good. However, the way Gelb developed and illustrated these rather general statements has been strongly criticised. William Edgerton<sup>6</sup> and Siegfried Schott<sup>7</sup> expressed their deep disagreement about one basic principle that he proposed, which conflicts with what is known of Egyptian

3 Littré 1874: 1914.

4 Gelb 1963: 23 and n. 46.

5 Gelb 1963: v.

6 Edgerton 1952.

7 Schott 1953.

hieroglyphic writing: “in reaching its ultimate development writing, whatever its forerunner may be, must pass through the stages of logography, syllabography, and alphabetography in this, and no other, order.”<sup>8</sup> As both these Egyptologists stressed, Egyptian writing is purely consonantal and, as proved by solid facts, not syllabic. Thus, Gelb’s whole treatment of Egyptian writing cannot be accepted, the more so since the author poses as an unbreakable rule (see the quote above) a linear evolution of all scripts with an ultimate goal: the alphabet. Hieroglyphic writing over the more than three millennia of its existence never moved toward this goal, even while different cultures close to the Nile valley created and developed alphabetic systems.<sup>9</sup>

Unfortunately for research in Egyptology, the concept of “grammatology” was popularised with considerable success by the French philosopher Jacques Derrida.<sup>10</sup> His knowledge of ancient Egyptian writing, however, was close to none and seems to have derived only from a short and rather simplistic contribution by Jean Sainte-Fare Garnot.<sup>11</sup> Moreover he was obviously influenced by the Greek vision of Ancient Egypt, as handed down by philosophers such as Plato. After writing that “all graphemes are of a testamentary essence” Derrida qualifies Thot in a lengthy note as “the Egyptian god of writing, evoked in *Phædrus*, inventor of the technical ruse”, that is, hieroglyphs.<sup>12</sup> Moreover, relying on the work of Jacques Vandier on ancient Egyptian religion,<sup>13</sup> he rather daringly interprets a well-known Egyptian myth: “Let us recall that in a sequence of Egyptian mythology, Seth, helper of Thot (god of writing here considered as a brother of Osiris), kills Osiris by trickery. Writing, auxiliary and supplementing, kills the father and light in a same gesture.”<sup>14</sup> Plainly, real hieroglyphic writing cannot be viewed through these lenses. Moreover, Derrida was also unconsciously influenced by what was written about hieroglyphs before their decipherment by Jean-François Champollion, since he devotes an important part of his reflections to such authors as Jean-Jacques Rousseau or Bishop William Warburton.<sup>15</sup> Even if his basic philosophical tool, “deconstruction,” could be regarded interesting since it tries to highlight what is implicitly embedded in a sign to show all that is concealed behind its immediate appearance, more generally his conception of “grammatology” would only lead to mere illusions and dangerously hamper any serious study of

8 Gelb 1963: 201.

9 Harris 2014: 1–4 examines the ideas of Ignace Gelb and Jacques Derrida critically. He develops his own conceptions of grammatology in his book taking contextualisation, constraints of communication, and macrosocial parameters into account. Another critical analysis of Derrida’s ideas and the difficulty of applying them to hieroglyphs is developed by Galgano 2003.

10 Derrida 2016 (first published in 1976).

11 Derrida 2016: 395 n. 45. See Garnot 1963.

12 Derrida 2016: 74 (below) and 386 n. 31.

13 Vandier 1949: 46.

14 Derrida 2016: 401 n. 4.

15 For Rousseau, see Derrida 2016 in general; for Warburton, see Derrida 1977.

Egyptian writing. This caveat also applies to other non-European writing systems, for instance that of Chinese.<sup>16</sup>

Since “grammatology” as defined by both Gelb and Derrida is misleading, Renaud de Spens has recently proposed to abandon this term and to replace it with “glyphology.”<sup>17</sup> One may hesitate to give up well-known terminology that is used in other fields.<sup>18</sup> In China, grammatical studies have a very long history.<sup>19</sup> One may even say that this scientific discipline was born in China almost two millennia ago out of the necessity to compile catalogues of all graphs known from a given period in order to provide writers with a reliable compendium.<sup>20</sup> The method and analyses in the standard work of Qiu Xigui on Chinese grammar, extremely inspiring as they are, cannot be applied to the Egyptian grammar even though the author ventured to offer some comparisons with Egyptian hieroglyphs.<sup>21</sup> In Egyptology, to the best of my knowledge, “grammatology” was first used by Aleida and Jan Assmann, but in an article devoted to the quest of the meaning of hieroglyphs before their decipherment by Jean-François Champollion, a quest considered by the authors to have been the origin of grammar applied to ancient oriental scripts.<sup>22</sup> A couple of years later, aware of the shortcomings of Gelb’s theory, I stressed the necessity of a new definition of “grammatology” based upon a palaeographical corpus of hieroglyphs.<sup>23</sup> To sum up, if it is preferable to retain a well-established term in different philological and palaeographical disciplines, it seems convenient to use “Egypto-grammar”, to avoid any confusion or ambiguity.

## 1.2. Grammar and Unicode

Any grammatical study requires access to an extensive corpus of hieroglyphs, ideally collected from photographs or facsimiles, and registering all signs known from publications, whether on paper or digital. Though two centuries old, Egyptology has not compiled such a corpus. With the growing interest in the study of hieroglyphic writing, because of this lacuna and given the considerable time probably needed to constitute such a corpus, a choice was made to rely on existing printers’ catalogues of characters, lead or digital. In recent years the Unicode Consortium undertook to build up a repertoire of all known characters registered in all printers’ catalogues, completed with various unpublished sources.<sup>24</sup> This repertoire contains a little less than 8000 characters and

16 Han-liang 1988.

17 de Spens 2022: 12–13 with n. 45.

18 For instance Rizza 2014: 167, who uses the term without proposing a definition.

19 Qiu Xigui 2000: xvii, where the original Chinese title of the work *Wenzixue gaiyao* is translated as “The Essentials of Grammar”.

20 On these compendia, see Qiu Xigui 2000: 48–50.

21 Qiu Xigui 2000: 8–9 for instance.

22 Assmann and Assmann 2002.

23 Meeks 2004: V and XVIII.

24 Suignard 2020, with the related database.



is intended to pave the way for a definitive encoding of all of them in order to set an international norm, as now exists for Latin or Chinese characters. The resulting repertoire is, of course, extremely useful and relieves Egyptologists from this admittedly tedious task. The whole project is supported by a circle of expert Egyptologists advising the leading members of the Consortium in charge of the implementation of Egyptian hieroglyphs.

As it is, the Unicode project is intended to give all necessary tools for those who wish to develop and design hieroglyphic fonts, no matter what computer system is used. From a philological and grammatological point of view, some rules or principles decreed by Unicode raise thorny questions. First of all, according to Unicode a character, no matter what script or period it was in use, exists only if it is documented in print. However, as Carl-Martin Bunz notes:

[...] the attempt to draw up an abstract encoding even for one single language dependent writing system is useless, because in the course of its long history no standardization has ever been made. What has come down to us from the extensive text production of the ancient Near East are exclusively manuscripts in the very sense of hand-writings showing up features of date, writing school, office, but also the particular features of the scribe's personal manner of handling pencil. Deriving standard shapes from more than a sixscore of ductus of different scriptoria [...] would mean to introduce something intrinsically alien to cuneiform writing.<sup>25</sup>

This is of course true of carved or painted hieroglyphs. Considering this statement of Bunz, Alfredo Rizza asks a pertinent question: “What does the process of deriving standard shapes have to do with the collection of a character repertoire if the character is an abstraction from the specific shape variants?”<sup>26</sup>

These quotes suggest some further remarks. First, a hieroglyph exists because it exists on monuments. Giving a kind of ontological pre-eminence to Egyptologists' hieroglyphs over the original Egyptian hieroglyphs is unscientific. In addition, a significant number of hieroglyphs from older periods (from the Archaic period to the Middle Kingdom) are poorly represented in fonts, even though essential knowledge for a better understanding of the writing system as a whole could be derived from these. Second, the strict distinction made by Unicode between “character”, as an abstraction of shapes, and “glyphs” as the actual shapes in a text, is hardly pertinent when original examples of Egyptian hieroglyphs are considered.<sup>27</sup> Hieroglyphs represent beings and objects, not geometric forms like Latin letters for instance, or shapes inherited from ancient calligraphic

25 Bunz 2000: 24.

26 Rizza 2012: 231.

27 This also true of less sophisticated writing systems: “While glyphs are needed in order to illustrate how a character is typically represented in writing, they are sometimes not enough to specify what the character really means” (Haugen 2013: 105).

traditions, like Arabic or Chinese signs. As Stephen Houston and Andréas Stauder write in an essay comparing hieroglyphic writing in the Maya and the Egyptian traditions:

Unlike writing systems based on the discrete combination of lines or strokes (e.g., cuneiform scripts and Chinese after their initial pictorial stages), hieroglyphs are not reducible to substitution classes. They build on shapes; they have outlines, an inside and an outside, even an implied or real three-dimensionality. They possess visual referents beyond the signary itself, steeping themselves in a broader graphic inventory of imagery. [...] Although helpful in some ways, fonts do another disservice by muting scribal wit and ingenuity, and by discounting agentive vitality and the artful use of space, even the specificity of signs—the details of this text, in that place and time, near those images.<sup>28</sup>

Indeed, what could be an abstract “character” of an elephant and its representations as “glyphs” over the three millennia during which the hieroglyphic writing was in use? The abstract image of the animal varied according with its accessibility, or otherwise, in the natural environment.<sup>29</sup> This is not a typographical problem but an Egyptological one, more precisely a palaeographical and a grammatological one. To quote Alfredo Rizza, “the difference between the grapheme and the character is that the grapheme is a scientific problem, the character is not.”<sup>30</sup> In other words, since Unicode is only concerned with typography, its treatment of Egyptian hieroglyphs cannot be scientific, the more so since the advice of expert Egyptologists could, perforce, comment only on typographical aspects, even when it comes to building up a taxonomy, as we will see.

The already complex issue is compounded by the lack of a corpus of hieroglyphs attested on monuments and in publications (as pointed out above), from which examples published only in hand copies and hieroglyphic type must be excluded. This deficiency has led researchers to take typographic signs into account as if they were like actual hieroglyphs, which they are not. The numerous (morphologically and semantically significant) variants of a single sign that must be used in grammatological study are said by Unicode to “pollute the repertoire”,<sup>31</sup> while expert Egyptologists think that such a proliferation “can be quite confusing, even for seasoned encoders.”<sup>32</sup> The question is still about typographical techniques and encoding, not Egyptology strictly speaking. The statements just quoted could seem puzzling, but they have a technical rationale that is hardly known outside

28 Houston & Stauder 2020: 12.

29 See my remarks in Meeks 2004: XVI–XVII. See also Grotenhuis, Nerderhof, Polis *et al.* 2021: 1 on the figurative dimension of hieroglyphs and the difficulty to characterise an abstract entity.

30 Rizza 2012: 238.

31 Anderson 2020.

32 Grotenhuis, Nerderhof, Polis *et al.* 2021: 3.

the Unicode circle, professional printers, and digital font designers, and this is clearly explained by a group of Egyptologists participating in the hieroglyphic project of Unicode:

One should also bear in mind the difficulties of implementing the control characters in OpenType, which is at present the most widely promoted font technology. An OpenType font can only contain up to 65,535 characters. Because dynamic scaling is not possible, each sign has to be represented several times in different scalings. To render left-to-right as well as right-to-left text, a mirrored copy is needed of each scaling of each sign. Having, say, seven scalings for 5,000 signs would therefore already surpass the limits of OpenType technology. In reality, the situation is even worse, as the process of scaling and positioning requires internal code points that need to come out of the above-mentioned 65,535 characters. In addition, we wish to introduce control characters for rotation and shading (hatching) which will require further characters. Consequently, prospects of creating a signlist of considerably more than 3,000 (graphical variants of) signs may at first delight some users who hope to use Unicode for palaeographic purposes, but later disappoint them if it turns out no font can be implemented that includes that many signs.<sup>33</sup>

This means that professional Egyptologists, not only grammatologists but all who wish to publish hieroglyphic texts of some length, especially from earlier or later periods, cannot use Unicode fonts at least in the present state of the technology. The technology will probably evolve in the future, but one wonders why the Unihan, the united Chinese Han set of many tens of thousands characters registered by Unicode, has not inspired those who are implementing Egyptian hieroglyphs.

Notwithstanding these technological constraints, some Egyptologists have already created fonts and typesetting software that allows dynamic scaling of signs and their arrangement in quadrats: the JSesh software by Serge Rosmorduc,<sup>34</sup> iGlyph (Mac), and VisualGlyph (PC) by Günther Lapp and Barbara Lüscher (Basel University), for instance.<sup>35</sup> Obviously typography and fonts on the one hand, and palaeography and grammatology supported by a philological analysis on the other hand, could be closely linked, meeting the needs for publications using font(s) based on grammatological sources. Each typeface would be first drawn as a facsimile and then modified as little as possible, just to respect the requisites of a universally usable font, with the closest possible resemblance to real Egyptian hieroglyphs. This is what I have attempted with the hieroglyphs used in the present article.<sup>36</sup>

33 Grotenhuis, Nederhof, Polis *et al.* 2021: 12.

34 Rosmorduc, JSesh.

35 See links in Bibliography.

36 For the typesetting I use Illustrator™ and Fontographer™ to design my hieroglyphs.

### 1.3. Grammatology. A challenge for the future

It is only fair to say that Unicode becomes progressively more flexible over some of its rules and recognises, implicitly, the specificities of Egyptian hieroglyphic writing, probably under the influence of the expert Egyptologists involved. But as typography remains the basis on which all the architecture of Unicode rests, it seems difficult for a grammatological study to take advantage of the considerable work done by the whole team involved in the project.

In recent years a good deal of projects have been launched in order to collect hieroglyphs from actual monuments and classify them, but each project has different goals. After a period of reflexion, discussions and maturation, the [Thot Sign List](#) database, supported by the universities of Liège and the Academies of Berlin and Leipzig, was released in 2019. Though its structure certainly permits a progressive incorporation of all known hieroglyphs, the chosen orientation is mainly typographic since the targeted users, at least for the moment, are text editors, encoders, software developers, font specialists etc., as well as students who can use it as a learning tool since the database lists also the different values/readings of hieroglyphs.<sup>37</sup> Fortunately enough, for each registered hieroglyph (under a typographic heading sign) access is given to their corresponding examples taken from monuments, usually small photographs. This area of the database, however, exhibits some inconsistencies (§3 below). Another important tool was recently presented: the platform *iClassifier*, which will provide a commented and minutely analysed catalogue of the classifiers (or determinatives) used in Egyptian and, in the future, also compare these to classifiers in other ancient Near Eastern writing systems. The authors expect to highlight a “phonetic classification versus semantic classification in the Egyptian script.”<sup>38</sup> As this programme will, as far as possible, also add a source image (a photograph) taken from monuments for each sign that is analysed, it will contribute significantly to the constitution of a global corpus. The project [Hieroteka 3D](#), directed by Marc Gabolde (University of Montpellier, Centre franco-égyptien d'étude des temples de Karnak) will use photogrammetry and orthophotography to generate 3D reproductions of the architectural blocs of Amenhotep I scattered within the Karnak precinct. Single hieroglyphs will be extracted from these digital models in order to generate a palaeographical database. The same method, once tested, could certainly be applied to almost all reliefs at Karnak and provide a diachronic palaeography of this monument.

Where preserved, coloured hieroglyphs give essential information for the grammatologist. Two projects are specifically devoted to this under-explored field: the [Painted Hieroglyphs Gallery](#), which is one of the programmes of the Epigraphic Survey of the Institute for the Study of Ancient Cultures (formerly the Oriental Institute) of the University of Chicago, and the [Polychrome Hieroglyph](#)

37 Hafemann 2018; Polis, Desert, Dils *et al.* 2021.

38 Harel, Goldwasser, Nikolaev 2023: 139.

*Research Project* of the Université libre de Bruxelles.<sup>39</sup> Though the catalogues they provide are so far extremely modest, consulting them proves instructive for identifying what a hieroglyph represents.

What one would perhaps dream of is to see all these projects cooperate in a kind of network. This is probably envisioned by some of them. The amount of data already collected from photographic sources could build a hieroglyphic corpus of considerable scope and give a decisive impulse to grammatological studies.

## 2. Egypto-grammatology and the taxonomy-typography challenge

### 2.1. Taxonomy: a glance backward

This brings us to defining what are the crucial needs for any grammatological study: first, a clear identification of every single hieroglyph based not only on its outward appearance but on all that can be drawn from its cultural and possibly theological significance, etc.; second, a system of classification, that is, a taxonomy based upon a properly argued analysis; third, registration of all variations of a single sign, because each variation provides a useful piece of information, be it simply for the period during which it was in use. There is a tendency to believe that the identification of what a hieroglyph represents poses no serious problems, except for a small proportion of signs. In many cases this is an illusion, even for signs depicting human activities or attitudes. The rather optimistic perception one can have about this question is largely influenced by the way what one calls “sign lists” have evolved up to now and the information they convey.

Hieroglyphs used during three millennia are extremely numerous, and their exact number will probably never be known. There is no logical limit to their number. Even if Egyptian hieroglyphic writing is no longer in use, every year publications or republications of monuments reveal new signs or unusual forms of signs already known. To find a sign in a list, there needs to be a clear method of classification based upon easily understood principles and accepted by all Egyptologists. Soon after their decipherment, Jean-François Champollion, in his *Grammaire de l'égyptien*, was faced with the necessity of classifying them into different categories, designated by capital Latin letters (A to N).<sup>40</sup> This list was significantly extended and improved in his *Dictionnaire égyptien* published a few years later.<sup>41</sup> The number of signs he listed was still modest, while what many of them really represent not been identified precisely.

On September 19, 1874, during the International Congress of Orientalists held in London, a group of eight Egyptologists met at the residence of Samuel Birch, then Keeper of the department

39 Note that Champollion 1836: 7–11 already saw the importance of the colours. The work of de Spens 2022 represents the first, and successful, real attempt to study polychrome hieroglyphs in detail for grammatological analysis.

40 Champollion 1836: 535–548.

41 Champollion 1841–1842: 465–486. The catalogue is divided into chapters, but the different categories are no more identified by a letter.

of Oriental Antiquities of the British Museum. They examined three proposals of Richard Lepsius that addressed what were considered the most urgent questions to be settled. The first concerned the conventional transliteration system into modern characters, the third creating a critical edition of the Book of the Dead that would be as complete as possible. The second was defined as follows:

it is eminently desirable to possess a recognized complete list of the hieroglyphical signs, arranged according to classes. Not only should these classes themselves be fixed and determinate, but the individual signs should be assigned to their respective classes, not arbitrarily, but according to definite rule. For the purpose of such arrangement the objects represented by hieroglyphs rather than the sounds indicated must be mainly kept in view. [...] It is confidently expected that the directors of museums in particular will note whatever new and admissible signs may be found in their respective collections.<sup>42</sup>

Even today one can adhere to this proposal without hesitation, and all the more so since it had apparently among its goals to collect hieroglyphs from monuments kept in museums. The year after the proposal was adopted, Richard Lepsius published a sign-list based on the collection and classification made by Ludwig Stern.<sup>43</sup> If the sign-list was so readily printed, it is simply because it presented not hieroglyphs painstakingly collected in museums but the font of typographic types created by Ferdinand Theinhardt that had been in use since 1848. The list contained a little more than 1360 characters distributed over twenty-five categories identified by a capital letter (A to Z). This system survives until now, with slight modifications, and was adopted not only by Alan H. Gardiner in his *Sign List* but also by Unicode for its repertoire. One should note that a curious feature was preserved all along, even by Unicode: the absence of a category “J”.<sup>44</sup> This choice was apparently imposed by the fact that capital letters “I” and “J” were easily confused in nineteenth-century handwriting. Preserving this peculiarity for ever would, in my opinion, be a mistake. We need this supplementary category in order to reorganise our taxonomy.<sup>45</sup>

With an awareness of these problems, and to quote the terms of the resolution taken in London, “the individual signs should be assigned to their respective classes, not arbitrarily, but according to definite rule.” Experience shows that this was hardly done and that its concrete realisation had to overcome many obstacles. These are considerably more numerous than is usually thought. Only a grammatological analysis could ultimately surmount them because only such an analysis can help in identifying difficulties that are not apparent at first glance. It is impossible to present in a

42 Douglas 1876: 441–442. Soon after the meeting Lepsius published the resolutions adopted in London in the German journal of Egyptology: Lepsius 1875a: 1–5, see p. 2–3 for the sign-list.

43 Lepsius 1875b.

44 Lepsius 1875b: 2; Gardiner 1957: 545; Suignard 2021: 3.

45 My proposal in Meeks 2004: XIX–XXII (this now needs some improvements).

single article all the traps the grammarologist has to avoid. In the following I outline only the most important difficulties.

## 2.2. Taxonomy: identification

As entries on hieroglyphs in different sign lists usually do not provide references to monumental sources where they are attested, their identification rests mostly on what is said in the scholarly literature and frequently reproduced without further re-evaluation. Identifying what a single hieroglyph represents is a complex task as it involves many different approaches. The collection of as many examples as possible of the sign from all historical periods and the development of a diachronic palaeography is frequently not enough, because in many cases this process provides no information about the cultural background of the hieroglyph.

Special attention should be given to misidentified and thence wrongly catalogued hieroglyphs. While a trained eye can recognise some of them when browsing sign lists, rare or unique hieroglyphs, lost in publications, are ultimately recognised by chance, or they still awaiting the unlikely moment when someone will finally link them to their monumental source (see below §3 *in fine*). Egyptologists do not browse sign list catalogues, and few people scrutinise texts in publications, still less monuments, for such a purpose. Thus, a top-down approach, from typography to monuments, should not be preferred. The bottom-up process, from monuments to typography, however, is extremely time-consuming when practised systematically, and it seems that no one has ventured to embark on such an undertaking.<sup>46</sup>

Some examples will suffice to illustrate the kind of confusions that can occur (fig. 1). As the classification of the IFAO catalogue of signs was chosen by Unicode as the point of departure for its taxonomy,<sup>47</sup> I have selected some characteristic examples from it, almost at random among many other possibilities (fig. 1 top row).

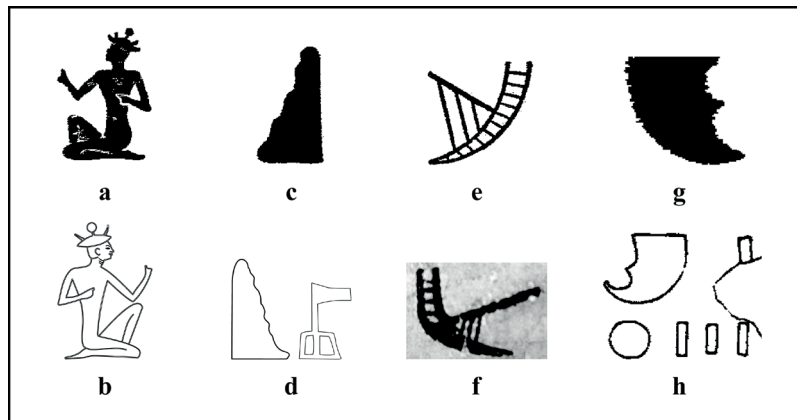



Fig. 1. Misinterpreted hieroglyphic types (top) and their monumental sources (below)

46 I have been collecting hieroglyphs for the past fifty years, and I still do so, but with each new publication of texts or new edition of a monument I observe how much remains to be done.

47 Suignard 2020: 1.



The first example (fig. 1a)<sup>48</sup> was considered a mere variant of the extremely common A1 of the Gardiner *Sign List* ()<sup>49</sup>. If the character is enlarged one can see the specific headdress. This detail is clear enough to identify it as the helmet of a Sherden warrior. The hieroglyph appears in the texts of the Battle of Qadesh (reign of Ramesses II); the facsimile given here was made after the one published by Charles Kuentz because the sign on the monument is now damaged (fig. 1b).<sup>50</sup> It might be convenient to create a subfamily (see fig. 8) for hieroglyphs representing foreign soldiers. The second example (fig. 1c) was thought to represent a stairway.<sup>51</sup> This is in fact an image of the rocky slope joining the Nile valley to the desert plateau, that is, the area in which most necropoleis were located in Antiquity. The hieroglyph is used here as a determinative of *hrt-ntr* “necropolis” (fig. 1d).<sup>52</sup> The third example is placed in the lists among parts of boats (fig. 1e).<sup>53</sup> In fact it is a plough.<sup>54</sup> The hieroglyph shown here is taken from the tomb of king Ay of the end of the 18th Dynasty (fig. 1f).<sup>55</sup> The last example (fig. 1g) is not the scale of a fish given in the lists<sup>56</sup> but a copper ingot (fig. 1h).<sup>57</sup>

One should stress again that none of the existing sign catalogues was conceived as a research tool and to use them as such would perpetuate a considerable number of mistakes, inconsistencies or errors. That would be of no consequence for typographers or even for an extremely limited professional use, but the taxonomy devised by Unicode ignores the fundamentals of ancient Egyptian culture too frequently for it to be universally accepted.

### 2.3. Taxonomy: one sign, multiple identities

Western observations of phenomena are usually defined, named or represented in an unequivocal way. Ancient Egyptian perceptions of the world allowed multiple identities or representations for a single reality, depending on which aspect among all possible ones was chosen. This approach is seen also in writing. A good example is provided by the sun. In the Gardiner *Sign List* (N5), what

48 Cauville, Devauchelle, Grenier 1983: 1 (9); Unicode catalogue A-01-008, Suignard 2020: 140.

49 Gardiner 1957: 442 (A1).

50 Kuentz 1928: pl. VI (3). Sherdens were used as auxiliary troops during the Ramesside period and many of them were integrated in the Egyptian society, see Schneider 2023: 145–148.

51 Cauville, Devauchelle, Grenier 1983: 319 (9); Unicode catalogue O-20-004, Suignard 2020: 358.

52 My facsimile from the stela Cairo CG 20535 (Middle Kingdom), Lange & Schäfer 1902: pl. XXXIX (top left). The same hieroglyph is used in typography as a determinative of *ḥ-dsr* “sacred ground” (i.e. “graveyard”), Lacau 1903: 109, 117, 123 (Middle Kingdom).

53 Cauville, Devauchelle, Grenier 1983: 337 (10); Unicode catalogue P-09-007, Suignard 2020: 371.

54 See the ploughing scene in the tomb of Nakht, Davies 1917: pl. XIX (below).

55 Hawass 2006: 238, photograph retouched by me; the determinative of *šn* “turn away” in a copy of the chapter 130 of the *Book of the Dead*.

56 Cauville, Devauchelle, Grenier 1983: 228 (14); Unicode catalogue K-02-007, Suignard 2020: 299.

57 From the temple of Seti I at Abydos, Calverley & Broome 1958: pl. 62D (logogram *hmt* “copper”).



is considered its usual hieroglyphic representation is a circle with another small circle inside (☉), a curious feature explained by the fact that the sign represents the Sun God's eye (fig. 2a–c).<sup>58</sup> The circle in the middle depicts the slightly protruding part of the cornea (fig. 2b–c). This is a symbolic, mythological rendering of the “sun” concept, as is confirmed by some polychrome hieroglyphs of the eye sign (*Sign List D4*) where the iris is coloured in red and the pupil reduced to a small black dot (fig. 2e).<sup>59</sup> The sun as a star (fig. 2d) is represented in a more realistic way as a red circle hooped by a white glowing light (fig. 2d).<sup>60</sup> A rigid taxonomic classification would separate these two forms, one in “parts of human body”, the other in “Sky, Earth, Water”. This, however, would be an awkward solution as it would place them in different categories although they both represent the same reality considered from two different points of view. Indeed, in terms of ancient Egyptian logic, both belong to the category “Sky, Earth, Water”.

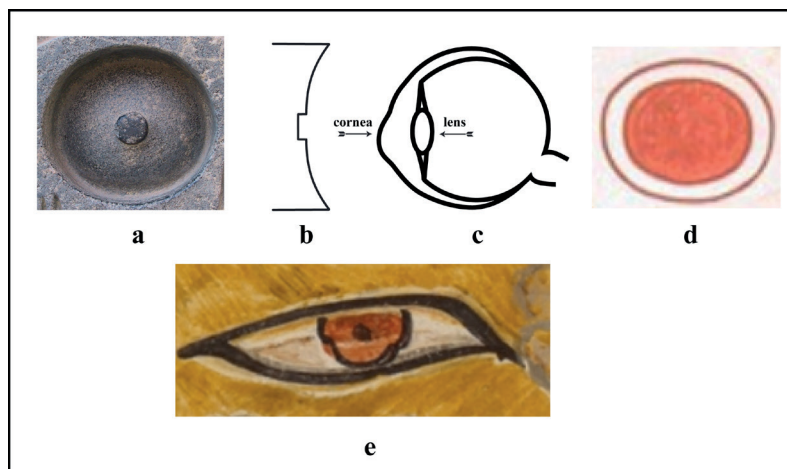


Fig. 2. The Sun God's eye (a) and the sun as a star (d)

Categorisation choices could be much more tricky in some cases like the puzzling example provided by the so-called “rosette” (*Sign List M42*, fig. 3a).<sup>61</sup> That it could be understood as a flower is proved by the blue rosettes on the ceiling of the tomb of Kakemut in Qubbet el-Hawa North (Aswan).<sup>62</sup>

58 Fig. 2a, Luxor temple, seated colossus of Ramesses II (19th dynasty) at the entrance of the main colonnade; author's photograph.

59 Fig. 2e, from the tomb of queen Nefertari, wife of Ramesses II (19th dynasty). Facsimile of one of the paintings by Nina de G. Davies, New York, Metropolitan Museum of Art 30.4.145, <https://www.metmuseum.org/art/collection/search/557768?ft=Davies&offset=0&rpp=40&pos=3> (Public Domain), accessed April 30, 2023.

60 Fig. 2d, from Theban Tomb 226, reign of Amenophis III (18th dynasty). Facsimile of one of the paintings by Nina de G. Davies, New York, Metropolitan Museum of Art 15.5.1, <https://www.metmuseum.org/art/collection/search/548355?ft=Davies&offset=0&rpp=40&pos=2> (Public Domain), accessed April 30, 2023.

61 Gardiner 1957: 484 defines the sign as “flower?” with a question mark.

62 Fig. 3b, author's photograph. The tomb is dated to the end of the New Kingdom.

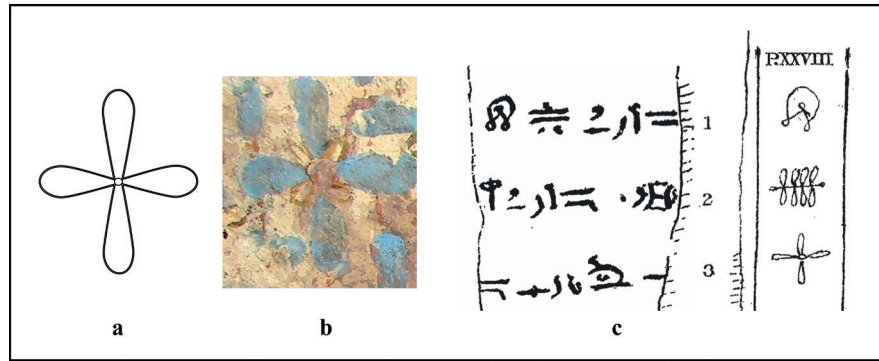


Fig. 3. The “rosette”, a picture and its definition in the Tanis Sign Papyrus

However a different reality emerges from the Roman Period Tanis Sign Papyrus, which lists less than five hundred hieroglyphs, giving for each of them its hieratic equivalent and a brief description of what it represents. In this ancient list, the “rosette” is clearly classified as a “rope” (fig. 3c).<sup>63</sup> The text of this excerpt reads as follows: line 1 “foundation rope” (*nwh n snṯ*); line 2 after the hieratic sign for *zʿ*, “protection rope” (*nwh n zʿ*); line 3 “*wnw*, that is, ro[pe of ...]” (*wnw dd nw[h n ...]*).<sup>64</sup> Unfortunately the end of the line is lost and we do not know what kind of rope this might be. An in-depth grammatological analysis, which is beyond the scope of this article, would show the similarities in different periods between variants of the *zʿ* hieroglyph and those of the *wn* hieroglyph. In this case the best solution is to retain the *wn* sign in the category of “trees and plants.”

#### 2.4. Taxonomy: misleading similarities

The epigrapher copying texts is hardly misled by hieroglyphs with similar or identical shapes but different semantic content. The context helps to differentiate what seems identical, for instance a rare sign from a similar, very common one. Without context it is difficult or impossible to allocate a sign to a specific category. This has long been admitted for geometrical shapes such as a circle (○), which could be used as a simplification of many different hieroglyphs.<sup>65</sup> Present codifications, in general, do not differentiate clearly between all possible semantic values, usually considering that a single code is enough for a geometrical shape, no matter what its semantic content may be. This approach is of course not acceptable for a grammatological taxonomy, especially when hieroglyphs that are similar in shape are not clearly identified by preliminary palaeographical study. Semi-circular hieroglyphs provide a good example of such a situation (fig. 4).

63 Griffith & Petrie 1889: pl. VI–VII, rearranged in order to bring together what is displayed on two different plates.

64 The horizontal line crossed by a stroke is not the determinative of *wnw*, but the late hieratic abbreviation for (*r*) *dd*, Verhoeven 2001: 208 (Z11b).

65 For instance Grotenhuis, Nerderhof, Polis *et al.* 2021: 7.













	<b>nb basket</b>		<b>ḥnkw scales pan</b>
	<b>ḥb basin</b>		<b>ḥnmt sieve/strainer</b>
	<b>ḥt brazier</b>		<b>ḥnmt cistern</b>
	<b>wh3t cauldron</b>		<b>mjnbt axe blade</b>
	<b>rhd̄t bowl</b>		<b>bj3 well</b>
			<b>t bread (reversed)</b>

Fig. 4. Some semi-circular hieroglyphs

Most of these hieroglyphs are used as determinatives, and this is why and how their identity could be ascertained. Very few of them are registered in printers' catalogues because a shape like *nb* () could be used indifferently in typography instead of almost any other semi-circular hieroglyph.<sup>66</sup> A grammatological corpus will register them independently and allocate them to the appropriate category.

## 2.5. Taxonomy. Profusion and scarcity

Some hieroglyphs were in use during three millennia, and this temporal spread accounts for the largen umber of variations in their details. One task of grammatology will be to identify such clusters and to determine if particular variations could belong to a specific period. The so-called “alphabetic” signs provide a good example of such diversity. Fig. 5 gives a selection of sign forms from different periods, all with the value š.<sup>67</sup> For the scribes, these could have had different associative nuances, beyond their identical phonetic value.

66 The Unicode repertoire registers under H-10-005 a *nb*-like sign that is supposed to behalf of an egg shell, Suignard 2020: 288. This sign is borrowed from *Wb* IV, 74, 3 *swḥt* “Np̄f o. ä. (ob: halbes Straussenei?)”. This, however, is a ghost word due to a misreading of an inscription in the tomb of Sarenput I in Qubbet el-Hawa. It should be corrected to *ḥnb's wh(?)t* 10 “*ḥnb's*-sweet, ten cauldron-like (containers)”, see Edel 1971: 31 and fig. 10. The sign is therefore an example of *whḥt* “cauldron” as in fig. 4.

67 Fig. 5a = Wild 1966: pl. 149 (5th dynasty); 5b = Wild 1966: pl. 152 (5th dynasty); 5c = El Awady 2009: pl. XIV (5th dynasty); 5d = Simpson 1976: fig. 20 (6th dynasty); 5e = Petrie 1900: pl. XXXVIII (First Intermediate Period); 5f = Cotteville-Giraudet 1933: pl. 35 (n°139) (13th dynasty); 5g = Rondot 1997: pl. 8 (n°14) (19th dynasty); 5h = Caminos 1974: pl. 46 (18th dynasty); 5i = Leclant & Croisiau 2001: pl. XXI (col. 24, 25) (6th dynasty); 5j = Parker, Leclant, Goyon 1979: pl. 18 (25) (25th dynasty); 5k = Habachi 1985: pl. 24 (22) (12th dynasty); 5l = Blackman & Apted 1953: pl. XXXIV (6th dynasty); 5m = Kanawati & Evans 2014: 113 (162) (12th dynasty); 5n = Bruyère & Kuentz 2015: pl. VI, VIII (end of the 18th dynasty); 5o = Guilmant 1907: pl. LXXXI (19) (20th dynasty); 5p = Bareš & Smoláriková 2008: 115 (middle, col. 4) (end of 26th dynasty); 5q = Chun Hung Kee 2014: 113, 119 (26th dynasty or later); 5r = Schäfer 2011: 163 (l. 14) (early ptolemaic); 5s = Schäfer 2011: 163 (l. 15) (early ptolemaic); 5t = Kockelmann & Winter 2016: 71 (n° 65) (ptolemaic); 5u = Leitz 2010: 301 (33) (ptolemaic); 5v = Cauville 2022: 35 fig 34 (6) (Roman Period). The Unicode repertoire registers a, c, e, f, j, r, s, u, v, Suignard 2020: 331.

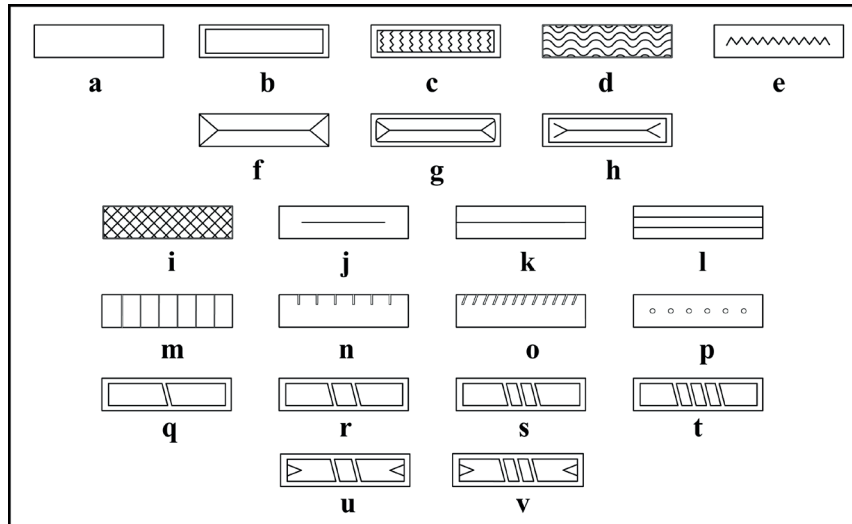


Fig. 5. The sign “s” and some of its variations

All these forms are of importance for the grammatologist, who will moreover try to find more variations to make as exhaustive a catalogue of this sign as possible.<sup>68</sup> As can be seen in fig. 5, such a catalogue could easily serve as a basis for creating unlimited numbers of characters in a font that would be closely linked to their monumental models. In my opinion what Egyptology needs is not only universally accepted codes for each sign and its variations based upon a developed scientific taxonomy, but also fonts based upon epigraphical sources and software that can use scalable characters. Of course, such software will not be text processors but “drawing processors”. Indeed such softwares already exist.<sup>69</sup> One will then have an improved way to recover the unlimitedness and flexibility of ancient metallic typography.

Another feature of great interest for grammatologists is the presence of rare or unique signs that have never been included in a font catalogue or have never been used among printed hieroglyphs. These are much more numerous than one would expect. Apparently they are beyond the scope of Unicode. Such signs could be divided broadly into two categories: rare or uniquely attested signs (fig. 6); and damaged signs, especially those with shapes that are easy to reconstruct (fig. 7).

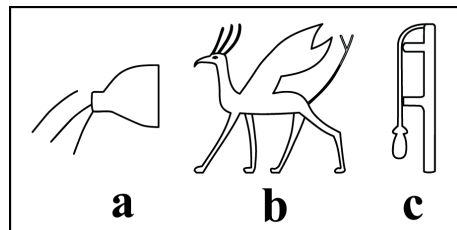


Fig. 6. Some signs not used yet in typography

68 For some of my colleagues such an approach will result “in a never-ending series of additions to the sign list”, Grotenhuis, Nederhof, Polis *et al.* 2021: 12. But from an Egyptological point of view, not a typographical one, this is precisely what is expected.

69 See above §1.2 with notes 34 and 35.

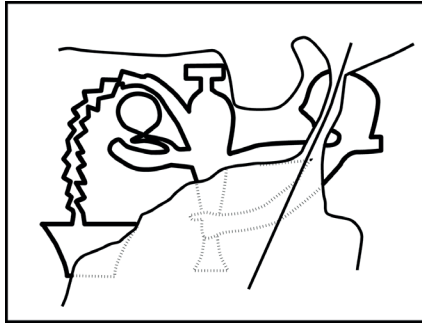



Fig. 7. Damaged sign and a proposed reconstruction of its outline

The sign in fig. 6a represents a breast producing (or pouring, as the Egyptians would think) milk.<sup>70</sup> It is used as a determinative of the verb *whʿ* “throw off, empty out” in the epithet of the Hathor cow *whʿt jrꜥt* “she who produces milk”. The griffin (fig. 6b) is the best preserved example among those known from texts of the reigns of Ramesses II and Ramesses III.<sup>71</sup> All are used as determinatives of *ḥḥ* “griffin” in metaphorical comparisons with the warrior king pursuing enemies.<sup>72</sup> The remarkable raptor’s head of this figure is inspired by the Levantine iconography.<sup>73</sup> Later examples of the hieroglyph show clearly a winged canid with a more Egyptian-looking style ().<sup>74</sup> The object depicted by the hieroglyph in fig. 6c is a plumb line designed to test the verticality of a wall. Curiously enough, the sign is not used as a determinative of the name of the object but of the substantive *ḥʿw* “right, proper place” (where one should stand) in a text of the 12th dynasty.<sup>75</sup> Like the sign in fig. 6a it is a hapax. But a real example of the object that is almost identical in form to the hieroglyph was found in the tomb of Sennedjem (reign of Ramesses II).<sup>76</sup> These short remarks show the advantages that can be gained from including rare signs in our corpus.

The sign in fig. 7 is reproduced from a text in the pyramid of Merenre (6th dynasty).<sup>77</sup> Though damaged, one can complete its outline with no difficulty because the offering gesture and what is offered are well known. It should be included in the grammatical corpus of signs.

70 Seele 1959: pl. 5 (below right, in front of the Hathor cow) (end of 20th dynasty).

71 The present example is taken from *Epigraphic Survey* 1936: pl. 4 (17) (20th dynasty).

72 Hsu 2011: 53–55, who seemingly misinterprets the hieroglyph as a “jackal.” In these texts, however, the king in his chariot pulled by horses is reminiscent of the young Horus in his chariot pulled by a griffin similar to the hieroglyph. See Berlandini 1998: 48–54 for the iconography.

73 Compare Montet 1937: 112–114.

74 From Schäfer 2011: 133 (l. 9), early Ptolemaic period.

75 El-Khadragy 2008: 230 (translation), 234–235 col. 32 (facsimile). I rely on this facsimile as it is more precise than the one in Kahl & Shafik 2021: 246 (U39H).

76 See the photograph in the exhibition catalogue *Ramsès le Grand* 1976: 176.

77 Pierre-Croisiau 2019: pl. I (top, bandeau) (6th dynasty).

### 3. By way of conclusion

In this article I have insisted on the problems posed by taxonomy. While one could think that taxonomy is not the main goal of Egypto-grammatology, this is only partly true. All those working on texts or studying the hieroglyphic writing system need generally accepted codes attached to each hieroglyph and to each of its variants. These codes should be stable. This means that it is absolutely necessary for a new coding system to accept new signs and new variations easily and smoothly, without modifying the existing codifying. No matter how many additions are made over the years, the coding should stay clear and logical. Only the grammatological approach will make it possible to classify hieroglyphs collected in the corpus in the correct category and then in the correct family and subfamily, following a bottom-up process (fig. 8).<sup>78</sup> Typographical signs that use tokens (defined below) as templates will have the same code.

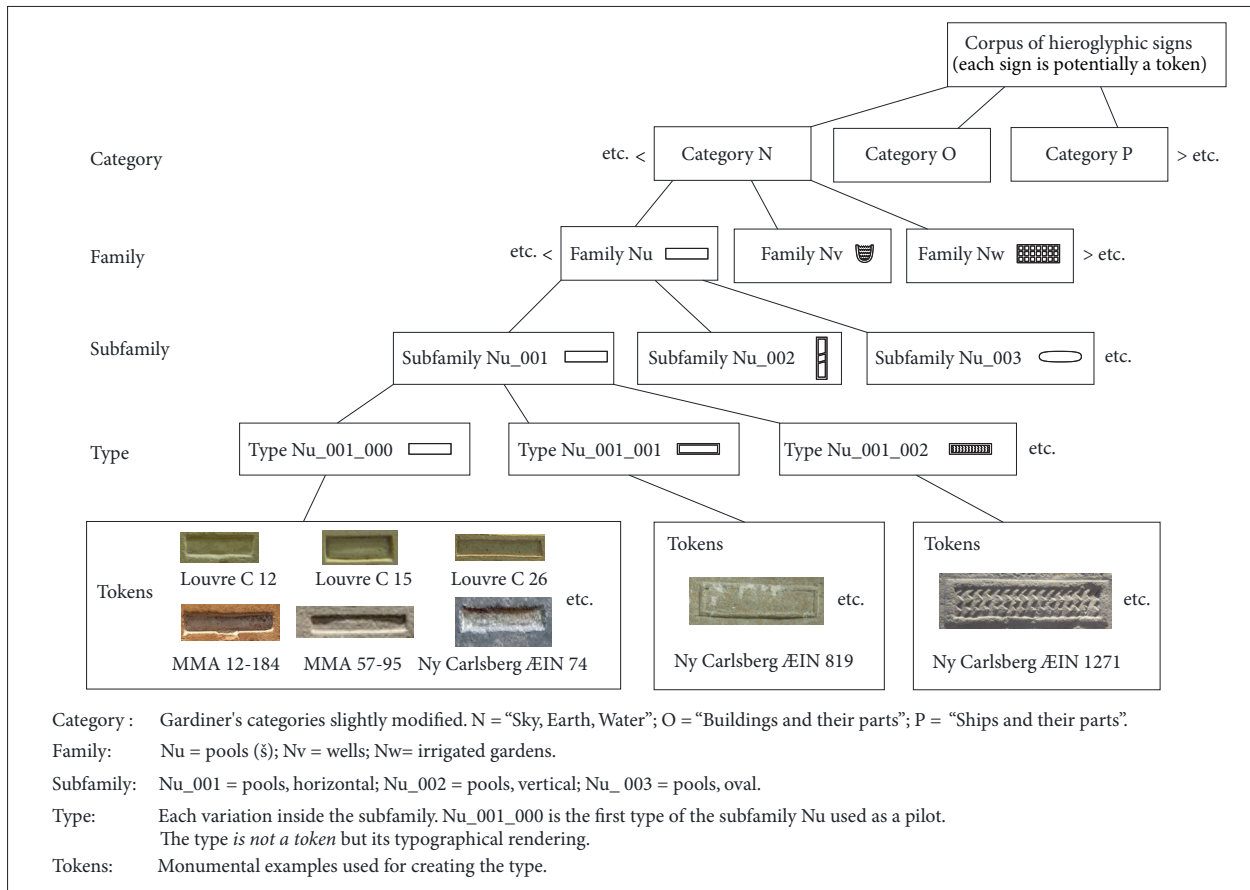


Fig. 8 The bottom-up process of classifying hieroglyphs

78 I already suggested such a process in Meeks 2013. Since that date my collection of hieroglyphs (see above n. 47) has increased in a very substantial way. Louvre and Ny Carlsberg museums hieroglyphs are author's photos, Metropolitan Museum of Art (MMA) are "Public domain".

All those interested in these problems of classification are fully aware of the necessity to follow this process. But, as already stated, they are confronted by the absence of a sufficiently large corpus of hieroglyphs. A very elaborate database like the *Thot Sign List*, although it collects hieroglyphs from monuments, is forced to use an empirical approach until the catalogue becomes large enough to enable the necessary improvements to be made.<sup>79</sup> Moreover, the kind of relation that will be selected between the token and its corresponding sign depends on the definition of what constitutes a “token”. Usually, the definition given by Unicode has been adopted without real questioning:

Token—particular sign in situ, a photography, a facsimile, a character in a font, or a hand-drawn character in a book. In practice, the token will always be a specific drawing, from a font or from a file, perhaps referring to an actual source.<sup>80</sup>

Such a definition, however, is too widely cast and is not really satisfactory because it misses a very important point: “Tokens are signs based on one–one correlations between single items.”<sup>81</sup> This is precisely what is illustrated in fig. 8. Different shapes are clearly differentiated, and identical ones are grouped together in a one–one relation, not only between one another, but also with the typographic character generated from them. A grammatological approach cannot accept “perhaps” in relation to supplying a reference to a source.

The aim of the bottom-up process, helped by palaeography and philology, is to remove uncertainties and ambiguities and thus to enable the correct classification of seemingly identical signs (as in fig. 4) in the correct category, family, or subfamily. In this way, the rectangular  $\check{s}$  (□), representing a pool, should not be confused with the near-identical sign representing a land surface used as a determinative of  $\check{h}t$  “field”, for instance.<sup>82</sup> The same shape could have the value  $zn$ , but in this case it is a variant of the oval bread (◻)<sup>83</sup> and should not be confused with the two preceding instances. All three should be classified differently.

Ghost hieroglyphs created by Egyptologists are not easily spotted in printers’ catalogues. In many cases they were included in old publications that almost nobody consults. When a reference exists, a more or less complicated investigation finally leads to a source where the correct form can

79 *Thot Sign List* > “About” > “2. Goal, data model and audience of TSL” > “2.2 TSL data model”. The authors of the database adopt roughly the same process as mine, but they proceed from existing fonts in their quest to identify the corresponding monumental hieroglyphs.

80 Suignard 2021: 3.

81 Harris 2014: 71.

82 Very common in texts of earlier periods. See, among many others, Duell 1938: pl. 37 (16) (6th dynasty); Blackman & Apted 1953: pl. XVI (in front of Pepi-ankh) (6th dynasty).

83 Gardiner 1957: 532 (X 4), 491 (N 37).



be identified.<sup>84</sup> Just one example is given here. The Unicode repertoire registers, among the category “vessels of stone and earthenware”, a curious object (𐦏).<sup>85</sup> With some luck and patience, one finds that this ghost sign was taken from an entry for *wšb* in the Berlin *Wörterbuch*, where it is defined as a kind of gold vessel.<sup>86</sup> The reference given by this dictionary points to the text of the Osirian ritual celebrated during the month of Khoiak and carved on the walls of a chapel in the temple of Dendara. The rendering of the sign in modern publications reveals that this is in fact a situla (𐦏).<sup>87</sup>

I hope that the preceding discussion and examples will convince the reader that a grammatological study of hieroglyphs is a necessity. But this task needs determined and persistent scholars as it is time consuming, not always rewarding, and sometimes discouraging. Clearly grammarology requires a good understanding of texts of all periods as it gives significant results only in a diachronic process; there must also be a good perception of the lexical meaning of the words in which a hieroglyph is used. But it also requires an ability to identify what each of the signs represents, using pictorial and archaeological data, without forgetting the social context, as well as a sound knowledge of Egyptian religion. In an article on the *hnt*-hieroglyph (𐦏)<sup>88</sup> and its numerous variants I have tried to show how far one can be led through textual, epigraphic, religious, cultural, and other byways and intersections before reaching a result. That treatment may serve as a case-study illustrating the main aspects presented in the present article.

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84 This is not the place to discuss the question of “false” ghost signs, such as the dwarf wearing a kilt mentioned in Grotenhuis, Nederhof, Polis *et al.* 2021: 13 as a “ghost”. That hieroglyph really exists, see Fischer 1978: 48.

85 Suignard 2020: 447 (W-11-106).

86 *Wb I*, 373 (ó).

87 Cauville 1997: 29 (3) with pl. 25 (19); Chassinat 1966: 211–212 with pl. I (19). Both published photographs are not in high resolution, but the shape of the situla is recognisable. Note that *wšb* is probably an orthographic variant of *wšm* a designation a metal vessel (*Wb I*, 374 1–3).

88 Meeks, forthcoming.



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# The Scribe's Outfit in the Deir el-Medina Pseudo-script Shapes and Uses

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**Abstract.** The sign for 'scribe' that occurs among identity marks on Deir el-Medina ostraca and other artefacts from the Ramesside Period (ca. 1290–1070 BCE) shows a remarkable graphic diversity. Its basic forms were inspired by hieroglyphic writing on the one hand, and by cursive (hieratic) writing on the other, and both forms appear to have enjoyed equal popularity in similar contexts. In addition to the information it provides on the reception of hieroglyphic and hieratic writing among semi-literate administrators, the sign is evidence for the existence of one 'senior scribe' at Deir el-Medina.

**Keywords.** Hieroglyphs, hieratic, identity marks, ostraca, pseudo-script

In the past two decades, the identity marks used by the community of royal necropolis workmen at Deir el-Medina during the New Kingdom (ca. 1550–1070 BCE) have become a prominent topic of research, after having been virtually neglected by Egyptology for almost two centuries.<sup>1</sup> The vast corpus of archaeological and textual sources from the site, and from the Valley of the Kings and Valley of the Queens, includes numerous objects bearing identity marks as well as graffiti and ostraca featuring such marks or clusters of them (fig. 1). The latter type of source has proved to be of great importance for the dating of the marks and the identification of their owners – success in the one objective depending on the other.

<sup>1</sup> The recent Egyptological interest in non-textual identity marks, and in non-textual marking systems more broadly, has been stimulated by interdisciplinary conferences in Berlin, Leiden and Warsaw from 2006 to 2013; see most recently Budka *et al.* (ed.) 2015; Haring *et al.* (ed.) 2018. The Deir el-Medina identity marks have been the object mainly by Leiden-based research; see Haring 2017 for a short overview and Haring 2018 for a synthesis.






















Fig. 1. Ostrakon Turin CG 57534  
(image kindly supplied by the Museo Egizio, Turin, and reproduced here with permission)

The thousands of ceramic and limestone ostraca from Deir el-Medina and the nearby valleys include different types, textual (various hieratic and hieroglyphic genres) and pictorial (sketches and exquisite drawings, and pictorial ostraca of an administrative nature). The ostraca bearing workmen's marks would appear to belong to both the textual and the pictorial categories. Such ostraca may feature one or several marks only, but also additional data in the form of dots or strokes, numbers in hieratic, and pictorial signs for commodities. Their purpose appears to be largely or exclusively administrative, and they are currently thought to represent the work of semi-literate 'scribes' who thus assisted the professional scribes that composed administrative records in hieratic (Soliman 2018; 2021; van der Moezel 2023). By the mid-Twentieth Dynasty (ca. 1130 BCE), this type of record had developed into a sophisticated pseudo-written genre that mimicked the style of hieratic administrative texts, consisting of entries starting with calendar dates, presenting information on deliveries of foodstuffs and firewood, and the responsible persons.




Fig. 2. Ostrakon Turin CG 57393 obverse  
(image kindly supplied by the Museo Egizio, Turin, and reproduced here with permission).

Taking ostrakon Turin CG 57393 as an example (fig. 2), we see entries starting at the right with days numbered 10 – 11 – 12 – 13 – 14 – 15. Every date is followed by a particular workman's mark:  –  –  –  – ; these marks were held by workmen named Harshire, Iyernutef, Nebnakht, Weskhet-nemtet, Pentaweret and Nekhemmut at the time the ostrakon was made.<sup>2</sup> Several of these marks betray a hieroglyphic (  ) or hieratic origin (). Only one of these can actually be connected with the name of the mark's holder:  is a hieratic equivalent of hieroglyphic  for *jwt* 'to come' or *nmt.t* 'step'; here it appears to represent the latter word as it occurs in the name *Weskhet-nemtet*.<sup>3</sup> Two more marks ( ) may be inspired by hieroglyphs or hieratic, but they may also be pictorial or abstract signs of a different nature; the repertoire of Deir el-Medina marks includes signs based on writing, as well as pictorial (but non-hieroglyphic) and abstract signs (Haring 2018: 227–231).

Following after the workman's mark in every entry except for the first, mention is made of commodities delivered, such as firewood and loaves of bread. The delivering person is sometimes mentioned as well; at the end of the third line (i.e., the entry of day 12/Nebnakht) we see , a sign inspired by hieroglyphic  or hieratic  *ms*, here as an abbreviation of *Ptahmose*. This man was a woodcutter responsible for the delivery of firewood to the gang of necropolis workmen. There is an important difference between the workmen's marks at the beginning of entries, and abbreviations such as  accompanying the deliveries: whereas the former were true identity marks, used also outside the ostraca as property marks and in votive graffiti, the latter merely appear to have been abbreviations used only for the creation of this particular type of ostraca (Haring 2018: 192). Such abbreviations usually refer, not to the necropolis workmen, but to members of a supporting workforce (*smd.t*), which consisted of date collectors, fishermen, gardeners, gypsum makers, potters, smiths, washermen, watercarriers and woodcutters (Gabler 2018). There are no indications that these men themselves used the signs, unlike the necropolis workmen who made frequent use of their identity marks, and transmitted them from generation to generation within their families and among colleagues. Such true identity marks are known at Deir el-Medina from the early Eighteenth Dynasty (ca. 1450 BCE) onwards, whereas the similarly-looking pseudo-script abbreviations are only known from the Ramesside Period (ca. 1290–1070 BCE).

Somewhere between these two categories of signs there are several that were used on ostraca as well as for other purposes, without being fully comparable to real identity marks. These are signs expressing the position or function of persons, rather than their personal or family identity. Among them are signs referring to the highest local authorities: the foremen or chief workmen of Deir

2 Which is the second month of the *peret*-season in regnal year 2 of Ramesses IV. The identifications and dating are based on the deliveries recorded and the watch rota (*weresh*) as known from contemporary hieratic sources; see Haring & Soliman 2014: 84–86 and van der Moezel 2023 for this particular ostrakon.

3 The extra stroke (diacritic) in  is occasionally found in hieratic *jwt* and *nmt.t*; see Wimmer 1995: 162 and pl. D. 54 (d), with ref. to O. Cairo CG 25783 obv. 12 and O. Turin CG 57006 rev. 4.

el-Medina (of which there were two: one for the right half of the gang, and one for the left), and the (senior) scribe. Other signs referring to position or task are those of doorkeepers and scorpion charmers. The latter, a door (𓂏) and a scorpion (𓂏 or variants), clearly refer to the tasks performed. In both cases the reference is indexical or metonymic; that is, the signs depict objects related to the signified, not the signified itself. The references made by signs used by the foremen are less direct: we know of a bee (𓂏) for the foreman of the right half, and an abstract(?) mark (𓂏 or 𓂏) for the foreman of left.<sup>4</sup> The sign for the senior scribe of the community, however, is again a clear metonym: it is the scribe's outfit (e.g. 𓂏), and evidently inspired by the hieroglyphic and hieratic characters (𓂏 and 𓂏) expressing the notion of writing and the function of scribe (*sš* or *shʒ*). This sign is the central object of this paper. The questions to be addressed are: (1) Who used this particular sign, and how? (2) How to explain its remarkable graphic diversity? Answers to these questions must be based on the contexts, dates and graphic shapes of the sign as used in the community of royal necropolis workmen during the Ramesside Period.

The first important observation to be made is that very few of the sign's forty-seven documented occurrences follow the supposed hieroglyphic model 𓂏 or 𓂏 (Gardiner nos. Y3 and Y4).<sup>5</sup> In fact, eighteen variants copy its hieratic equivalent (Möller no. 537; see Möller 1927), while the twenty-nine others have a more or less hieroglyphic appearance but omit or reduce certain details, such as the palette with pigments or the cap of the pen case.<sup>6</sup> Many of these twenty-nine variants are more appropriately called pseudo-hieroglyphic, combining the hieratic 'scribe' character with a hieroglyphic rendering of the pen case, although that pen case is included in the pictorial origin of the hieratic sign.<sup>7</sup> The hieratic variants always face right, just like surrounding signs whenever these

4 The sign 𓂏 probably represents the function of foreman of right, rather than an individual or family holding that position. Its use is perhaps to be explained by its meaning *bj.t.y* 'king of Lower Egypt' in hieroglyphic and as a royal emblem (Haring 2018: 196, 203), which could be used here to indicate the foreman's position at the top of the local hierarchy. The sign 𓂏 or 𓂏, possibly representing a carpenter's level, became a reference to the left side and its foreman by the mid-Twentieth Dynasty. It had been an identity mark of a family supplying at least two foremen of left during the previous dynasty, which may be the reason it came to be associated with the left side of the gang more generally (Haring 2018: 213–215, 223).

5 The known occurrences of the sign were collected by Kyra van der Moezel in her dissertation (van der Moezel 2016: table I3–2, no. I 24.003). Actually, they add up to 53 there, but include several published in hieroglyphic font type only, and some rather uncertain examples. Only 47 certain attestations are accessible as photos or facsimiles. The Gardiner numbers refer to the sign list in Gardiner 1957: 438–548. For the graphic development of the hieroglyph, see Fischer 1996: 222–225. The single difference between Y3 and Y4 is the orientation. Y4 (pen case followed by palette in reading direction) represents the usual orientation in Ramesside hieroglyphic texts; see the references in the following footnote.

6 The palette is, in fact, often reduced in Ramesside hieroglyphs; see Haring 2006: 136; Servajean 2011: 123; this appears to be a chiefly Upper Egyptian phenomenon: Moje 2007: 421 and tables Y 03–04.

7 As becomes clear from Old Kingdom specimens of Möller no. 537; see Goedicke 1988: 48a–b.





consistently adhere to the same orientation. The pseudo-hieroglyphic variants may face right or left regardless of the surrounding signs' orientation (fig. 3).<sup>8</sup>



Fig. 3. The sign for 'scribe' on pseudo-script ostraca from Deir el-Medina:

- a. hieroglyphic (Ifao ONL 6507 – unpublished);
- b. pseudo-hieroglyphic (BTdK 539 obv. – Dorn 2011: pl. 455);
- c. pseudo-hieroglyphic (Florence 2628 – Killen & Weiss 2009: 145);
- d. hieratic (Turin CG 57534 – López 1984: pl. 173 a). Facsimiles by Kyra van der Moazel.

Before going deeper into the distribution of the different graphic shapes of the sign, we must discuss its uses: where do we find the sign, and which scribe or scribes does it refer to? By far most of its occurrences are on ostraca inscribed with clusters of identity marks and with more complex types of information. Many of the relevant ostraca show horizontal or vertical sequences of marks (fig. 1) in a more or less fixed order, starting with the signs identifying the foreman of one side, the scribe, and the deputy of the foreman, followed by the identity marks of the workmen. In figure 1, for instance, the sign  (top right) represents the foreman of the left side; it is followed by the sign for 'scribe' and by , the identity mark of the workman who served as the foreman's deputy. On some of the ostraca the individual signs are followed by strokes or by numbers in hieratic, or by other notations. The signs for foreman and scribe are rarely attested on ostraca with dated entries, such as Turin CG 57393 (fig. 2), for an obvious reason: as superiors of the workmen, these persons were not included in the watch rota (*weresh*).<sup>9</sup>

Apart from its use on ostraca, the sign is attested as property mark on a few pottery vessels and limestone headrests from the workmen's settlement.<sup>10</sup> Its use as a property mark appears to have been rare when compared with the numerous marked pottery sherds and other marked objects from the site, and from the Valley of the Kings and the Valley of the Queens. Its use as a single sign in graffiti is even rarer. Whereas many hundreds of graffiti in the Theban mountains feature individual workmen's marks or clusters of them, the nearly four thousand Theban graffiti documented so far include only a few possible similar uses of the 'scribe' sign. It is sometimes found together






8 Left-facing signs in right-facing context, e.g., O. BM EA 50716 rev. (Demarée 2002: pl. 109) and O. BTdK 539 obv. (Dorn 2011: pl. 455).

9 See note 2 for the watch rota. One ostrakon bearing calendar dates and featuring the scribe sign is Ifao ONL 338+339 (unpublished), where the sign is not included in the *weresh* duty roster, but in a series of marks preceding it.

10 The pottery is from ancient village waste; see Bruyère 1953: pl. XVI (bottom left, 2 sherds) and XVII (middle, 2 sherds); one sherd is from Tomb 359 (Nagel 1938: 49, no. 305). The headrests are from houses in the workmen's settlement: Bruyère 1939: 233, 300 and 302; their marks are rendered by Bruyère in hieroglyphic font type.

with one or more identity marks,<sup>11</sup> and once as an isolated sign if its presentation as edited is correct.<sup>12</sup> The sign is exceedingly often found in hieratic and hieroglyphic graffiti as writing of the title ‘scribe’, in combination with proper names.<sup>13</sup> It would seem that professional scribes almost invariably chose to apply their hieratic and hieroglyphic writing skills, rather than the single marks often used by the semi-literate workmen. Finally, the absence of the scribe sign in the corpus of stones and sherds bearing single identity marks is noteworthy. Such pieces seem to present a semi-literate parallel to ostraca inscribed with single names in hieratic, mostly of necropolis workmen. That corpus includes several ostraca with names preceded by the title ‘scribe’, or even simply saying ‘the scribe’ (anonymous).<sup>14</sup> Here as in the case of graffiti, it seems that scribes preferred writing out their title and names to the use of marks.

The rare use of the ‘scribe’ sign as property mark and graffiti is precisely the reason for not classifying it among the workmen’s identity marks, whose uses for these purposes are much more frequent.<sup>15</sup> The distinction is understandable: whereas the workmen’s marks were primarily associated with families and their individual members, the sign for ‘scribe’ was primarily connected with a function, just like the signs indicating the foremen, scorpion-charmers and doorkeepers. These signs are also rare as graffiti and property marks.<sup>16</sup> However, whereas the latter are only securely attested around the middle of the Twentieth Dynasty, the ‘scribe’ sign already appears on pseudo-script ostraca of a much earlier date: the middle of the Nineteenth Dynasty (ca. 1240 BCE). Several ostraca featuring the sign can be dated around this time and the following decades.<sup>17</sup> For

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- 11 Theban graffiti 1713 consists of hieratic *sš* preceded by a lotus flower; similar groups are 1703 and 1704, which add a cross-shaped sign in between (Černý *et al.* 1970–1977: pl. IX and XII). Cf. graffiti 517: hieratic *sš Bʿy* preceded by a lotus flower (Spiegelberg 1921: pl. 59). Graffiti 2013 combines the mark  with pseudo-hieroglyphic *sš* and some more scratches difficult to interpret (Černý *et al.* 1970–1977: pl. IIII). Graffiti 2430 is probably hieratic (*sš J<...>* or *sš-qd* ‘draftsman’?) (Černý *et al.* 1970–1977: pl. CIX). Graffiti 2462 shows a seated figure with *Qn-ḥpš=f* in hieratic, the mark  and hieratic *sš* with vertical stroke (Černý *et al.* 1970–1977: pl. CXV). Graffiti 2851 appears to be a name in hieroglyphic ( for *Jmn-nḥt*) surrounded by marks and hieratic *sš* (Černý *et al.* 1970–1977: pl. CLXIV).
- 12 Graffiti 3072; Černý *et al.* 1970–1977: pl. CXCII.
- 13 Hieroglyphic graffiti are less frequent than hieratic ones; some examples are graffiti 2011.f (*sš Nb-nfr sš-nswt Dḥwty-ms*; Černý *et al.* 1970–1977: pl. IIIV) and 2716.b (*sš m s.t-mʿ.t <J>mn-nḥt*; Černý *et al.* 1970–1977: pl. CL).
- 14 O. Ifao inv. No. 1510 (unpublished). For the name ostraca as well as the stones and sherds bearing single marks (over 150 of which are known) see Dorn 2011: 139–143; Pietri 2021; Haring forthcoming.
- 15 See Fronczak & Rzepka 2009: 169–173 for occurrences of workmen’s marks in graffiti.
- 16 This is true, at least, for the sign for the foreman of right () , attested once as graffiti (no. 2645; Černý *et al.* 1970–1977: pl. CXL). As a mark on pottery this sign is only a bit more frequent than the ‘scribe’ sign; the same is true for the scorpion (see, e.g., Bruyère 1953: pl. XVI–XVIII). I do not know of any occurrences of the door sign as property mark. Identifying  on pottery and other objects as the mark of the foreman of left is tricky, since it was also used by individual workmen prior to its becoming the sign for the left side of the gang (see note 4).
- 17 To this period belong ostraca Ashmolean Museum HO 1120, Hawass, Ifao ONL 6226 and 6487, Amenmesse Project Ostrakon (APO) 153 and 162. All are unpublished with exception of ostrakon ‘Hawass’ which is called thus here because it is shown by Zahi Hawass together with other objects found in the Valley of the Kings in a Youtube video:

many years in this period, the senior scribe of the workmen's community was Qenhirkhopshef. This scribe may therefore have been the earliest holder of the office for whom the sign is attested. As the sign refers to the office, not to the person holding it, reference may also be made in some cases to his predecessor Ramose or his successor Bay.<sup>18</sup> The scribe himself is not likely to have been the author of the ostraca; instead, reference is probably made to him and to other persons by semi-literate creators of the ostraca, of which there seem to have been more than one in view of the differences in style, including both hieratic and pseudo-hieroglyphic versions of the 'scribe' sign.<sup>19</sup>

The largest group of relevant ostraca is from the early Twentieth Dynasty (ca. 1190–1130 BCE), the most productive period for Theban ostraca in general (Haring 2018: 146).<sup>20</sup> Here as in the case of the Nineteenth Dynasty pieces, there are notable differences in style between these ostraca, and between the shapes of the 'scribe' sign—the examples in figure 3 are all from this period. Several of these ostraca probably refer to the best documented senior scribe of the Twentieth Dynasty: Amennakht, son of Ipuy, attested from the late years of Ramesses III until the end of the reign of Ramesses VI,<sup>21</sup> and some quite possibly to his son and successor Harshire, who is attested until the late reign of Ramesses IX (Davies 1999: 132–133).<sup>22</sup> This brings us to the late Twentieth Dynasty (ca. 1130–1070 BCE), to which six relevant ostraca can be attributed, including Turin CG 57534 (figure 1).<sup>23</sup> It is impossible, however, to identify scribes other than Harshire as users of the 'scribe' sign in this period, given the uncertainty about the precise dates of the ostraca, and about the status of the documented scribes.

A short note on the notion of 'senior scribe' is in order here. Other than 'chief workman' (or 'foreman'), this is not the translation of an Egyptian title, but an Egyptological expression that refers to the most important scribe of the royal tomb workforce, who was one of its three formal superiors (the other two being the foremen of the right and left sides), and as such presumably the

Heritage Key: Valley of the Kings – Part 2, June 2009 <https://www.youtube.com/watch?v=OSTMyBuinPc>, accessed June 2023. The dating of the individual ostraca is mainly based on Soliman 2016.

18 See Davies 1999: 123–125, 283, for the scribes mentioned.

19 See Soliman 2021 for this type of ostraca in general.

20 Nineteen ostraca can be probably be dated to reigns in this period (Ramesses III–VIII), including several published ones: BM EA 50716 and 50731 (Demarée 2000: pl. 109, 129–130), BTdK 539 and 551 (Dorn 2011: pl. 454–455, 462–463), and Florence 2628 (Killen & Weiss 2009: 145). The dating of the individual ostraca is mainly based on Soliman 2016.

21 The most likely references are BM EA 50716 (Demarée 2000: pl. 109), and Ifao ONL 338+339, 6474, 6515 (unpublished).

22 BM 50731 (Demarée 2000: pl. 129–130) and Ifao ONL 6240 of the late Twentieth Dynasty (unpublished); see Soliman 2016: 276, 288–289.

23 Cairo JE 96647, Ifao ONL 6240, 6449, 6549, 6603, all unpublished; Turin CG 57534 (López 1984: pl. 173 a). The dating of the individual ostraca is mainly based on Soliman 2016.

main person responsible for local record-keeping.<sup>24</sup> It has been assumed in older literature that this scribe was referred to in Egyptian by the full title ‘Scribe of the Tomb’ (in hieratic documents) and ‘Scribe in the Place of Truth’ (in hieroglyphic). Subsequently it became clear that many other local administrators used the same titles; these administrators could be assistants to the senior scribes (some were their sons), scribes of the supporting workforce (*smd.t*), and (chief) draughtsmen. The Egyptian titles ‘Scribe of the Tomb’ and ‘Scribe in the Place of Truth’ are therefore unreliable as indications for the actual status and tasks of the persons thus designated. To make matters worse, there is the possibility that there were actually two ‘senior scribes’ in the mid and late Twentieth Dynasty; hence two superiors for each side of the necropolis workforce.<sup>25</sup> According to some sources, however, the second superior of the left side was the chief draughtsman.<sup>26</sup> It remains difficult to this day to establish the status and tasks of the known Deir el-Medina administrators, despite (or perhaps rather due to) the abundance of references to them.

The idea that one scribe was more important than others is supported in dozens of texts by the expression ‘the scribe’ (*p<sup>3</sup> sš*).<sup>27</sup> It is also supported by the very use of the ‘scribe’ sign among other abbreviations and identity marks. Presumably, only one person was thus referred to, especially when the sign was used as a property mark—although this seems to have been done rarely. It has already been noted that on many ostraca inscribed with sequences of identity marks, the ‘scribe’ sign appears at the start of such a sequence, directly after the sign representing the foreman (of the right or left). This use is a perfect parallel to the mention of foremen and scribes in hieratic accounts on ostraca and papyri, and therefore suggests that the ‘scribe’ sign in this position represents the scribe as one of the superiors of the workforce, that is, as the senior scribe. On several ostraca from the early Twentieth Dynasty, the ‘scribe’ sign refers to the senior scribe Amennakht, and is followed by the mark  $\overline{\text{𓂏}}$  of his son Harshire.<sup>28</sup> We know that Harshire acted as an assistant to his father, and this may be the reason for mentioning him directly after his father and before the workmen, despite the fact that Harshire’s formal status was merely that of workman until he succeeded his father as senior scribe, on which occasion he himself started using the ‘scribe’ sign.<sup>29</sup> Although as an assistant

24 The expression ‘senior scribe’ appeared for the first time in Ventura 1986: 70, but the existence of a single scribe responsible for both sides of the workforce was convincingly argued earlier, on the basis of accounts of grain rations, by Janssen 1975: 461–462. See also McDowell 1990: 69–91; Davies 1999: 123–142.

25 Lines 6 and 10 of papyrus Turin Cat. 1894 (Ramesses IX) explicitly mention two ‘chiefs’ (*hr.y*) for each side (Kitchen 1983: 657). O. DeM 381 (Ramesses IV) mentions ‘four superiors’ on its obverse, but ‘three superiors’ plus a scribe on its reverse (Kitchen 1983: 140).

26 E.g., Papyrus Turin Cat. 2071/139 verso 2–3 and 7 (Ramesses IX; Kitchen 1983: 642–643).

27 Also found once on one of the name ostraca; see note 14.

28 Clear instances are ostraca Ifao ONL 6241 and 6515, both unpublished. O. BTdK 551 (Dorn 211: pl. 462–463) appears to have a non-hierarchical order but includes the senior scribe and Harshire. O. Ifao ONL 6474 (unpublished) has the sign for the foreman of left between the scribe and Harshire.

29 See note 22.

scribe Harshire is sometimes called 'scribe of the Tomb' in hieratic documents, just like his father and several other scribes, the ostraca inscribed with marks make a clear distinction between the senior scribe and his son, the workman.

A remarkable parallel to hieratic accounts is ostrakon Cairo JE 96647 (unpublished) from the late Twentieth Dynasty, which has two columns of marks, one for the right and one for the left side of the workforce. Both columns include the hieratic 'scribe' sign; in the right column it is preceded by the foreman of the right side (a very cursive variant of 𓄏), while in the left column the preceding sign (damaged but probably 𓄏) seems to be that of a workman who may have stepped in occasionally for the foreman of the left, although the official deputy follows only after the 'scribe' sign.<sup>30</sup> The double occurrence of the same 'scribe' sign on the ostrakon may indicate that the same senior scribe is mentioned for the right and left side, as happens often in hieratic accounts of grain rations, where the senior scribe receives his ration in two portions, one for the right and one for the left side. Alternatively, given its late date, ostrakon Cairo JE 96647 may precisely show us the existence of two senior scribes, one for the right and one for the left side, even with the possibility that the left 'scribe' was actually the chief draughtsman.

Having discussed the uses of the 'scribe' sign throughout the Nineteenth and Twentieth Dynasties, we may now return to the distribution of the different graphic shapes of the sign, that is, the occurrences of the hieratic and the pseudo-hieroglyphic variants and their contexts. The possibilities one may envisage for their distribution are (1) chronological, that is, the increasing or diminishing use of graphic variants of the sign through the Nineteenth and Twentieth Dynasties (ca. 1290–1070 BCE, a period of approximately 220 years); (2) by scribal competence, that is, by the style of the inscribed sherds and stones featuring the 'scribe' sign, apart from the sign itself.

Starting with the second possibility, we may distinguish ostraca written by 'untrained' hands (that is, by persons apparently unexperienced in writing correct hieratic texts or hieroglyphs, e.g., Turin CG 57393 – fig. 2), hieratic hands (e.g., Turin CG 57534 – fig. 1), and hieroglyphic hands. The latter (presumably those of trained draughtsmen) are rare, and so, in fact, is the hieroglyphic shape of the 'scribe' sign itself, which is not necessarily found on hieroglyphic ostraca only.<sup>31</sup> Nor do hieratic variants of the sign occur exclusively on ostraca written by hieratic hands: against six hieratic-style ostraca featuring the hieratic 'scribe' sign, there are six ostraca by untrained hands, and

30 As suggested by Soliman 2016: 328. The ostrakon is there said to be probably from the very end of the Twentieth Dynasty (reign of Ramesses XI).

31 One possible published example is O. BM EA 50731 (Demarée 2000: pl. 129–130), the obverse of which has three columns of marks that include correct hieroglyphs (among which we find the hieroglyphic variant of the 'scribe' sign), or carefully mimic a hieroglyphic style. The style of the reverse seems different, which may be due to the different layout or to different writing circumstances. Another hieroglyphic specimen of the 'scribe' sign is that on O. Ifao 6507 (see fig. 3a), but the other signs on this ostrakon betray an untrained hand.

one possibly hieroglyphic, that use the same variant.<sup>32</sup> The pseudo-hieroglyphic variant is the most frequent on ostraca: eight or nine examples are found on ostraca produced by untrained hands,<sup>33</sup> four to six on hieratic-style ostraca,<sup>34</sup> and one possibly by a hieroglyphic hand.<sup>35</sup> This distribution may suggest a preference for the pseudo-hieroglyphic form by ‘untrained’ (that is, semi-literate) producers of ostraca, but the numbers and their differences are really very small. It seems best, therefore, to say that the pseudo-hieroglyphic and the hieratic forms of the ‘scribe’ sign were both popular forms in these semi-literate inscriptions.

There appears to be no significant chronological development in the distribution of the graphic variants. The Nineteenth and early Twentieth Dynasties essentially present similar distributions of hieratic and pseudo-hieroglyphic sign variants on ostraca of different styles. The six ostraca that can be dated to the late Twentieth Dynasty seem to present a relatively clear-cut distribution of three pseudo-hieroglyphic variants made by untrained hands<sup>36</sup> and three hieratic variants on hieratic-style ostraca.<sup>37</sup> But a group of six ostraca is a very poor basis for this suggested division, which may easily be disturbed by a group of ostraca that are as yet undated, some of which might turn out to belong to the same period, and/or ostraca that defy stylistic categorization.<sup>38</sup> This means that no clear pattern can be discerned in the graphic diversity of the ‘scribe’ sign on Ramesside pseudo-script ostraca. The one thing that stands out clearly is this graphic diversity itself, with two basic forms (hieratic and pseudo-hieroglyphic) being popular throughout the period discussed, indicating how two different scripts used at Deir el-Medina inspired local semi-literate administrators.

- 32 Hieratic-style ostraca: Cairo JE 96328 and 96647, Chicago OIM 19215, Ifao ONL 1371 and 6603 (all unpublished); Turin CG 57534 (López 1984: pl. 173 a). Untrained hands: BTdK 551 (Dorn 2011: pl. 463), Hawass (<https://www.youtube.com/watch?v=OSTMyBuinPc>, accessed June 2023), Ifao ONL 338+339 and 6487, Prague 3836, APO 162 (all unpublished). Hieroglyphic(?): Ifao ONL 6874 (unpublished).
- 33 Ashmolean Museum HO 999, Ifao ONL 6240(?), 6241, 6507, 6508, 6515(?) and 6549 (all unpublished), Petrie Museum UC 31989 (Petrie Museum Collections Online <https://collections.ucl.ac.uk/Details/petrie/46605>, accessed June 2023), Turin CG 57144 (López 1980: pl. 63a).
- 34 BM EA 50716(?) (Demarée 2002: pl. 109), BTdK 539 (Dorn 2011: pl. 455), Florence 2628 (Killen & Weiss 2009: 145), Ifao ONL 6684(?), 6851 and Leipzig 1821 (all unpublished).
- 35 KV 47/335 (unpublished).
- 36 Ifao ONL 6240, 6449 and 6549 (all unpublished).
- 37 Cairo JE 96647 and Ifao ONL 6603 (both unpublished), Turin CG 57534 (López 1984: pl. 173 a).
- 38 Ashmolean Museum HO 999 and 1120, KV 47/335, Ifao ONL 1371, 6226, 6240, 6449, 6474, 6572 and 6805 (all unpublished), Turin 57144 (López 1980: pl. 63a), Petrie Museum UC 31989 (Petrie Museum Collections Online <https://collections.ucl.ac.uk/Details/petrie/46605>, accessed June 2023), Michaelides 91 (Goedicke & Wente 1962: pl. LXXX).



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# Hieroglyphs in the Renaissance: Rebirth or New Life?

## (Part 1)

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**Abstract.** This paper (the first of a series) deals with the reception of Egyptian hieroglyphs in the Renaissance. Humanists and artists were not much interested in deciphering the ancient Egyptian writing, which was increasingly revealing itself in the monuments that were rediscovered in the 15<sup>th</sup> and 16<sup>th</sup> centuries, mainly in Italy. Stimulated by the (neo-)Platonic vision of a purely symbolic mode of expressing ideas, and comforted in this by the edition of the *Hieroglyphica*, attributed (probably wrongly) to Horapollo, they created their own system of writing, which was first put in practice in Francesco Colonna's *Hypnerotomachia* (Venice, 1499). After a general introduction, this paper presents the available documentation in a principled way, by sorting out the data according to their semiotic functions, whose mechanics will be dealt with in the second part of the study.

**Keywords.** Hieroglyphs, neo-hieroglyphs, Renaissance, Francesco Colonna, *Hypnerotomachia* Poliphili, neo-Platonism.

While the official death certificate of hieroglyphic writing has been conventionally set in 394 CE, three years after Theodosius I ordered the closing of the temples, the knowledge of hieroglyphs had already by then been circumscribed to a limited number of religious centers. Inscriptions on private stelae and coffins had either been reduced to some formulaic expressions, or mimicked the presence of hieroglyphs, sometimes with a limited set of arbitrary geometric strokes (Sternberg el-Hotabi 1994).

Despite some occasional interest displayed in Byzantine circles, the reminiscence of hieroglyphs, or more generally of ancient Egypt, in the collective mind in Western Europe had considerably

dwindled.<sup>1</sup> Genuine monuments of ancient Egypt had almost completely vanished out of sight after the sack of Rome in 1084 by Norman troops.<sup>2</sup> The *Memorabilia*, which were composed in the 12th–13th centuries for the usage of pilgrims, mentioned the pyramid of Cestius (*meta Remi*) and another one near Castel del-Angelo (*meta Romuli*), and the obelisk of the Circus Vaticanus, which was supposed to contain Julius Caesar’s ashes at its top.<sup>3</sup> Access to hieroglyphs was mainly limited to the inscriptions that run on the base of the two sphinxes of Nectanebo which had been installed in front of the Pantheon by the late 12th century (Curran 1998–1999). Except for the uninscribed obelisk of the Circus Vaticanus, the place of some fallen obelisks bearing hieroglyphic inscriptions had also occasionally been spotted (Iversen 1968: 98, n. 3; Farout 2016: § 3), well before their eventual re-installment in strategic places in the city in the late 16th century and during the 17th–18th centuries.

In 1419, a copy of a curious manuscript written in Greek was brought from the island of Andros to Italy by Christoforo Buondelmonte. The manuscript (Laurent. plut. 69,27), which had been copied in the century before, contained three texts.<sup>4</sup> One of them, simply entitled *Hieroglyphica*, had been transmitted under the name of a certain Horapollo who was identified as an Alexandrian philosopher mentioned in the Suda.<sup>5</sup> The *Hieroglyphica* present themselves as a practical guide to hieroglyphs. Their structure is quite simple: when the Egyptians wanted to write down a specific idea A, they drew the sign B, because of C (Thissen 2001; Winand 2018: 224, 2022a: 46–49). While the correlation between A and B can sometimes be checked and eventually validated, the explanation is often dependent from sources alien to Egyptian realities.

Very early on, the *Hieroglyphica* sparked an interest—albeit a modest one—among humanists.<sup>6</sup> One had to wait 1505 to have the first edition (Greek text only), 1515 or 1517 for the first translation in Latin (Rolet 2021: 178–180), and 1543 for the first illustrated edition (the French version by Jean

- 1 For the reception of hieroglyphs in Arabic sources during the Middle Ages, see Sundermeyer 2020a and 2020b.
- 2 See Hamilton 2003, who relativizes the importance of the so-called sack of 1084, when compared to the catastrophic event of 1527.
- 3 See the description of Master Gregorius (Wolff 2005: 167).
- 4 On the history of this manuscript, see Fournet 2021: 1–2, who notes that another manuscript was in Europe already in the 14<sup>th</sup> century.
- 5 Doubts have been recently voiced on Horapollo’s identity. Recent scholarship now views Horapollo’s name as a pseudonym. The redaction of the *Hieroglyphica*, which is made of several layers, should be placed in the Byzantine circles, at the turn of the 9th–10th centuries: see the collective volume Fournet (ed.) 2021.
- 6 As noted by Fournet 2021: 3, n. 8, the *editio princeps* by Aldo Manuce inserted the *Hieroglyphica* in a volume which was mainly devoted to fabulists. See also Dempsey 1988: 342, who underplayed the significance of the *Hieroglyphica*: “it (i.e. the *Hieroglyphica* – JW) was by no means the only source of such information available to Renaissance scholars (who used it with caution), and it was certainly not the most important”.

Martin, edited by Jacques Kerver in Paris).<sup>7</sup> Partial copies and tentative translations and comments however already circulated in 15th century Italy (Rolet 2021: 180–183).

The *Hieroglyphica* were of course not a dictionary, not even a lexicon. Their notes could nonetheless be arranged in a simple tabular way to match signs and meanings; for instance, lion: power, vulture: mother, bee: king, etc.<sup>8</sup> With such an admittedly rather primitive list, a first attempt at deciphering the hieroglyphic inscriptions that were available in Rome could be expected. This was apparently Cyriacus' of Ancona ambition when he made his last trip to Egypt in 1438. He had indeed made for himself a summary of what he could understand from the *Hieroglyphica* in order to confront his list to the monuments he hoped to visit in Egypt (van Essen 1958). Apparently he could not achieve any result and he passed his query on to his friend Niccolo Niccoli, who was, as he wrote, the most capable man to find the solution to the hieroglyphs' mystery. Unfortunately, the famous humanist died shortly after receiving Cyriacus' letter without dealing with the matter. This genuine attempt in the first half of the 15th century to confront the *Hieroglyphica*'s notes with authentic hieroglyphic inscriptions remained isolated. Epistemologically, this attitude reflected an archaeological and philological approach: archaeological because it supposed that the understanding of hieroglyphs must be grounded in the study of monuments whose provenance and authenticity could be checked, and philological because it applied the methods that were experienced at the time for the edition of Latin and Greek classical texts. The archaeologico-philological approach is representative of the linguistic pole.

As already stressed, this position was disregarded for reasons that remained actually unexpressed. In the Quattrocento, leading scholarly figures like Marsile Ficino, Pico della Mirandola, Leon Battista Alberti, and Erasmus of Rotterdam were fascinated by Plato's philosophy, and hold in high esteem the works of the medio- and late Platonic schools. Prominent authors for the issue discussed in this paper, like Plutarchus and Apuleius, Plotinus, Porphyry, and Jamblichus, as well as historians like Diodorus and Ammianus were progressively revealing to humanists and artists a convergent picture of what seemed the *raison-d'être* of the hieroglyphic writing: a system made of signs whose symbolic force was self-sufficient for expressing the highest values of religion without any link to a linguistic expression (Winand 2020). The vacuity of words when compared to the power of images was also vehemently expressed in the *Corpus hermeticum*, which was edited in 1471 by the indefatigable Ficino.<sup>9</sup> The *Hieroglyphica* did not at first seem to contradict this

7 A previous illustrated edition of the texts with engravings by Dürer planned by W. Pirkheimer in 1516 was never edited. Dürer's drawings, which have fortunately been saved (Vienna Cod 3255), are reproduced in Raybould 2015: Appendix 4.

8 Simple and straightforward correspondences of this kind between sign and meaning can also be found in Alberti's *De re aedificatoria*, VIII, 5.

9 Cf. Ficino's often cited principle: *in quibus interpretandis dimitte voces accipe sensus* (*Opera omnia*, 1576, p. 1901), which actually goes back to Jamblichus' teaching. As he wrote elsewhere (p. 1768): "since God obviously has

widespread opinion. As the text was transmitted without illustrations or actual hieroglyphic signs, it left fully open the question what was actually a hieroglyph.<sup>10</sup> Furthermore—and this has not yet received the attention it deserves (Winand forthcoming)—humanists and artists of the Renaissance were fully equipped to receive the *Hieroglyphica* as an Egyptian textbook on symbolic writing. On the one hand, theologians since Late Antiquity had been developing ideas that promoted symbolic thinking as powerful means to understanding God’s design. In this they were elaborating upon the teachings of St. Paul (2 Corinthians, 3,6: “The letter kills, the spirit gives life”), St. Augustine (*De christiana theologia*; Schneider 2019: 70),<sup>11</sup> and pseudo-Dionysius Aeropagites (around 6th century), a Byzantine theologian who had built a complex theory on symbolic theology. Dionysius’ writings were translated into Latin by John Scotus Eriugena in the 9th century. They then quietly diffused into Western Europe where they had a deep influence on Albertus the Great and his most famous disciple, Thomas Aquinas (Humbrecht 2006).<sup>12</sup> On the other hand, the Middle Ages had widely popularized a mode of expression where symbolic imagery took a significant place. In this, the *Physiologos*, a treaty dealing with animals (and to a lesser extent with plants and minerals) that probably originated in Alexandria in the 2nd century CE played a decisive role (Zucker 2004, Lazaris 2016).

The *Physiologos* is both the recipient and the source of several traditions. It is itself a piece of work that underwent significant modifications, alterations and additions over the centuries. It was well received in Western Europe where it gave a decisive impetus to the genre of bestiaries that would burgeon and grow all over Europe till the Renaissance.<sup>13</sup> While the *Physiologos* partly relies on Aristotle and other scholars dealing with animals and plants,<sup>14</sup> the spirit and the purpose are completely different. The notices of the *Physiologos* follow a regular pattern (Schneider 2019: 63): after an introductory sentence from the Scriptures that gives the general moral tone, the author gives the characteristics of an animal (its φύσεις), which are then explained from a Christian moral

knowledge of everything, not as a multifaceted reflection on an object, but as a simple and solid form of the object” (*videlicet Deus scientiam rerum habet non tamquam excogitationem de re multiplicem, sed tamquam simplicem firmamque rei formam*). See also Alciat’s *De verborum significatione: verba significant, res significantur* (apud Raybold 2014: 254).

- 10 In the first half of the 15th century, the word hieroglyph was not systematically used for referring to the ancient Egypt script; neutral expressions like *figurae animalium* are also occasionally found.
- 11 According to the Church Father, nature speaks in a symbolic language which has to be deciphered. In other words, Nature presents itself with a theological text for those who are capable of reading it. This of course found an echo in Plato’s teachings, for instance in *Phaedrus* to take a prominent example.
- 12 Denys’ treaty *On the celestial hierarchy* was translated in 1436 by Ambrose Traversari.
- 13 See for instance the *Dicta Joannis Chrysostomi de naturis bestiarum* (now in the Pierpont Morgan Library ms. M. 832), which were highly popular during the 12th–15th centuries.
- 14 Actually, the *Physiologos* is also dependent from other genres: fables like Esopus’ and Phaedrus’, works on stones (*lapidaria*), like Xenokrates’ of Ephesus, etc.



perspective. As has already been noted, while the *Physiologos* and the *Hieroglyphica* have demonstrably much in common, it would be going too far to claim that the latter directly and slavishly derives from the former (Zucker 2021). What is important to note for our purpose is the metaphorical, allegorical, or symbolic link made by the *Physiologos* between a particular behavior of an animal and a moral value in human nature. In this, the *Physiologos* paved the way for the reception of the *Hieroglyphica*. Communicating with images by using animals was also a common practice in the decorative programs of churches, monasteries, and other cult places. The sceneries found in the bestiaries were frequently transposed in sculpture, on capitals and porches of many religious monuments. Highly sophisticated compositions like the scene above the main entrance of the cathedral San Pedro of Jaca in Spain from the 11th century offered different layers of interpretation, from the simplest, which any uneducated pilgrim could understand, to the most complex, to be deciphered only by those who had a deep knowledge in theology and Church's history (Favreau 1996, Winand 2022b: 65–66).

In the Quattrocento, humanists were convinced that communication through images was the ultimate mood of expression to access the divine, the world of ideas. What they retained from the *Hieroglyphica* was not the practical information on the value of different signs, but their supposed guiding spirit. As the treaty had no reproduction of hieroglyphs (genuine or not), they felt free to compose their own hieroglyphs. The first attempt in this respect, whose inventiveness and quality were never surpassed, was Francesco Colonna's *Hypnerotomachia Poliphili*, which was edited by Aldo Manuce in Venice in 1499. In this richly illustrated novel, probably one of the most beautiful printed book of the Renaissance, Poliphilo, the hero, in his search for his well-beloved Polia, in his dreams visits antique monuments and other pieces of architecture that sometimes bear a hieroglyphic inscription, which he thankfully translates for the ignorant reader. Figure 1 shows one of the novel's most famous inscriptions which will be inspirational for many artists through the 16th century.<sup>15</sup>

15 This inscription was indeed reproduced in the decoration of the court of the Escuelas Mayores of the University of Salamanca (1525–1530, fourth enigma), emulated in Hubert Mielemans' funerary inscription in 1568–1570 (Winand in press a), and integrated by Bocchi in his *Symbolicae quaestiones* published in 1574 (Rolet 2015).

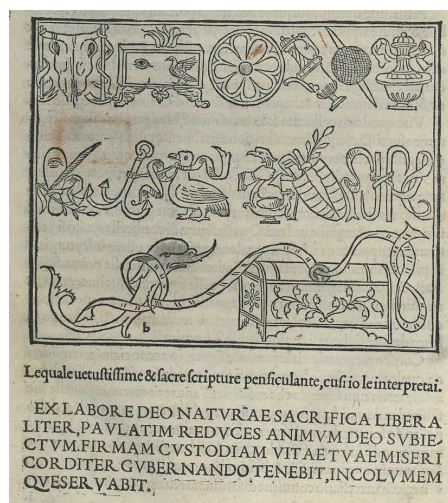


Fig. 1. Francesco Colonna's *Hypnerotomachia Poliphili* (1499) – First inscription.

As is immediately evident, such inscriptions emulate the rules of classical, i.e. Latin epigraphy: the signs are calibrated, arranged in lines (or columns), submitted to rules of vectoriality, and belong to a more or less fixed repertoire. Furthermore, arrangements for suggesting syntactic relations could sometimes be found, like the inclusion of one sign into another for expressing grammatical dependency, the hand holding something for possession, or a ribbon uniting two signs for marking coordination.<sup>16</sup> Of course, a quick look at the inscription suffices to realize that the signs are as far away from real hieroglyphs as possible. Above all, as the signs have been chosen for their supposed symbolic value only, there is no indication as regards their morphological status or their syntactic relations with the others components of the inscription. Thus, if one takes for granted that the reader has correctly identified the bucranium (line 1, first sign) as the symbol of labour, work, he/she is still left in the dark as regards the morphological class it should be assigned to: a noun (labour, work), a verb (to work), an adjective (industrious), or an adverb (laboriously)? If a verb, new questions immediately arise: what are for instance its tense-aspect-mode features? The number of potential readings inevitably could not but quickly result in ambiguity. Last but not least, there is no cue suggesting how to segment the text into phrases, clauses, or sentences. It does not come as a surprise, therefore, that neo-hieroglyphic inscriptions, as they are usually called, only exceptionally contain more than fifteen signs. Even so, their translation remains a scholarly exercise full of pitfalls and uncertainties. While neo-hieroglyphic inscriptions that were inserted in printed texts or manuscripts are generally provided with their author's translation,<sup>17</sup> this is not the case for

16 This will be discussed fully in Section 2.

17 Colonna's *Hypnerotomachia* gave the tone with translations in Latin. One can of course dispute the transposition into Latin as a translation *stricto sensu*, for the hero actually introduces its version with the formula "cusi io le (i.e. *lequale sacre scripture*) *interpretai*," which is rendered "i'interpertray en cette sorte" in the French edition by Kerver (fol. 11b). This notwithstanding, neo-hieroglyphic texts are sometimes glossed word by word before coming to the Latin (or another

the ones that occasionally show up on paintings,<sup>18</sup> or in monumental art.<sup>19</sup> The underlying texts, usually in Latin,<sup>20</sup> that were the model of the neo-hieroglyphic inscriptions, have been lost. This raises a fundamental question that should ideally be settled before going any further in the study of these inscriptions: how confident can we be that a column of signs imitating the neo-hieroglyphic style can actually be translated or glossed in a natural language? As will be seen, there are several examples on paintings and in epigraphy where neo-hieroglyphs are actually only indexical of this type of writing, exactly as hieroglyphs in some late Antique inscriptions are indexical of writing, the best example being probably the inscriptions of the *Mensa Isiaca*. This Roman artefact of the 1st century CE, which was rediscovered at the beginning of the 16th century in Rome, was for some time seriously considered an important artefact for deciphering the ancient Egyptian writing.<sup>21</sup>

The term hieroglyph received a very wide extension during the Renaissance. From a typological point of view, it is interesting to contrast the polysemy of the term with the usages of writing in Ancient Egypt. The discussion of this paper is articulated as follows. After giving a general overview of the uses of the term hieroglyph in the Renaissance (1), I proceed to a semiotic analysis of some emblematic examples (2). The analytical criteria are then applied to the actual productions of Ancient Egypt (3). A comparison between the two cultural modes of expression is attempted in turn (4) in order to appreciate in a concluding section how far they typologically resorted to similar reflexes (5).

In this paper, the meaning(s) of hieroglyphs in the Renaissance is considered from two perspectives. I first deal with the definitions and theoretical discussions occasionally provided by humanists (§ 1), before examining how the concept of hieroglyph was actually used in the contemporary production by artists and writers (§ 2).

language) version, suggesting that these interpretations were given the same status as a translation in the modern sense. Translations, for obvious reasons as it was intended to be a press book, are found in Alberti's manuscript (Royal MS. 12 C III, Winand 2022c: fig. 36). This is also the case in Jean Martin's composition for the Joyous entry of Henri II of France in 1549 (Winand 2022c: fig. 37–38), and in Jan van der Noot's *Lofsang van Brabant* in 1580 (Winand 2022c: fig. 42).

18 See below § 2.2.2.

19 The funerary monument for Hubert Mielemans (Church of the Highly Cross, Liège, around 1558–1560) is the best example of this category (Winand & Ogier 2022; Winand in press a).

20 But note that the linguistic equivalent of the neo-hieroglyphic inscription made for Henri II's Joyous entry in 1549 by Jean Martin is French.

21 On this exceptional artefact, which was somehow connected to the celebration of the Isiac cults, see Arroyo de la Fuente 2015, Budichowski 2018: 322–339. Despite some dissent voices that could be heard in early 17th century, Kircher gave the *Mensa Isiaca* a place of choice in his studies (1652–1655: t. 3, 80–160). Warburton in the *Divine Legation of Mose* has to be credited for the correct dating of the *Mensa*, which was however doubted by Monfaucon, who remained persuaded that it was a most ancient artefact (Winand in press b).

## 1. Ancient Egyptian Hieroglyphs in the Renaissance: a definition

Ancient Egyptian hieroglyphs were occasionally discussed by humanists. While mainly relying on the testimonies of classical sources, they could also make an idea for themselves by studying the antique testimonia that were available. In this section, I first review the general statements on hieroglyphs expressed by Renaissance scholars (§ 1.1), before examining how they applied their theoretical views on actual monuments (§ 1.2).

### 1.1. General statements on ancient hieroglyphs

The term hieroglyph was apparently not used in early Quattrocento. Poggio Bracciolini for instance, when dealing with ancient Egyptian writing, reports that he saw “another (needle) a bit smaller with diverse images of beasts and birds which were used by the ancient Egyptians instead of letters” (Poggio 1447–1448, I: vii).<sup>22</sup>

For Marsilio Ficino, hieroglyphs were used to express the secret and hidden realities of nature. To interpret them, it was therefore necessary to go beyond the words to directly reach the meaning. This theory was encapsulated in the phrase *in quibus interpretandis dimitte voces accipe sensus* “in interpreting this, welcome the senses, dismiss the letters.”<sup>23</sup> This very popular adage was frequently cited by humanists down to Father Athanasius Kircher.<sup>24</sup> The distrust of natural language reconnected with the teaching of Late Antiquity on the effectiveness of hieroglyphs, but also with the impossibility of translating Egyptian into another idiom. The same idea would be taken up by Alciatus when he declared in the *De verborum significatione: verba significant, res significantur*, which could be rendered by “the words signify, the things have a signification.” Marsilio Ficino’s thought (1576: 1768) is made explicit in the following passage:

To express the divine mysteries, the Egyptian priests did not use individual letter characters, but complete figures of plants, trees or animals since God obviously has knowledge of things, not so much a multifaceted reflection on the object, but a simple and consistent form of the thing.

In *De re aedificatoria*, published after his death in 1485, Leon Battista Alberti (1404–1472), discussing the fate of funerary monuments, sadly observed what happened to Etruscan, Greek and Latin inscriptions: no one was able to understand them any longer. According to Alberti, these people, knowing only their own letters, were doomed to oblivion. However the system of notation used

22 *Vidi alteram paulo minorem variis animalium, aviumque figuris, quibus prisci Aegyptii pro litteris utebantur.* Obelisks were by then called needles (*agulia*). On the *De Varietate Fortunae*, see Boriaud 1999.

23 This motto actually goes back to Jamblichus. In his commentary, Albertus the Great already argued that symbols are of prime importance, because they are con-natural (*connaturalia*) with our daily experience. As he put it, “through symbols we are led to meanings” (*per symbola ducimur in significationes*), see Humbrecht 2006.

24 Kircher *Obeliscus Pamphilius*, p. 398, probably taken from Ficino, *Opera Omnia*, II, p. 1901.

by the Egyptians, i.e. the hieroglyphs, could very easily be interpreted by educated people all over the earth. Alberti concluded this section by giving examples of famous tombs of Antiquity whose inscriptions consisted of a few figurative symbols, which were, according to him, in keeping with the spirit of ancient Egyptian compositions.<sup>25</sup>

Alberti's opinion is important in several ways. First of all, it establishes a hierarchy between the figurative writing of hieroglyphs and the alphabet. Writing in pictures, whose paragon were the hieroglyphs, is superior to any other because it speaks directly to the intellect without going through the medium of language. Language is an oversimplification, but also a source of ambiguities as demonstrated by the multitude of languages that resulted from the destruction of Babel tower. Following a tradition firmly anchored since Antiquity, Alberti reserved the understanding of hieroglyphics to highly educated people, worthy of being entrusted with such a secret.

In one of his most commented *adagia* (1001), Erasmus (Saladin 2011: 4–5) discussed Augustus' motto *Festina lente* (σπεῦδε βραδέως), which was emblematically rendered on his coinage by the famous composition of a dolphin entwined around a marine anchor.<sup>26</sup> He made a link between this figurative manner of illustrating a sentence and the ancient Egyptian hieroglyphs:

We call hieroglyphs those enigmatic drawings so often used in ancient times, especially among the priests and theologians of Egypt, who thought it harmful to express the mysteries of wisdom in ordinary writing, exposing as we do to an uninitiated public. What they thought worth knowing, they wrote down by drawing shapes of animate beings, or various objects, in such a way that it was difficult for the ordinary reader to decipher them. It was necessary to first learn the properties of each object and the strength and special nature of each creature. And only the man who had a thorough knowledge of them could interpret the symbols and put them together, and thus solve the riddle of their meaning.

After reporting the common assumption that hieroglyphs were used by the priests to keep ignorant people at bay,<sup>27</sup> Erasmus insists on the learning of the properties of each object, which only could give access to their intimate meaning. By analyzing an object or an idea into its constitutive parties

25 The famous medal with the winged eye is one of Alberti's best known contributions to this program (Raybold 2015: 73).

26 Actually, Augustus' coinage bears a crab and a butterfly. This was reused by Symeoni 1560: 174–175, and Claude Paradin 1583: 173–174, who contrasted the two illustrations. Paul Frelon in Lyon adopted it as his printer's mark with the motto *Matura*, which is reminiscent of one of Alciat's *emblemata*. The equivalence between *Festina lente* and *Matura* (or *Maturandum*) had already been discussed by Erasmus (Winand 2022c: 125–128). The motto of the dolphin entwined around an anchor is actually found on Titus' coinage (*RIC* II, 110). It was reused in Colonna's *Hypnerotomachia* (§ 2.1.1), taken up by Manuce as his printer mark, and commented countless times in the *emblemata* and *imprese* in the 16th century.

27 The celebrated obscurity of hieroglyphs was a complete non-sense for Reformers who emphasized the clarity of the Holy Scriptures. As soon as in 1520, Melancthon famously made a comparison between the scholastic theologians who could interpret allegorically some supposed secrets of the Bible and the hieroglyphs (Millet 2012: 268).

it was possible to render it figuratively. By encapsulating the essential properties of an object, a figurative hieroglyph was superior to any natural language.

Augustus' motto was also discussed in Geoffroy Tory's *Champs Fleury* (1529). The author considered hieroglyphic arrangements of signs bearing a discursive meaning, but also iconographic compositions whose elements could be interpreted as symbols constituting a complex discourse (Tory 1529: fol. 42v–43r). He comes back to this topic later (fol. 73r) when he mentions a hieroglyphic inscription he allegedly saw in Rome. As is immediately evident, the inscription was made according to the *Hypnerotomachia*'s principles and had nothing to do with ancient Egyptian hieroglyphs.

Une teste de bœuf, ayant pendu aux deux cornes deux hoes, puis une grenoille  
et au dessus d'elle ung oueil, en apres une chauffrette pleine de feu, ung visage  
d'homme, ung vaisseau vuydant de l'eau, des violettes en ung pot, ung œuil sus  
une sole de soulier, une ancre de navire, une grue tenant une pierre de l'ung de ses  
pieds et ung dauphin sus une lampe qui est tenu d'une main.

Tory, who had apparently made a translation of the *Hieroglyphica* in French for one of his friends—thus, well before Jean Martin's edition for Kerver in 1546—did unfortunately not provide us with a gloss, even less with a translation of the inscription in a vernacular language, which ironically shows how distant the neo-hieroglyphs were from being the universal writing celebrated by humanists.<sup>28</sup> He nevertheless concludes this section by underlining the Egyptian hieroglyphs' value since they had been conceived according to the principles of natural philosophy (fol. 73v).

This short review of the discussion found in humanists' writings is sufficient to give a general idea of what was by then the general assumption on the role and the functioning of hieroglyphs. Being heavily dependent on the testimonies of the Greek and Latin authors, and consolidated in their analysis by the pervasive (neo-)Platonic teaching, they put the hieroglyphs on the pinnacle of the philosophic expression because of their supposed disposition of expressing the essence of the objects and ideas.

## 1.2. Ancient Egyptian hieroglyphs in the Renaissance: the real and the fakes

Having a rough idea about the general appearance of the ancient Egyptian hieroglyphs was insufficient to make a difference between what was a genuine hieroglyphic inscription and what was an approximate imitation, without speaking of artefacts that had nothing to do with ancient Egypt.<sup>29</sup>

28 The French edition by Kerver was an important milestone in the reception of the *Hieroglyphica*. The text was however already known in elite circles: on the relevance of ms. 682 of the Condé Library in Chantilly, dated from the beginning of the reign of François I, which proposes a partial translation in French of the text, and on Rabelais' familiarity with the *Hieroglyphica* and Colonna's *Hypnerotomachia*, see Menini 2021.

29 The *Thesaurus hieroglyphicorum* by Herwarth von Hohenburg (published in 1610) is a heterogeneous collection of everything that was supposed Egyptian or connected to ancient Egypt. The *Mensa Isiaca* was significantly given



The classical authors that had occasionally dealt with hieroglyphs usually limited themselves to giving a formal, visual description of the script (animals, plants, artefacts, geometric signs) without attempting a definition (with the notable exception of Clement) nor an explanation of its functioning. As a result, any monument bearing signs that were reminiscent of hieroglyphs, above all birds and wild animals, were qualified as Egyptian.<sup>30</sup> The consequence of this was very damaging indeed as the corpus became polluted with artefacts that contributed to the confusion of ideas and considerably delayed the progresses that could be made in the deciphering. Humanists and artists in the Renaissance, but also scholars of the Baroque Era like Athanasius Kircher, had not realized that ancient Egypt had become so popular and fashionable in Imperial Rome that it initiated an important local production. A first category of hieroglyphic inscriptions were created by people willing to stay as close as possible to the Egyptian tradition, but having limited skills in Egyptian epigraphy. In a second category should be placed monuments where hieroglyphs were carelessly used as an index of ancient Egypt without considering the adequacy of their production to authentic monuments. Figure 2 is an attempt to sort out the antique monuments found in Italy bearing hieroglyphic or pseudo-hieroglyphic inscriptions. This will be discussed in more details in Part 2.

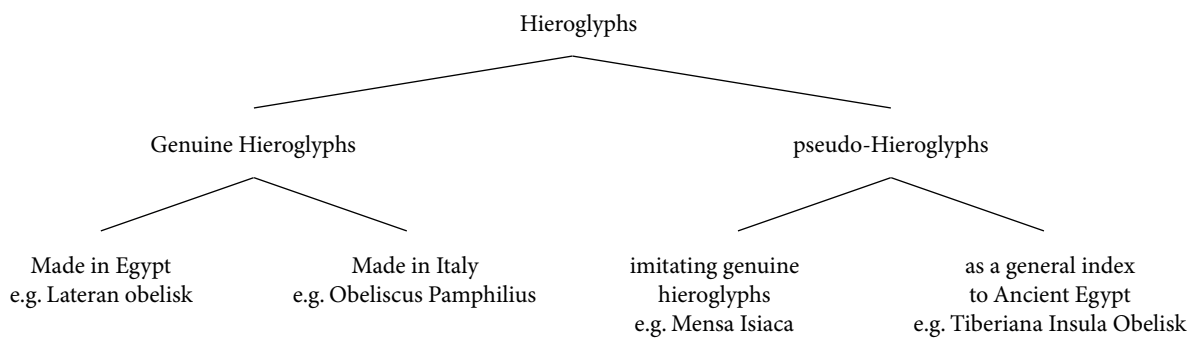


Fig. 2. Hieroglyphic monuments in Imperial Rome.

Genuine hieroglyphs could be seen on obelisks. Of course, no distinction was made between obelisks of Egyptian provenance, some of them dating back to the New Kingdom, and those that had been produced in Rome like the obelisk of Domitian (better known as Obeliscus Pamphilius in Kircher's time). Genuine hieroglyphs were not set apart from an important production of monuments decorated with signs imitating hieroglyphs. These pseudo-hieroglyphs can be sorted out in two categories. In the first one, the signs taken individually reproduce genuine hieroglyphs, and

primacy, with no less than 12 plates, followed by the obelisks that were known at the time. Also included were a statue of Mithra, another of the Artemis of Ephesus, some Roman Canopic jars, diverse alchemical and astrological objects, some Egyptian themes like Harpocrates sitting on the lotus, and a set of Bar Kokhba Revolution coins.

30 Birds were emblematic of the ancient Egyptians script as witnessed by the terminology in Greek and Arabic (Devauchelle 2014; Winand 2020) and the description in Coptic texts (Winand 2022b).



are grouped in such a way as to invoke hieroglyphic inscriptions. Nevertheless they do not make any sense when considered as possible sentences, at least according to the rules of ancient Egyptian epigraphy. The prototypical example for this category is the *Mensa Isiaca*. In the second category, the signs use some types found in the hieroglyphic repertoire without however respecting their actual shape; the general layout does not follow the rules nor the patterns of hieroglyphic writing, and obviously the signs, except for some possible symbolic meaning, are devoid of any linguistic sense. A nice example of this category is offered by the obelisk, actually a Roman artefact, that stood in Late Antiquity in front of the temple of Aesculapius on the Tiberiana insula.<sup>31</sup> From what can be grasped of what remains of the now destroyed monument,<sup>32</sup> the faces of the obelisk were divided into rectangular panels containing images of deities and sacred animals.<sup>33</sup> Its influence on humanists is unclear, but this type of decorative pattern dividing the obelisk faces into regular panels can be found on some Egyptianizing monuments of the late Renaissance.

## 2. From ancient to new hieroglyphs

As it seems, humanists quickly lost confidence in their ability to decipher hieroglyphic writing. In his *Hieroglyphica* (XXXIII, 331–332), Pierio Valeriano reported the distress of his uncle Urbano Bolzanio facing the immensity of the task, the poor quality of the sources, in particular the manuscripts of Horapollon, and the weakness of the contributions of his contemporaries, who were only scratching the surface (Curran 1998/1999: 159). This however did not diminish the taste for ancient Egypt to the least. All over Europe, the nobility was eager to claim for itself Egyptian roots. Emblematic in this respect was Pope Alexander VI Borgia, who followed the advice of Annius of Viterbo (1432–1502)<sup>34</sup> for decorating his apartments in the Vatican with frescoes showing Isis and Osiris, as well as the bull Apis, which was given a prominent place as it was connected to the Pope's central heraldic motto. Moved by political interests, some scholars tried by all means to reconstruct genealogical links between their people, their leaders and the land of Pharaohs. This frenzy also contaminated what were still embryonic comparative and etymologic studies: almost all European languages seemed to take pride in their supposed link to ancient Egyptian.<sup>35</sup>

31 For the history of the shaping of the island into a boat to recall the installation of the god in 292–291 BCE, see Iversen 1968: 179–180.

32 A drawing of a panel was reproduced in Kircher 1652–1655: t. 3, 380.

33 A copy from the beginning of the 15th century, now in Oxford, shows a face of the monument (Curran 1998/1999: 149, fig. 6). The fragments, now in the Louvre (Iversen 1968: fig. 163 ad p. 161), can be completed with a drawing by Pococke (Iversen 1968: fig. 162). See Rouillet 1972: n° 85 and fig. 95–102.

34 Obsessed by the past glory of ancient Etruria, Annius of Viterbo, condottiere della scienza, made a name for himself as forger of antiquities (Popper 2011). He edited supposedly complete texts of the most famous historians of Antiquity, like Manetho, Berosus and Philo, from manuscripts he pretended to have miraculously retrieved.

35 This gave curious if not hilarious texts like the famous *Hieroglyphica* by Goropius Becanus (posthumously edited in 1580), where the primacy of writing and language was given to Dutch, the author's native dialect (Baker 2019). Dutch

In the Renaissance, Ancient Egypt was synonym of prestige and respect. It was the cradle of ancient wisdom, mother of all arts. The hieroglyphs were a brilliant testimony of the priests' achievement. This script, truly divine, made it possible to philosophically analyze the objects and ideas into their constitutive elements without being polluted by the vagaries of linguistic diversity. It could unfortunately not be deciphered, but its grounding principles were sufficiently understood thanks to the testimonies of the Greek and Latin authors, who hopefully had provided some examples. The recently discovered *Hieroglyphica* attributed to Horapollo were the ultimate proof of the validity of the system.<sup>36</sup>

For the artists, mainly painters and writers, there was no obstacle to put their feet in the footsteps of such a glorious tradition. Starting with Francesco Colonna's *Hypnerotomachia*, the Renaissance experienced a rich hieroglyphic production. Hieroglyphic must of course be considered here in the widest possible sense. Without exaggeration, every figure that could be interpreted in a symbolic or allegoric way was by then susceptible to be indistinctly called hieroglyphic. Figure 3 suggests a possible classification of this polymorphous production, taking, as the main criteria, the linkage to a linguistic rendering and, as a secondary criterium, the principle of vectoriality (which implies the principle of proportional scaling) for disposing the signs in lines or columns.

The two main branches make a fundamental distinction between hieroglyphs as bearing a semantic meaning and hieroglyphs used as an index (§ 2.3). The left branch can be subdivided according to some potential linguistic rendering of hieroglyphs. The left arm, which will not be discussed here, deals with hieroglyphs as linguistic signs in a narrow sense, that is hieroglyphs as they were used in ancient Egypt. The right arm considers hieroglyphs in their symbolic dimension as they were understood in the Renaissance. This class can in turn be subdivided in two categories. On the one hand, hieroglyphs were used as a kind of writing, respecting rules and usages that are normally found in classical epigraphy (§ 2.1). On the other hand, hieroglyphs could also be used as an iconic mode of expression; artists of course enjoyed much more freedom, for example by loosening the constraints imposed by vectoriality (§ 2.2), but in the same time they altered, and sometimes broke, the link with a possible linguistic rendering (§ 2.3). As a conclusion to this section, I shall briefly consider some cases where the presence of hieroglyphs can be suspected without being proven due to the lack of positive elements from the author to encourage the reader to do so (§ 2.4).

was not only the primitive language, but also the most perfect one, because it had preserved, so Goropius, its genuine simplicity. See Droixhe 2007.

36 Recent scholarship has cast reasonable doubts on Horapollo's authorship (see above). He is now better considered a pseudepigraph, whose prestige as philosopher, rhetor, and Alexandrian was sufficient to provide a prestigious authority to the *Hieroglyphica*. The redaction/compilation of the *Hieroglyphica* notices is now settled in a Byzantine milieu, around the turn of the 9th–10th centuries, if not later (Fournet 2021).

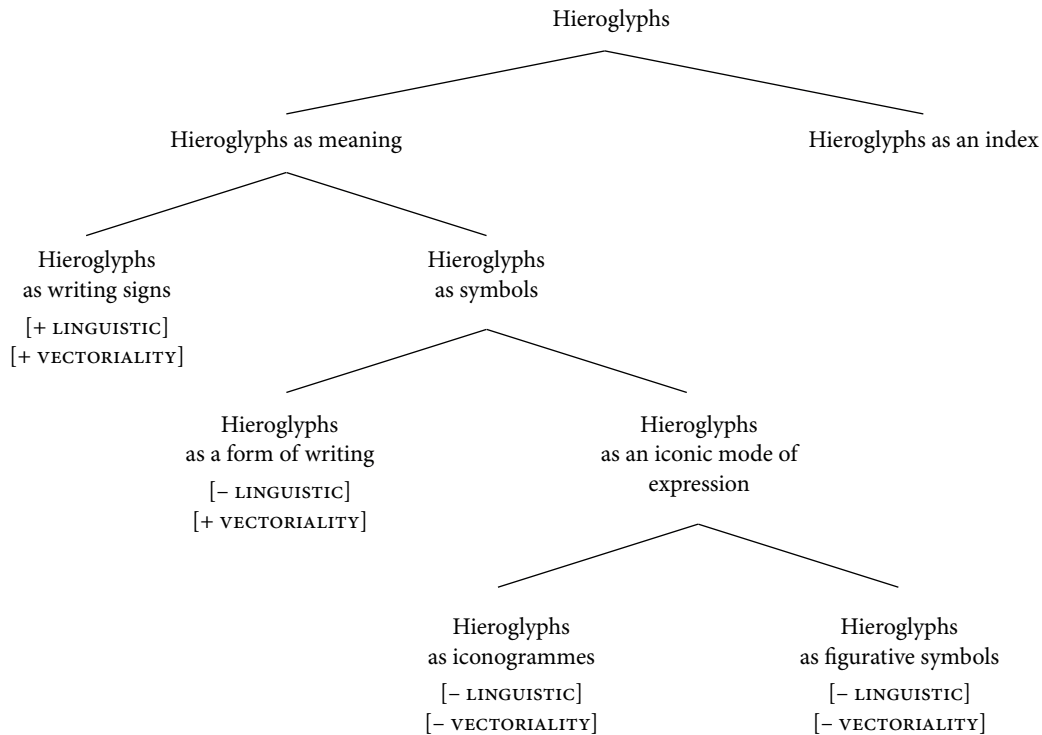


Fig. 3. Functional classification of hieroglyphs.

In what follows, I seized the opportunity to present a large sample of examples, with figures. It does not, of course, pretend to be exhaustive, but it is the first time, to the best of my knowledge, that such a corpus is collected and arranged in a principled way. The hieroglyphs present in Colonna's *Hypnerotomachia*—the founding text which inspired artists till the end of the Renaissance—are dealt with systematically. This will hopefully give a sound basis for the semiotic analysis proposed in § 2.

### 2.1. Renaissance hieroglyphs as a new mode of writing

Inscriptions in hieroglyphic, or Egyptian letters as they were regularly called, appeared in Europe during the Renaissance. Inspired by Francesco Colonna's *Hypnerotomachia*, artists, mainly painters, took on this new mode of expression for communicating short messages. The model was antique epigraphy, following Alberti's comments in *De re architectura* (see above). Commemorative in essence, the inscriptions adorned funerary monuments and stelae, pieces of architecture whose function was to celebrate glorious events, like obelisks, porches and gates, or seemingly more modest artefacts which played however a central role in the scenery like altars, wells and fountains. Neo-hieroglyphic inscriptions are mostly found in places of catholic tradition, like Italy, France, the Southern Low Countries and Spain. This limitation should probably be correlated to the reluctance of Protestants to use a cryptic, hidden writing that was overtly designed to keep ignorant people at bay (see above). This was in frontal opposition to the Reformers' position of opening the divine message as wide as possible to everyone—a position that had already resulted in the rejection of

Latin as the vehicle of the Bible. The production of neo-hieroglyphic inscriptions is also limited in its chronological extension. The peak was apparently reached in the mid-16th century. Some new compositions were occasionally still created in the second half of the century and in the very beginning of the 17th century, but their fashion was clearly in decline.

After presenting the evidence of the *Hypnerotomachia*, Francesco Colonna's founding text (§ 2.1.1), I give an overview of the rest of the production of neo-hieroglyphic inscriptions as they are now usually called (§ 2.1.2). The last section (§ 2.1.3) deals with the curious translation in hieroglyphs of a supposedly ancient Egyptian inscription as reported by Plutarchus.

### 2.1.1. Francesco Colonna's *Hypnerotomachia*

As has long been recognized, the model of neo-hieroglyphic inscriptions is to be searched for in Francesco Colonna's *Hypnerotomachia*.<sup>37</sup> In his short *Praefatio* to the readers, Jean Martin, who translated the novel in French for the Parisian edition by Jacques Kerver in 1546, did not fail to mention ancient Egypt, its monuments—Obelisks and Pyramids—and its script, the “*characteres Egyptiens que l'on dict lettres Hieroglyphiques*”, which undoubtedly were one of the book's main attractions.<sup>38</sup> In his wanderings, Poliphilo, the hero, comes across inscriptions he calls hieroglyphic several times. Three of them—the longest and most elaborate ones—bear resemblance with ordinary, Latin epigraphy. The first one is engraved on the base of a monumental elephant bearing on its back an obelisk.<sup>39</sup> Here is the description of the inscription made by Poliphilo himself, after the French edition:<sup>40</sup>

*Premièrement l'os de la teste d'un beuf, avec instrumentz rustiques, liez aux cornes, un autel assiz fur deux piedz de chevre, puis une flamme de feu, en la face duquel y avoit un oeil, & un vaultour. après un bassin a laver, un vase a biberon, un peloton de filet trauersé d'un fuzeau, un vase antique aiant la bouche couverte, une semelle avec un œil & deux rameaux, l'un d'oliue, & l'autre de palme, un ancre, une oye, & une lampe antique, tenue par une main, un timon de nauire aussi antique, auquel estoit attaché une branche, d'olivier puis deux hamessons, & un daulphin, & pour le dernier un coffre cloz & ferré, le tout entaillé de belle sculpture, en cette formé.*

37 See already Grielow 1915 (apud Raibow 2015: 94–150).

38 The “hieroglyphic” signs in the *Hypnerotomachia* were accepted as genuine by humanists. Erasmus was persuaded that Colonna had succeeded in having a copy of the famous treatise written by Chaeremon (Dempsey 1988: 348).

39 This extraordinary composition inspired Bernini and Kircher in 1667 for the restoration in Piazza della Minerva of an obelisk recently discovered during the excavations of the Isieum. The inscription itself was popular in the Renaissance and henceforth copied many times (see below).

40 While reproducing the original typography, I have discriminated for the sake of the reader the typo [u] in /u/ and /v/, and the typo [f] in /f/ and /s/ as needed etymologically. I have also interpreted the tilde which is frequently used above a vowel as an abbreviation for /n/.



Fig. 4. First neo-hieroglyphic inscription in Colonna's *Hypnerotomachia* (1546: fol. 11b).

After thinking about it, Poliphilo, as he reported, was able to give the following translation in Latin, which was accompanied by its transposition into French in the Paris edition:

*Ex labore deo nature facrificica liberaliter, paulatim reduces animum deo subiectum. firmam custodiam vitae tuae misericorditer gubernando, tenebit incolumemque seruabit.*

Sacrifie liberalement de ton labeur au dieu de nature, peu a peu tu réduiras ton esprit en la subiection de dieu, qui par sa misericorde sera seure garde de ta vie, & en la gouvernant la conservera saine & sauve.

The second inscription is engraved on an obelisk below a medallion with an iconogram figuring a scale, which is also composed of hieroglyphs (see below § 2.2.1). The inscription, which runs in two lines, is described by Poliphilo as follows:

*(Il) y avoit un oeil, deux espiz de froment liez, un braquemart antique, deux fléaux pareillement liez en travers dessus un cercle, un monde, un timon de navire, & puis un vase antique duquel sortoit un rameau d'Olivier, une platine, deux cigongnes, six pièces de monnoye mises en rond, un temple à huys ouvert, & pour le dernier deux plombz ou perpendicles.*



Fig. 5. Second neo-hieroglyphic inscription in Colonna's *Hypnerotomachia* (1546: fol. 85b).



Poliphilo did not apparently face any serious obstacle that could prevent him from giving the translation. As Jean Martin did previously, he first reproduced the Latin version found in the edition princeps of 1499 before giving its equivalent in French:

*DIVO IVLIO CAESARI SEMPER AVGVSTO, TOTIVS ORBIS GVBERNATORI,  
OB ANIMI CLEMENTIAM, ET LIBERALITATEM, AEGYPTII COMMVNIAERE  
SVO EREXERE.*

Au divin Jule Cesar toujours Auguste, gouverneur de tout le Monde, pour la clemence & libéralité de son courage les Egyptiens m'ont érigé de leurs deniers communs.

The last inscription stands on a chest, on the front panel facing the spectator (fol. 96a). The neo-hieroglyphic signs, which run on two lines, are described by Poliphilo as follows:

*deux masques, & dessus chacun un œil, une fusée de fil, une vieille lampe, deux  
fléchés, l'une tournée au contraire de l'autre, un monde, une semelle de solier, des  
crochetz, du feu, un couteau, une mouche, deux brandons entraversez & liez par le  
mylieu, un coffre demy ouvert, & des branches de Cyprès sortans d'iceluy d'un costé  
& d'autre, avec un joug.*

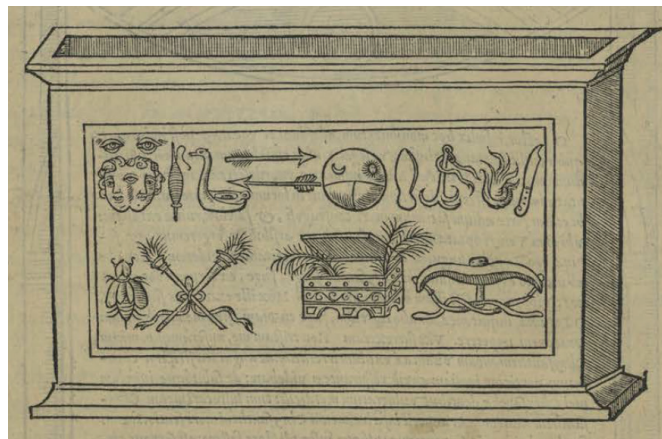


Fig. 6. Third neo-hieroglyphic inscription in Colonna's *Hypnerotomachia* (1546: fol. 96a).

Jean Martin kept the same pattern, first reproducing the Latin version of the original edition, then adding the French translation:

*DIIS MANIBVS.*

*Mors vitae contraria, & velocissima, quae cuncta calcat, suppeditat, rapit, con-  
sumit, dissoluit, mellifluè duos mutuò se strictim & ardentè amantes, hic extinctos  
conjunxit.*

*AVX DIEUX INFERIEVRS.*

*Mort soudaine & contraire à la vie, qui tout suppeditè & ravit & consume & separe  
a icy conjoint mortz deux personnages qui s'entr'aymoient tres doulcement, estroic-  
tement, & ardemment.*

Besides these three major inscriptions, the hero also notes smaller texts with only three signs. The first two, facing each other, he found on a bridge.

*Un Cabasset antique, cresté de la teste d'un chien. Une teste de bœuf, seiche & des-nuée avec deux rameaux à menu feuillage attachez aux cornes de celle teste, puis une lampe faicte a la mode antique.*



Fig. 7. Smaller neo-hieroglyphic inscription in Colonna's *Hypnerotomachia* (1546: fol. 22a-1).

Poliphilo of course was able to deliver a translation, however not without warning the reader of his hesitation regarding the correct interpretation of the second sign, as he could not guess precisely the nature of the palms flanking the bucranium: pine, fir tree, juniper, cypress, larice, or willow.<sup>41</sup>

*Patientia est ornamentum, custodia, & protectio vitae*  
*Patience est l'ornement, garde & protection de la vie.*

The second one, which would become famous as already noted (see above, § 1.1), is described as follows, starting from the right:

*Un Cercle, & un Ancre, sur la stangue<sup>42</sup> duquel s'estoit entortillé un Daulphin*



Fig. 8. Smaller neo-hieroglyphic inscription in Colonna's *Hypnerotomachia* (1546: fol. 22a-2).

This is interpreted as:

*Semper festina tarde*  
*Toujours haste toy par loysir*

One will immediately note here that Poliphilo's translation is different from the traditional one—*Festina lente*—and that the French equivalent introduces a nuance which is absent from the Latin version, with *par loysir* an only approximately rendering of Latin *tarde*.<sup>43</sup>

41 The matter is discussed again later (fol. 45b). Logistique then explained to Poliphilo that pine and larice have distinct properties, for larice (Engl. larch) cannot burn, and pine cannot bend. The whole means that patience is to be glorified, for it does not take fire because of anger, and does not bend out of adversity.

42 In heraldry, the *stangue* (syn. of *verge*) is the vertical staff, usually in wood, which holds the anchor *sensu stricto*.

43 The adverb *tarde* was also retained by Alberici 1507: fol. 9v.



Hieroglyphic inscriptions could also be found on banners, which is only natural if one considers the mutual influence of this new medium of expression and heraldry. Poliphilo described such an object that was fixed on the top of a ship's mast bearing three figures he unhesitatingly calls hieroglyphic (fol. 104b):

*un vase antique plein de flammes de feu, & un monde, liez ensemble, avec un petit rameau de Pervenche, enrichy de fueillage.*



Fig. 9. Banner with hieroglyphs in Colonna's *Hypnerotomachia* (1546: fol. 104b).

The banner is then interpreted as follows:

*omnia vincit amor*  
*Amour surmonte toutes choses*

### 2.1.2. *Neo-hieroglyphic inscriptions after Colonna's Hypnerotomachia*

The edition of the *Hypnerotomachia* in 1499, six years before the *editio princeps* of the *Hieroglyphica*, was the starting point of a rich production of inscriptions, but also of iconograms (see § 2.2.1), that took their inspiration in Colonna's book.<sup>44</sup> From a practical point of view, these inscriptions can be distributed in two classes: inscriptions which came with a translation in a natural language, and those which did not. In the latter case, one can dispute the fact that what presents itself as a meaningful inscription is actually what it pretends to be, instead of being a mere decorative composition that was used as an index of ancient Egypt (§ 2.3).

Neo-hieroglyphic inscriptions that were provided with a translation by their inventor are limited in number. This is not surprising as most inscriptions are actually found on paintings or

44 One usually considers that the first edition's reception was limited compared to the 1546 first French edition, which almost coincided with the Italian reedition of 1545. This opinion should be nuanced as shown by some echoes already found in the Mantegna's series of the Triumph of Julius Caesar (1486), Bellini's *Predica di san Marco in Alessandria* (1504–1507), and Alberici's album (1507).

engraved on monuments, all places where a translation would totally be unexpected.<sup>45</sup> In this presentation, I shall focus on three productions.

I start with Filippo Alberici's album, a manuscript now in the British Library (BL Royal MS 12 C III), which was composed around 1507,<sup>46</sup> i.e. very early, a few years only after the publication of the *Hypnerotomachia*. Alberici, who died in 1531, went to England hoping to raise the interest of the nobility and the king himself in neo-hieroglyphic inscriptions, apparently without success. He made an album that could be considered as a kind of press-book, divided in two main parts. He started with a short lexicon of 60 signs which he described from a symbolic perspective before presenting some inscriptions of his own with a Latin translation.<sup>47</sup> The first part will be dealt with in section 2. I here limit myself to briefly discussing the first three of Alberici's exemplary inscriptions.<sup>48</sup>



Fig. 10. First inscription in Alberici's album (1507: fol. 19v).

The translation that stands at the bottom of the inscription runs as follows:

*Perpetuo incolume vitam in pace custodies. et prudenter ac in mundo gubernes.  
amore divino retentus. in bello victor longanimis. ac dives. semper deo protegente  
invictus.*

- 45 An exception is offered by the inscriptions engraved in the court of the Escuelas Mayores of the University of Salamanca, which are all completed with a translation. Actually, the exception is only apparent as these inscriptions are not original ones but reproduce well-known compositions, like the most famous first inscription of Colonna's *Hypnerotomachia*.
- 46 See Rundle 2005, Drimmer 2014/2015. The manuscript is accessible on line: [https://www.bl.uk/manuscripts/Viewer.aspx?ref=royal\\_ms\\_12\\_c\\_iii\\_fs001r](https://www.bl.uk/manuscripts/Viewer.aspx?ref=royal_ms_12_c_iii_fs001r).
- 47 Cf. the preface in ms. Condé 682, which states "*ceulx qui scauront ce livre pourront escrire par figure les gestes des roys en marbre et tapisserie*" (Menini 2021: 227). Influence of ancient Egypt, with the insertion of hieroglyphs, in tapestry was materialized in Caron's memorial for the funeral of Henri II of France (see *infra*, Fig. 24–25).
- 48 The other inscriptions present nonetheless interesting features that will be discussed in the second part of this study.

*You shall preserve for ever the life well and sound in peace, and you shall govern (it) with caution in the world being retained by divine love, magnanimous winner in war, and always rich and undefeated with the help of god.*



Fig. 11. Translation of the first inscription in Alberici's album (1507: fol. 19v).

The relation between signs and meaning is rather straightforward:<sup>49</sup> the circle for eternity (l. 1 *perpetuo* and l. 4 *semper*), the dolphin for safeguard (*incolumnis*), the lamp for life (*vita*), the olive branch for peace (*pax*), the goose for keeping (*custodire*), the snake for prudence (*prudenter*), the globe for world (*mundus*), the rudder for governing (*gubernare*), the fire for love (*amor*), the eye for divine (*divinus*), the hook for keeping (*retinere*), the vase with flames for war (*bellum*), the sword with palms of victory and crown for winner (*victor*), the eagle extinguishing a fire for magnanimity (*longanimis*), the cornucopia for riches (*dives*), the helmet for protection (*protegere*), and the palm for victory (*invictus*).



Fig. 12. Second inscription in Alberici's album (1507: fol. 20r).

The translation is once more kindly provided by Alberici at the bottom:

*Vivat rex per eterna secula. mundi ornamentum pacis servitor malora cades justitie conservator liberalis rerum copiam suppeditans et celeri prudentia ageris.*

49 The signs are of course commented in the first part of the book.

*Live the king for eternal centuries, ornament of the world, servant of peace, you'll slain what is evil, liberal conservator of justice, provider of things in abundance, you shall act with quick caution.*

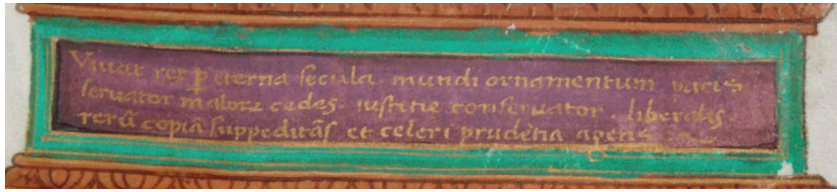


Fig. 13. Translation of the second inscription in Alberici's album (1507: fol. 20r).

There are no major obstacles for identifying the meaning of the signs: the lamp for life (*vivere*), the crown for king (*rex*), the circle for eternity (*aeterna*), the bird (phoenix?) for century (*seculum*), the globe for world (*mundus*), the palms for ornament (*ornamentum*), the vase for peace (*pax*), the griffin (?) for servant (*servitor*), the spider for bad things (*malor*), the gladius for slaying (*cadere*), the scales for justice (*Justitia*), the helmet for preserving (*conservare*), the wheel for generosity (*liberalis*), the cornucopia for abundance (*rerum copia*), the sole for providing (*suppeditare*), the arrow for speed (*celeris*), the snake for prudence (*prudentia*), and the burning fire for activity (*agere*).

The third inscription is shorter. Its beginning is directly inspired by the third inscription in Colonna's *Hypnerotomachia*. Here is the transcription of the translation:

*Diis manibus ac mundi inferioris regi. injusto in malis astuto modicisque domino.*  
*To the infernal gods and the king of infernal world, to the unjust lord, moderate and*  
*astute in bad things*



Fig. 14. Third inscription in Alberici's album (1507: fol. 21v).

When comparing these inscriptions with the ones created by Colonna, the similitude is striking. There are however differences in the design of the individual signs, which clearly indicate how they were conceptualized as elements of writing. New signs are also used like the spider, the griffin, the scales, while some others already appeared in Colonna's iconograms as constituting elements like the scales, the crown, and the palms (§ 2.2.1).



In 1549, on the 16th of June, king Henri II of France made his Joyous entry in his capital. It was then the custom to build ephemeral monuments for such occasions to celebrate the new monarch. The accession to the throne of Henri II was no exception. The king entered the city through the gate of Saint Denis. He was welcomed by different portals and triumphal arches.<sup>50</sup> In front of the church of the Holy Sepulcher, situated in Saint Denis street, was a curious arrangement. On the back of a rhinoceros an obelisk had been erected. This unmistakably referred to Colonna's *Hypnerotomachia*, where Poliphilo comes across an obelisk standing on the back of an elephant.<sup>51</sup> The influence of the latter on the former is particularly evident since Jean Martin, who was responsible for the decorative program, had previously translated Colonna's book in French. As indicated in the text, the obelisk bore an inscription in hieroglyphs with the vows of the Parisians to the king.<sup>52</sup> On the top of the obelisk was a globe with a statue of approximately three meters figuring France.

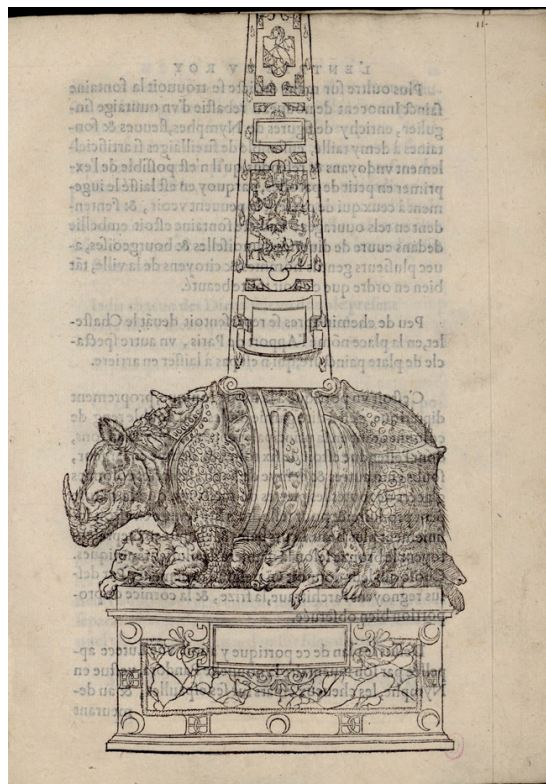


Fig. 15. Obelisk made for Henri II's Joyous Entry (1549).

- 50 The detail of the decorative program, with illustrations, was immediately printed and circulated (Jean Goujon 1549). For the Joyous Entry of Henri IV in Rouen, see *infra* § 2.3.
- 51 On the competition between the elephant and the rhinoceros as the most powerful animal, see the confrontation organized by king Manuel I<sup>st</sup> in Lissabon in 1516, see Winand 2022c: 122–123.
- 52 According to reports by various Italian ambassadors, nobody really understood the obelisk's meaning; most people did not even notice the presence of hieroglyphs. This probably suggests that familiarity with symbolic, cryptic expressions like neo-hieroglyphs was limited to a very small elite circle (Blanchard 2003: 494–495).

Before proceeding to the translation, Martin first gives a description of every sign:

*Premièrement, il y avait un Lynx & un chien de front, reposans chascun sur un pied sur une couronne de France Impériale, estant au milieu d'eux un livre antique fermé a gros fermoirs, dedans le livre une espée nue traversante de bout en bout: un serpent tortillé en forme de couleuvre, un croissant large duquel les cornes reposoyent sur deux termes: un globe sur marche d'un pied du naturel, une poupe de navire & un trident, un œil ouvert, unes fascés consulaires, un rond ou cercle, un pavois, un ancre de long, deux mains croisées sur des rameaux d'olivier: une corne d'abondance dessus laquelle tomboyt pluye d'or, un cerf, un dauphin, une couronne de laurier, une lampe antique allumée, un mors de cheval, & puis le timon d'un navire. (Goujon 1549: 10v)*

Then comes the translation, which runs as follows:

*May strength and vigilance guard your kingdom. With council, good enterprise and prudence, may your limits be extended so that to you be submitted all the brutal machinery of the earth, and that you rule the sea, always with God as avenger and defender against your enemies: by firm peace and concord, with affluence of all kinds of goods in duration and health, triumphant, may you live, rule and govern.<sup>53</sup> (Goujon 1549: 10v)*



Fig. 16. Detail of the inscription on the obelisk made for Henri II's Joyous Entry (1549).

53 *Force & vigilance puissent garder vostre Royaume Par conseil, bonne expédition & prudence soyent vos limites estenduz, si qu'à vous soit soubmise tout la rude machine de la terre, & que dominez a la mer, ayant toujours Dieu pour vengeur & deffenseur contre vos ennemys: par ferme paix & concorde, en affluence de tous biens longuement & sainement triumphateur, vivez, regnez & gouvernez.*

One of the last neo-hieroglyphic inscriptions with a translation provided by its author is found at the end of Jan van der Noot's *Cort Begryp der XII Boeken Olympiados*, which was published in 1579 in Anvers (Zaalberg 1958).<sup>54</sup>



Fig. 17. Obelisk in Jan van der Noot's *Cort Begryp der XII Boeken Olympiados*.

The neo-hieroglyphic inscription concludes the poem. The signs are not identified, but a translation is provided in Dutch and in French:<sup>55</sup>

*Tousiours te hasant à loger, t'accommodant selon le temps, par Labeur & Industrie, par Amour, & par Prudence, conduis peu à peu ton courage en l'obeissance de Dieu, lequel par sa benignité, & toute puissance, sera tres-ferme garde, protection, & gouvernement de ta vie, & te donrà apres la mort, la vie eternelle.*<sup>56</sup>

As was already recognized by Zaalberg (1954: 227–231), the inscription took its inspiration directly from Colonna's compositions. This first impression is confirmed by other productions of the same vein.

54 The monument first appears in the *Cort Begryp der XII Boeken Olympiados* published in 1579; it was then reproduced in the *Lofsang van Brabant* printed in 1580, and in the *Veerscheyden poeticschee Weerken*, published in 1581.

55 It was augmented in a later edition with translations in Latin, Spanish, Italian, and German.

56 *V Haestende al-tijdt med staden, vueghende v na den tijdt, med Erbeydt en Vernuft, med Liefde, en med Veursichtigheydt, leydt alleynskens v ghemoedt in d'onderdanigheydt Godts, de welcke deur sijn bermhertigheydt, endeaal-maghtigheydt, wesen sal een vaste wachte, bescherminghe, ende regeringhe dyns leuens, en sal v gheuen nae dese doot dat eeu- wigh leuen.*





Fig. 18. Neo-hieroglyphic inscriptions in Joncker Jan van der Noot (Waterschoot 1975: 502).

The left obelisk is translated as follows. One will note that the fourth face is not translated, probably because it was interpreted as a variant of the preceding face, which is a copy of the obelisk found at the end of the *Buch of Extasis*.

*Celles qui sont sus la face 1 disent, Sustenez & abstinez, heureux ceux la qui ont tenus la mediocrité, celle sus la face 2. disent, voyant, oyant & taisant, temperez la hastivité seant, & la tardivite en vous levant: & celles sus la face 3. disent Tousjours te hastant a loisir, t'accommodant selon le Temps, par Labeur & Industrie: par Amour & Prudence, condui peu à peu ton courage en l'obeissance de Dieu, lequel par sa benignite, & toute puissance sera tres-ferme garde, protection, & gouvernement de ta vie, & te donnera après la mort, la vie eternelle.*

The obelisk on the right was apparently left untranslated. In the background, there is another obelisk, broken in two pieces with faint traces of hieroglyphic signs. The inscription on the obelisk in the foreground looks different from the one in the background. With some exceptions, most signs are unusual in neo-hieroglyphic inscriptions, their referents barely recognizable, and they seem to defy any transposition in a natural language. This would explain why there is no translation. In this case, this obelisk would be an illustration of our last category (§ 1.2.3).

The last neo-hieroglyphic inscriptions that I am aware of are panels that were composed for Agostino Carraccio's funeral in Bologna in 1603. A commemorative obelisk had been set up in the cathedral. According to the written documents commenting or reporting the event,<sup>57</sup> the obelisk

57 See Morello 1603 for the reproduction of the neo-hieroglyphic inscriptions and their translations, and Giovanni Pietro Bellori 1728. In the latter's work on the lives of artists (*Le vite de pittori, cultori ed architetti moderni*), is a copy of a letter by Morello to Cardinal Farnese with additional information on Carraccio's funeral.

was apparently divided into panels. Poets and artists, friends of the painter, were commissioned to decorate the obelisk. Four short neo-hieroglyphic inscriptions were composed by Lionello Spada (1576–1622). While clearly anchored in the tradition initiated by Colonna, these texts differ from the production of the previous century in many ways (see § 2 for the details). The repertoire was indeed improved with new signs, which had apparently never been used before; ancient signs sometimes received another meaning, and the general layout took some liberty with what was done before.

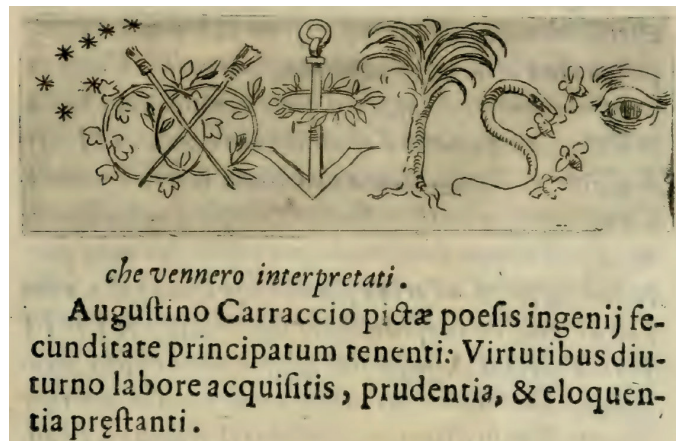


Fig. 19. Lionello Spada's first inscription (Morello 1603: 17).

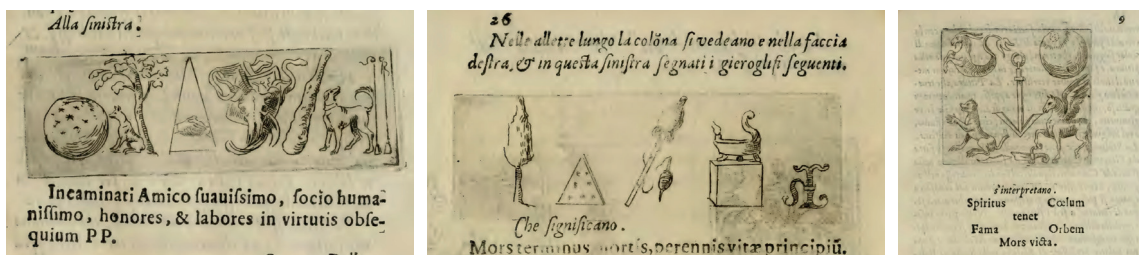


Fig. 20. Lionello Spada's 2nd, 3rd, and 4th inscriptions (Morello 1603: 17, 26, and 9).

I here limit myself to commenting the first inscription. The Latin translation is given below the inscription. Bellori (1728: 78–79) provides a description of each sign, followed by their explanation.

*Sette Stelle del Carro Celeste, due corone, l'una di lauro, l'altra di Quercia intersecate insieme con due pennelli, l'ancora con un'altra corona, l'albero della palma, un serpe, quatro api, un occhio.*

*Le sette Stelle del Carro significavano il cognome d'Agostino Caracci, le due corone co'pennelli la dipinta poesia, per l'ancora con l'altra corona si volle intendere, che egli teneva il principato di essa, la palma il premio della virtù acquisata con fatica, il serpe la diuturnità del tempo, l'occhio la prudenza, e tale era il titolo.*

The explanation looks a bit curious. The inscription would rightly deserve a detailed study, which is impossible to give here, but a few words are in order to point out some problems. In the last part of the inscription, the snake is interpreted as meaning eternity (*diuturnità del tempo*), and the eye prudence. The bees, which are correctly identified (*quattro api*), are left unexplained. The eternity, which is absent from the Latin translation given below the inscription, is normally figured by a ring or an ouroboros, but certainly not by a zigzagging snake. Actually, the snake looks rather like an eel, and this animal was knowingly connected to caution and prudence.<sup>58</sup> Labour is normally represented by the bucranium, one of the commonest neo-hieroglyphic signs (see above, fig. 4), but the bees can also symbolize industrious activity. As they operate during the day, they would perfectly render the phrase *diuturno labore* in the translation. The eye, which closes the inscription, is normally and ubiquitously linked to everything divine (see above, fig. 4). I wonder if it could not stand here for Augustino, the first name of the monument's beneficiary. The seven stars, which symbolize the Charriot, here stand for the family name. If we accept the hypothesis, the core of the inscription would be totally included in the two components of the dead recipient. The remaining signs would clearly benefit from a throughout investigation, which I hope to give in another paper.



In the Renaissance, artists, mostly painters, took a fancy in putting neo-hieroglyphic compositions in their work. Unfortunately, in those cases, the underlying text that was necessarily the starting point before proceeding to the neo-hieroglyphic inscription has been lost. This raises a preliminary and fundamental question. While in most cases, one can remain rather confident that the signs do compose a text that can be translated or rather transposed in a natural language, as was the case in the previous section, the issue should remain undecided for some pieces. If it one day turns out that these compositions are devoid of any linguistic counterpart, they should then rather be placed in the last section (§ 2.3).

I shall here review some significant monuments in a chronological order. The first one is actually a description made by Geoffroy Tory (1480–1533) in his famous treaty *Champ Fleury*, published in 1529. In the last part of his work, Tory briefly deals with Egyptian hieroglyphs. After reporting what was common knowledge in his times about the script (external appearance and functions), he makes an allusion to Horapollo's *Hieroglyphica*, which he pretends to have translated for a friend (Cordier 2006: 24). He then recalls hieroglyphic inscriptions that he saw in Rome on three obelisks without giving much detail.<sup>59</sup> Finally he claims to have seen a painting in a house next to the palace

58 See, for instance, BL Royal MS 12 C iii, fol. 6v (*Anguis prudentiam innuit quoniam summe est calliditatis animal*), where the eel has an identical shape.

59 Fol. 79r. Tory mentions the square before Notre Dame la Ronde, the church of the Cordeliers in *ara coeli*, next to the Capitol, and finally another obelisk (called *esguille*, cf. *aguglia* in Italian) close to the Minerva.



of Mount Jordan. He gives a description of the inscription sign by sign, without producing a facsimile of it nor providing a translation. Clearly, the description perfectly suits the tradition initiated by Colonna, even if there are some idiosyncrasies. A doubt will however subsist as to whether such an inscription ever existed or if it was a mere fantasy dreamed by Tory.

*Une teste de boeuf, ayant pendu aux deux cornes deux hoes, puis une grenoille et au dessus d'elle ung oeuil, en apres une chauffrette pleine de feu, ung visage d'homme, ung vaisseau vuydant de l'eaue, des violettes en ung pot, ung oeuil sus une sole de soulier, une ancre de navire, une grue tenant une pierre de l'ung de ses pieds et ung dauphin sus une lampe qui est tenu d'une main.*<sup>60</sup>

The next text to be considered is a funerary inscription found on the monument of Hubert Mielemans in Church of the Holy Cross in Liège (Belgium). In the lower part of the monument, flanking a Latin inscription that bears the name and the most significative elements of Mieleman's life, are two columns with a neo-hieroglyphic inscription. As shown elsewhere (Winand 2022c and in press), the inscriptions are deeply influenced by Colonna's *Hypnerotomachia*, without being totally dependent of it. Even if this cannot be definitely proven, it is not unreasonable to suggest that the great artist Lambert Lombard dealt with the texts in a way or another. Indeed, Lombard, who had been sent to Rome by the Prince-Bishop Erard de la Marck, took a fancy in the symbolic way of expressing ideas. As will be shown below, he left several sketches of neo-hieroglyphic compositions with glosses, and regularly put neo-hieroglyphic signs into his compositions.

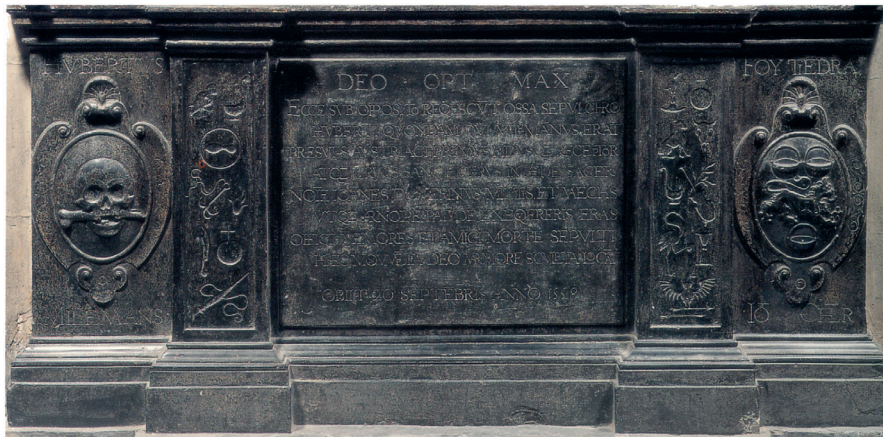


Fig. 21 . Funerary monument of Hubert Mielemans (ca. 1558), Holy Cross Church, Liège.

60 This text has been interpreted by Dempsey 1988: 353 as follows: "The labor (or works) of man are contemptible in the eye of God. By his divine love for the man who little by little subjects his soul to God, He will take firm custody of his life and vigilantly preserve it in safety."

I here give my interpretation of the two inscriptions without any further comment.<sup>61</sup> As I suppose that the underlying text was composed in Latin, I also propose a reconstruction of the Latin prototype. The left column is a very common statement on the destiny of life, a general statement reinforced by the medallion with the skull and bone on the outer left, and by the Greek inscription under the sarcophagus ΑΠΟΒΛΕΠΕ ΤΕΛΟΝ (*sic*) “consider the end.”<sup>62</sup> The right column is an appeal to moral rectitude, which is the best way to fight death and secure a good reputation for oneself. The two texts in Mielemans’ inscription connect thus rather well with the *topoi* found in the funerary and wisdom literature of ancient Egypt.

## LEFT COLUMN

*Morti vita semper subiecta, rapienti, consumenti, truncanti omnium fortunam (ou fatum)*

Life is always subjected to death, which steals, consumes and cuts the destiny of all

## RIGHT COLUMN

*lumina mundum! custodia et labore vitam gubernata liberaliter prudenterque per horas morti contrariam*

Be a light for the world! with a sure guard and labour, govern your life in a liberal way, in opposition to death, with noble prudence, hour after hour

The next two inscriptions stand on an obelisk, which was used as a decorative element by the artist in two famous paintings. The first one is Giovanni Bellini’s *Predication of saint Marcus in Alexandria* (1504–1507), now in the Pinacoteca di Brera in Milan, the second is Joachim Beuckelaer’s *Ecce Homo* (1565), now in Stockholm. According to Dempsey (1988: 348), who devoted a detailed study to Bellini’s inscription, the hieroglyphs represent:

a crooklike form and a circle, the soles of two sandals, the Roman letters V.L., an owl, an eel (or less likely, a snake), an awl, and the old moon cradled within the full circle of the new.

61 See also Dempsey 1988: 355 for a somewhat similar interpretation of the left column, except for the syntactic arrangement. Dempsey did not deal with the right column.

62 On the mistake ΤΕΛΟΝ for ΤΕΛΟΣ, see Deroy 1946–1948: 31. The general idea developed in the right column receives some support from the first inscription in Alberici’s album (fol. 19v, see above fig. 11).



Fig. 22. Giovanni Bellini's *Predication of saint Marcus in Alexandria* (Wikipedia).

The inscription, whose signs can to some extent be related to ancient and contemporary sources, would deliver a message perfectly in accordance with the general theme of the painting.<sup>63</sup> After explaining the meaning of each sign, Dempsey first gives a gloss enumerating the core ideas expressed by the individual signs:

Serapis, subjects, willing vow, death or ignorance, envy or hatred, life to come, and a declining fortune

He then concludes his demonstration by introducing morphological classes and syntax to build an acceptable sentence in Latin, suggesting one of the two following translations:

*a) Serapis subjectis suis vovit libens: ex ignorantia invidiaque in vita ventura fortuna sua decrescet.*

*b) Serapis subjectis suis vovit libens: ex ignorantia invidiaque in spe futurae salvationis (or in signo crucis) fortuna sua decrescet.*

(a) Serapis willingly makes a vow to his subjects: out of ignorance and envy his fortune will decline in the life to come (b: in the hope of future salvation or in the sign of the cross).

In his paper, Dempsey also briefly deals with an inscription found on an obelisk in Joachim Beuckelaer's *Ecce Homo*. He first draws a parallel with André Thévet's *Cosmographie du Levant*, which was published in Lyon in 1554 (and reprinted in 1561). The book displays a plate with two obelisks (one standing, one laying on the ground) that Thévet reportedly saw in Alexandria. One

63 Dempsey 1988: 379–361 “refers” to the well-known episode of the destruction of the Serapeum as reported by Rufinus, Sozomenes and Socrates. On this, see Winand 2022b: 70–73.

is immediately led to wonder whether the traveler did really set a foot in Egypt as the hieroglyphs seem the creation of his own inventive mind. According to Dempsey (1988: 362), Thévet relied on another source, namely the “hieroglyphs” that Cyriacus of Ancona sent to his friend Niccolo Niccoli during his last trip to Egypt, but this does not sound very convincing. The relation between the drawing of Thévet and Beuckelaer’s painting cannot be questioned. The issue however is whether one can give some credence to such a succession of signs as expressing a meaningful sentence. To start with, Thévet does not seem to care too much about the hieroglyphs as shown by the comparison between the 1554/1561 edition of *Cosmographie du Levant* and the 1575 edition (published in Paris) of *Cosmographie universelle*.<sup>64</sup>



Fig. 23. (a) Joachim Beuckelaer’s *Ecce Homo* – (b) and (c): André Thévet 1556: 129 and 1575: 33b.

Dempsey, who elaborates upon the conclusions drawn from his study of the obelisk painted by Gentile Bellini, is confident that the inscriptions reproduced by Beuckelaer in *Ecce homo* can be deciphered by the same method. Without denying the possibility that Thévet, Beuckelaer’s source, had concealed a message in his inscription that could be translated in a natural language, the hypothesis is rather doubtful. First, Thévet does not comment the inscription nor provide any translation, which is contrary to what is observed elsewhere. Where a neo-hieroglyphic inscription is reported, his benevolent inventor usually provides the reader with the solution. This is not the case here, in neither edition. In the 1554/1561 edition, Thévet mentions the obelisk in passing,

64 Thévet 1556: 128–130: “Y a une Coulomne carrée de couleur rouge inscrite de plusieurs lettres sacerdotales, & hiéroglyphiques.” The text in Thévet 1575: 33b is a little more expanded: “l’ay veu une Obelisque quarrée, de couleur rougeastre, avec plusieurs figures de bestes, oyseaux, mains d’hommes, vases à l’antique, d’arcs & carquois, corselets, cousteaux, astres du ciel, yeux, & autres choses semblables, qui iadis estoient lettres sacerdotales, que nous nommons Hieroglyphiques: l’interprétation desquelles n’estoit entendue que des Roys, des Prestres & Sacrificateurs de ce peuple idolatre.” The second obelisk is only mentioned in the latter edition.



without insisting, only as an object of curiosity. If one now turns to Beuckelaer's integration of the obelisk in his composition, one fails to see the link between the meaning of the inscription as reconstructed by Dempsey and the general theme of the composition, which is a strong indication in favor of his interpretation of Bellini's inscription. Indeed, according to Dempsey (1988: 362), the inscription would first celebrate the magnanimity of Alexander the Great towards his enemies and then deplore the fate of the king whose life had been cut too short. Finally, as far as can be known, there is nothing in Thévet's education or centers of interest suggesting that he was interested in or had any knowledge of the symbolic interpretation of hieroglyphs.<sup>65</sup> The responsibility of the signs figuring on the obelisk probably rested on the engraver, who nourished his inspiration with what he could collect in the books and albums available around him.

The last example I would like to discuss here very briefly is a cartoon out of a series that was designed for a tapestry made for Catherine de' Medici, widow of king Henri II.<sup>66</sup> In this cartoon, the queen, like a new Artemisia, is deploring the tragic passing away of her husband in 1559.<sup>67</sup> The landscapes and the monuments are directly inspired by Antiquity, mainly Greek and Roman, but also augmented by some elements that passed for oriental in the Renaissance. Ancient Egypt is discreetly reminded by the presence of its most emblematic monuments, obelisks and pyramids, which can be seen in the background,<sup>68</sup> but also of sphinxes with hieroglyphic inscriptions carved on their base, the sources of which are Nectanebo's famous sphinxes.<sup>69</sup>

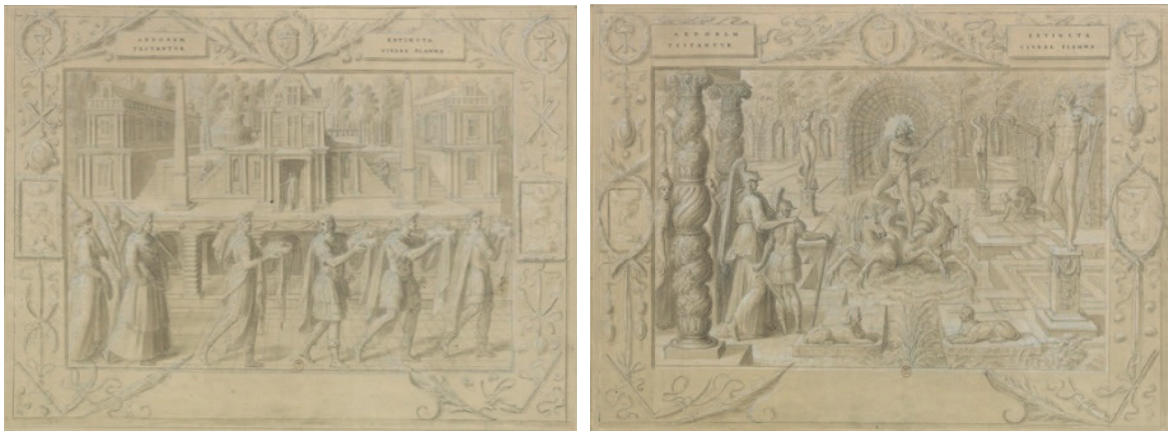


Fig. 24. A. Caron, *Histoire de la Royne Arthemise*, BNF ms. fr. 306 (cartoon #5 and 23).

65 This opinion is apparently shared by Baydova 2021, who does not know Dempsey's study.

66 *Histoire de la Royne Arthemise*, BNF ms. fr. 306; see Hueber 2018. The theme of Mausolus' lament by his widow is already present in Colonna's *Hypnerotomachia* (see below, § 2.4).

67 The drawings were made by Antoine Caron (1521–1599), appointed court painter by Catherine de' Medici. See Capodiecchi (in press).

68 See also cartoon #11 (obelisks put on the gate and roof of a monument reminiscent of the Pantheon), cartoon #16 (obelisk in the background of the Rhodes harbor), cartoon #21 (obelisks in the background of Halicarnassus).

69 On the last cartoon are represented in the foreground two sleeping lions laying on a base with hieroglyphs.

The composition also follows some rules that were established in Colonna's *Hypnerotomachia*. For instance, the procession of the servants carrying the emblems of cities (cartoon #6) is reminiscent of a similar scene in Colonna (1547: 121v). The garlands and flowers adorning the bulls' horns that are led to the sacrifice are a recurrent motive that goes back to ancient Roman sacrificial practices.<sup>70</sup>

On the penultimate cartoon stands a large obelisk (called a pyramid in the preceding accompanying sonnet) with a column of hieroglyphic signs that are obviously inspired by contemporary productions. Unfortunately, there is no description nor translation. Some signs look familiar (from the middle down to the base): an owl, a globe, scales (?), sun, an eye in a square, a crest upholding a leg, a wheel, and a rectangle. The upper signs are difficult to identify in the numeric rendering provided by the Bibliothèque nationale.<sup>71</sup> The glosses that can be appended to the signs of the lower half do not seem to make an immediately obvious and general sense: owl = DEATH, globe = EVERYTHING, ALWAYS, EVERYONE, scales (?) = JUSTICE, sun = SUN, LIGHT, eye in a square = GOD, DIVINITY,<sup>72</sup> crest upholding a leg = PATIENCE, PRUDENCE, wheel = FORTUNE, and a rectangle = ?



Fig. 25. A. Caron, *Histoire de la Royne Arthemise*, BNF ms. fr. 306.

### 2.1.3. *The so-called inscription of the temple of Sais*

Humanists and artists of the Renaissance did not really bother to deal with genuine hieroglyphic inscriptions. They rather preferred to discuss the testimonies of classical authors to evaluate how they could fit in a general theory of communication. Although the hieroglyphic inscriptions that

70 The bucrane with garlands and agricultural tools hanging from the horns is an emblematic sign in the neo-hieroglyphic repertoire, opening for instance the first inscription of Colonna's *Hypnerotomachia* (see *supra*, fig. 4).

71 From the top, there is a circular sign, then three strokes, like a roman number (III), two unidentified signs, and once again III.

72 The square does not seem to add something to the meaning. As shown in the *Hypnerotomachia*, the eye is sometimes included in another sign, altar or sole, to express a syntactic relation (see *supra*, fig. 4).

could be seen in Italy were firmly keeping their secrets, they apparently quickly persuaded themselves that they had at least understood the mechanisms of hieroglyphic writing. This explains why they confidently composed their own inscriptions in the same spirit. There is however at least one exception worth mentioning here because of its success. In his influential treaty *De Iside et Osiride*, 32, Plutarchus mentions the following sequence of figures supposedly engraved on a corridor of the temple of Sais: a boy, an old man, a hawk, a fish, and a hippopotamus. He explains that these figures are symbols, with the following meaning: “o you who are coming to life, and about to leave, God hates impudence.” The same adage is reported by Clemens (*Stromata* VII, 41,4–42,1), who however locates the text on a pylon of a temple in Diopolis, with a graphic variant since impudence is iconically expressed by a crocodile.<sup>73</sup> He translates the sequence as follows: “o you who come to birth and perish, God hates impudence.” This passage became extremely popular in the Renaissance and prompted artists to propose their own version of what was supposed to be a genuine hieroglyphic inscription. Here is an illustration in Valeriano’s *Hieroglyphica* (XXXI: 311) followed by Kircher (1650: 198), and another one in Junius Hadrianus’ *Emblemata* (# 45).

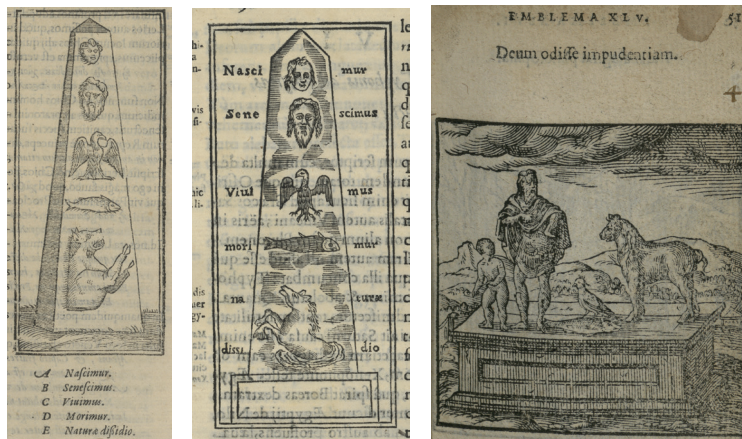


Fig. 26. Deum odisse impudentiam. a) Valeriano, b) Kircher, c) Hadrianus.

## 2.2. Renaissance hieroglyphs as an iconic mode of expression

I have already stressed the fluidity of the term hieroglyph in the Renaissance. Using hieroglyphs—or rather neo-hieroglyphs—as if they were elements of writing supporting a linguistic rendering sign by sign remained limited (§ 2.1). On the other hand, hieroglyphs could be the constituting elements of figurative compositions. The main consequence was the loss of the principle of rectilinear vectoriality. Some compositions could still be glossed, sometimes translated sign by sign (§ 2.2.1), while others only retained the symbolic power of the “hieroglyphs.” In the latter case, the meaning of the composition could only be accessed by adding the individual meaning of the composing elements in a kind of cumulative effect (§ 2.2.2).

73 See Winand 2020.



### 2.2.1. Hieroglyphs as iconograms

In Colonna's *Hypnerotomachia*, Poliphilo had several times the chance to see iconograms, that is symbolic figurative compositions that can be interpreted linguistically. He discovered the first ones (called *sculpture hieroglyphique*) on the sides of a bridge (fol. 46a). On the right side is a woman sitting with her right leg slightly lift up. In her right hand, she is holding a turtle and in her left one two wings. The meaning of the tableau was explained by Logistica as follows:<sup>74</sup>

VELOCITATEM SEDENDO, TARDITATEM SVRGENDO TEMPERA.

*Modere la legiereté par t'asseoir, & la tardiveté par te lever.*

When given the right interpretation, the functioning of each component is rather straightforward. The composition is articulated in two antithetic pairs that oppose the turtle (*tarditas*) to the raising leg (*surgere*) on the one hand, and the wings (*velocitas*) to the resting leg (*sedere*) on the other. The semantic relation between the two pairs (*tempera*), which is supposed to express the inscription's moral instruction, remains opaque, however. The only clue can be found in the second instruction, which celebrates those capable of staying within right proportions (*medium tenere* "to hold the [correct] middle"). As was already the case in the preceding section, the solution to the hieroglyphic enigma could not be easily found without the proper explanation of their inventor.

The second sculpture is described by Poliphilo as two angels facing each other. On the figure, they seem to hold something circular, which is not commented upon in the text. Logistica offers the following translation:

MEDIUM TENUERE BEATI

*Ceux sont heureux, qui ont tenu le moien*

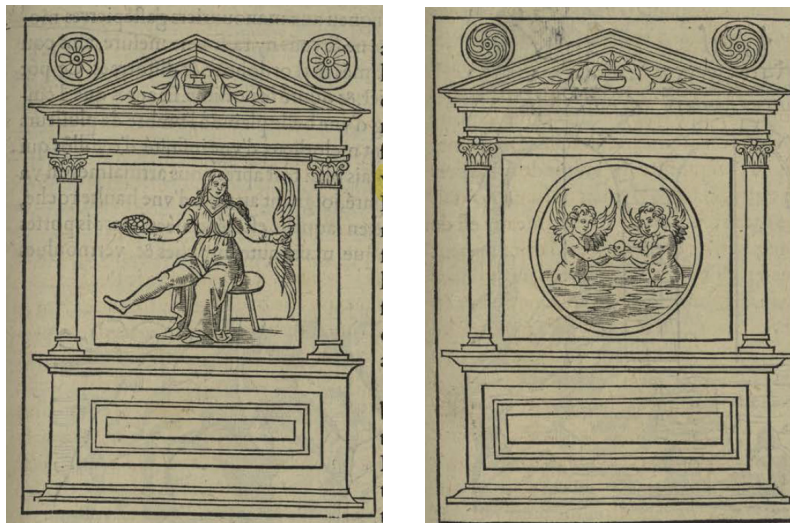


Fig. 27. Hieroglyphic sculptures in Colonna's *Hypnerotomachia* (1546: fol. 46a).

74 In this occasion Logistica, as if to apologize, repeats that she is aware that Poliphilo does not understand hieroglyphs.

Poliphilo had another opportunity of contemplating an obelisk—a quadrangular one—posed on an elevated base.<sup>75</sup> On this base four medallions were engraved, each containing a hieroglyphic figure. Below one of these was also an epigraphic text in neo-hieroglyphs (see above Fig. 5). The four medallions are fine examples of iconograms analyzable in elements which receive a linguistic interpretation. In contrast to the neo-hieroglyphic inscriptions *stricto sensu*, the vectoriality is here no longer rectilinear. It is thus up to the reader to discover the right and meaningful arrangement. Very fortunately for the poor people not drilled in this particular exercise, the translation is kindly provided by Poliphilo. The first medallion represents:

*une balance, & au mylieu une platine en façon de bassin, de l'un des costez duquel y avoit un chien, & de l'autre un Serpent: puis au dessoubz un coffre antique, avec une espée nue, la poincte droite contremont, surpassant le ioug des balances, & entrans dans une couronne.*

This was interpreted as follows:

IVSTITIA RECTA, AMICITIA ET ODIO EVAGINATA ET NVDA, PONDERAT  
AQVE LIBERALITAS, REGNVN FIRMITER SERVANT.

*justice droiste, nue despouillée de hayne & amytié, avec liberalité bien pesée, gardent  
fermement les royaumes en leur entier.*



Fig. 28. First and second medallions in Colonna's *Hypnerotomachia* (1546: fol. 85b–86a).

The second one was then described:

*un Caducée ou baguette sur laquelle deux Serpens s'estoient entortillez. Devers le  
bas d'un costé & d'autre, y avoit un Formy, qui croissoit en Elephant: & devers le  
hault deux Elephans, qui declinoient en Formy. Entre les deux d'un costé y avoit un  
vaisseau plein de feu, & entre les autres deux, un comble d'eau.*

followed by the translation (in Latin with its French transposition):

75 In the drawing of the Kerver edition (fol. 85a), the base has the shape of a truncated obelisk (thus extending the lines of the obelisk down to the ground), which does not match the description found in the text. The original drawing of the Aldus edition however correctly makes a difference between the two components of the monument.

PACE AC CONCORDIA PARVAE RES CRESCVNT: DISCORDIA MAXIME  
DILABVNTVR.

*Au moyen de paix & conorde, les petites choses augmentent: & par discorde les  
grandes se ruinent.*

The third and fourth medallions are then presented to the reader. The third is composed in Poliphilo's words of:

*un Ancre en travers, & sur la stangue un Aigle à aëles estendues: une Gomene<sup>76</sup>  
attachée à l'Ancre: au dessoubz un homme armé, entre aucunes machines de guerre,  
regardant un serpent qu'il tenoit en sa main.*

which is interpreted like this (in Latin with its French transposition):

MILITARIS PRVDENTIA SEV DISCIPLINA, IMPERII EST TENACISSIMVM  
VINCVLVM.

*La prudence ou discipline militaire, est tres fort lyen de l'empire.*



Fig. 29. Third and fourth medallions in Colonna's *Hypnerotomachia* (1546: fol. 86a–b).

The fourth and last medallion is first described as composed of:

*un Trophée: & au bas de la lance qui le soustenoit, deux rameaux de Palme en  
travers, attachez à deux cornes d'abondance: à l'un costé un oeil, & à l'autre une  
Comete.*

before being translated (in Latin with its French transposition):<sup>77</sup>

DIVI IVLII VICTORiarVM ET SPOLIORVM COPIOSISSIMVM TROPHJEVM,  
SEV INSIGNIA.

*C'est le copieux & abundant Trophée avec les enseignes des victoires & despouilles  
du divin Iule Cefar.*

76 "Gomene" is borrowed from Italian (*gomena*), whose French equivalent is "(h)aussiere" (engl. "hawser"), which refers to the thick rope that is now used for mooring a ship. Here it means the rope that links the anchor to the ship.

77 For this last piece, Poliphilo expresses in the French edition some reserve as regards his interpretation: "qui signifioient à mon advis" (Kerver 1547: fol. 86b), which contrasts with the flat statement of the Aldine edition: "Questo diceva."

I now turn to another emblematic composition which heavily relies on the *Hieroglyphica*, with no apparent connections to Colonna's *Hypnerotomachia*. The pharaonic project of Maximilian's Arch (295 × 357 cm), also known as the Triumphal Arch (*Ehrenpforte Maximilians I.* in German), is a woodcut commissioned by the emperor before 1515, which is the date of the print.<sup>78</sup> On the top of the central gate is a portrait of Maximilian sitting on a throne, turning left. The emperor is surrounded by unexpected items, mainly animals but also different objects and body parts, such as two feet on water, which have to be understood as symbolic elements highlighting the qualities and virtues of the imperial ruler. These elements are directly brought from the *Hieroglyphica* whose text circulated in Eastern Europe in the first decades of the 16th century after the first edition (in Greek only) of 1505. Among the several artists working on the emperor's project, Albrecht Dürer was directly responsible for the part discussed here. Dürer shared his interest in hieroglyphs with Willibald Pirckheimer, who had projected to publish his own edition of the *Hieroglyphica*. The project never materialized in print, but Dürer's drawings to illustrate the publication have come down to us on a manuscript now in Vienna.<sup>79</sup> In his commentary on the Triumphal Arch, Johannes Stabius (1468–1522), wrote about the emperor's portrait: "*Conspicitur etiam in tabernaculo, supra titulum, Mysterium Hieroglyphicum a Rege Osyride exortum.*"<sup>80</sup>



Fig. 30. Maximilian's Arch – Detail of the top (Wikimedia Commons).

As is clear since Volkmann's work elaborating on Giehlow's pioneering study (Giehlow/Raibouw 1915/2015: 14–20), the figure was composed by Pirckheimer who first wrote the emperor's panegyric in Latin and then appended the relevant hieroglyphs, inspired to him by his intimate knowledge

78 See Lüken 1998.

79 A reproduction is available in Giehlow/Raibouw 1915/2015: 295–329.

80 See Giehlow/Raibouw 1915/2015: 14.



of the *Hieroglyphica*, to the keywords. According to Pirkheimer, the figure should be interpreted as follows:<sup>81</sup>

*Immortalis ac sempiternae famae heros, antiqua ab origine natus, princeps optimus, animosissimus, fortissimus, vigilantissimus, cunctis nature bonis praeditus, artibus et disciplinis egregie eruditus, divus Maximilianus, Romanorum imperator semper augustus ac magne terrarum orbis partis dominus, virtute bellica summaque animi modestia victoria excellenti superavit regem Gallum potentissimum, quod univ-  
ersis ferme impossibile videbatur hominibus, sicque ab insidiis inimici sapienter se vindicavit.*

I here reproduce Volkmann's translation as transposed into English by Raybould. I added in brackets the hieroglyphic elements that are present in the figure as identified in Volkmann (1923).

A hero of immortal and eternal fame [BASILISK], born of an ancient lineage [BUNDLE OF PYPYRI], the greatest leader [DOG WEARING A STOLE], the most courageous, the strongest, most vigilant [LION], endowed with all the goods of nature, arts and learning [HEAVENS DROPPING DEW], the Divine [STAR] Maximilian, Emperor of the Romans [EAGLE], perpetually august, lord of the greater part of the orb of the world [SNAKE CUT IN TWO], with warlike virtue and the greatest modesty of spirit [BULL] overcame in an excellent victory [HAWK] the most powerful King of the French [SNAKE + COCKEREL] which for most men seemed almost impossible [THE FEET OF A MAN WALKING IN WATER], and thus defended himself from the wiles of the enemy.

I have already pointed out the difficulties in translating neo-hieroglyphic compositions in a natural language: the absence of morphological and syntactic markers, and, in the case of iconograms, the absence of a natural, sequential vectoriality. In the case of Maximilian's arch, the task is to a certain extent simplified as this is mainly a list of attributes, without the complex relations linking a verbal predicate to its arguments and satellites. In a way, Pirkheimer's panegyric renewed in spirit the pharaonic eulogies and the divine aretalogies that were composed in Graeco-roman times.

Figurative compositions that could be linguistically interpreted were probably very common in the Renaissance. It remains difficult, however, to add new evidence when the linguistic counterpart is missing. Even in Colonna's *Hypnerotomachia*, for instance, there are iconographic compositions that are in every respect similar to the ones discussed in this section, but not provided with an explanation, a gloss, or a translation by Poliphilo or his muse (see § 2.4). In sculpture or in painting, the underlying texts written in a natural language, which undoubtedly preceded the symbolic composition, have not been preserved. Very fortunately, such models sometimes survived as in a handful of sketches made by the artist Lambert Lombard (1505/1506–1566), who worked mainly in

81 See Volkmann/Raybould 1923/2018: 189–200, for an explanation of the individual symbols.

Liège. Architect, painter, numismatist, Lombard was sent to Rome by his patron, Érard de La Marck, prince-bishop of Liège, to get acquainted with Italian humanists and artists. As we shall see in the next sections, he frequently added panels of hieroglyphs in his paintings. These inscriptions—if I am not mistaken—were rarely intended as texts in the sense of Colonna’s neo-hieroglyphs, but rather as indexes of a certain idea of Egypt and symbolism. Lombard no less played with the idea of composing iconograms, that is allegorical scenes the elements of which could be arranged in such a way as to form sentences in a natural language. His drawings have been partially preserved in the so-called Album d’Arenberg and Album of Clérembeault (now in the Cabinet des Estampes, Liège). Two of them are worthy of attention. The sketch of fig. 31a shows a bull standing right, crowned by a winged Victory. On the background (rather than on his back), a caduceus with ears of wheat; before the bull, a helmet and a wheel. The drawing comes with a translation which runs as follows:

*Sapientia congiunto co[?] la fortuna  
corona di gloria et d[?]abondanti[a]  
li vigilanti labore nostre in tra(n)[qui]  
lita di pace*



Fig. 31. Lambert Lombard, Liège, Cabinet des Estampes, N 207 and 208.

The second sketch is different as each sign is provided with an identification or gloss: the distaff is the symbol of Atropos, the name of one of the three Fates, whose Roman equivalent was Morta; the hand holding a knife was simply paraphrased by the phrase *trunca il filo*; the dolphin on the back of the lion stands for *festina*; and the wheel is glossed as *instabile*. The lion is not interpreted, but its meaning is clear from the caption that stands above the scene: *breve et veloci è la vita dei grandi*.

The interest of Lombard in this figurative way of conveying meaning is also supported by another document showing that the artist had created for himself a repertoire of signs.<sup>82</sup>

82 Cabinet des estampes, Liège, D-210.



Fig. 32. Lambert Lombard, Liège, Cabinet des Estampes, D 210.

This first impression is confirmed by another drawing of Lombard, with a handful of seemingly unrelated figures. A closer inspection, however, reveals that the depicted objects were commonly used as hieroglyphic signs. One will note here especially the six items in the middle register, separated by a tripod and another unclear signs, actually sacrificial tools, that are clearly taken from Colonna's inscriptions in *Hypnerotomachia* (see above fig. 4).



Fig. 33. Lambert Lombard, Cabinet des Estampes D-163a.

### 2.2.2. Hieroglyphs as figurative symbols

In Colonna's *Hypnerotomachia*, Poliphilo notes the presence of a triangular obelisk (fol. 44a–b). On each face a circle has been carved, and above it a Greek letter: O, Ω, and N. Below, on the base were three hieroglyphs: the sun, a rudder, and a vase full of flames. Here are the properties of these three signs as explained to Poliphilo by Logistica, his philosophical guide:

*Le soleil p(ar) sa belle lumière crée, conserve & enlumine toutes choses. Le tymon ou gouvernail signifie le sage gouvernement de l'universel par la sapience infinie. Le troisieme qui est un vase plein de feu, nous donne à entendre une participation d'amour & charité qui nous est communiquée par la bonté divine.*

These three symbols are interpreted separately; they do not constitute a sentence nor a clause in a linguistic sense. However, considered together they form the essential components of a higher unity, as detailed by Logistica:

*Et combien que les trois images soient séparées, si est-ce une mesme chose indivisible, éternellement comprise en un, & inseparablement cojoincte, laquelle nous départ & communique benignement ses grâces & ses biens, ainsi q(ue) tu peulx comprendre par les cornes d'abondance posées sur les coingz du triangle, qui est ferme sur tous ses coftez: par quoy il nous signifie que dieu est immuable & invariable, sans jamais recevoir alteration ne changement.*

This statement is completed by additional considerations about the symbolic power of the obelisk (also sometimes referred to as a pyramid). The obelisk, by its shape, but also by its decorative program is nothing else but a summary of the supreme power of God. This argument will be later developed and expanded by Athanasius Kircher, who considered that the hieroglyphs had been invented specifically for concealing the secrets of wisdom and the religion, and that the obelisks were the natural receptacles for this.<sup>83</sup>

Symbolic hieroglyphic compositions, with no linguistic transposition, are numerous in the Renaissance. For consideration of place, the presentation will be limited here to some emblematic examples: a) Andrea Doria's epitaph by Sebastiano del Piombo, b) the letter Y in Tory's Champ Fleury, and c) the pedestal of a young divinity in Lambert Lombard's painting Saint Paul and Denis before the altar of the unknown deity.

a) Andrea Doria's symbolic epitaph by Sebastiano del Piombo

The painting (now in the collections of the Palazzo Doria-Pamphilj, Rome) was realized around 1526. Its subject is the famous naval commander Andrea Doria (1466–1560). The symbols that have been drawn at the bottom, exactly where a title should be expected, refer to emblematic parts of a battle ship: anchor, prow, stern, and rudder. These elements are copied from a relief that could then be seen in the basilica of San Lorenzo fuori le mura (now in the Museo Capitolino); together with the sacrificial tools coming from the temple of Vespasianus, they had been integrated in the repertoire of neo-hieroglyphs by the artists of the Renaissance. Except for the anchor [STABILITY, SLOWNESS] and the rudder [GOVERNANCE, RULE], the other elements are never used in neo-hieroglyphic inscriptions. The titulus is emblematic of Andrea Doria's activities as fleet admiral, but the sequence cannot pretend to be an inscription that could be rendered in a natural language.

83 See Winand in press b. This explains, among other reasons, why Kircher rejected Hermapion's translation as reported by Ammianus (XVI,4, 17–23). To the Jesuit scholar, it was inconceivable that such trivial matters as the names and actions of a king would be recorded in a hieroglyphic inscription.





Fig. 34. Sebastiano del Piombo, Portrait of Andrea Doria (around 1526), Wikipedia.

As such they were reproduced on a plate in Herwarth von Hohenburg's the epoch-making *Thesaurus hieroglyphicorum*, published in 1610.<sup>84</sup>



Fig. 35. Herwarth von Hohenburg, *Thesaurus hieroglyphicorum*, 1610 (ULL R-36E).

84 See Winand & Chantrain 2022: 294–295.

b) Lambert Lombard

As already noted, Lambert Lombard was very fond of hieroglyphs as an original way of expressing ideas with images. His interest was nurtured in Rome and materialized later in his paintings. While Lombard composed iconograms (§ 2.2.1), he did not invent regular neo-hieroglyphic inscriptions in the sense of Colonna's *Hypnerotomachia*.<sup>85</sup> As will be shown in the next section, Lombard regularly adorned his paintings with neo-hieroglyphic signs, but apparently only as an index of symbolic writing, thus without an underlying message that could be interpreted in a natural language.

Lombard also occasionally included hieroglyphic signs whose symbolic meaning was important in the general context of the composition. The painting of Saint Paul with Dionysius in front of the altar of the unknown God is a good example thereof (fig. 36). In the background stands a statue of a young naked man, holding a sword upright in his left hand and supporting flames in his right hand. His left foot assumedly lays on a shield. Near his right foot is a globular shaped item with a tail behind, which has been identified as a helmet.

On the pedestal, three figures have been drawn: a radiant sun, an open eye, and a lion passing right. These figures have long been recognized as hieroglyphic signs.<sup>86</sup> However, their meaning—at least for two of them—is open to discussion. The open eye is of course a well-known representation of God. The radiant sun alone is not a frequent item in neo-hieroglyphic inscriptions; it is most often included in a large circle with the moon for representing the universe.<sup>87</sup> According to Valeriano (*Hieroglyphica*, XLIIII) the sun can have one of the following meanings: the divine principle, the principle of unity, the principle of truth, Christ, the light, the principle of *maiestas*, life, and the expression of time. As for the lion, Lombard uses a similar image in one of his sketch with the meaning of powerful one, referring to princes and rules (see above). According to Horapollo's *Hieroglyphica*, the lion also means “vigor” (I,17), “vigilance” (I,19), the Nile in flood (I,21), and “anger” (II,38). Valeriano (*Hieroglyphica*, ch. I) extended the possibilities by adding the following meanings: “magnanimity,” “vigor of spirit,” “strength,” “terror,” “subduction,” “cunning, subtlety,” “indomitable furor,” etc.

85 A possible exception could be the two inscriptions carved on the funerary monument of Hubert Mielemans (§ 2.1.1). The place (Liège) and the date of Mielemans' death (1558) reasonably point to Lombard, who was probably among the very few people having sufficient knowledge of this mode of expression in the city.

86 See lastly Laboury 2006: 52–54, Oger & Winand 2022: 146–147.

87 See already the first note of the *Hieroglyphica*: “for representing eternity, they draw the sun and the moon.”



Fig. 36. Lambert Lombard and his school (?),  
s. Paul and Dionysius in front of the altar of the unknown God (Musée de l'art wallon, Liège).

Behind the god, three Greek words can be seen, engraved on an arch: ΑΔΙΗΓΗΤΟΣ “inexpressible,” ΑΔΙΑΧΩΡΙΣΤΟΣ “imperceptible,” and ΑΔΙΕΡΕΥΣΗΣ “inscrutable.” The shapes of the letters show that the drawer probably did not understand what he was writing. Suffice it here to point out the different, sometimes odd, shapes of the same letter, like delta, sigma, and even alpha. Moreover, the last, much rarer, spelled ΑΔΙΕΡΕΥΣΗΣ for ἀδιερεύνητος, was obviously beyond the understanding of the artist. As has been suggested, these words are some of the attributes of God as described by Dionysius Areopagites (*Divine Words* I,2), whose story was mixed with that of Dionysius, to whom the paintings were dedicated. The statue of the god has been identified as Mars whose model should be looked for in Marcantonio Raimondi’s drawing “Jeune homme au brandon.”<sup>88</sup>

This however leaves unexplained the fire the god holds in his hand and the relation between the symbols and the Greek words.<sup>89</sup> The provenance of the three attributes of God in Greek may ultimately go back to Dionysius Areopagites’ treaty entitled “On the divine words,”<sup>90</sup> but it is unlikely that Lombard, who did not master Latin nor Greek, had a direct access to this theologian’s works. Actually, the link was mediated through a source that was much more popular in Lombard’s time.

88 Brussels, Cabinet des Estampes, SII 26891 (Denhaene 1987: 90, 2006: n° 127, p. 482).

89 Denhaene 1987: 90–91 already noted that the presence of Mars looks odd in a composition that is entirely dedicated to the exaltation of god’s qualities.

90 See Krönig 1974: 125; cf. Denhaene 1987: 91; 1990: 148.



It has often been underlined that Lombard was familiar with the *Hypnerotomachia*, very probably in its French edition. I would like to suggest here that this part of the painting can be directly related to a passage of Colonna's novel. In his erratic journey, Poliphilo, the hero, comes across several hieroglyphic inscriptions, as he calls them. Most of them, but not all, are on monuments that are clearly connected to ancient Egypt: pyramids and obelisks. An obelisk in particular gives the opportunity to Logistica, Poliphilo's guide and teacher, to develop a tight reasoning of the secret meaning of obelisks in general and of the elements that can be seen on this particular monument. Two points are here of interest. First, Logistica describes the three hieroglyphs that have been engraved on the base of the obelisk (I here reproduce the French edition by Kerver, fol. 44, v<sup>o</sup>):

*Autour de la circumference & rondeur sont contenuz ces trois hiéroglyphes, la propriété desquels est attribuée à nature divine. Le soleil par sa belle lumière crée, conserve & enlumine toutes choses. Le tymon ou gouvernail signifie le sage gouvernement de l'universel par la sapience infinie. Le troisieme qui est un vase plein de feu, nous donne à entendre une participation d'amour & charité qui nous est communiquée par la bonté divine.*

Logistica then proceeds to explaining the theological significance of different symbols and the relevance of certain numbers in contributing to the general harmony as created by God. She particularly insists on two divine attributes: immutability and invariance. This is confirmed by the presence of three words written in Greek on the obelisk:

*Regarde cette parole greque escripte soubz la figure du soleil, ΑΔΙΗΓΗΤΟΣ. soubz celle du tymon, ΑΔΙΑΧΩΡΙΣΤΟΣ. en celle du feu, ΑΔΙΕΡΕΥΝΗΣ.*

Colonna's text is undoubtedly Lombard's source for this part of the painting. The mistake in the spelling of the last word in the painting—ΑΔΙΕΡΕΥΣΗΣ for ἀδιερεύητος—is proof of Lombard's dependence on ΑΔΙΕΡΕΥΝΗΣ in Colonna's text.<sup>91</sup> The first extract from Logistica's speech also suggests a possible explanation for the fire in the god's hand, which is the symbol of love and charity as they are given to humankind by god. Actually the image of a god, in this case Jupiter, holding fire is illustrated in Colonna's text, on the next page after the one with the Greek words.

91 As the three adjectives are absent from the pseudo-Dionysian corpus and, according to the digitalized *Thesaurus Linguae Graecae*, they do not seem to be used together, their presence in Colonna's text remains to be explained.



Fig. 37. Medaillon with Jupiter sitting in Colonna's *Hypnerotomachia* (1547: fol. 45a).

The radiant sun, which is carved on the pedestal, is “the sun which by its splendid light creates, preserves and illuminates everything.” The two objects that lay at the feet of the god also deserve attention. As already noted, they have been identified as a helmet and a shield. This might be problematic. Of course, if the identification of the young man holding a sword with Mars is valid, the presence of a helmet and a shield is only natural, but one fails to understand how the figure of Mars fits in the general theme of the unknown god. I once considered the possibility that the item on the right could be a rudder. If so, this would be an echo of the emblematic signs on Colonna's obelisk (fig. 38, a). When shown horizontally, the shape of the rudder comes close to that of a shield, as suggested in a drawing in Lazarus Le Baïf's *Annotationes in legem II* (1536: 37). But as I cannot for the moment suggest an alternative explanation for the other item on the pedestal, which might look like a helmet, I prefer to leave the question open.

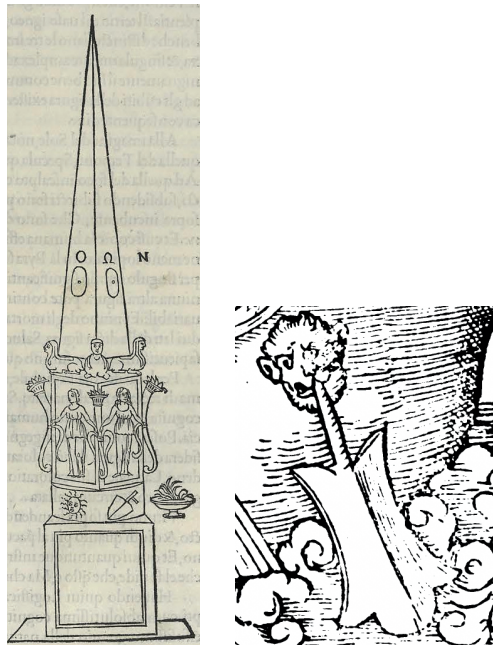


Fig. 38. (a) Colonna, *Hypnerotomachia*, Venise, 1499 –  
(b) Lazarus Le Baïf, *Annotationes in legem II*, Paris, 1536, 37.

In this painting, Lombard succeeded in distributing essential qualities of god in different places and formats. The Greek inscription ΑΓΝΩΣΤΩ ΘΕΩ “to the unknown god” that is given the prominent place naturally induced Lombard to resort to symbolic means as possible clues to unveil the mysterious attributes of god. This he did by using text (the three Greek adjectives painted on the arch) and symbolic figures that pointed to supposedly ancient Egyptian hieroglyphs, which were deemed to be particularly well suited to express hidden aspects of the divine truth.

c) Letter Y in Tory’s Champ Fleury

Hieroglyphs as they were received in Europe during the Renaissance were sometimes accommodated in curious symbolic representations. This was for instance the case in Geoffroy Tory’s *Champ Fleury*. As has been already recalled, Tory was vividly interested in hieroglyphs. In his book, he devoted some lines on ancient hieroglyphs, reported to have translated Horapollo’s *Hieroglyphica*, and described an inscription that he saw in Rome with neo-hieroglyphs (see above, § 2.1.2). In his recommendations on the right proportions of letters, which is the main focus of the book, Tory discusses the symbolic properties of the letter Y, following the Pythagorean interpretation.<sup>92</sup> The two arms of the letter symbolizes indeed the two ways that open to the young man: the left one, which is the wider and easier one, symbolizes the pleasures. This road leads to the soul’s devastation and punishments. The right arm, which is narrower and tougher, symbolizes the virtuous way. He who takes it and lives according to moral principles will be crowned and awarded.<sup>93</sup> The two figures nicely illustrate the text in a very suggestive manner.

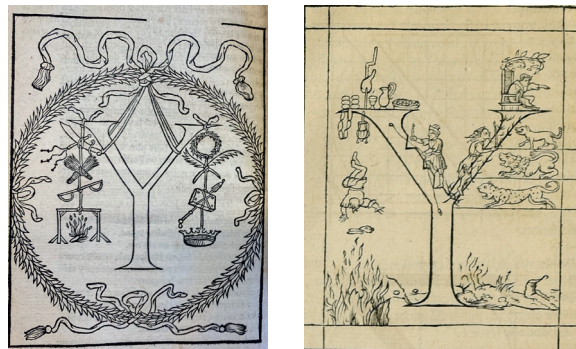


Fig. 39. Geoffroy Tory (1529/1549).

92 See Drucker 1995: 164. On Geoffroy Tory, see Jimenez ed., 2019. The symbolism of the letter Y was commented upon by Greek and Latin authors, but also by Christian theologians (e.g. Lactantius, *The Divine Institutes*, VI,3: *Of the Ways, and of Vices and Virtues; And of the Rewards of Heaven and the Punishments of Hell*).

93 See also the poem by Pierre Coustau 1560: “Pythagoras Philosophe d’esprit, / Vice & vertu sous l’Ypsilon compris, / Le trac de vice en val ses suyvens meine, / Cil de vertu les conduit en la plaine” (cf. <https://www.emblems.arts.gla.ac.uk/french/emblem.php?id=FCPa105>). In his collection of emblems, Coustau also devoted a notice “Sur la Vipere, selon les Hieroglyphiques des Aegyptiens. Contre les femmes qui haissent leurs maris” (Coustau 1560: 412), and another on the ouroboros, entitled *Ex hieroglyphicis Aegyptiorum* (p. 255). The letter Y also retained Erasmus’ attention (*Adagia*, 1.1.2).

Although Tory did not explicitly call these figures hieroglyphs, one can suppose that they are to be considered as such. In the *Epitome emblematum panegyricorum Academiae Altorfinae* published in 1602 in Nuremberg, Levinus Hulsius reproduced a token that on its obverse figures the Pythagorean Y in a simplified way.



Fig. 40. Token, 1578 in [Hulsius 1602].

### 2.3. Hieroglyphs as an index: Decorative hieroglyphs as entertainment

Hieroglyphs, every kind of hieroglyphs, Egyptian ones, neo-hieroglyphs, or whatever figure that could pass for hieroglyphic, were sometimes used without any linguistic or symbolic meaning. They served as indices pointing either to ancient Egypt or to some symbolic way of writing ideas. This opened the path to hieroglyphs as decorative items, a practice that is still well alive today.<sup>94</sup>

I shall here limit myself to (neo-)hieroglyphs that clearly mimic inscriptions without having — as far as one can judge — any precise meaning translatable in a natural language. The first example is provided by one of the many paintings by Lambert Lombard where signs imitating neo-hieroglyphs have been added. Figure 41 represents a small panel figuring on the well that constitutes the central motive in “Rebecca et Eliezer au puits,” one of the paintings in the cycle of the “Wirtuous women.”<sup>95</sup> Except for one or two, the signs are barely recognizable. They are clearly no genuine hieroglyphs. They rather relate to the repertoire that was inaugurated in Colonna’s *Hypnerotomachia*, obviously trying to imitate neo-hieroglyphic inscriptions by respecting the general layout as observed elsewhere, *sensu lato*. However, they do not seem to imply anything more than a vague link with Antiquity. Strictly speaking, the presence of hieroglyphs is a little odd in a Jewish context, even if the story of Jacob can be loosely connected with Egypt. The presence of such small panels with pseudo-inscriptions is recurrent in Lombard’s work.<sup>96</sup> If some neo-hieroglyphic inscriptions can

94 In the Renaissance, hieroglyphs were close to the genre of the grotesque, that was very popular after the rediscovery of the paintings in Nero’s Domus aurea (see Hansen 2018).

95 See Dehaene 1990: 508.

96 See for instance “Christ and Samaritaine” (London), “The Holy family” (Windsor), where the inscription is partly missing, the right part being out of frame. As regards the “Healing of the blind man” (Amsterdam), the signs are better to be analyzed as symbols pointing to cultic practices, without however constituting an “inscription” translatable in a natural language.



be taken in a Colonesque sense of the term, like that figuring on the base of the altar in the “Joachim’s Offering repelled” (see § 2.2.2), they should rather be explained as mere indexes of a certain representation of Egypt and Antiquity, *sensu lato*.



Fig. 41. Lambert Lombard, *Rebecca et Eliezer au puits* (detail), Grand Curtius, Liège.

The second example is a detail on an architrave in the background of Mantegna’s *Caesar’s triumphs* (1486), as interpreted by Andrea Andreani in 1598–1599 in his album where he engraved the nine paintings of Mantegna’s cycle. The signs that have been schematically drawn are clearly related to Colonna’s *Hypnerotomachia* inscriptions. They also imitate the cultic items from Vespasianus’ temple on the Forum, which were partly the source of inspiration for Colonna (see above).

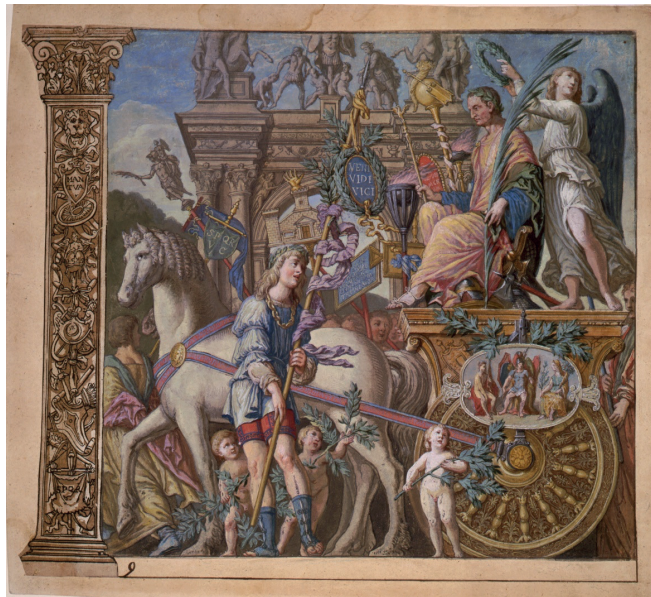


Fig. 42. Andrea Andreani, *Triumph(us) Caesaris* (Wikimedia).

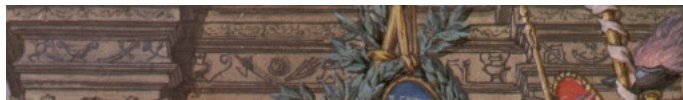


Fig. 43. Andrea Andreani, *Triumph(us) Caesaris* (detail, Wikimedia).

The third example is provided by Marteen van Heemskerck (1498–1574), taken from the series “Wonders of the World,” which were engraved in 1572 by Philips Gale (Sammut 2022). Van Heemskerck, who also spent some time in Rome (Rather 2017: 158–159), was apparently fond of Egypt as shown by the obelisks he frequently draws in the background of his paintings. More concretely, in 1570 he erected an obelisk (2,2 m high) in the memory of his father in his eponymous native town, which is the earliest monument of its kind in the Low Countries (Rather 2017: 155–157). The *Pyramides Aegypti* shows a phantasmagoric representation of Cheops’ pyramid surrounded by six obelisks.<sup>97</sup> The two closest to the viewer bear signs on one of their faces. The signs that are on the one in the background are made of geometric forms in the lower part; in the upper part, the signs seem to refer to objects and animals, but are barely identifiable. Quite to the contrary, the signs adorning the obelisk that stands in the foreground can easily be identified, at least one can assign them a referent.



Fig. 44. Marteen van Heemskerck, *Pyramides Aegypti* (Wikimedia).

The last monument to be briefly discussed here is the ephemeral obelisk that was erected in Rouen in 1596 for the Joyous entry of king Henri IV of France, as reported by Raphaël Du Petit Val.<sup>98</sup> The faces of the obelisk, which stood on four female sphinxes (called “harpies” in the accompanying text), were divided in ten panels. The figures reproduced on the plate represent the famous labours

97 One will also note a possible representation of the sphinx at the right of the pyramid. As has been frequently noted, pyramids and obelisks, either by name or by shape, were usually confused with one another. Like the pyramids, the obelisks were considered funerary monuments, a tradition that goes back to the Middle Ages. For instance, the obelisk of the Vatican supposedly contained Caesar’s ashes at its top.

98 See Raphaël Du Petit Val 1599. For the Joyous entry of the same king in Lyon, obelisks with military emblems were also present, see Ancelin 1598.



of Hercules.<sup>99</sup> As explained in the booklet, the capital H at the top of the obelisk stands both for Henri and Hercules. On the face of the pedestal facing the church was written in golden letters “*Hercules Gallicus*.” The section of the booklet concludes with these words (p. 53): “*Le Roy ayant contemplé ce magnifique ouvrage vray hieroglyphique de ses vertus, etc.*,” which shows that the scenes figuring Hercules in his activities were understood as hieroglyphic because they had a symbolic force as epitomizing the virtues of the king.

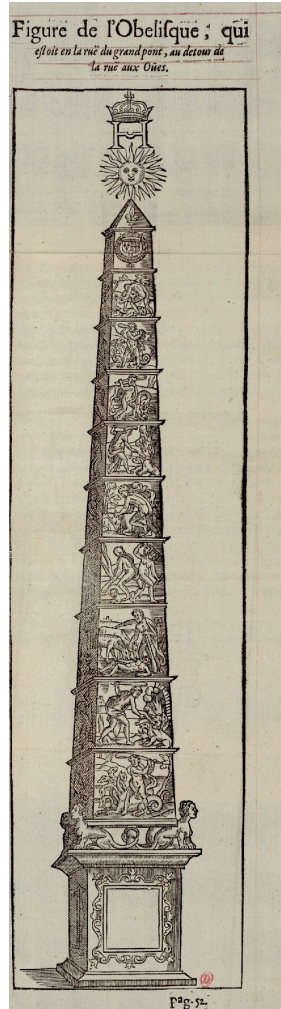


Fig. 45. Raphaël Du Petit Val 1599: ad p. 52.

This manner of distributing the decoration in panels was already present on the obelisk standing on the *Insula Tiberiana*, in front of the temple of Aesculapius (see above). In the Renaissance, such monuments are attested in the last decades of the 16th century and the beginning of the following century. The first example in a printed version seems to occur in Van der Noot’s collection of works

<sup>99</sup> Actually, the uppermost panel was reserved to the king’s emblems. Only three faces of the obelisk were decorated. The fourth one was left blank to signify all the splendid works the king would achieve during his reign.

(see above, fig. 18). It is also attested in the funeral monument made for Augustino Carraccio (see above, fig. 19–20). Another example is the funerary monument of Edward Seymour, 1st Earl of Hertford (died in 1621), in the cathedral of Salisbury, surrounded by four obelisks.<sup>100</sup> The panels have been decorated with trophies and panoplies that symbolically recall the earl's military career. Such items are already present in Colonna's *Hypnerotomachia*, which makes their identification as hieroglyphs very likely.



Fig. 46. Funerary monument of Edward Seymour, Cathedral of Salisbury, 1621 (photo Jean Winand).

#### 2.4. Possible hieroglyphic compositions

As a final remark, some arrangements that could easily pass for hieroglyphic were not apparently considered as such. This is particularly striking in Colonna's *Hypnerotomachia*, where every image has a high potential of symbolic force. It is thus curious that some architectural pieces that seem to meet all criteria were not analyzed as instances of neo-hieroglyphic compositions (fol. 32a).

This is also the case for a medallion, presented as a diamond, showing Jupiter standing on a throne, holding in his left hand a cornucopia and in his right hand a flame of fire (fol. 45a–b).

100 See also the plate in Androuët du Cerceau 1584: 31; cf. Winand 2022c: fig. 31. This format is also found on an obelisk erected for the Joyous entry of Henri IV in Rouen in 1596 (see § 2.3).

Logistica gives Poliphilo the required explanation without suggesting a transposition into a natural language. When discussing the object, neither Logistique nor Poliphilo makes an allusion to Egypt or to hieroglyphs. It is all the more intriguing as this figure is followed by the hieroglyph of the women sitting with a leg lift-up (fol. 46r, see above fig. 27).



Fig. 47. Medaillon with Jupiter sitting in Colonna's *Hypnerotomachia* (1546: fol. 45a).

The same contrast can be observed elsewhere. In a dramatic scene, the two lovers meet an old woman leading a group of six young women. The older, so Poliphilo, was holding a sword turned upright with a crown and a bough engaged in the middle of the blade (fol. 47b).<sup>101</sup> This is rather curious as the sign of a sword with a crow engaged in the blade reappears later (fol. 85b) in an iconogram which is interpreted as a hieroglyphic figure (see above).



Fig. 48. Medaillon" with Jupiter sitting in Colonna's *Hypnerotomachia* (1546: fol. 47b).

Later in the text (fol. 57a), Poliphilo describes a panel showing people looking in the sky Cupido who is busy drawing with his arrow four animals: a dragon, a goose (?), a horse, and a goat (?). The nature of the animals is not specified, and no explanation is given as to what this could signify:

101 “& veint à notre reception une matrone de regard furieux, tenant une espée fourbie, la poincte contremont, passée atravers une couronne parmy laquelle passoit un rameau de palme.”

*devant estoit Cupido en aage d'enfance, volant en l'air, & paignant contre le ciel atout une fleche trenchant toutes manieres de bestes & oyfeaux: dont il sembloit que les hommes estans en terre s'esbahissoient de la merveille.*



Fig. 49. Cupido drawing in Colonna's *Hypnerotomachia* (1546: fol. 57a).

After visiting the obelisk that displays the four medallions already presented (§ 2.2.1), Poliphilo saw nearby a fragment of a pediment of antique craftsmanship, where two figures could still be recognized: a bird, whose head is missing, but tentatively identified by the hero as a kind a vulture (a Chahuant) and a lamp (fol. 87a). Poliphilo did not explicitly call them hieroglyphs, but he nevertheless suggested a translation, proceeding exactly as he did previously for neo-hieroglyphic inscriptions:<sup>102</sup>



Fig. 50. Pediment with two figures in Colonna's *Hypnerotomachia* (1546: fol. 87a).

This was interpreted by Poliphilo as follows:

VITAE LETIFER NVNTIVS

*Le messenger de mort à la vie*

102 The translation is introduced by the very expression that is used everywhere in the text: "*ie l'interpretay ainsi*" (*Cusi io le interpretai* in the Aldine edition, with occasional slight syntactic variations).



One of the most famous pieces of architecture visited by Poliphilo is undoubtedly the funerary monument of Mausolus erected by his widow Artemisia.<sup>103</sup> At the bottom was reportedly a trophy, commemorating, so Poliphilo thought, his victory over the Rhodians. The trophy, which bears some resemblance with the one figuring on the fourth medallion (interpreted as a hieroglyphic figure), is described as follows (fol. 98b):

*Ce toit l'esperon d'une gallere, avec partie de la proe sur laquelle estoit dressé un tronc d'arbre, revestu d'une cuyrace antique, les branches passant par l'ouverture des bras: en l'une desquelles pendoit un escusson, & en l'autre le manche d'une trompe à vuyder la sentine<sup>104</sup>: au dessoubz de la cuyrace un ancre, & un tymon entraversez. Sur la poincte du tronc qui sortoit par le collet de la cuyrace, estoit un cabasset à creste.*

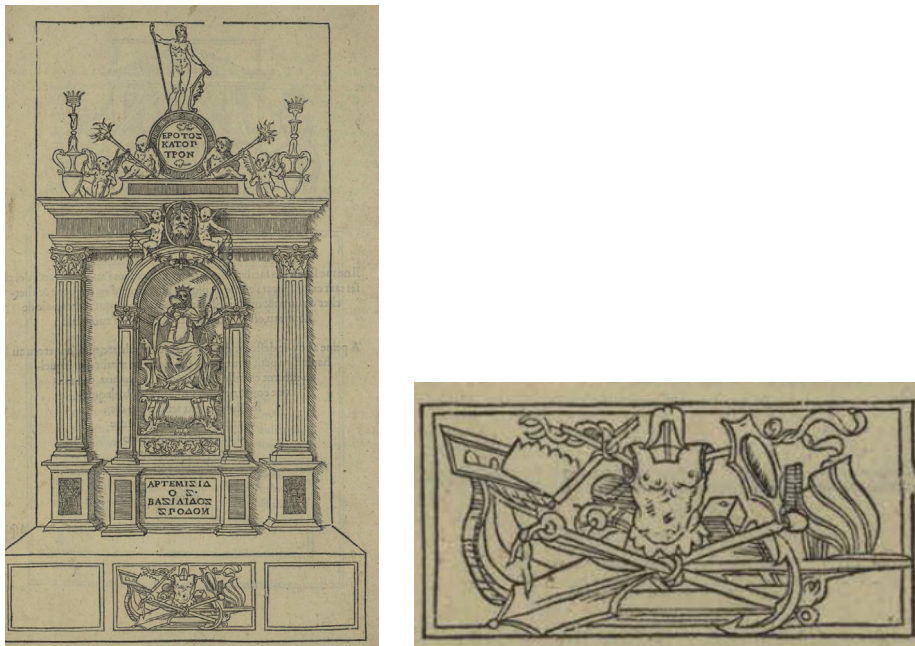


Fig. 51. Mausolus' funerary monuments in Colonna's *Hypnerotomachia* (1546: fol. 98b).  
General view and detail of the trophy.

When entering a beautiful garden, Poliphilo notes a bucranium engraved on the base of a small monument (fol. 114a). The head is decorated with festoons and garlands, in a manner that reminds hieroglyphic texts mentioned earlier by the hero. In this case however, no attempt is made at suggesting a symbolic interpretation, even less a translation.

103 This theme will be later treated by Caron for commemorating the laments of Catherine of Medici after the death of her husband, king Henri II of France (see above, § 2.1.2).

104 *Sentine* is an ancient word (Latin *sentina*) designating the lower part of a ship (Fr. *cale*, Engl. hold).





Fig. 52. Bucranium in Colonna's *Hypnerotomachia* (1546: fol. 114a).

Upon his arrival on the island of Cytherus, Poliphilo sees several Nymphs coming, each bearing richly elaborated ensigns which by their shape and arrangement very much remind the trophy described earlier by the hero as hieroglyphic (fol. 116a–117b). In this case however, the ensigns are very precisely described, but no proposition is made for interpreting them symbolically, which would normally be followed by a translation. The seven ensigns are reproduced below without any further comment:

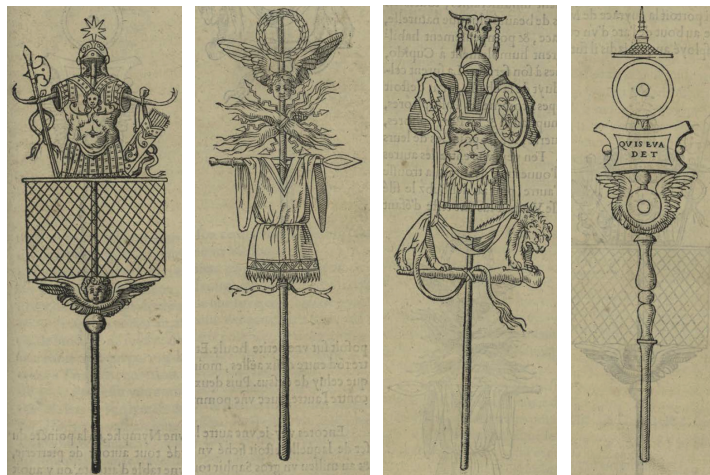


Fig. 53. Ensigns in Colonna's *Hypnerotomachia* (1546: fol. 116a–b).

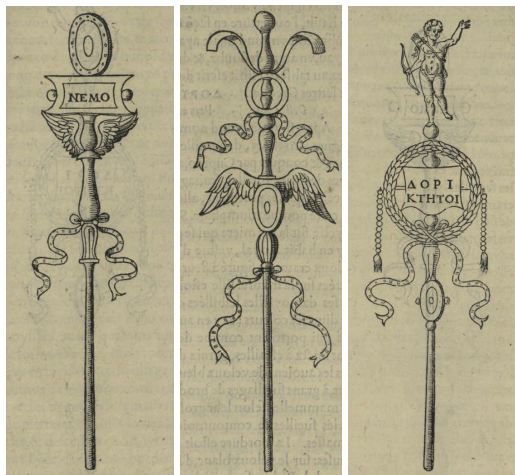


Fig. 54. Ensigns in Colonna's *Hypnerotomachia* (1546: fol. 117a–b).

I voluntarily limited myself to examples coming from Colonna's *Hypnerotomachia* as this set the standard for the neo-hieroglyphic tradition in the Renaissance. All examples provided in this section have typologically close counterparts that are interpreted as hieroglyphs by the hero or his muse. I cannot offer a satisfactory explanation for a different treatment, but I can at least suggest two possible causes. First, and this would easily apply to the last examples, the figures that were left untranslated are in the second part of the book, and they are typologically repetitive. Could it be that a certain fatigue fell on Colonna, who ended up dispensing himself of these cumbersome descriptions? Another, maybe more gratifying possibility would be that Colonna, having trained the reader in the mysteries of his neo-hieroglyphic writing system, finally considered that he/she was now up to the task of deciphering the figurative enigmas presented to him/her in the last part of the book. This would be well in accordance with the spirit of the times. One should not indeed underplay the pleasure coming from the personal discovery of the meaning of such compositions, especially if this required some skills that would unequivocally remind the reader that he/she and the author belonged to the same cultural circle.

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# Exploring the Hieroglyphic Sign after Champollion<sup>1</sup>

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**Abstract.** Through a review of the approaches and achievements of our two hundred years of study into Egyptian hieroglyphic writing, we will first explore the analysis and classification of signs, the list of signs and palaeographies, as well as the relations of the hieroglyphic signs with representation, with an emphasis on the use of the figurative dimension of the sign. We will then study the expedients employed by writing in order to achieve a high degree of effectiveness for the sign: its colour, shape, mobility, smell and combination of different elements or its association with other signs. The question will be asked whether a sign needs to be read or visible in order to be effective. At last, the performative value of Egyptian writing, its origin and its use will bring to light the role that writing indeed plays in maintaining the harmony of creation.

**Keywords.** sign analysis, classification, palaeography, effectiveness, performative writing.

Champollion had succeeded in grasping the compositional richness of the hieroglyphic script, which was found to be capable of combining phonetic and figurative aspects at various levels.<sup>2</sup> It was a discovery all the more admirable because barely conceivable at the time, as the iconic appearance of the signs led rather to a symbolic approach, which did not allow for the possibility of a reading.<sup>3</sup>

Since then, other figurative scripts<sup>4</sup> such as Mayan, Aztec or Naxi have been acknowledged as *real* scripts, i.e., capable of communicating a discourse, a transcription of the word. For a long time,

1 Based on a lecture given on May 18th 2022, at the colloquium “Autour de Champollion – Deux cents ans après” at the Bibliothèque nationale de France in Paris.

2 Champollion le Jeune 1836: chap. 2, p. 22.

3 Thomas Young would be the first to assign phonetic values to some hieroglyphic signs in 1819, but he thought that phonograms were not wholly Egyptian, but only used to write Greek names (I thank R. de Spens for this point).

4 Beaux, Pottier, Grimal 2009; Houston & Stauder 2020.

this figurative dimension was granted as a concession to cultures that had not yet experienced the “triumph of the alphabet”,<sup>5</sup> which represented the indisputable indicator of “civilisation” for the linguists of the time.

Today, we would no longer think in such terms. These scripts are explored in their richness, and their figurative dimension has received increasing attention over recent years. Signs are now studied as complex units, both phonetic and figurative.<sup>6</sup> However, have we really been able to approach the hieroglyphic script without being influenced by our own cultural bias?

Such an inquiry is daring. Have two hundred years really allowed us to advance our understanding of the writing of a remarkably rich culture, which developed over more than three millennia? Linguistic evolution is to be expected over such an extended period of time. From the dawn of a script, up until its sunset, many changes may occur. Hieroglyphic writing was born in the very first dynasties as a complex system,<sup>7</sup> as described by Jochem Kahl, and it later proceeded with the loss of compositional rules, adding pseudo-hieroglyphs, omitting signs or writing them backwards, such as in the Temple of Esna.<sup>8</sup> We witness this system crumbling, and progressively becoming less employed after the Roman conquest, before eventually disappearing in the 4th century CE, as analysed by John Baines.<sup>9</sup>

Over this vast period of time, not only did writing, society and belief systems change, but so did language. Thus, when we speak of the “hieroglyphic system,” we are immediately struck by the magnitude of its implications: we are either tempted to simplify it in order to give a general description, or we risk being overwhelmed by its diachronic ramifications. This system, however—withstanding a few predictable adjustments—remained consistent throughout most of its history.

I would thus like to begin by reviewing the approaches and achievements of our two hundred years of study into this script. In doing so, I will only be able to briefly touch upon those different research paths that may hopefully disclose the beauty and sophistication of this writing, as well as its purpose.

## 1. An analytical approach

The genius of hieroglyphic writing consists in the fact that it is unlimited in its compositional potential. There exists no such thing as a finite list of signs, since the scribe could, at his leisure, model and complete words with new signs. No one will ever be able to provide an exhaustive list—and yet, the writing is legible.

5 Klock-Fontanille 2020: 4, § 2.

6 Polis 2008: 21–67; Polis & Rosmorduc 2015: 149–174; Houston & Stauder 2020.


7 Kahl 1994: 22 and 105–111. See also a general introduction by Silverman 2011: 203–209.

8 Sauneron 1975; 1982.

9 Houston, Baines, Cooper 2003: 435–450.

This is due to the fact that although a basic set of some 700 signs can be traced in many written compositions,<sup>10</sup> these signs could evolve and acquire new phonetic or semantic value, and the scribe could always—as far as the strictly figurative non-phonetic signs were concerned—create, enrich, and refine his thoughts by making use of new signs. On their part, the readers were able to understand the signs not only in virtue of the context or cultural values they shared with the scribe, but precisely because of the figurative dimension of the signs themselves.

For instance, a zoomorphic sign rarely corresponds to a specific animal, according to our taxonomy. If we are to identify a zoomorphic sign, we should first determine its semantic field and isolate—by means of several examples—its characteristic features. Then, we can ask ourselves what could be a plausible identification.

For example, the scribe could choose, according to his social environment and experience, the reptile that best illustrated, in his eyes, the concept of “multitude”, expressed by the word ‘š’ and whose sign takes on the shape of a gecko or a lizard, and, at times, even specifically a salamander (fig. 1).<sup>11</sup> He could likewise choose to combine the traits of animals that shared a relevant, distinctive feature, corresponding to the essential meaning of the sign. The  L2 hieroglyph is a fitting example, as it is the result of combining traits typical of bees, wasps and hornets, all insects with a powerful stinger. Identifying this combination makes it possible to single out and emphasise the stinger—and perhaps, as Linda Evans points out,<sup>12</sup> to understand that the designation of the king as *bjty* might be suggestive of his power, in that he would be “the one who can sting with his stinger”.



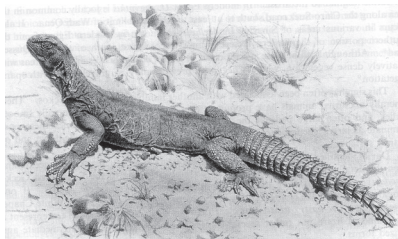
Salamander legs and tail



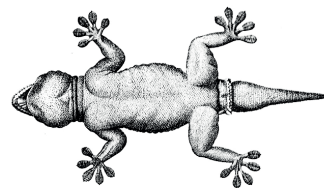
Salamander's tail and Gecko legs



Gecko legs



Salamander (*Uromastyx*)



Gecko

Fig. 1. Selection of distinctive features belonging to either or both Gecko/Salamander to express the concept of “multitude” (examples from the white chapel of Sesostris I at Karnak (photo A. Chéné), from the temple of Hatshepsut at Deir el-Bahari (photo N. Grimal) and from Anderson 1898: pl. XIV, and the *Description de l'Égypte* 1809: pl. 5).

10 Collombert 2007: 15–28.

11 Beaux & Goodman 1992: 125–134; see also Guilhou 2009: 1–25.

12 Evans 2016–2018: 11–16; see also Meeks 2010: 273–304.








### 1.1. Analysis and classification of signs

It could be said that hieroglyphic signs range from the entirely phonetic to the entirely figurative, passing through all possible combinations and degrees of semantic transcription.

The more we learn about ancient Egypt, the more we realise that things are not as simple as they seem. Texts can be read on several levels. In a given context, a sign may be read phonetically and still retain its figurative dimension as active on another level of reading, which is accessed by means of contexts or shared metaphorical references. These may be strictly visual or graspable through the semantic values suggested by the phonetic reading of the neighbouring signs.<sup>13</sup>

In the spirit of analytical classification, scholars have sought to describe the complexity and richness of the combinational system, such as, in recent years, Stéphane Polis through his research and the creation of the *Thot Sign List* database.<sup>14</sup> In a similar fashion, in her publications and in the *iClassifier* database,<sup>15</sup> Orly Goldwasser has focused on those “determinatives” renamed “classifiers,” which are key in understanding how the ancient Egyptians conceived their world. These studies aimed not only at delving into the Egyptian system, but also at being part of a more universal linguistic reflection, both necessary and remarkable.

We should, moreover, mention the work of Gérard Roquet, whose reading texts with a careful eye to prosody led him to identifying in the sign a potential prosodic marker, considerably refining our understanding of the encoding of a text. Accordingly, the presence of a sign would no longer be deemed the result of chance, but rather, it would indicate that the sign had been used by the scribe as a prosodic key for the reader.<sup>16</sup>

It should also be borne in mind that the “system” evolved, as one might expect, between the Old Kingdom and the end of Pharaonic civilisation. For example, classification became more rigid after the Old Kingdom. In that respect, the way of classifying the divine or certain toponyms in the *Pyramid Texts* as compared to the *Coffin Texts* is significant:<sup>17</sup> in the former corpus, determinatives are mostly referring to the specificity of the god, and its generic identification as a “divinity” is only occasional, whereas in the latter corpus, there is a quasi-systematic employment of generic divine classifiers. Thus, the name of the goddess Uret-hekau, paired in the *Pyramid Texts* with the sign of the white crown  S2 or red crown  S4 depicted on a basket—a *specific* determinative—is found exclusively matched with *generic* classifiers within *Coffin Texts*, the sign of the seated woman  B1—underlining her gender—, that of the erect cobra  I12—indicating a female deity—or that of the seated god  A40—a marker of divinity.

13 Vernus 2003: 196–218.

14 Klinkenberg & Polis 2018: 9–56; Polis 2023: <https://thotsignlist.org/About>.

15 See specifically Goldwasser 2002, and her database iClassifier <https://www.archaeomind.net/about>.

16 Roquet 2016.

17 Beaux 2004a: 43–56; Thuault 2018: 7–22. See also Shalomi-Hen 2000.

Similar results emerge from a study conducted by Simon Thuault on 3 toponyms occurring 93 times in the Pyramid Texts and the Coffin Texts: the variety of classifiers used in the first corpus—five—as opposed to the only two employed in the second corpus, emphasise the standardisation of writing following the end of the Old Kingdom. This gradual change underlines the desire for organisation and increasing categorisation, sometimes to the detriment of specific determination.

Caution is therefore required when elaborating theories on the hieroglyphic writing system. We should not only be specific as to which period we refer to, but our arguments should be backed up by supporting, dated examples. Analytical studies such as these undoubtedly allow us to refine our understanding of how writing functioned, while at the same time they help us grasp the *formamentis* of Egyptians.

## 1.2. List of signs and palaeographies

Notwithstanding the theoretically infinite number of hieroglyphs, a taxonomy had to be drafted: in other words, a list compiling genus, species, and subspecies, as for any scientific study classifying living beings. The order of categorisation—what comes first: man, god, or the cosmos...? —is often more revealing of the researcher's cultural bias than of the Egyptian conception of life.<sup>18</sup>

Regrettably, the lists of available signs are quite scarce.<sup>19</sup> The difficulty in assembling them lies in paying attention to the time frame, the monument and the context from which the sign is copied, which often evolves throughout the history of its use. It would therefore be ideal to specify the period of use of the sign and its attested functions, and to include a few references for each type of use. Studies focusing on a specific period, such as that of Sylvie Cauville for the time of Cleopatra, are therefore valuable resources.<sup>20</sup> Moreover, as previously mentioned, an important database has been created by Stéphane Polis for the University of Liege and the Berlin-Brandenburgische Akademie der Wissenschaften.<sup>21</sup> We have, however, just now embarked on the challenging task of collecting all known examples, ideally following verification of the epigraphic or photographic record, and accompanied by the indication of the context of each sign.

In order to deepen our knowledge of the signs, we compiled palaeographies, where the variants and variations of the sign are carefully noted down. Palaeographies usually deal with a single monument: their degree of detail varies, they often consist only of plates of signs, occasionally accompanied by a commentary indicating the uses of each sign on the given monument. Palaeographies may

18 Compare, for instance, Gardiner's list, starting with the categories of man (A), followed by woman (B) (Gardiner 1957: 438–549), with the work by Meeks 2004, who also places man (A) first, then anthropomorphic kings and gods (B), followed eventually by the category of woman (C).

19 See the latest one: Polis 2023, <https://thotsignlist.org/About> edited by the University of Liege and the Berlin-Brandenburgische Akademie der Wissenschaften.

20 Cauville 2001.

21 Polis 2023, <https://thotsignlist.org/About>.

come as plates of line drawings, as in the work by Philippe Collombert on the tomb of Mereruka; they also at times may consist of plates of photographs, such as those of the chapel of Senusret I and, whenever possible, even colour photographs, as in the case of the exquisite palaeography of the Giza stelae by Peter Der Manuelian.<sup>22</sup> Unfortunately, they are most often taken as dating sources, and are more rarely analysed for how they reflect the semantic field of the sign, what it represents, and its various phonetic or semantic values, which allow us to better understand the sign in all its richness. This is precisely the scope of regrettably rare specific, individual sign studies,<sup>23</sup> which, with the help of palaeographies, enable us to catch a glimpse into how Egyptians conceived of the world.

A few scholars have been brave enough to create palaeographic databases on a number of monuments, accompanied by reflections on the collections of signs and their variants. Among these are David Nunn, who has made his polychrome hieroglyphic research project available online<sup>24</sup> and, most recently, Renaud de Spens,<sup>25</sup> whose work also sets out from a chromatic perspective.

The main obstacle to the establishment of these palaeographies is that they must be compiled from the monument itself, and not merely from its publication, since it is not possible to rely, at the level of a sign, on a published final plate, due to its scale. These palaeographies therefore require a great deal of time and rigour.

### 1.3. Sign and representation

Researchers quickly realised that thanks to their figurative aspect, signs could seamlessly shift between the text and the representation of a scene, as the former could be completed by an element of the latter, which thus operated as a unit of both the writing sign *and* the image. Valérie Angenot<sup>26</sup> shows how, in a scene where Hesire is consecrating offerings, and is depicted holding a libation vase and a round loaf of bread—which can be read as the signs *ḥsj* and *Rʿ*, corresponding to his name, Hesire—he is actually making an offering which he validates for himself, through this rebus. The work by Henry George Fischer<sup>27</sup> in particular uncovered these dynamics of exchange between

22 See, for instance, the series “Paléographie hiéroglyphique,” based on line drawings and edited by D. Meeks for IFAO (such as Collombert 2010), or the palaeography based on colour photographs by P. Der Manuelian (Manuelian 2003)—a reference on the subject—, or that of N. Beaux (Beaux 2015), based on photographs.

23 There are several studies of that kind, both monographs (e.g., McDonald 2003) and articles (Roquet 1984; Beaux 1988, 2004b; Janák 2010; Relats-Montserrat 2014; Evans 2016–2018...).

24 Nunn 2018, 2020, 2021.

25 De Spens d’Estignols 2021.

26 Angenot 2018: 87–88.

27 See all the bibliography by H.G. Fischer, and especially *Egyptian Studies (I–III)* published by the Metropolitan Museum of Art of New York, between 1976 and 1996.

the image and the text, moreover allowing other scholars, such as Pascal Vernus,<sup>28</sup> to build on his arguments and enrich them further.

We observed how the sign tended to *escape* from the constrictions of the strict written dimension, diving into the adjacent visual representation—or rather, we understood that its figurative aspect allowed it to navigate freely between several dimensions—2 or 3—and different levels—linguistic, artistic, and so on.<sup>29</sup> The sign had thus been analysed and classified, but had its nature been fully grasped?

## 2. The effectiveness of the sign

When the sign for “life”—whose identification is still debated—is represented in three dimensions on a dish employed for a libation to the Ka of a deceased person, the water that was to be poured in became effective, vivified by means of its passage *through* the sign (fig. 2).<sup>30</sup>

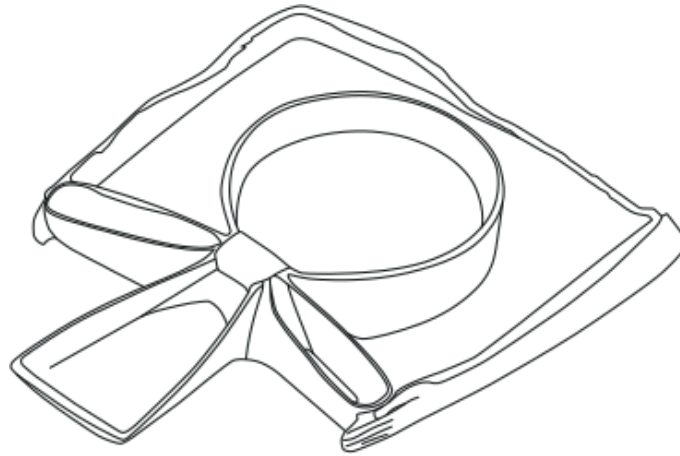


Fig. 2. Example of the performative function of the sign: A ritual vessel in the shape of an *ankh* life sign (middle of dish), and *ka*-sign (arms on dish edges). When pouring water through the life sign the arms of the deceased (*ka*-sign) received it and were vivified by the ritual (after Fischer 1972: fig. 1).

Similarly, when offerings, *htpwt*, were placed on an altar in the form of a *htp* sign—a 3D representation of a mat with a loaf of bread on top—they were, in a way, multiplied by virtue of their support, while bringing peace, *htp*, to whomever they were offered. Here, phonetic and semantic values are linked, combined so as to boost the power of the offering.

These last two cases emphasise the so-called performative facet of the sign, that is to say that what the sign represents or means is considered by the ancient Egyptian as actually occurring. To

28 P. Vernus published extensively on the topic, see in particular Vernus 2016.

29 See especially Fischer 1972; 1973.

30 Fischer 1972: 5–14.

quote Yvan Koenig, whether it is “a simple vocal sound, image, writing or even gesture, the sign always carries an active, performative charge.”<sup>31</sup>

Several expedients were employed in order to achieve this high degree of effectiveness, among these are: colour, shape, the combination of different elements or the association with other signs, and even smell.

#### 2.4. Colour<sup>32</sup>

A sign may be identified with a specific colour corresponding to its semantic value, as happens with the shades of yellow and white that signify, respectively, nocturnal and diurnal light. However, in certain cases the scribe could have opted for another colour, because the general context meant to emphasize a different dimension than that of the individual semantics of the sign. Thus, in the *Pyramid Texts*, the blue/green colour applied to all the signs without exception was intended to stimulate and vivify the deceased pharaoh, insofar as these colours were characterising water and vegetation, sources of life (fig. 3).



Fig. 3. Blue/green colour applied on all the signs to vivify the king through the texts engraved in his tomb (Pyramid of Unas, photo N. Beaux).

31 Koenig 2013: 171.

32 Mathieu 2009: 25–52; De Spens 2021.



## 2.5. Mobility and animation

Signs could be activated through the addition of arms or legs, that allowed them to perform acts connected to their semantic value: these elements could be either integrated into writing and result in a composite sign,<sup>33</sup> or activated in a representation, as happened with the sign of life, *ankh*, when represented holding a fan behind the king with both arms, thus enlivening the royal shadow (fig. 4).<sup>34</sup>

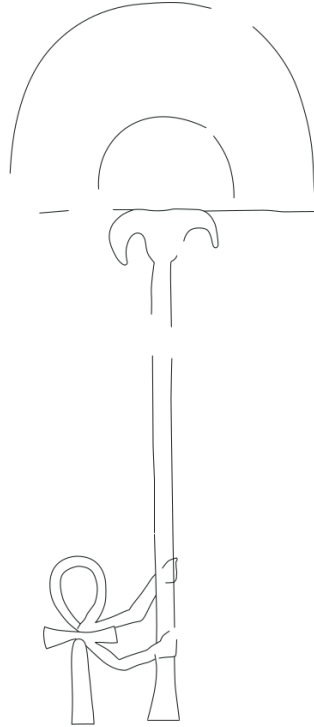




Fig. 4. Sign of life holding a sun-shade behind the king, vivifying the royal shade (after Beaux, Karkowski, Majerus, Pollin 2016: pl. 21).

## 2.6. Transformation

Over the course of its history, the sign could have been reinterpreted either because its original meaning had been lost, or due to the intention of enriching it with other semantic references. For instance, Renaud de Spens shows how the sign of the enemy  A13 –  A14 was originally represented with the hands tied behind his back; then, in the 18th dynasty, a stream of blood was depicted as gushing from the head: this same stream was reinterpreted in the Ramesside period as an axe lodged into the head, either struck inside the cranium by the enemy himself, as if he had lost his mind, or which he tries to pull out because he is wounded.<sup>35</sup> We may interpret it first as a

33 Fischer 1978.

34 Beaux, Karkowski, Majerus, Pollin 2016: plate 21.

35 De Spens 2021: 102–103, 269.

neutralisation of the enemy's power, then a killing of the enemy as he bleeds to death, and finally the powerlessness of the enemy who puts himself to death or is unable to avoid being killed. All of this reflects a desire for magical neutralisation that reaches an acme: we are, indeed, in the realm of magic. Furthermore, a sign could have also been over-motivated<sup>36</sup> through the combination of characteristic features of two distinct referents.<sup>37</sup>

Cryptographic writing also functioned as a means of reinforcing the power of a message, or a name, such as that of Hatshepsut's royal and Horus names, *M<sup>3</sup>'t-k<sup>3</sup>-R'* and *Wsrt-K<sup>3</sup>w*, which in the cryptographic scheme are written as a combination of three signs in one—the sign of the erect cobra uraeus set up between the arms of the Ka and surmounted by the solar disk.<sup>38</sup> Therefore the name, inscribed in the upper register of the walls, dominated and “protected” the monument through the sign of the erect cobra, which is both royal and divine, as it is the classifier of the goddesses, here read as *Maat* and *Wsrt*. Similarly, in the realm of tridimensionality, the addition of signs to a statue of Ramesses II allows us to read his name as part of the statue.<sup>39</sup>

## 2.7. Perfume

Alexis Den Doncker and Hugues Tavier<sup>40</sup> have recently discovered on the walls of New Kingdom tombs in Thebes that certain elements of decoration—including signs—could be coated with a scented resin or beeswax: this practice was meant to render certain offerings more effective, or could serve to sanctify the name of a deceased person.

We have therefore observed how the sign, endowed with semantic value due to its phonetic and figurative referents, could become more effective by means of a specific colour, by association with other signs, or even through the addition of scents: in addressing the various senses, the sign could be seen, heard, smelled, touched, moved, transformed into three dimensions, and be integrated in a visual scene.

But did the sign need to be read, or to be visible, in order to be effective?

## 3. Conditions for the effectiveness of the sign

The existence of inscriptions in hidden or inaccessible places indicates that the sign did not need to be read by someone to be efficient: its mere existence was enough. This is exemplified, for instance, by the representations of Senenmut in the temple of Hatshepsut at Deir el-Bahari, which were

36 Beaux 2009a: 364–371.

37 See for instance Evans 2016–2018.

38 Drioton 1938: 239–240 and Graefe 1980: 45–51; Beaux 2012: 4–5 and Beaux, Grimal, Pollin 2012: figure 9. On enigmatic writings see Klotz & Stauder 2020.

39 Angenot 2018: 103.

40 Den Doncker & Tavier 2018: 16–19.

engraved on walls yet hidden by doors when opened.<sup>41</sup> Though his depictions were not visible to those entering the room, the worship of Senenmut was still ongoing.

In another area—much later, at the time of the Meroitic restoration of Kushite temples in Gebel Barkal—bronze plaques<sup>42</sup> in the shape of an enemy with tied up arms—corresponding to the Egyptian hieroglyphic sign for the enemy—were discovered with a nail piercing through the chest or the head; they were fixed to the base and under the oriflamme masts, now disappeared (fig. 5). These plaques were found in front of the B500 temple pylon. They were completely invisible but allowed the enemy to be crushed forever under the weight of the erected mast, through an act of sympathetic magic.



Fig. 5. Bronze plaques in the shape of a bound enemy prisoner, a figure ritually nailed to the wooden bottom of the flag mast at the entrance of Gebel Barkal Temple (B500) in order to kill it forever. The figure was inscribed in Meroitic script with the name of the particular enemy tribe represented and it was pierced through the chest (Courtesy T. Kendall, drawing E. Majerus).

Signs, however, could also be mutilated: in this way, the power of that which the sign represented, judged to be dangerous or harmful, was neutralised, while the sign was still allowed to function within the text.<sup>43</sup> This was valid even if the sign was intended to function strictly phonetically, as happened, for instance, with the hieroglyph of the elephant in the *Pyramid Texts*: while in the

41 Beaux, Karkowski, Majerus, Pollin 2012: plate 44–67.

42 Some of the plaques were uncovered in 1920 by G.A. Reisner (Harvard University-Museum of Fine Arts Expedition. MFA 24.1791; Kendall & El-Hassan 2016: 66, figure 4), while another one was discovered in 1987 by Kendall (Kendall & El-Hassan 2016: 66, figure 3).

43 Pierre 1994: 302–303; Lacau 1914: 1–2, 36–41. See also the latest study by Thuault 2020: 106–114.

Pyramid of Pepi I it is found half-plastered within a word where it functioned as a phonogram,<sup>44</sup> in the case of the Pyramid of Unas, the sign remained intact (fig. 6). In most circumstances of sign mutilation, it is the sign in its iconic aspect, and what it refers to, that is being targeted.

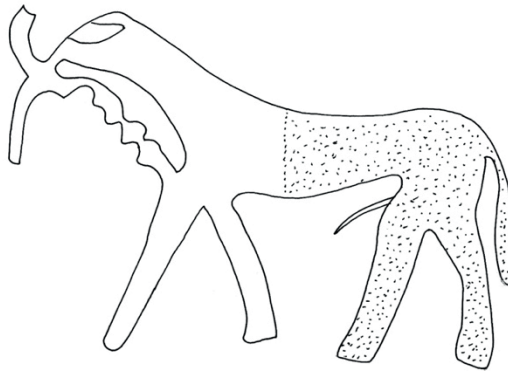


Fig. 6. Mutilated elephant sign in the pyramid of Pepy I. Although the sign in that text was functioning only as a phonogram, the plaster filling its back legs is meant to prevent the image from being active, a potential danger for the deceased (Drawing E. Majerus).

Signs could even be completely erased: it appears, at first sight, that ancient Egyptians considered it enough to annihilate their power. Accordingly, the cartouches of disgraced kings, as well as their representations, were chiselled out or smoothed; moreover, they were often covered up and replaced by the name and representation of another king. But is it as simple as it appears to be?

In the case of the reuse of statues erected by a previous king, as has been proved by the work of Simon Connor,<sup>45</sup> one may wonder whether a ruler selected statues of a particular king—not just any king—to remodel them in his own image, as a way of appropriating his appearance, by “slipping into” his shape, in order to gain his power and fame. Ramesses II, for example, did not reuse representations of proscribed pharaohs, but rather chose those portraying pharaohs of the twelfth, thirteenth, and eighteenth dynasties, including highly renowned kings such as Senusret I, Amenemhat I, Thutmose III, and Amenhotep II. If we are to accept this hypothesis, it is clear that statues preserved their initial effectiveness through the outer appearance, even if the name of the possessor had disappeared. The new owner would *double* his power by adding the power of the previous king to his own. In addition, the power of the statue of the original king was reactivated by giving it/him the opportunity to “participate” in the building of a new temple. One can imagine that the same was true for erased signs: by reusing a cartouche and adding one’s name, the power was doubled. At times, moreover, the cartouche with the original royal name was preserved in a

44 Beaux 2009b: 250–251, figure 4.

45 Connor 2022: 114–116.

discreet place—such as the belt—and the name of the new owner was added in a different, larger and more visible, place.

In short, it sufficed for the sign to have been written for it to convey an effective message. A magic formula could be licked by the patient who would consequently ingest it, as happened with water that was drunk when poured over a healer-statue covered in magic formulas. Here, the trace of the sign itself is lost, but through the contact by ingestion its effectiveness was guaranteed.<sup>46</sup>

It is therefore clear that the sign, even out of context, always remained potentially active, be it through its figurative value, or by means of a more complex process—for example, by being read differently from the linear reading of the text. This potential of the sign was always taken into consideration by the scribe, who played with its various aspects to multiply the levels of readings, but also to empower his inscription.

#### 4. Efficiency and synergy

We acknowledged the performative value of Egyptian writing, an aspect rooted, as Pascal Vernus describes, in “a fundamental belief characteristic of Pharaonic thought, a belief according to which the Egyptian language, when encoded by hieroglyphic writing (...), is capable of summoning the very essence of what it states, and thus of making it effective.”<sup>47</sup> This belief had its roots in the realm of magical thinking, where the word is intimately linked to that which it describes. To represent or describe a ritual is to perform it, and this ritual continues to be performed as long as the mark—the writing—persists: just as happened with the execration figurines covered in texts which cast a spell for eternity,<sup>48</sup> or the signs of the nine bows under the king’s feet that established his royal authority forever, a form of both iconic and graphic domination, the two being intimately linked.

Thomas Schneider<sup>49</sup> stresses the importance of sympathetic analogy in Egyptian thought. Magic, the energy of the creator god through which the world was conceived, also contributed to maintaining what had been created. And the use of writing takes place in this context. Yvan Koenig claims that “language was considered as a divine creation that brings to life that which is signified by words (...) Representations were supposed to have a powerful effect, and therefore to be capable of acting on concrete reality.”<sup>50</sup>

46 Koenig 1994: 100–126.

47 Vernus 1996: 557–558, n. 2 specifies that the term “performative” is two-fold: the second aspect, taken in a broader sense, “designates the ‘illocutionary’ force of statements, the fact that they can lead to the accomplishment of action. Here, I use the adverb ‘performatively’ to describe a fundamental belief characteristic of Pharaonic thought, a belief according to which the Egyptian language, when encoded by hieroglyphic writing (...), is capable of summoning the very essence of what it states, and thus of making it effective”.

48 Posener 1987.

49 Schneider 2000: 37–83.

50 Koenig 2013: 171.



We thus come to understand the role that writing plays in maintaining the harmony of creation. If language is a divine emanation that yields creation, writing is the efficient means by which creation is maintained in harmony.

Let us return, in conclusion, to the Egyptian word for the written sign: *mdw ntr*, literally “divine speech.”

In reading the story of the world’s creation by the demiurge, it appears that the event takes place through enunciation associated with intelligence (capacity to connect matters), *hw* and *sj*.<sup>51</sup> And, as is written in the Papyrus Bremner Rind 49 (28: 22) about the demiurge: “It is by myself that I have made use of my mouth, for Magic—*hk*—is my name.” Therefore, it is through magic, *heka*, that enunciation and intelligence together produce speech, which in turn generates creation. Now, the sign for *mdw*, “speech”, is representing a stick, analogous to the device Egyptian supervisors leaned on: a metaphoric way of expressing that the demiurge literally leans and relies on speech for creation.

The “sign”, *mdw ntr*, is therefore interpreted as “support / speech of the god”. The distinction that we make between “spoken word” and “writing” was perhaps irrelevant to an Egyptian, since both were actually referred to as “speech”. Moreover, the ingestion of magic formulas allowed the word, emitted by the mouth and inscribed on a support, to return to the patient’s mouth as speech, together with all of its power. This course and effectiveness of the spoken word are made possible by the medium of writing.

The sign was thus designated as the “divine speech.” However, how can a sign be divine, exactly? By means of its visual, tangible dimension, and through the hand of the god Thoth, “master of writing,”<sup>52</sup> the sign is “engraving” this creating word—note that the word “book,” *mdt*, is a homophone of *mdt*, the “sculptor’s chisel.” The demiurge thus secures creation through writing, and ensures that it will endure by acting upon it. Therefore, the sign is both a witness and a guardian of creation. It is characterised by this double visual/audio facet, and it also conveys a divine creative energy. Asclepius later said that “the sound of Egyptian words contains the energy of the things that they speak of,” while insisting on the part played by figurative writing in “the clarity of the meaning of words.”<sup>53</sup> It is within this energy that its effectiveness lies: the sign acts in synergy with the demiurge and its creation, ensuring its harmony and durability.<sup>54</sup>

Besides being a linguistic tool, we are now able to perceive that the sign was to the Egyptians no more and no less than the guardian of creation: an indispensable, vital element in the Pharaonic edifice.

51 Beaux 2009b: 246–248.

52 AL 79.1427.

53 He speaks of the “proper character of spelling” concerning the iconic feature of writing (Nock & Festugière 1945: 231–232). See Grimal 2014: 99.

54 “In Egypt, writing established and ordered the cosmos” (Frankfurter 1994: 189–221).

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# Hieroglyphic Complexity at Esna

## Unetymological Spellings, Trigrams, and Anadromes from Esna Temple and *Finnegans Wake*

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**Abstract.** Exploration of various types of scribal innovation (particularly in the arrangement of hieroglyphs), as evidenced in Roman period inscriptions from Esna, compared to similar practices in James Joyce's *Finnegans Wake*. Beyond the much-discussed phenomenon of unetymological spellings, particular attention is paid to the reduction of chief divinities' names to sportive bigrams and trigrams, which could be rearranged to express theological constellations.

**Keywords.** Esna Temple; Roman Period; Ptolemaic Egyptian; Enigmatic Writing; Horapollo; James Joyce; Neith; Khnum; Tatenen

was I not rosetted on two stellas of littleegypt? had  
not I rockcut readers, hieros, gregos and democriticos?

JAMES JOYCE (*Finnegans Wake*, 551.30–31)

### 1. Introduction

James Joyce's high modernist epic *Finnegans Wake* (hereafter *FW*) and the Roman Period hieroglyphic inscriptions from Esna temple are both notorious, albeit among different audiences, for their dense, frustrating, and often impenetrable writing styles.<sup>1</sup> Esna is perhaps most famed for the two hymns in the pronaos, composed almost entirely with ram and crocodile signs (Leitz 2001; Morenz 2002). *FW*, meanwhile, is replete with such textual gimmicks, perhaps most famously

<sup>1</sup> Morenz 2002: 77 already connected the two by beginning his own article on the Ram Hymn from Esna with an epigram he attributed to *Finnegans Wake* ("Everyword for oneself but Code for us all"), but which actually only appeared in Joyce's working notebooks for the book (VI.A.755: cf. McCreedy 2010).

sneaking in the names of hundreds of rivers into the main text of the Anna Livia Plurabelle chapter (Bishop 1986: 336–385).

Although Joyce was deeply interested in ancient Egyptian religious and historical texts, and quoted many of them throughout *FW*,<sup>2</sup> a direct influence from Esna seems unlikely.<sup>3</sup> Some inscriptions from the temple had been published already in the 19th century by Champollion, Lepsius, and Brugsch, but the writing system was hardly studied in detail prior to the foundational studies by Serge Sauneron, begun in 1951 (Sauneron 1959: 6–9), a decade after Joyce’s decease. Nonetheless, it is still profitable to compare two major similarities between both texts.

## 2. Wordplay and Unetymological Spellings

First, *FW* is composed in a difficult, dream-like language, where seemingly ordinary sentences, in English and many other languages, are distorted and rendered almost unrecognizable by phonetic puns, word associations, and cultural references. For example, the Egyptian Book of the Dead is referred to alternately as “the *Bug of the Deaf*” (*FW* 134.35), “the balk of the deaf” (*FW* 309.3), and the “boke of the deeds” (*FW* 13.30–31).

To examine one passage in greater detail, briefly consider the bedtime prayer concluding Chapter IX (*FW*, 259. 7–8):

Loud, heap miseries upon us yet entwine our arts with laughters low!

The first half of this sentence can be understood as a garbled phonetic variant of: “Lord, have mercy upon us.” Scholars have identified the second half, meanwhile, as a more extreme distortion of a phrase from the Book of Common Prayer: “incline our hearts to keep thy law” (McHugh 1991: 259). So on the one hand, the above quote could read as a conventional prayer altered with ludic, non-etymological spellings (e.g., the false cognate of “heap miseries” < Latin *miserere*, “to have mercy”). Yet the sentence can simultaneously be understood as an autobiographical note: Joyce had his fair share of troubles, both personal and professional, and his writings (“arts”) were infamous for jokes about bodily functions (“laughters low”)

Even more obscure are the various attempts to render foreign phrases more or less phonetically employing seemingly random strings of English and nonsense words. For example “And let luck’s puresplutterall lucy at ease!” (*FW* 262.16–17) roughly corresponds to Latin *et lux perpetua luceat eis*, “and may perpetual light shine for them!” (McHugh 1991: 262). Or even more confusingly (*FW* 16.4–5):

Come on, fool porterfull, hosiered women blown monk sewer?

2 Troy 1976; Bishop 1986: 86–125.


3 Troy 1976 posited that Joyce may have been influenced by P. le Page Renouf, an Egyptologist who had taught in Dublin and wrote extensively on Egyptian religion, symbols, and sportive hieroglyphs. While he was notably a pioneer in the study of Egyptian enigmatic writing (e.g., le Page Renouf 1874), and often quoted Ptolemaic and Roman temple texts, I am unaware of any specific times le Page Renouf discussed the trigrams from Esna.



This has been identified as phonetically rendered French (McHugh 1991: 16):

Comment vous portez-vous aujourd’hui, mon blond monsieur? (McHugh 1991: 16).

Both examples shift word boundaries so drastically (e.g., “lucy at ease” > “luceat eis”; “hosiered women” > “aujourd’hui mon”) that the puns can only be understood by reading each passage aloud.

Such unusual spellings also occur in hieroglyphic, hieratic, and Demotic texts of the Ptolemaic and Roman period, and specialists typically refer to them as “unetymological” (Pries 2023: 3–4, with references). Their precise motivation is still debated: they might be mere wordplay, purposefully cryptographic, embedded with multiple layers of meaning, or simply intended to convey the original, Middle Egyptian pronunciation of ritual texts.

Sauneron (1959: 48; 1964) noted several examples at Esna where traditional word boundaries are shifted,<sup>4</sup> as when the past-tense marker (.n) and suffix pronoun (=f) in a *sdm.n=f* verb form are merged into the unrelated signs for *nfr*, “good” ()<sup>5</sup> a word which at that point in history was usually pronounced as \*/nu: fe/ (De Meulenaere: 1994).

Individual words are also broken apart into new spellings, like in *FW*, perhaps reflecting novel or *ad hoc* etymologies. For example, the common word *sh.t*, “field,” is written as if it were a compound *s.t-ih.t*, “place of food offerings”: .<sup>6</sup> Similarly, the king is said to be the successor of the crocodile-headed Shemanefer, invoked with an epithet beginning with the phrase *p³wty-tpy*, “first primeval one,” but which is spelled as if it were \**p³y w³d-tp*, “he with the green head”:  (Esna III, 324, 5). Although the word *p³wty* is written this way in both hieroglyphs and Demotic (Quack 2009: 131)—perhaps also suggesting the phrase “he of the papyrus stalk”—here it might have been chosen because of the god’s reptilian face (cf. also Klotz 2012: 174–175, n. 1137).

More frequently at Esna temple, local divine figures replace the conventional signs used to represent phonetic elements of various words. Besides in toponyms and divine names, where this phenomenon is quite common (Leitz 2023b), the substitution occurs with keywords salient to the local theology. Khnum-Re was identified with both the Memphite demiurge Ptah-Tatenen, who separated heaven from earth to begin creation at the potter’s wheel (Berlandini 1995), and with the solar deity Re, represented as a four-headed ram traversing the midday sky in his celestial bark.<sup>7</sup> As such, many words at Esna are written unconventionally with the ideogram of Tatenen (or his crown), or more frequently different types of rams. Just like the more famous hymn composed almost entirely with ram hieroglyphs, these graphic variants reflect the “criocentric” worldview of the local clergy.

4 See also Kurth 2007: 55–56.


5 E.g., Esna II, 162, 4, 5; 184, 24.

6 Esna III, 306, 20; see also Esna III, 340, 5 and 7.


7 See especially Esna IV, 437, No. 6; Mendel 2022: 444. Numerous texts identify the midday sun with the four-headed ram in the solar bark: e.g., Esna II, 48, A; Esna IV, 405, 1–2; 431, 2; 441, 2.


**Khnum-Re as Ptah-Tatenen**

*itn*, “solar disk”  (Klotz 2014: 58)<sup>8</sup>

*tn(n)*, “Tatenen”  (*t* < *tʹ*y, “male (ram)” + *n(hp)* “potter’s wheel”: *Esna* VI, 514, 8)


**Khnum-Re as a ram in the solar bark**


*wbn*, “to rise”  (*w(iʹ)*, “bark” + *b(iʹ)*, “ram” + *n*: the ram sails within the solar bark of Khnum)<sup>9</sup>


*psd*, “to shine”  (*p(.t)*, “sky” + *s(r)*, “ram” + *d* < *t(iʹ)*, “earth”: the ram shines between heaven and earth)<sup>10</sup>


**Khnum as king**

*nb*, “lord; all”  (*n*, “crown” + *b(iʹ)*, “ram”: the ram is king of Lower Egypt)<sup>11</sup>

*shd*, “to illumine”  (*s(r)*, “ram” + *hd(.t)*, “white crown”: the ram is king of Upper Egypt)<sup>12</sup>

ʿ, “great”  (the ram is a manifestation of Thoth: Leitz 2001: 254 (2); also *Esna* III, 262, 19, § 5)<sup>13</sup>

šps, “august”  (the ram is a manifestation of Shu)<sup>14</sup>

*tʹ*, “the earth”  (the ram is a manifestation of Geb; Klotz 2014: 50–51, n. b)

8 *i* < *ii*, “to come” and < *iʹw*, “old man”; *tn* < *tnn*, “Tatenen.” In the final example, the middle consonant is spelled with an ideogram of Geb, representing *t* < *tʹ*, “the earth.”

9 *Esna* II, 169, 5; Klotz 2014: 34, n. b.

10 Derchain-Urtel 1999: 196–197; Pries 2023: 5. See also *Esna* II, 150, 1.


11 Leitz 2001: 255, 261; see also *Esna* II, 53; 76, 15; 171, B; 184, 25; 191, 21; *Esna* III, 328, A; 393, 23; *Esna* VI, 541, A; *Esna* VII, 549. At Edfu and Dendera, a falcon (*p* < *pʹ*) wearing the red crown (*n*) similarly writes the demonstrative pronoun *pn*: Cauville 2002: 96; Kurth 2007: 247, No. 16.


12 Leitz 2001: 258 (16); Kurth 2007: 199, No. 28; add also *Esna* II, 164, A; *Esna* III, 389, 15; 394, 24. At Edfu and Dendera, a ram or *bʹ*-bird wearing a composite crown writes the epithet *bhdy*, “Behedety,” perhaps for a similar reason (*bʹ* + *hd(.t)*): Kurth 2007: 199, No. 27; Cauville 2002: 105; *Dendara* XV, 4, 2; 5, 7; 270, 10; Cauville 2021: 41–42, 85

13 Here the ram wears the typical *hmhm*-crown of Thoth, thereby inheriting his typical epithet ʿ, “great”: Kurth 2007: 142, No. 81; 163, n. 566; Junker & Winter 1965: 400, bottom.


14 E.g., *Esna* II, 59, 1; 106, 1; *Esna* III, 368, 34.

**Other rams**

*mḥy*, “north”  (the north-wind is a flying ram)<sup>15</sup>

*imnty*, “west”  (the west-wind is a flying ram-headed falcon)<sup>16</sup>

**Esna as Land of the two Rams (Khnum-Re and Khnum-Shu Lord of the Field)**

*tʰ-sn.t*  (*Esna* II, 76, 15; Klotz 2014: 51; see also *Esna* VII, 596, 24)<sup>17</sup>

### 3. Trigrams, Acrostics, and Nomina Sacra

A second major feature of *Finnegans Wake*, again tied to its dream language, is the reduction of the main characters’ names to three-lettered monograms, which then spark myriads of acrostic word associations throughout the novel. The protagonist’s true name appears to be Humphrey Chimpden Earwicker (HCE), while his wife is Anna Livia Plurabelle (ALP). The name of the first transforms into “Here Comes Everybody” and hundreds if not thousands of acrophonic variants and anagrams.<sup>18</sup> Of particular interest to Egyptologists are the following examples (initials bolded by the author):

first pharoah, **H**umpheres **C**heops **E**xarchas (*FW* 62.20–21)

on the night of making **H**oruse to **c**riumph over his **e**nemy (*FW* 328.34)

Even unto **H**eliotropolis, the **c**astellated, the **e**nchanting (*FW* 594.8–9)

Just as the ram and Tatenen spellings discussed above reinforce the Esna priests’ obsession with the god Khnum, so the constant appearances of HCE and ALP in numerous contexts, including in chemical and mathematical formulae,<sup>19</sup> drives home that all of *FW*, touching on much of world history and literature, is a projection of the main character’s subconscious. Moreover, each acrostic variation adds new dimensions to their personas.

15 *Esna* II, 163, 26; Sauneron 1962: 294, n. x.

16 *Esna* II, 163, 19; Sauneron 1962: 294, n. x.


17 See also Fernández Pichel 2018: 20, with n. 17. The first ram writes *t* < *tʰy*, “male (ram).” The latter two might be unilaterals, or function together as a group (< *snw*, “the two rams”).

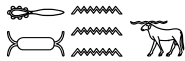
18 For a sample, see Glasheen 1977, 11 (ALP), 121 (HCE). A more extensive list available at <https://brettlockspeiser.com/fw/>. Note that even the initials are not immune to unetymological spellings, for example “HCE” can be rendered phonetically as “Haze sea east” (*FW* 593.5).

19 “H<sub>2</sub> C E<sub>3</sub>” (*FW* 95.12), the triangle ALP or αλπ (*FW* 293), which begets multiple phonetic puns such as “lapis” (*FW* 293.10; i.e. multiple “L-A-π”s), or “Olaf’s lambtail” (*FW* 294.10; i.e. “aleph lambda”).





The closest parallel at Esna would be the use of so-called “trigrams,” many of them acrophonic, to spell the names of the chief divinities. These writings occur primarily in the litanies on the central columns (Sauneron 1982; Leitz 2023a), but other examples are clustered in certain repetitive hymns to Khnum, then sporadically throughout the temple (Leitz 2023b).

For most of Pharaonic history, the name of the god Khnum (*hnmw*) had been denoted almost exclusively with the trilateral *hnm*-vessel, followed by a determinative of a ram or ram-headed anthropomorphic god (e.g., ). Yet at Esna, in one of the earliest preserved inscriptions from the joint reign of Ptolemy VI, Ptolemy VIII, and Cleopatra II (170–164 BCE), Khnum’s name is spelled only using a combination of uniliteral values:



Esna II, 17, 5 (Fernández Pichel 2018: 19, n. a)

A further step occurred in the reign of Domitian (81–96 CE), when for the first time, and only at Esna,<sup>20</sup> scribes began experimenting with **strong** acrophony.<sup>21</sup> That is, reducing a sign to its first consonant, even if it includes multiple strong consonants, for example  or  = *h* < *hrp*, as the first element of Khnum’s name (Sauneron 1982: 117, No. 22; 177, No. 320; 193).

This radical innovation led to numerous possibilities, as suddenly myriads of sign combinations could theoretically represent each sacred name. In general each divine name was reduced to tri- or bi-consonantal groups:

Biliteral		Trilateral	
Neith	<i>NT</i>	Khnum	<i>HNM</i>
Heka	<i>HK</i>	Menhyt	<i>MNH(Y)</i>
Isis	<i>IS</i>	Nebtu	<i>NBW</i>
		Osiris	<i>WSR</i>

Like Oulipian writers, the Esna scribes worked within these phonetic constraints to encode complex, multi-faceted theological allusions into each spelling and verse of the litanies, analyzed exhaustively in two recent works by Leitz (2023a; 2023b). As one very simple example, compare the following name of the local child god Heka:

20 Sauneron 1982: 190–191, 195. Kurth 2007: 59–62 recorded acrophony as one of the general principles in Ptolemaic sign derivations, but most of his examples come from Roman period Esna; the few from Dendera and Edfu can be explained without resorting to acrophony. The same is true of the pre-Roman examples listed by Sauneron 1982: 104 (the man holding the cord is an elaboration of the cord, which often writes *s* (< *šs*); the figure of Nephthys writes *rs*, not *r*).

21 For the distinction between strong acrophony and weak acrophony (the latter more frequently called the “Consonantal Principle”), see Vernus 2015. Despite the general scholarly consensus on this question (e.g., Roberson 2020: 143–145), Leitz (2023a: 442, n. 154; 2023b: 9) still advocates for strong acrophony as a principle of sign derivation already during the New Kingdom, preferring to read a lion-headed goddess in the word “Isheru” as *r(w)* < *Rpy.t*, “Repyt,” rather than a simple variation of the lion (*rw*) typically used in this word.



*Esna* III, 242, 15 (4) and 17 (12);<sup>22</sup> 299, 5

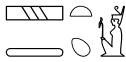
As the first-born son and eldest heir of Khnum, Heka is essentially the local form of Horus. Yet since Khnum and Nebtu are frequently identified with Shu and Tefnut, their child Heka can simultaneously be an avatar of the Heliopolitan pair's son, namely Geb (Klotz 2014: 40, n. 35). As such, Heka's name is spelled here with two ideograms, as if it were actually Horus-Geb > H(orus)-G(eb) > *HG* > *HK*, "Heka."<sup>23</sup>

Because of acrophony, and the generally rich polyvalency of hieroglyphs during the Roman Period, the precise reading of certain divine names can be ambiguous at times:



*Esna* II, 58, 5

*Wsir*, "Osiris" (*w* < *wp* (horns) + *sr*, "ram") or *b<sup>3</sup> dmdy*, "the United Ba" (an epithet of Osiris).<sup>24</sup>



*Esna* II, 104, 2; see also *Esna* VI, 513, 17; 528, 7

*N.t*, "Neith" (*n.t*, "water" + *t<sup>3</sup>*, "earth"),<sup>25</sup> or *št.t*, "the Mysterious one" (a frequent epithet of Neith at Esna).

More challenging is another designation for Khnum which appears throughout the temple, and occurs with the signs appearing in various permutations:



*Esna* III, 383, B



*Esna* III 310, 28; *Esna* VII, 619, 22



*Esna* III, 225, 4, § 3; *Esna* VII, 570, 34; Bénédite 1893–1895: 98, 10 = Leitz 2002–2003: IV, 204c, example 6 (Philae)



Zivie 1982: No. 35, 6 (Deir Shelwit)



*Esna* III 341, 9; 371, 1



Chassinat 1930: 184, 15 (Edfu)






*Esna* III, 277, 22, § 6; Bénédite 1893–1895: 107, 6 = Cauville 1980: 55, 5 (Philae); Cauville 2000: 144, 6 (Dendera)

22 Cf. Leitz 2023a: 546–547, 562–564.

23 For the crown of Geb on the second figure, see Sauneron 1982: 122; Klotz 2014: 50–51.



24 So read by Sternberg 1985: 66, n. aa; Leitz 2001: 255, 6.

25 So read by Sternberg 1985: 92, 95, n. i.

Based on the variants, this would appear to write *nb phty*, “Lord of strength”, an appropriate designation of Khnum-Shu as Onuris, the mighty warrior.<sup>26</sup> Dimitri Meeks gathered references from outside of Esna, and suggested this should read *nb nph*, “le maître de l’appareil génital” (Meeks 1999: 582). Nonetheless, at Esna this group occurs precisely where one would expect the divine name “Khnum” (particularly in *Esna* III, 225, 4 (3) and 277, 22 § 6, both hymns in which all other verses begin “For Khnum...”), as Sauneron (1982: 83–84) already recognized (see also Rüter 2003: 67, n. 313).<sup>27</sup> Here, then, the sign order must be perturbed (see below, section 3), and since this spelling occurs already at Edfu during the Ptolemaic Period, one should not resort to acrophony for an explanation. Thus the lion’s rear hieroglyph () is most likely just a different view of the hide sign () which in turn alternates with the larger mammal skin () thereby obtaining the biliteral value *hn*. Thus reading:

$$h(n) + n + b \text{ (var. } hn+nb) = hnb > hnm(w), \text{ “Khnum” (cf. Greek } Khnoubis) \text{ }^{28}$$


#### 4. Reversals and other Perturbations

Further complicating the acrostic values in *FW*, Joyce also employed a range of symbols (typically called “sigla”) representing various characters or archetypes (McHugh 1976; McCreedy 2010). For the protagonist, Joyce used the sign , explaining in a letter that it evokes “H C E by moving letter round” (McHugh 1976: 8). As a sideways letter E, this of course stands for the main character’s last name, Earwicker, while inverted (; *FW* 6.32) it evokes the Chinese (and Egyptian) sign for “mountain” (Glasheen 1977: 81), a Paleolithic stone structure (“trilithon”: *FW* 119.17), or even a recumbent, ithyphallic Osirian mummy. The symbol for ALP is a pyramid or triangle ( $\Delta$ ), which of course is identical every time it is rotated.<sup>29</sup> Like Egyptian hieroglyphs,<sup>30</sup> these sigla restore the iconic visual aspect to the otherwise highly phonetic reading experience.

26 E.g., *Esna* III, 277, 22, § 6; so apparently understood by Wilson 1997: 512. Note that the epithet *nb phty* occurs in a conventional spelling as an epithet modifying the group in *Esna* III, 225, 4 (3); similarly Khnum with this spelling is also called “lord of might (*nb qn*)” in *Esna* VII, 570, 34, and “great of victory (*‘nh*)” in *Esna* VII, 619, 22.

27 See also Leitz 2002–2003: IV, 204c: “*Nph*: “...?”. Name fur Khnum”; Leitz 2023a: 45, with n. 25, who translated “Nepheh-Re,” but suggested the alternate reading “Chnum-Re” in the footnote.

28 Sauneron 1982: 83. For *b* representing an expected *m*, see also Kurth 2007: 508; Leitz 2023a, 85.

29 The relationship between the two sigla are described at length in *FW* 119.16–23: “the initials majuscule of Earwicker: the meant to be baffling chrismon trilithon sign , finally called after some his hes heciteny Hec, which, moved contrawatchwise, represents his title in sigla as the smaller  $\Delta$ , fontly called following a certain change of state of grace of nature alp or delta, when single, stands for or tautologically stands beside the consort.”

30 For the hieroglyphic nature of Joyce’s sigla, see Schotter 2010: 99–100. It is possible that Joyce was aware these symbols (essentially Greek epsilon and delta) ultimately derived from Egyptian hieroglyphs via Proto-Sinaitic and Phoenician scripts, as demonstrated already by Gardiner 1916.

If each element of HCE could be permutations, however obscurely, of the related symbol  $\pi\pi$ , then each letter should be roughly interchangeable. Indeed, the trigrams HCE and ALP occur in all possible permutations throughout the book, both as acrostics (“Et Cur Heli” [FW 73.19]; “caller herring everydayly” [FW 136.25–26]), and as trigrams (“his hes heciteny Hec” [119.18]; “if hec dont love alpy” [332.3]; “ech with pal” (264.3), “Paa lickan laa lickam, apl lpa!” (298.1), “Hecech” [377.3]).

Beyond the trigrams, Joyce employs many other word reversals to various effects, including in several examples imitating the Book of the Dead (FW 237.24–7):

You are pure. You are pure. You are in your puerity. You have not brought stinking members into the house of Amanti. Elleb Inam, Titep Notep, we name them to the Hall of Honour.

The pseudo-Egyptian names in the final sentence are simply reversals of two nicknames: “belle mani” (Italian: “beautiful hands”) and “petit peton” (French: “little feet”). Towards the end of the book, at daybreak, we find the following passage (FW 593.23–24):

Pu Nuseht, lord of risings in the yonderworld of Ntamplin, toph triumphant, speaketh.

Although the mysterious name “Pu Nuseht” somewhat recalls Nu and Ani, two names Joyce would have seen in Budge’s translation of the Book of the Dead, it is also simply “the sun up” spelled backwards (McHugh 1991: 593). Yet another Egyptian name is concealed within the following reference to “the chaptel of the opening of the month of Nema Knatut” (FW 395.22–23).

In earlier Egyptian, such reversals and perturbations are not especially common, even in enigmatic texts. Sauneron (1982: 87–89) noted a few cases in the litanies from Esna. Another possible example is the trigram of Atum, written frequently in temple and magical texts as a sequence of hieroglyphs evoking the sun’s transformations through the day (Klotz 2010: 72–73):



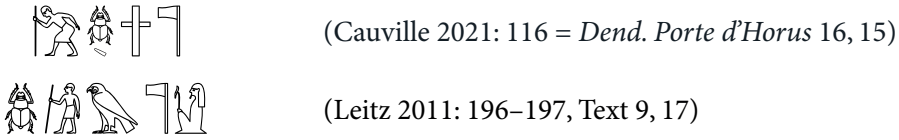
*Esna* III, 318, 9, § 8

According to Egyptian solar theology, the sun manifested as a scarab rising from the earth (morning), bright disk (midday), old man returning to the grave (evening), repeating the cycle the next day. This trigram for “Atum” (*Itm*) is difficult to explain until one realizes the cycle is backwards. If one reverses the signs, then the sequence follows correctly: Old Man (evening) > scarab (morning) > bright sun (midday), and so on. Thus:



$i(^3w) + t(^3) + m(^3wy)$  (< “radiance”)

As I noted elsewhere (Klotz 2010: 73, n. 42), the name Atum is frequently spelled with the old man leaning on a stick ( $i < i^3w$ , “old man”), or the scarab for *it* or *t* (see below), but not typically together. Nonetheless, two recently published texts combine them for the name Atum, providing further support to this proposed reading:



In the second example, the sign-order is also perturbed, and the falcon (writing *m* via substitution with the owl or vulture) takes the place of the usual radiant sun sign.

### 5. Palindromes and Anadromes

Throughout *FW*, Joyce explores numerous relations between the abstracted HCE and ALP. Among other associations, the combined initials can be arranged to form CHAPEL, short for Chapelizod, the area of Dublin in which the novel is set (Glasheen 1977: 54; McBride 1996: 149). In a letter to Miss Weaver, Joyce explained that the combination of these sigla  $\sqcup + \Delta$  (i.e., a mountain + the Egyptian Delta) could symbolize the source of the Nile (Milesi 1990: 84–86). But even with all the complex permutations, there is little indication they were conceived of as mirror images,<sup>31</sup> much less palindromes or anadromes. However, that practice does occur at Esna, for both graphic and deeper theological reasons.

Scholars have occasionally noted examples of intentional palindromes and antimetabole in ancient Egypt, based on trilateral consonantal roots. For example, palindromic phrases such as the solar epithet *wbn m nbw*, “he who rises from gold” (Bojowald 2011), or the personal name *Pth-ḥtp*, “Ptah-hotep” (Gourdon 2006; Breyer 2011). At Esna, near palindromes can be found throughout the litanies mentioned above, since the individual hieroglyphs employed in the divine name are often borrowed from the subsequent epithets. Such as in *Esna* III, 317, 25 (32) and 27 (40):<sup>32</sup>



*n Ws̄ir m ḥw.t-sr wr m Ṭwnw*, “For Osiris in the Chapel of the Prince, great one in Heliopolis.”



*n Ws̄ir sr wr m W̄s.t*, “For Osiris, the great prince in Thebes.”


In the second case, a standard epithet of Osiris written with two standing figures (*sr wr*, “great prince”) is reversed to form the first two consonants of his name: *w(r)s(r)*; in the first, those same

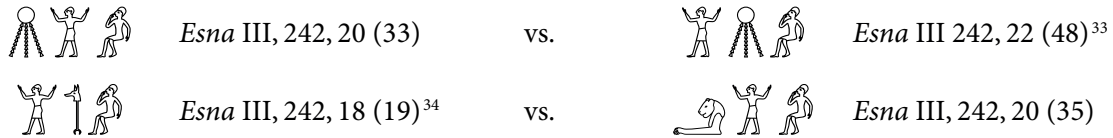
31 For arguments that HCE and ALP represent conceptual opposites of one another, see Honnor 2010: 6–8.

32 Cf. Leitz 2023a: 924, 946.

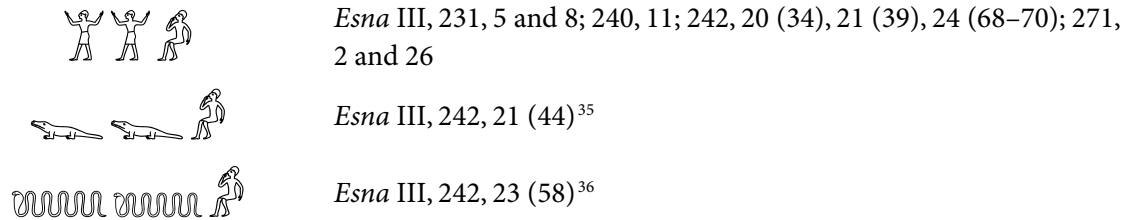


terms are split between two epithets: “Osiris in the Chapel of the Prince (*sr*), great one (*wr*) in Heliopolis.”

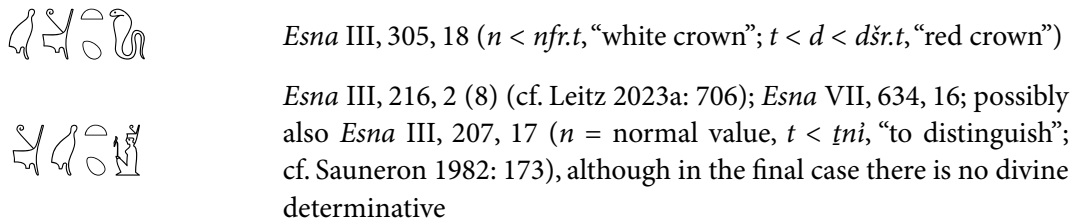
Somewhat trivial examples occur for the child deity of Esna, Heka (*Hkʿ* or *Hqʿ*), whose name is generally reduced to two major consonants, *HK*, both in the litanies and throughout the temple. Since both elements could be spelled, without acrophony, via the standing man hieroglyph ( = *h* < *h(i)*, “to rejoice”; *k* < *q* < *qʿ*, “high”), the standing man can appear in either or both positions. So there are anadromes, where the name Heka is read the same when it is reversed:







There also palindromes, where the two phonetic elements are identical, so the name can essentially be read in either direction. The following all spell “Heka”:



Similarly, the name of the goddess Neith, which also reduced to two consonants (*NT*), could be written with the dynastic crowns in either order:



For the latter value, compare also a unique writing of the third person plural independent pronoun *ntsn* (   ) in *Esna* III, 311, 17.

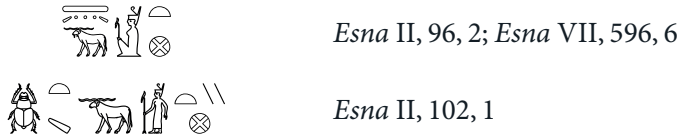
33 Sauneron 1982: 161 and Leitz 2023a: 607, n. 362, assumed the second spelling is simply a reversal. However, the interchange of *h* (here derived from < *iʿhw*, “radiance”) and *q/k* is well-attested in the Ptolemaic and Roman periods, see Kurth 2007: 535 (28.2), 536 (29.2); Quaegebeur 1990: 74–75.

34 The jackal head, which otherwise often writes *hʿ.t*, here might writes *k* < *q* < *qʿb.t*, “chest”; Leitz 2023a: 575, n. 210.



35 Sauneron 1982: 146, suggested acrophonic derivations for both crocodiles. One wonders if perhaps they simply substitute as reptiles for the serpents in the previous writing; cf. Klotz 2006: 163–164, n. B.

36 The first snake writes *h* < *hfʿw*, “snake”; the second often determines the word *kʿ*, “spirit; agathos daimon” (e.g., *Esna* II, 70, 12; 161, B; 279, 10–11; 341, 9; 388, 8), and can also serve as an ideogram for the same word (e.g., *Esna* III, 241, 14 (95); 44, 7 and 8; 312, 6; *Esna* VII, 630, 9; 633). Leitz 2023a: 539, n. 2 suggested an acrophonic derivation from *qrh.t* or *qrry*, thinking of serpents associated with the grottos of Nun.

More interesting are two distinct examples of anadromes between two divinities. A palindrome is a word or phrase that can be read the same in both directions (e.g., “madam”, or “my gym”). Anadromes, meanwhile, are words which are mirror images of one another (e.g., “dog ~ god”, “plug ~ gulp”). Similar to Kom Ombo, Esna temple was dedicated to two major divinities: Khnum, originally from Elephantine (Upper Egypt) and Neith of Sais (Lower Egypt).<sup>37</sup> Sportive writings of the name Esna (*t<sup>3</sup>-sn.t*) incorporate both divinities, as if the toponym meant “land of the ram (Khnum) and Neith” (cf. Leitz 2023a: 148, n. 515):



As such, much of the decoration of the surviving forecourt or pronaos was divided symmetrically between texts and scenes featuring Khnum-Re and Neith (Hallof 2007).

As mentioned above, Khnum of Esna was directly associated with Ptah-Tatenen, the demiurge from Memphis who fashioned the cosmos, all living beings, and other creator gods (the Ogdoad, the seven Khnums), working manually upon his potter’s wheel. Neith, meanwhile, was considered a primeval deity in her own right, who gave birth to Re and produced a different set of creator gods (the seven Djaisu) through her verbal utterances. These two cosmogonical traditions, Memphite and Saite, coexisted within the temple of Esna, and in fact Neith herself was also identified as Tatenen (el-Sayed 1982: II, 122) and even Irita (lit. “earth maker”), his common epithet as demiurge (e.g., *Esna* III, 216, 2, 6–7). The name “Tatenen” could even be spelled employing the hieroglyph of Neith:  (Esna III, 388, 8: *t < d < dhn*, “obelisk,” *n < N.t*, “Neith”), while “Neith” is rendered with the ideogram of Tatenen:  (*Esna* III, 216, 10 (48): *n < nb.t, t < t<sup>3</sup>-tnn*).<sup>38</sup>

The local scribes took this a step further by writing Tatenen (determined with a figure of Khnum) and Neith as mirror images, or anadromes:



A later variant, not employing the same symmetry, writes the first element differently:

37 For the major divinities at Esna, see Sternberg 1985: 37–45; Hallof 2011; Fernández Pichel 2020.

38 For Tatenen and Neith, see also el-Sayed 1982: I, 122.

39 El-Sayed 1982: II, 636 (Doc. 1027), 638 (Doc. 1032) highlighted the symmetry by translating this epithet as: “le *T<sup>3</sup>-N* et *N-T<sup>3</sup>*” and “le *T<sup>3</sup>-n(ty)* et *N(ty)-t<sup>3</sup>*,” which he elsewhere recognized as Tatenen and Neith (El-Sayed 1982: II, 122). Sternberg 1985: 96, n. n, understood the phrase in *Esna* II, 104, 4 quite differently (“das Land des Chnum, welches (auch) das Land der Neith ist”), overlooking the parallel in *Esna* II, 63, 3, as did Goyon 1987: 119 (“la terre du dieu [...] et celle de la déesse”).



Esna VI, 513, 11-12

(*tʰ*)-*tʰnn* N.t m rn=s

Tatenen and Neith, in her name.

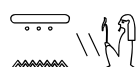
To understand the above-mentioned palindrome phonetically, one should note that Tatenen (lit. *tʰ-tʰnn*, “the elevated land”) had reduced to simply \**tn* at this point. His ideogram, and the ideogram of his crown, both served to write the verb *tʰni*, “to distinguish,” and comparable spellings of his name occur elsewhere in the temple:



Esna III, 243, 10



Esna VI, 513, 17 (an epithet of Neith)

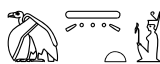


Esna VI, 537, 17

Similarly, Neith’s name, unlike other goddesses, retained a strong *t*-ending. As in the anadrome writing, her name is written with a final *tʰ*-sign multiple times, for example:



Esna III, 216 (4, 5, 80); 305, 18; Esna IV, 424, 2; Esna VII, 579, 11



Esna III, 216 (22, 51)




Esna III, 216 (12)



Esna III, 216 (31)



Esna III, 216 (29)

From a theological perspective, one must note the palindrome () occurs in both instances after the same epithet, crucial to the theology from Esna:



Esna II, 63, 3

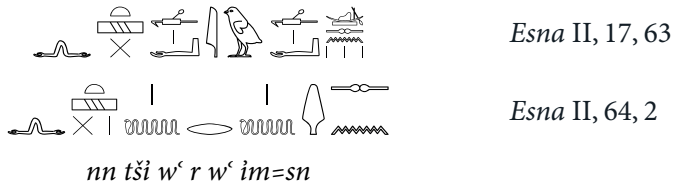


Esna II, 104, 4

From these spellings, and other parallels, the epithet can be interpreted as: “the single (serpentine) god, who transformed into two (serpents) (*ntr wʿ hpr m snw*).”<sup>40</sup> This is an allusion to Irita and the *d*-serpent, twin ophidian children of Kematef, who emerge from the waters of Nun at the beginning

40 Klotz 2012: 173, with n. 1130; see also Leitz 2023a: 702, n 58; and Esna VI, 534, 1-2 (partially damaged)..



of creation.<sup>41</sup> At Esna, these siblings are also identified with Khnum-Tatenen (aka “the Father”) and Neith (aka “the Mother”), and other texts mention they are so similar that:



“One cannot distinguish between one (serpent) and the other (serpent).”<sup>42</sup>

In other words, those primeval serpents are essentially identical twins,<sup>43</sup> and thus their anadromic names are perfectly appropriate. That the names of Neith and (Khnum)-Tatenen were anadromes is a phenomenon recorded with surprising accuracy by Horapollon (*Hieroglyphica* I, 10–12). In those passages, Horapollon noted that the scarab could write “father” (10), and the vulture, “mother” (11). The former ideographic value occurred already in the New Kingdom, but was more common later; whereas the vulture wrote “mother” in all periods. More interestingly, Horapollon claimed these signs could be combined to form two different divine names (I, 12):

Ἡφαίστων δε γραφοντες καθαρων και γυπα ζωγραφουσιν;  
 Αθηναν δε γυπα και καθαρων.

To write “Hephaistos” they depict a scarab and a vulture (  );  
 or “Athena,” a vulture and a scarab (  ).

Phonetically, the two spellings reported by Horapollon follow the same principle from the anadrome discussed above: the scarab writes  $T < t(\ddot{s})$ , the vulture  $N < n(r.t)$ , so combined they can represent  $TN$  (Tatenen) and  $NT$  (Neith) respectively. Scholars have long recognized this passage must refer to Tatenen (Hephaistos) and Neith (Athena),<sup>44</sup> and several have sought similar spellings from Esna


41 Note that Kematef and Irita are mentioned in epithets of Neith right after the variant of the anadrome (Tatenen and Neith) mentioned above in *Esna* VI, 513, 12.


42 For this text, see also Fernandez Pichel 2018: 152, n. 10, noting another example from Philae in an epithet of Khnum (Bénédict 1893–1895: 80, 11–12). A very similar phrase occurs also in *Esna* IV, 424, 1, where it describes Khnum united with Menhyt-Nebtu.


43 Hallof 2011: 5, characterized the two creator deities of Esna as being “[!]like a coin, only one side of which can be regarded at a time.”

44 For the interpretatio graeca of these divinities, see Quaegebeur, Clarysse, van Maele 1985a; 1985b: 26–32; Galazzi 1985.

temple.<sup>45</sup> Unfortunately, examples with these specific signs are difficult to find within the remains of the temple,<sup>46</sup> of which only the pronaos survives.

Nonetheless, in one text (*Esna* II, 71, 5–6) Neith is called: “father of fathers, mother of mothers, , who came about in the beginning (*hpr m hʿ.t*).” Brugsch had suggested interpreting this passage literally as “that means the scarab and vulture,” but based on the remarks above, one might understand this as “that means Tatenen, who came about in the beginning” (von Lieven 2010: 570). Since there is no divine determinative confirming this is Tatenen, perhaps the most likely reading here is “that means the father and the mother (*it mw.t pw*).” Support for this final interpretation comes from the trigram litany to Neith, where she is addressed in two subsequent verses featuring the scarab and vulture, each time in different positions (*Esna* III, 216, 6; Leitz 2023: 738–742):

(25)  “(Neith), **the father and mother** who came about in the beginning, who came forth from Nun, before what exists had come into being.”

(26)  “(Neith), the mother of mothers, the father of fathers, who came about before anything existed.”

These verses employ the scarab and vulture (the latter incorporated into the *nb.ty* sign in verse 26), and call Neith both “mother of mothers...” as well as “father and mother,” suggesting the example from *Esna* II, 71 should be understood the same way.

In the associated litany to Khnum, meanwhile, his divine name (not Tatenen’s) is also spelled with the scarab and vulture, albeit with one additional sign in between, a falcon writing *n < ntr*:

 *Esna* III, 232, 14 (141); Leitz 2023a: 292–293

Otherwise, there are multiple examples where the second consonant (*t*) of Neith is written with the scarab,<sup>47</sup> but none with a preceding vulture.

Nonetheless, Horapollo correctly reported that Neith and Tatenen in particular were somehow mirror images of one another, both graphically and theologically. Moreover, he connected them specifically to divine archetypes of a “father” and “mother,” coincidentally much like HCE and ALP in Joyce’s *FW*. These two points strongly suggest Horapollo was directly informed about the hieroglyphic conventions and nuances of local theology of Esna temple, whether from priests, scribes,

45 E.g., Brugsch 1891a: 114–115; Brugsch 1891b: 4 (both books at least theoretically accessible to James Joyce); Van de Walle & Vergote 1943: 54–55; Winter & Winter 1996; von Lieven 2010: 569–570.


46 Leitz, *et al.* 2002–2003: VII, 411c, recorded an example of the first group (scarab + vulture) at Dendera as a unique spelling of “Atum.” However, the text passage cited there, example (202), is a standard spelling of the divine name, without scarab or vulture.

47 *Esna* III, 216, 3 (13); Chassinat 1939: 101, 2.



or papyrus copies of the local hymns. On the one hand, Esna was the only major temple wherein Tatenen (Hephaistos) and Neith (Athena) were so closely connected. More importantly, multiple hymns and cult-topographical monographs from Esna designate it as both “Temple of the Father” and “Temple of the Mother,” clarifying that in these instances, Khnum was “the Father” and Neith “the Mother” (Fernández Pichel 2018: 85, 89–90).

While this non-commutative relationship ( $AB \neq BA$ ) between the names of Neith and Tatenen has long been recognized, similar anadromes exist for the next divine generation. If Khnum-Tatenen and Neith represent the first primeval moment of creation, their successors are Khnum and Menhyt. In fact, multiple texts explicitly link the two together, such as *Esna* II, 104, 4, just before the passage in which the anadrome discussed above occurs: “thus Khnum became the name of Tatenen, and Menhyt the name of Neith.” Similarly, the pairs are identified again in the litany to Khnum (*Esna* III, 232, 12 (135); Leitz 2023a: 285–286), where their names are written as near-anadromes of one another:

*n hnmw Mnhyt m tʿ-sn.t* For Khnum and Menhyt () in Esna: that  
*tnn pw hnʿ N.t* means Tatenen together with Neith.

Other texts directly compare Tatenen and Neith to Khnum and Menhyt (*Esna* VII, 633), or refer to Menhyt in contexts typically associated with Neith, such as Menhyt one of the two primeval serpents (*Esna* VI, 507). In their litanies, Neith is identified with Menhyt (*Esna* III, 216 (31, 67)), and Menhyt with Neith (*Esna* III, 233 (12, 33, 36)).<sup>48</sup>

Just as Tatenen (*TN*) and Neith (*NT*) had essentially symmetrical consonantal structures, so the reductive trigram scheme at Esna permitted a comparable relationship between Khnum (*HNM*) and Menhyt (*MNH*). The main challenge comes from the two different fricatives (*h* vs. *ḥ*). Although they were quite distinct in earlier phases of the language, they could interchange in Ptolemaic and Roman texts (Kurth 2007: 524–530). Particularly in the Esna litanies, Khnum’s name could begin with multiple consonants due to sound changes (*h*, *ḥ*, *ḥ*,<sup>49</sup> but also *q* and *š*)<sup>50</sup>, and the same was partially true for Menhyt (*ḥ* for *ḥ*).<sup>51</sup> As in the example noted above, the radiant sun (*ḥ* < *iʿḥw*) could represent both *h* in Khnum, and *ḥ* in Menhyt (Sauneron 1982: 160, No. 225), the latter possibly derived from *ḥʿy*, “to shine” (Leitz 2023a: 379).









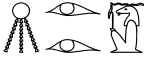



48 For Menhyt designated as Neith, see also *Esna* III, 251, 22, § 2; the relationship was briefly discussed by el-Sayed 1982: I, 137–138.

49 Sauneron 1982: 99.

50 Sauneron 1982: 134, No. 101 (baboon = *q* < *qnd*, “to rage”; see Kurth 2007: 535, n. 3), 145, No. 159–160 (feather = *š*; see also *Esna* III, 393, 21); 164, No. 252 (lake = *š*); 176, No. 315 (scimitar = *q* < *qn*, “might”). So also in *Esna* III, 230, B (*š* < *šms*).

51 Sauneron 1982: 128, No. 77; 176, No. 316.

This being established, one can recognize a number of symmetrical anadromes for Khnum and his consort Menhyt:

Khnum		<i>Esna</i> II, 157, B
Menhyt		<i>Esna</i> III, 335, B
		<i>Esna</i> VII, 635, 10
		<i>Esna</i> III, 301, 10
Khnum		<i>Esna</i> III, 232, 11 (129); possibly 225, 19 (56)
Menhyt		<i>Esna</i> III, 346, 24
		<i>Esna</i> III, 254, 12
		<i>Esna</i> III, 232, 22 (47)
Khnum		<i>Esna</i> III, 353, A; 387, 1; possibly 225, 17 (49); cf. Leitz 2023a: 133, n. 448
		<i>Esna</i> III, 264, 25
Menhyt		<i>Esna</i> III, 233, 23 (50)
		<i>Esna</i> III, 233, 22 (46)

All variants involve the radiant sun (*i³ḥw* > *ḥ/ḥ*) and the two eyes or pupils, both round and ovoid (*m³n*, “to see” > *mn/nm*, via metathesis).<sup>52</sup> Graphically, the anadrome is simple, but it may allude to a major event in the religious calendar at Esna. On the first day of the month of Khoiak, the pacified goddess of the Eye of the sun, Menhyt-Nebtu, would return to the city and unite with Khnum (Sauneron 1962: 47–67; von Recklinghausen 2017). At this time, other neighboring deities would visit Esna “in order to see the beauty of the two celestial disks (*r m³n nfrw itn.wy*),”<sup>53</sup> namely Khnum and Menhyt-Nebtu and Shu and Tefnut.<sup>54</sup> The circular pupils in some of these writings may allude to the twin celestial luminaries, while the others evoke phrases such as “beholding the radiance” or “the radiance of the two (reunited) eyes.”

52 Cf. Sauneron 1982: 100, 126, No. 66; Smith 1984.

53 *Esna* II, 81, 6; 127, 9; *Esna* III, 346, 22.

54 For their identification with the two disks, see also *Esna* II, 31, 59; 80, 3.

There do not appear to be any similar anadromes between Khnum Lord of the Field and his main consort, Nebtu, the divine couple at nearby North Esna. Nonetheless, there is also a degree of symmetry between their primary names and epithets. Nebtu's name literally means "Lady of the agricultural domain (*ww*)," which is roughly synonymous with Khnum's title "Lord of the Field (*sh.t*)." Indeed, this form of Khnum can also be called "Lord of the agricultural domain (*nb ww*)" (Leitz *et al.* 2002–2003: 605b), essentially the masculine equivalent of Nebtu.

## Conclusion

It is fair to characterize *Finnegans Wake* and certain texts from Esna temple as attempts towards a transcendental writing system. Both radically disrupt traditional readerly expectations, foreground the visual iconicity of their texts, and add multiple layers of meaning to be interpreted from each phrase. Most remarkable is their mutual adoption of acrophonic or acrostic trigrams representing the archetypal father and mother figures: Khnum (*HNM*) and Menhyt (*MNH*), or Neith (*NT*) and Tatenen (*TN*) at Esna; HCE and ALP in *FW*. For Joyce, this practice draws attention to the visual script, as readers cannot help but notice and seek out more instances of these trigrams. In turn, each acrostic variation expands the network of imagery and personal associations for each character, so that most wordly events, personages, and phenomena are filtered through HCE, ALP, and the other major characters.

So too at Esna, the novel trigrams replace graphic associations between divinities and their conventional spellings; indeed, Khnum was much more than just the *hnm*-vessel which historically wrote his name, and the mysterious ideogram for Neith reveals nothing about her complex role in the Egyptian pantheon. The myriad graphic variations would have prompted devotees of Khnum and Neith to reflect on further epithets, attributes, and mythological events encoded in their very names, and on their inter-divinity relationships. Just as the original temple must have been divided symmetrically into sanctuaries for Khnum and Neith, so the very names of Khnum-Tatenen and Neith-Menhyt were redesigned into mirror anadromes.

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NB: Passages from *Finnegans Wake* are cited by page and line number (e.g., *FW* 24.5). Citations from Esna temple are cited by volume, inscription number and column or line (e.g., *Esna* II, 61, 5). Abbreviations for Esna are as follows:

*Esna* II = Sauneron 1963; translations at <https://bookdown.org/shemanefer/Esna2/>

*Esna* III = Sauneron 1968; translations at <https://bookdown.org/shemanefer/Esna3/>

*Esna* IV = Sauneron 1969; translations at <https://bookdown.org/shemanefer/Esna4/>

*Esna* VI = Sauneron 1975; translations at <https://bookdown.org/shemanefer/Esna6/>

*Esna* VII = Sauneron and Hallof 2009

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# Graphetic Compounding in the First Intermediate Period<sup>1</sup>

## The Micro-history of *ḥtr.wy* “span” and the Process of Sign Decomposition<sup>2</sup>

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**Abstract.** This paper details the circumstances by which ‘composite hieroglyphs’ developed and the factors that may have influenced their subsequent evolution. It is organized into two complementary sections. In the first section, I offer a fine-grained contextual analysis of the sign  *ḥtr.wy* “span (of one pair of oxen)” and its variants in the First Intermediate Period. This analysis suggests two possible scenarios for the development of this sign, an inductive local one (SCENARIO A) and a deductive global one (SCENARIO B). In the second section, I describe the process by which composite signs decomposed within the same period and propose distinguishing ‘compound splitting’ from ‘component merging.’ The results of this systemic approach are used to assess the probabilities of the two scenarios envisioned for the case-study and to plead in favour of the inductive local position.

**Keywords.** Composite signs, monograms, compound splitting, component merging, First Intermediate Period, 11th Dynasty, Dendera, *ḥtr*.

- 1 I am indebted to Stéphane Polis and Anna Lisa Beck for valuable methodological discussions and for their feedback on this paper. I also thank Philippe Collombert and Lilian Postel who reviewed this paper for their precious remarks, Gaëlle Chantraine and Jelena Gvozdenović for their comments on an earlier version of this paper, as well as Renaud Pietri for the bibliographical references he suggested. In addition, I am grateful to Susan Allison and Marc Maillot for providing me with information about and photographs of Text A, and Campbell Price for photographs of Texts B and D. Finally, I would like to extend my thanks to Daniel J. Waller for his diligent proofreading of this paper.
- 2 All occurrences of signs and sign groups cited throughout this paper can be accessed in the Thot Sign List (<https://thotsignlist.org/>, last accessed 26.06.2023). I excluded those signs that are published in facsimiles only if I did not have my own photographs thereof.

## 1. Introduction

Compounding signs into groups is a common feature of complex scripts that employ graphetic blocks.<sup>3</sup> In Egyptology, such blocks are traditionally referred to as ‘quadrates.’ A quadrate is defined as the smallest unit of a graphetic sequence inside of which signs can (theoretically) be organized freely.<sup>4</sup> In practice, the evolution of epigraphic visual culture in ancient Egypt is reflected in the process of block compounding: the quadrates in Ramesside monumental inscriptions, for instance, generally appear to be much denser than those of earlier periods.<sup>5</sup> Two visual parameters are of paramount importance when it comes to the systematic investigation of the principles behind graphetic compounding: (1) the quantity of signs within one block and (2) their graphic interaction. With respect to the latter, St. Polis (2018: 315–330) has outlined a set of five basic operations that allow us to specify the “degree of visual fusion (and semiotic interaction)” displayed by the signs (Polis 2018: 316).

Operation	Example	Graphemes
(a) tabulating		$\square + \triangle + \text{—}$
(b) inserting		 + $\triangle$
(c) stacking		 + $\text{—}$
(d) connecting		$\{ + \triangle$
(e) combining		$\square + \triangle + \text{—}$

Tab. 1: Classification of sign compounding operations (Polis 2018: 326, tab 1).

The common feature of types (c)–(e) above is that the contours of the compounded signs are connected or merged. As such, they are traditionally termed ‘signes-joints’ (Lacau 1954: 105), ‘composite

- 3 Klinkenberg & Polis (in press) use the term ‘blocs grammémiques.’ For the difference between graphetics and graphematics, see Meletis & Dürscheid 2022.
- 4 The notion of quadrates is discussed briefly in many grammars (e.g., Schenkel 2012: 45; Werning 2015: 4–6; Beylage 2018: 29–31: ‘graphic squares’) but has never been explored in detail (an exception is Polotsky 1929: 16–18). Explicit borderlines between quadrates are found in some preliminary drawings of inscriptions (e.g., the hieroglyphic frieze-band in the corridor of TT 12; personal observation) and the so-called crossword texts of the New Kingdom (Clère 1938; Zandee 1966; Stewart 1971; Fischer 1986: 126–127; cf. Delvaux 2016). Another interesting example of such borderlines can be found in the painted inscriptions on the coffin Uppsala, Museum Gustavianum, VM 348 from First Intermediate Period–early Middle Kingdom Sedment. There, the separating lines between the quadrates were contoured in black and painted in blue like the hieroglyphic signs (Petrie & Brunton 1924: 5, no. 11 & 10–11, no. 22, pl. XXIII, no. 2106 inner coffin; Jørgensen 2002: 42–44, no. 8). Finally, one also might compare the quadrates of the preliminary drawing on the coffin Cambridge, Fitzwilliam Museum E.71.1903 (Dawson & Strudwick 2016: 138–140). These examples, which could certainly be added too, demonstrate that the Egyptological ‘quadrate’ was indeed not alien to those responsible for the ‘ordinatio’ of hieroglyphs (Vernus 1990: 39).
- 5 Loprieno 1995: 21–22; Junge 2008: 27; cf. Jansen-Winkel 1996: 20, § 21.

hieroglyphs' (Fischer 1977a), or 'monograms' (Meeks 2017).<sup>6</sup> In his seminal study, H.G. Fischer (1977a)<sup>7</sup> shows that compounds of these three types reflect a significant chronological distribution: (e) was most productive during the Old Kingdom, (d) prevailed from the late Old Kingdom to the Middle Kingdom, and (c) appeared during the Middle Kingdom and became the dominant sign compounding operation in the 18th Dynasty. The First Intermediate Period was clearly a crucial time for the development of compounds in general, as it generated several forms of compounding that had a significant impact on the long term diachronic evolution of the hieroglyphic system's graphetic dimension.<sup>8</sup> Indeed, the efforts of the Theban 11th Dynasty to establish standards for all graphetic levels<sup>9</sup> implies that choices had to be made among the sign forms and graphetic habits that had emerged within the various regional microcosms of First Intermediate Period epigraphic culture.<sup>10</sup> As such, texts of the 9th–11th Dynasties provide an excellent opportunity to examine the circumstances by which 'composite hieroglyphs' developed and the conditions that determined their subsequent success or lack thereof.

This paper presents a fine-grained inductive investigation of graphetic compounding and its intricacies. It consists of two parts. I begin in § 2 with a micro-history of the group  $\overline{\text{K}}\overline{\text{K}}$ , an example of sign compounding that Fischer (1977a: 11 & 12, fig. 6.g) mentions only briefly. Having contextualized the eight relevant occurrences of this grapheme in their phraseological, topographical, and chronological settings (§ 2.1–§ 2.3), I suggest two possible but very different scenarios that might explain the sign formation process  $\overline{\text{K}}\overline{\text{K}} + \text{I} > \overline{\text{K}}\overline{\text{K}}\text{I}$  (§ 2.4). In § 3, I describe the systemic process by which conventionalized 'composite signs' like  $\overline{\text{K}}$  begin to decompose. This phenomenon has not yet received due attention in the scholarly literature, and I thus present a systematic survey of First Intermediate Period examples of decomposition. The results of this section, especially in terms of diatopic and diachronic distribution, are then used in § 4 to evaluate the two scenarios suggested in § 2.

6 This is the term found in most grammars, e.g., Gardiner 1957: 51–52, § 58; Jansen-Winkel 1996: 15–16, § 15; Schenkel 2012: 46–47.

7 Cf. Fischer 1986.


8 Fischer 1977a: 11–14.

9 Morenz 1998a: 198; 2010: 266.


10 See Legros 2003.


## 2. Case Study: The Sign in the First Intermediate Period

### 2.1. Dendera


The sign  is known to us in the first place from the frieze inscription of the tomb of *Mri-Pth* A (Petrie 1900: 49, pl. X.A, t6r).<sup>11</sup> This tomb is located in the eastern part of the First Intermediate Period necropolis at Dendera. According to the reconstructed ordering of its blocks, which were found scattered,<sup>12</sup> the text reads as follows (fig. 1.a):

#### Text A

*jw*  $\overline{d}^3(=j)$  *n jwty* [*mhn.t=f*                    “I crossed over for the one who had no boat;  
<sup>?</sup>*jw*<sup>?</sup> *sk*<sup>3</sup>(=*j*) *n jwty*  [=*f*<sup>?</sup> -]            I ploughed for the one who had no **span** [-].”

A similar compound is found in the frieze of *Šn-st.j* (P) (Petrie 1900: pl. XI.C, r2t5).<sup>13</sup> It consists of two separate signs, namely  on top of two cattle dragging a plough, while the text of which it forms a part provides a direct parallel to the frieze of *Mri-Pth* A (fig. 1.b):<sup>14</sup>

#### Text B

*jw*  $\overline{d}^3(=j)$  *n jwty* (*m*)*hn.t=f*                    I crossed over for the one who had no boat;  
*jw* *sk*<sup>3</sup>(=*j*) *n jwty*  =*f*                    I ploughed for the one who had no **span**,  
*rdi.n(=j) pr.t n dbh m-*(=*j*)                    after I had given seed to the one who demanded (it) from me;  
*jw hw(=j) n jwty* [-]                    I harvested for the one who had no [-].”


These two texts are not only connected by their nearly identical phraseology<sup>15</sup> and their use of an unusual sign group: the tombs of *Mri-Pth* A and *Šn-st.j* (P) also lie in direct proximity, in the south-eastern angle of C. Fisher’s grid 15, and share the same orientation (Fischer 1968: plan).<sup>16</sup>

11 Chicago, ISAC Museum E5038 (Fischer 1968: 165–166). The documents published in Petrie 1900 are cited in the present paper following the system outlined in Fischer 1968: VII.

12 The frieze inscriptions in Denderite tombs from the late Old Kingdom and the First Intermediate Period consist of several rectangular limestone slabs with one line of hieroglyphic text. Because they most probably ran “along the top of the mastaba” (Fischer 1968: 65), no examples have been found in situ. The order of the two blocks that are translated here as Text A (Petrie 1900: 49, pl. X.A, t8r2 & t6r) follows Schenkel 1965: 136. Further phraseological parallels will be mentioned below.

13 Fischer 1968: 178 n. 751 remarks that the frieze is distributed over several plates of the editio princeps (Petrie 1900: pl. VII.A, b; XI.A, b & tr; XI.C, r2t5; cf. the discussion, as separate texts, by Schenkel 1965: 149–150, no. 139; 151, no. 141; 166, no. 211). The sign discussed here is also found on the block Manchester Museum, inv. no. 2901 and is mentioned by Polotsky 1929: 62 n. 1 and in *Wb* III, 199.

14 The reconstruction of the sequence follows Fischer 1968: 180–181.

15 Additional parallels are found in the frieze of *Jni-jt=f.j* (Text D below) and the fragment Philadelphia, UPMMA 29-66-618 = excav. no. D 842, l. 3:  $\overline{d}^3.n(=j)$  *m dp.t sk*<sup>3</sup>.*n(=j)* [*m* -] (Fischer 2006: 23–24, fig. 1). The similarity between the latter and Text A is further strengthened by the inversion of  in *sk*<sup>3</sup> (cf. JE 46050, l. 3 = Musacchio 2008: 56, 72 fig. 18; architrave of *Jni-jt=f.j*, l. 4 right part = Petrie 1900: pl. XII, tr). Compare further excav. no. D 628, l. 1:  $\overline{š}d.n(=j)$  *mhr.w sk*<sup>3</sup>[-] (Florès 2018), and a fragment from Petrie tomb 331, l. 5:  $\overline{š}[d.n(=j)]$  *mhr.w sk*<sup>3</sup>.*n(=j)* [-] (Petrie 1900: pl. XIII, b3r).

16 Cf. Petrie 1900: pl. XXVII.



This makes a direct relation between the two sign groups very plausible. At first glance, one might imagine that the sign group in the tomb of Šn-st.j P (𓂏𓂛𓂏) inspired the more synthetic group 𓂏𓂛 in the Tomb of *Mri-Pth A*, but this is contradicted by the relative chronology of the Denderite tombs. *Mri-Pth A*'s text exhibits close palaeographical similarities with the proximate frieze texts of *Mrr.j* and *Sn-nds.w.j*, which serve as reference point for the local relative chronology of tombs (Fischer 1968: 165–166), but that of Šn-st.j P belongs palaeographically to the following period, even though the north-south orientation of his tomb means that it still dates to before the 11th Dynasty (Fischer 1968: 179).<sup>17</sup> Accordingly, 𓂏𓂛 is more likely to be a secondary interpretation of 𓂏𓂛 than its conceptual antecedent. It may even have been influenced by a ploughing scene, like the scene found in the tomb of *Mri-Pth A* (fig. 4.b below). Indeed, if 𓂏𓂛 did not originally feature a plough—the traces at the bottom rear of the sign do not allow for clarity on this point—𓂏𓂛 may have been inspired by the figurative features of this depiction.






Fig. 1. (a) The frieze of *Mri-Pth A* = Text A (after Petrie 1900: pl. X.A, t8r2 & t6r);  
 (b) the frieze of Šn-st.j (P) = Text B (after Petrie 1900: pl. XIA b3r, b2r2, b3r2 & XI.C, r2t5);  
 (c) the frieze of *Jni-jt=f.j* = Text D (Petrie 1900: pl. XI.C, t3l & t4l).


Later, during the Theban struggles for reunification,<sup>18</sup> 𓂏𓂛 resurfaces in the text on the architrave of *Hr.w-nht.j* (Cairo, JE 46048, l. 6; fig. 2 below).<sup>19</sup> The concluding line of this lavish self-representation contains two different variants of the sign:

- 17 This relative chronology remains unchanged even if one accepts the suggestion that Šn-st.j P is the 𓂏𓂛𓂏𓂛 (Fischer 1968: 169, 182).
- 18 Line 3 of the text mentions hostilities with the Thinite nome, which points to a date between the reign of Intef II and the unification (Fischer 1968: 132 n. 580). Quack 1992: 103–104 opts for the reign of Mentuhotep II due to the spelling of *hry.t* (<*hrw.t*>). Note, however, that the change of word final <*yt*> > <*wṯ*> is attested on occasion during Dynasty IX–X (Demidchik 2016: 102–103 n. 24; Brovarski 2018: 127 n. 231 & 473).
- 19 Excav. no. D 3128; on this stela, see also Schenkel 1965: 158, no. 177; Abdalla 1993: 249–253, pl. XXIV.1; Musacchio 2006: 77–81, fig. 2; Musacchio 2008: 55 & 70, fig. 16.


Text C




<i>jw rd.n(=j)</i>  <i>n dbh</i> 	“I gave a <b>span</b> to the one who asked for a <b>span</b> ;
<i>rd.n(=j) sm.w n dbh sm.w</i>	I gave <i>sm</i> -donkeys to the one who asked for <i>sm</i> -donkeys; <sup>20</sup>
<i>rd.n(=j) dp.t n dbh dp.t</i>	I gave a boat to the one who asked for a boat.”




A newly added feature of the sign is the diagonal dual marker behind the palm risp in the sign’s first occurrence here ()<sup>21</sup>, though this addition appears to be absent from the second use of the sign.

The straight vertical variant of the dual marker also appears in the 11th Dynasty frieze of *Jni-jt=f:j* (Petrie 1900: pl. XI.C, t3l).<sup>22</sup> In this text (Text D), the front part of the cattle sign has broken off ()<sup>23</sup>, so that we can only hypothesize as to whether it represents a similar compound. Text D (fig. 1.c) appears to cite the same phrase that appears in Texts A and B, though it comes from a mastaba in the south-west of the Denderite necropolis (Petrie 1900: pl. XXVII & XXXV):

Text D

<i>[- d³](=j) n jwty mh.n.t=f</i>	“I [crossed over] for the one who had no boat;
<i>[jw sk³=j n jwty]</i>  <i>=f</i>	[I ploughed for the one who had no] <b>span</b>
<i>jw s[-]</i>	I s[-]

Similarly, Text C re-uses phrases from older Denderite autobiographies from tombs located next to those of Texts A and B, e.g., *gm.n=f sw<sup>(pr jt=f)</sup> m h.w* “after he found it<sup>(the house of his father)</sup> in ruins” (l. 1)<sup>23</sup> and *rht.y hr rht* “the washerman was washing” (l. 3).<sup>24</sup> This makes a strong argument for the hypothesis that  was a deliberate copy of  or the like, and that  (Text D) might also be an intentional copy. This hypothesis would be even stronger if we knew the precise location of *Hr.w-nht.j*’s tomb.<sup>25</sup> In this regard, the fact that all of the Denderite texts that contain the name *Hr.w-nht.j*<sup>26</sup> also come from the southern part of C. Fisher’s grid 15 might point to its location in the vicinity of the tombs of *Mri-Pth* A and *Šn-st.j* (P) (Texts A & B).

20 Abdalla 1993: 252 n. q explains  as (1) unknown designation for “donkey” or (2) erroneous transcription of a cursive spelling of ‘s.w “donkeys.” The second option, which he favours, is indeed seducing but I am not aware of any contemporaneous spellings of ‘s.w with a bird sign below . Therefore, I propose that  metaphorically designates the donkey as “helper” (cf. *sm* “to help”; van der Molen 2000: 488–489).



21 Damage to the stone cuts the second occurrence of the sign into two halves and largely obscures the palm risp. The photograph in Abdalla 1993: pl. XXIV.1 suggests that it is highly unlikely that the damaged area also contained dual strokes.







22 Petrie 1900: pl. XI.C, t2–5l. Note that the order of the blocks proposed here—Petrie 1900: pl. XI.C, t3l before Petrie 1900: pl. XI.C, t2l—differs from that of Schenkel 1965: 146–147, no. 134.




23 See the architrave of *Sn-nds.w.j* (Fischer 1968: 158 n. b; Petrie 1900: pl. X, t2r).








24 See the frieze of *Htp.j* (Fischer 1968: 156, pl. XVII.a).

25 Abdalla 1993: 249 states that: “Their exact find spots are not known (...).”

26 Rectangular stela fragment Philadelphia, UPMAA 29-66-647 (= excav. no. D 3494) from 15:421 B/x7:    
<https://www.penn.museum/collections/object/84454>, last accessed 11.05.2023; fragment of self-presentation


The sign  is not the only ‘innovative’ compound sign in the epigraphic material that survives from First Intermediate Period Dendera, though it is certainly one of the earliest. In fact, Text A, Text B, and contemporaneous monuments (Fischer 1968: 128–176) do not contain any other new compounds except for the merged sedges  *nn* “this.”<sup>27</sup> Eleventh Dynasty texts are only slightly richer, the sole examples being  from the stela Edinburgh NMS 1898.382.3, l. 2 (logogram for *jt-šm* “small barley”; Petrie 1900: pl. XI, tr)<sup>28</sup> and  from the architrave of *Bb.j* (II), l. 2 (classifier of *šnd.t* “acacia-wood”; Petrie 1900: pl. VII.A, bl).<sup>29</sup> In this respect, Text C stands out because it contains three ‘new’ compounds,<sup>30</sup> namely  (l. 2; classifier of *wh* “column”),<sup>31</sup>  (l. 3; logogram




Philadelphia, UPMAA 29-66-804 from 15: 11 Dx:  (https://www.penn.museum/collections/object/264429, last accessed 11.05.2023); lintel Philadelphia, UPMAA 29-66-581 from 15:331 A/x2:  (https://www.penn.museum/collections/object/336544, last accessed 11.05.2023); lintel Philadelphia, UPMAA 29-66-700 (= excav. no. D 6129) from 15:631 C/x17 (Pillon 2022: 474–475 fig. 4a): . Additionally, it is unclear whether the architrave of *Hr.w-nht.j* is connected to the owner of Petrie’s Tomb of Hornekhta (Petrie 1900: pl. XXVII, XXXII); this tomb is also located in the southern part of grid 15, and Petrie 1900: 19 dates it to ‘Class D: IX–Xth(?) Dynasties.’


27 While the two sedges are kept apart in the 6th Dynasty frieze of *Snn.j* (Petrie 1900: pl. VII.A, tr2), the leaves of the sedges are fused in the three unquestionable First Intermediate Period attestations of *nn* “this”: Text B (Petrie 1900: pl. XI.A, bl); lintel of *Sn-nds.w.j* (CG 1658, l. 3; clearly visible on the photo in Musacchio 2008: 62, fig. 4); Cairo, CG 20805 = excav. no. D 1542, l. 6 (Musacchio 2010: 2 fig. 1 draws separate plants, but they appear to merge in the photograph in Pitkin 2017: pl. LXXIV); cf. also the examples from the burial chamber of *Bb.j* (e.g., Petrie 1900: pl. XXXVII col. 18; pl. XXXVII.H col. 714 & 716). In comparison, the sedges are separated in six out of nine attestations of  *nn* “this” on contemporaneous stelae from the Fifth Nome (Fischer 1964: 55, pl. XIX, no. 21; pl. XXX, no. 33) and in most occurrences from other regions (Clère 1941: 457 n. 10; exception: Callender 2019: 203, § 294). Like the exchange  ~ , this is evidently due to the corresponding hieratic grapheme  (Graphem ID 1439, AKU-PAL 2023: https://aku-pal.uni-mainz.de/graphemes/1439, last accessed 11.05.2023). A similar phenomenon occurs in the 5th Dynasty tomb of *Ny-nh-Hnm.w* and *Hnm.w-htp* in  *nn* “this” (Moussa & Altenmüller 1977: 83, fig. 10), which clearly derives from the cursive . Compare  *h’b’* “to winnow” from the same tomb (Moussa & Altenmüller 1977: 126, pl. 54.b, fig. 24; other examples are found in Wild 1966: pl. 155; Murray 1905: pl. XI), which might be linked to the cursive writing of numerals (Goedicke 1988: 54a–b, no. 642).

28 For the translation, see Müller-Wollermann 1987; Florès 2015: 299–301. See also n. 33 below.

29 Cf. Fischer 1977a: 11 & 12, fig. 6.b. Compare another attestation in the burial chamber of *Bb.j* (Petrie 1900: pl. XXXVII.H, col. 720).

30 According to the drawing in Abdalla 1993: 250 fig. 2, the group  in line 2 is a compound; Musacchio (2008: 70, fig. 16) separates its two components.

31 Cf. Fischer 1977a: 11 & 12 fig. 6.f. Note that the sign does not appear as a compound in the drawing in Musacchio 2008: 70, fig. 16, even if the elements are clearly fused in the above-mentioned photograph. On the 11th Dynasty architrave UPMAA 29-66-618 = excav. no. D 842, l. 2, both signs are separated:  (cf. Fischer 1968: 158, who does not indicate this difference in his hieroglyphic transcription). As classifier of *wh* “column,” this sign also appears on the door jamb CG 20502, l. 2 from Abydos, which is only available to me as a hieroglyphic transcription (Mariette 1880: 97, no. 545: ; Lange & Schäfer 1908: 94: .

for *rht.y* “washerman”),<sup>32</sup> and  (l. 4; logogram for *jt-šm* “small barley”).<sup>33</sup> This unexpected abundance of compounds, as well as the nature of these compounds, clearly link the text to the Theban 11th Dynasty in terms of palaeography.<sup>34</sup>

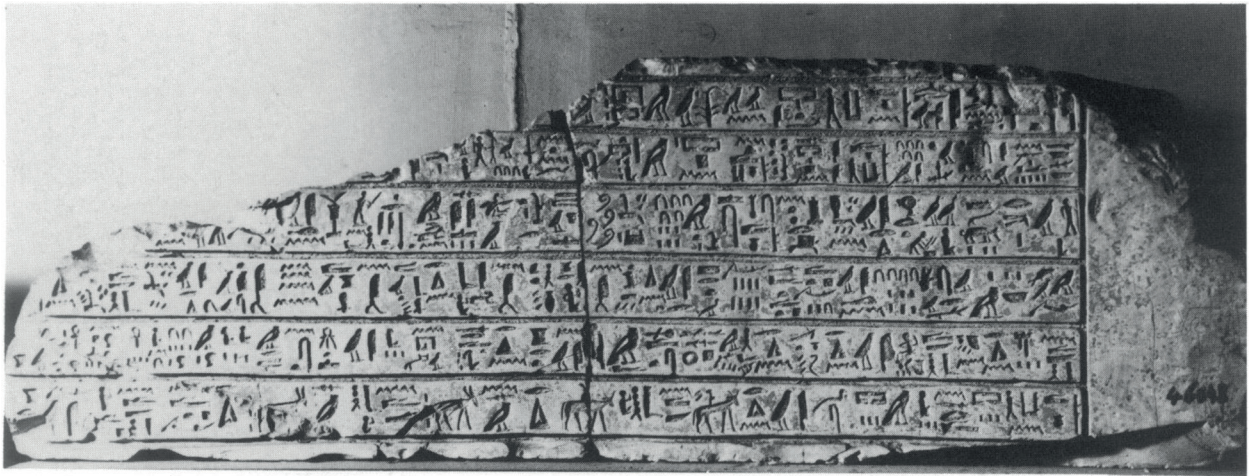

















Fig. 2. The architrave of *Hr-nht.j*, JE 46048 = Text C (after Abdalla 1993, pl. XXIV.1)



Against this background, the position of the sign  in the lowest line of the architrave of *Hr.w-nht.j* (Text C) appears particularly significant (fig. 2): first, this was certainly the most visible part of the text in its original setting, at the top of the entrance, and second, the graphetic sequence that contains  is composed of especially spacious graphetic blocks that contrast significantly with the high density of the rest of the inscription. This *mise en scène* would certainly have attracted the attention of ancient visitors; as such, it may be seen as an explicit and purposeful reference to local palaeographic traditions.




- 32 Cf. Fischer 1968: 156. The detail whereby the feet of the birds merge might simply be due to a slip of the chisel, but other contemporary stelae provide parallels for similar connections that seem to be significant:  *m-m* “among” on stela Strasbourg 344, l. 4 & 5 (Fischer 1964: pl. XVI top, no. 16) and in stela Cairo, JE 41437, l. 5 (Petrie & Walker 1909: pl. II right);  *m-s* “to see” on stela MMA 13.182.3, l. 8 (Winlock 1943: pl. XXXVI);  *s-s* “wise” on MMA 57.95, l. 2 (Fischer 1960: fig. 1, pl. VII); cf. the examples in Callender (2019: 146, § 218 & 158, § 237). In Middle Kingdom texts, the *rht.y*-birds are commonly superposed (e.g., Simpson 1995: 50, pl. 9.f:  ) or written using a cursive ligature (e.g., CG 20160, section r, l. 6 = Lange & Schäfer 1902: 189, pl. XIV; Amer 1999: 22). By contrast, the rare Old Kingdom examples of this group mostly reflect two separate birds, e.g., the stela Leiden F1938/1.4 (Fischer 1968: 62, fig. 13) or the tomb of *Ny-nht-Ppy* at Saqqara (Hassan 1975: pl. 25–26).
- 33 The same group also appears in line 3 (), though its components do not merge in that instance. The signs are linked on stela Edinburgh NMS 1898.382.3, l. 2 (see above), but separate on the architrave Manchester 2891  (Petrie 1900: pl. XI.B, tr). Note further that the merged compound is found in other 11th Dynasty documents, e.g., the graffito CM 114, l. 6 (Cuyat & Montet 1912: pl. XXXI) and the unprovenanced stela CG 20011, l. 7  (Lange & Schäfer 1902: 10–11, Pl. II; cf. el-Khodary 2012). These latter examples strongly suggest that the process of compounding was influenced by the cursive group  (Qaw bowl, inside, l. 5 = Gardiner & Sethe 1928: pl. II; cf. bowl from QH 30b, l. 4 = Edel 1987; the cursive signs are separated in Edel 1970: 139; Pantalacci 2005a: 84, fig. 1).
- 34 Cf., for example, the stela Copenhagen AIN 891 which is equally abundant in compounds (Mogensen 1930: 92–93, pl. XCVIII bottom).





## 2.2. Other Regions



The 11th Dynasty stela CG 20506 of unknown provenance contains the sign group  (l. 7; Lange & Schäfer 1908: 96–97, pl. XXXIV). This group is clearly related to the compounds discussed above. The offering formula in this text consists of two lines and one column of figurative hieroglyphs; it is followed by a self-presentation in six columns that consists of crudely incised signs, many of which display clear influences of cursive writing.<sup>35</sup> This observation also applies to the sign group  which is composed of ,<sup>36</sup> ,<sup>37</sup> and  (fig. 3.a):<sup>38</sup>



Text E	
( <i>jnk</i> ...)	“(I am one ...)
<i>skʹ m</i> 	who ploughs with a <b>span</b> ,
<i>pjs m</i> 	who transports (grain) with a donkey,
<i>sft m jh.w</i> <sup>39</sup> (...)	who slaughters from the oxen (...)

The signs here clearly correspond to the hieroglyphic group , which equals  (Text B), though  expresses the dual through the use of two strokes rather than two yoked oxen. Palaeographic<sup>40</sup>


35 This layout recalls the stela CG 20805 from Dendera, which also dates to the 11th Dynasty (Schenkel 1965: 167, no. 223.3; Musacchio 2010).



36  ~ ; cf. Goedicke 1988: 20a–b, M6/271; Backes 2020: 624, M6/271.

37  ~ ; cf. Goedicke 1988: 9a–b, E1/142; Backes 2020: 613, E1/141–142. The cursive variant of this sign also appears on the First Intermediate Period stela Chicago, ISAC Museum E12105, l. 7 (Fischer 1964: pl. XVI bottom), in a caption on the stela Louvre C15 from the mid-11th Dynasty (Delange 2015b; the caption is located to the right of the offering table, below the writing tablet of the little standing scribe), and on the somewhat later stela BM EA 1628, l. 10 (Franke 2007: 153, fig. 2). There is probably no direct relation between the use of this cursive sign variant in these different documents, because all of the text sections in question are characterized by a high frequency of cursive sign shapes.

38 Translations of this section are found in Polotsky 1929: 35, § 62; Schenkel 1965: 300; and Landgráfová 2011: 98–99, who mistakenly transcribes the hieratic spelling as  (as does the current version of the TLA:  = <https://thesaurus-linguae-aegyptiae.de/sentence/IBUBd86T6HWBDknwmxuUottEE10>, last accessed 11.05.2023). Only late Middle Kingdom stelae from Edfu provide phraseological parallels; see § 2.3 below.

39 For the introduction of the direct object of *sft* with *m* compare CG 1596, l. 5: *sft.n=j m wʹ.f(=j)* Borchardt 1964: 74, pl. 79 = *Urk. I*: 151.2. A roughly contemporaneous parallel is found on the Theban stela CG 20007, l. 6: *skʹ m kʹ.w sft m jh.w* “[I am one who ...] ploughed with bulls, slaughtered from the oxen” (Saleh 1999: 112–115, no. 16; Schenkel 1965: 120, no. 91).

40 Brovanski 2018: 115 n. 96 & 138–139 n. 310 remarks that the shape of the sign  and the reference to the *hkr.t nzw wʹ.tyt jkw* (l. 8–9) speak to the stela’s Theban origin. He dates it to the 11th Dynasty, perhaps to the reign of Mentuhotep II. In contrast, Ilin-Tomich attributes the stela to el-Salamiya (<https://pnm.uni-mainz.de/2/inscription/1895>, last accessed 11.05.2023), possibly based on its Journal d’Entrée number (JE 26911); cf. his discussion on later stelae from the Rizeikat area (Ilin-Tomich 2017: 113–120). Unfortunately, its closest stylistic parallel, CG 20006 (Lange & Schäfer 1902: 6, pl. I), is also without provenance. As Philippe Collombert suggested to me, an in-depth study of the two stelae might allow for precisions in terms of date and workshop.

and phraseological<sup>41</sup> features make it unlikely, however, that the stela derives from a Denderite scriptural tradition. In Text E, the palaeography of the classifier  of the verb *pjs* “to transport (grain) on a donkey’s back” (*Wb* I, 502.9; Meeks 1978: 134, no. 78.1431) is also noteworthy. The sign depicts a donkey with two lines emerging from its back. The somewhat clearer spelling in CT Spell 203 (= CT III, 138b, S1C:  = *prjs* ~ *pjs*) demonstrates that these two lines should be interpreted as the loops that hold the donkey’s load (hanging down on its sides) in place.<sup>42</sup> A comparable pictorial representation is to be found on a relief fragment from the tomb of *Mri-Pth* A (fig. 4.b below). There, the motif is located in the middle register, with a ploughing scene in the register directly below it.<sup>43</sup>

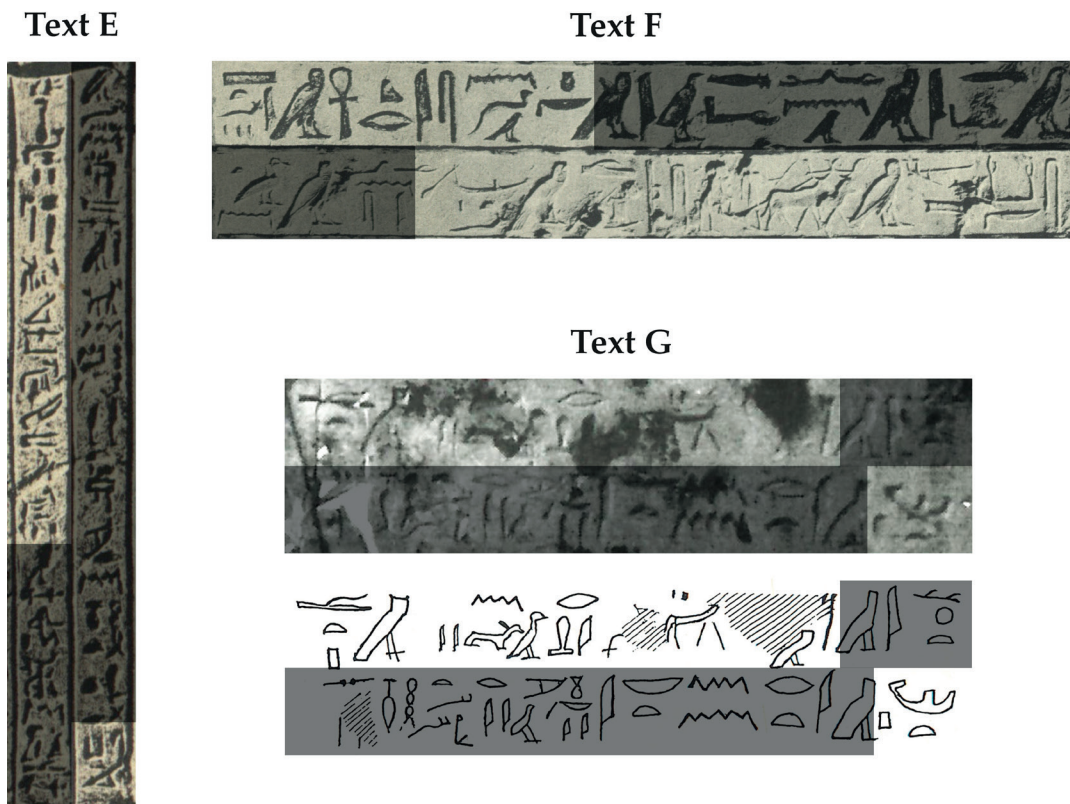





Fig. 3. (a) The stela CG 20506, l. 6–7 = Text E (after Lange & Schäfer 1908: pl. XXXIV);  
 (b) the stela Chicago, ISAC Museum E16956, l. 6–7 = Text F (after Dunham 1937: pl. XXXII);  
 (c) the stela of *Šdi-nfr-kꜣ*, l. 4–5 = Text G (after Fischer 2006: fig. 1–2).


- 41 In fact, the phraseology of the stela finds its closest parallels in the contemporaneous Abydene stela CG 20012, l. 4–5 and in a group of stelae from Second Intermediate Period Edfu (see § 2.3 below).
- 42 Cf. Borghouts 2010: 42, E7+. A similar sign, E221 = , depicts a donkey with a load on its back. It is found as the classifier of the verb *šdi* “to take away” in Old Kingdom harvesting scenes, e.g., in the tomb of *Iy* (Wild 1966: pl. CXLIX; cf. Montet 1925: 211). The early dynastic sign e13, where the donkey carries a rectangular load, might have the same value (Kahl 1994: 486; Regulski 2010: 390, e13). It is found in personal names in 1st Dynasty dipinti. Kaplony 1966: 199–200, n. 321 and Vandenbeusch 2020: 36 add two possible examples: CTII, 175a (the context of which does not allow for any certain identification); and CTV, 199a which more likely depicts a pig, cf. the variants of  collected in Volokhine 2014: 71–77.
- 43 Donkeys with sacks fixed to their bodies by similar loops also appear in QH 110 (Edel *et al.* 2008: pl. LXXII). In the Old Kingdom, the load is mostly depicted from above (Stoof 1987: 116–118).



Another sign that is both visually and semantically related appears on the stela Chicago, ISAC Museum E16956<sup>44</sup> from Nag ed-Dêr, which Brovarski (2018: 305–307) assigns to the *Polychrome Group* of the 9th Dynasty. Lines 6–7 of this text read as follows (fig. 3.b):

Text F

<i>jnk nḏs jkr</i>	‘ <i>nḥ m jš.wt=f</i>	“I am an excellent <i>nḏs</i> ,	who lives from his goods,
	<i>skʾ m</i> 		who plough with the <b>span</b> , <sup>45</sup>
	<i>skḏ mḥn.t</i>		who sails the boat.”

The logogram  depicts a yoke with two oxen followed by their driver and another man holding the plough in place. This is a common motif in the parietal decoration of contemporary tombs. At Nag ed-Dêr, this motif appears twice in the late Old Kingdom tomb N248 (fig. 4.a; cf. Peck 1959: 45, 47, pl. III); at Dendera, it appears on the limestone fragment from the tomb of *Mri-Pth* A (fig. 4.b; Petrie 1900: pl. X, br2; Fischer 1968: 166). Further parallels come from the tomb of Ankhtyfy at Moalla (Vandier 1950: pl. VIII & XXXII.3) and QH 110 (Edel *et al.* 2008: pl. LXXXIV). But all of these contemporaneous representations differ slightly from the sign discussed here; in all the other examples, the cattle-driver adopts the most common posture (for the Old Kingdom as well),<sup>46</sup> swinging his stick behind his head and stretching his other hand out towards the span. A rare occurrence of this motive with the driver in a similar posture is found in the late Old Kingdom tomb QH 34h (fig. 4.c; cf. Edel *et al.* 2008: 547).

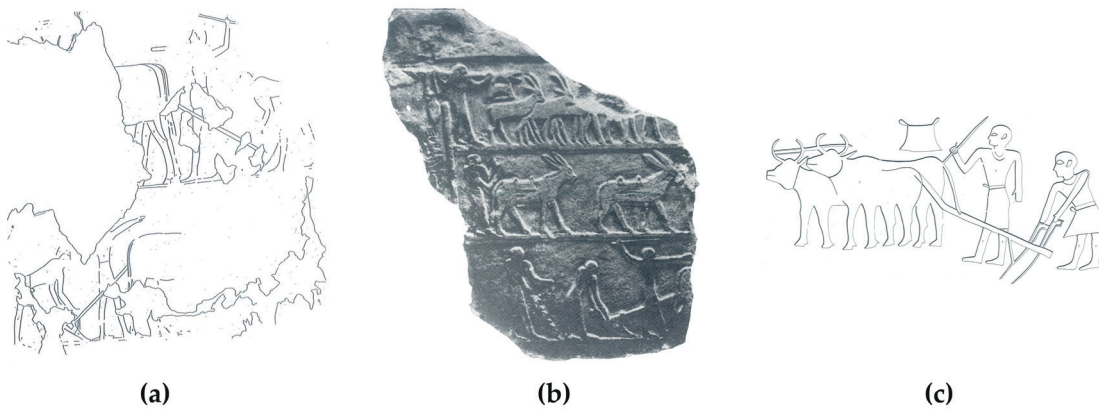



Fig. 4. Scenes of ploughing in later Old Kingdom and First Intermediate Period tombs: (a) N248, (after Brovarski 2018: 102, fig. 8.2); (b) tomb of *Mri-Pth* A, Dendera (after Nibbi 1978: pl. X); (c) QH 34h (after Edel *et al.* 2008: pl. XXI).


44 Dunham 1937: 102–104, no. 84, pl. xxxii; Schenkel 1965: 184–185, no. 263 [cited with wrong inv. no. 19956]; Teeter 2003: 33–34, no. 12; Brovarski 2018: 305–307, color pl. III; <https://oi-idb.uchicago.edu/id/b8dd6c8e-19db-47e8-886a-c6bf47d9a6a>, last accessed 11.05.2023; Stauder 2023, 70–71, fig. 3.1.

45 Note that Polis 2022: 45 proposed the ‘maximal’ reading *skʾ m ḥtr.wy (m) ḥb m tp rmt.w* “(j’)étais quelqu’un qui labourait à l’aide d’un attelage de bœufs et d’une charrue (agissant) comme premier des hommes” for the logogram , ascribing additional semographic values to the plough and to the two men accompanying the span. To the best of my knowledge, the only known phraseological parallel is from the tomb QH 35I (Edel *et al.* 2008: 915, pl. LIX). In view of the tomb’s date (time of Hatshepsut) and the lack of First Intermediate Period or Middle Kingdom parallels, I consider this hypothesis to be untenable.

46 Cf. Harpur 1987: 161–162.

The last sign to be discussed here is found on a stela that is purportedly from Akhmim (fig. 3.c; Fischer 2006: 34–35, fig. 1–2):



Text G

$s[k^3=j]$   $m^3$    $=j$ <sup>47</sup>




“[I] pl[oughed] with my **span**,

$d^3(=j)$   $n$   $jwy$ <sup>48</sup>  $m$   $dp.t=j$ <sup>49</sup>

I crossed over for the stranded one with my boat.”

Unfortunately, the published photograph and drawing are of insufficient quality for a detailed palaeographic assessment.<sup>50</sup> Consequently, this example will (for the most part) be excluded from the following discussion. Note, however, that the photograph and drawing do seem to indicate (*contra* Fischer 2006: 36 n. f) that this document depicts a bull pulling a plough (and possibly its driver: ) with two strokes above the animal’s back used to mark the dual. If this reading proves to be correct, the sign would resemble  in Text E (which is also the closest parallel from a geographical point of view). Finally, as in Text E, the motif [TRANSPORT OF THE STRANDED ONE] in this text appears after [PLOUGHING WITH SPAN] and not before it (as in the Denderite Texts A, B, and D).

### 2.3. Lexicographic Excursus: *tr.wy* or *htr.wy*

The phraseological relations apparent in the preceding discussion (§ 2.1–2) demonstrate that the different sign groups in question must refer to a single lexeme, namely, a device that is used for ploughing (*sk^3*). The most ‘intuitive’ reading is, of course, *htr.w* “span,” which appears in all dictionaries (e.g., *Wb* III, 199–200; Hannig 2003: 911; Hannig 2006: 1814). Indeed, the phrase *sk^3 m htr.w* “to plough with a span” (Text E; cf. also Text A & B) is spelled with mono-consonantal signs in the contemporaneous stela CG 20012, l. 4–5 (Lange & Schäfer 1902: 11–13, pl. II):<sup>51</sup> *pr.n(=j) r sh.t h^3.n(=j) r pr sk^3.n(=j) m htr.w* (  ) “I came out to (my) field, I descended to (my) domain and I ploughed with (my) span”; as well as in a group of stelae from late Middle Kingdom Edfu that provide direct phraseological parallels to Text E:<sup>52</sup>

47 Note that the retention of the final *r* before the suffix pronoun is marked by the addition of  $\llcorner$ .



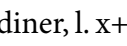
48 Cf. Rizzo 2005: 174.

49 The following statement, probably an adverbial phrase, is fraught with philological difficulties (Fischer 2006: 35–36).





50 I have been unable thus far to locate more recent photographs of the stela in sales catalogues.







51 A more recent photograph of the stela is to be found in Pitkin 2017: pl. CLXV, no. 322. Brovanski 2018: 418 n. 180 assigns it to the reign of Mentuhotep II.

52 Polotsky 1929: 35, § 62; Janssen 1946: II, 107–108 Fd; Moreno García 1999: 248; Kubisch 2008: 66–67, 210, 212, 226, 233. Note that the motif [TRANSPORT OF THE STRANDED ONE/BOATLESS] appears next to [PLOUGHING WITH SPAN] in the Denderite self-presentation of the First Intermediate Period discussed above, in similar texts from Second Intermediate Period Edfu, as well as in Text E, l. 5–7, where another phrase was inserted between both motifs: *jw d^3.n(=j) jw m mhn.t ds=s(sic!) jnk jwjw sdr m hn tsm n hnsky.t mr n hnw.t=f sk^3 m htr.w pjs m ^3 sft m jh.w* “I transported the stranded one with my own boat. I am a dog who sleeps in the tent, a greyhound of the bed, beloved of his mistress, who ploughs with a span, who transports grain with a donkey, who slaughters from the oxen.”

- CG 20499, l. 8–9 (Lange & Schäfer 1908: 90–91, pl. XXXIV):  $d^3=j m jmw=j sk^3=j m \dot{h}tr.w$  (<sup>53</sup>)  $pjs(=j) m ^3.w$  “I travelled by my ship, I ploughed with (my) span, I transported grain with (my) donkeys”
- CG 20530, l. 13–14 (Lange & Schäfer 1908: 131–133):  $sd^3 m m\dot{h}n.wt=f sk^3 m \dot{h}t\{t\}<r>.w=f$  (<sup>54</sup>)  $pjs m ^3.w=f m h^3r.w=f$  “who travelled by his boat, who ploughed with his span, who transported grain with his donkeys”
- ex. coll. Gardiner, l. x+2–3 (Gardiner 1916: 100):  $d^3 m m\dot{h}n.wt=f sk^3 m \dot{h}tr=f$  ()  $pjs m ^3.w=f$  “who travelled by his boat, who ploughed with his span, who transported grain with his donkeys”

Finally, it should be noted that the earliest attestation of this lexeme, which is found in the tomb of *Jbj* at Deir el-Gebrawi, is spelled  $\dot{h}tr.w$  (Kanawati 2007: 55, pl. 75).<sup>55</sup>

The logographic spellings from Dendera (Text A and C) are not definitive proof, however, that *htr* was the lexeme’s common reading in Upper Egypt during the First Intermediate Period. If one were to infer its reading from the two spellings  (Text B) and  (Text E) which include the phonogram  $\dot{h} tr$ , one might indeed conclude that there existed a local variant *tr* “span,” and that the cattle merely served as its classifier. In fact, Fischer (1977a: 11) seems to have held this view, reading  *tr* “span.” In doing so, he was possibly influenced by the lexeme  in account V of the archive of *Hk^3-nht*. R<sup>o</sup> 24 of this document adds 15 *trw*-cattle (James 1962: 59–60; Allen 2002: 54–55, pl. 16 & 41: “team-bull”) to a list of the  $k^3.w swd.n Hk^3-nht n S^3-nb-n^3.t$  “cattle that Heqanakht entrusted [to Si]nebniut” (Allen 2002: 19).<sup>56</sup> In fact, the lexeme *trw* “team-bull” might somehow be connected to *htr.w* “span.” But I would argue that the relation is more likely derivative, as *trw* seemingly refers to a single bovine used for ploughing and not to the whole device.<sup>57</sup> As such, the spellings from Dendera should be understood rather as graphetic blocks within which  $\dot{h}$  expresses the phonetic complement *tr*.

At this point, it should be stated that the lexeme is evidently not *htr* or *htr.w* but the dual *htr.wy*.  (Text C),  (Text D),  (Text E), and  (Text G) indicate this morphological feature by means of two strokes //||, while  (Text B) and  (Text F) express it logographically by duplicating the oxen. This strongly suggests that the lexeme was perceived as *duale tantum*

53 McDonald 2002: 205–206; 2007: 36 n. I identifies the classifier of *htr.w* “span” as a donkey but the published photograph shows the sign to differ from the following classifier of  $^3.w$  “donkeys.” That said, its simplified head (with one ear and a long muzzle) does not correspond to the classifier of *mnmn.t* in l. 8 (characterized by a triangular ear and V-shaped horns).

54 This misspelling is evidently due to the fact that the groups  and  are homographic in certain cursive hands.

55 Cf. Davies 1902: pl. 23; Chioffi & Rigamonti 2012: 124.

56 A later list of cattle types that mentions *htr.w* is pUC 32179, VI.10 (Collier & Quirke 2006: 24).

57 From a phonological perspective, one might compare the elision in Coptic  $\alpha\tau\rho\epsilon^s \sim \alpha\tau\rho\epsilon/\alpha\rho\epsilon^b$ , but this is probably a rather late development (Vycichl 1990: 135–136; Peust 1999: 158, § 3.14.7). I tentatively propose that *htr.w* derives from *trw* by way of the plural-extensive affix *h*; cf. Brose 2017.





in Southern Egypt during the First Intermediate Period, not least because a span usually involved two animals. Due to the gradual recession of the dual inflexion,<sup>58</sup> *ḥtr.wy* seems eventually to have developed into the abstract noun *ḥtr.w*, which appears in the above-mentioned 11th Dynasty stela CG 20012 and in the texts from Edfu. But the notion of duality or “binding together” (*ḥtr*) remained part of the lexeme’s semantic field in the long run (cf. Vernus 2009: 2–3).



## 2.4. Interpretative Scenarios



The seven surviving attestations of the group *ḥtr.wy* “span” allow for two different scenarios with respect to the diachronic development of the sign group. Firstly, looking solely at the Denderite sources and their topographical as well as phraseological links (§ 2.2), one might suggest two processes of local sign transmission:

### 2.4.1. Scenario A

a) Graphetic analysis:  (Text A) >  (Text B)

In addition to the chronological and topographical relations between the signs discussed in § 2.2, the lexicological observations in § 2.3 suggest that the ‘analytic’ group  is a secondary development. If  originates from  (or from a similar compound sign), the phonogram *tr*  may have been detached in order to clarify the reading of the logogram.

b) Copy (with morphographic enrichment):  (Text A) →  (Text C)

The fact that a rare ‘innovative’ sign group appears on two monuments, separated in time by several generations though linked spatially, suggests a degree of interdependence. This hypothesis is further strengthened by the visual enhancement of the sign in Text C, achieved through specific grapho-syntactic modifications (§ 2.2).<sup>59</sup> It is not possible on the basis of the available evidence to determine whether the individual(s) who composed Text C copied  directly from Text A, or whether the transmission occurred indirectly through a chain of now-lost sources. That said, the novelty of the compound sign  would certainly have increased its visual salience, as a consequence of which it may have been transmitted like other pictorial motifs in the decoration of tombs.<sup>60</sup> In fact, similar cases can be observed in the Memphite necropolis of the Old Kingdom (Thuault 2020: 220–224).

58 See, e.g., Loprieno 1995: 60.

59 Alternatively, one might posit the existence of phrasebooks containing this specific compound sign (Morenz 2010: 229–334). This is not a particularly economical explanation, however, as all of Morenz’s case studies can be explained by less mechanical processes, e.g., the practicalities of copying and adjusting texts on writing tablets or reproducing them from memory.

60 On the transmission of motifs in the decoration of tombs, see, e.g., Pieke 2017; 2018; 2022. Note that the transmission of our sign in this fashion would represent a direct consequence of the interplay between script and pictorial












	Dendera			unknown	Naga ed-Dêr
	compound	sign-group	unclear		
Dyn. IX-X					
Dyn. XI					


Fig. 5. Chronological and geographical distribution of the group *ḥtr.wy* in Texts A–F.

The largely lost signs in Text D and UPMAA 29-66-618 (see n. 15 above) show that the reality of sign transmission in First Intermediate Period Dendera was certainly more complex than the other available sources might suggest.<sup>61</sup>

Estimates concerning the number of spellings of *ḥtr.wy* that may have been produced in First Intermediate Period Dendera are futile. It is nonetheless important to keep in mind that the surviving spellings are not necessarily a representative sample. It is, for instance, far from certain whether the available sources represent the initial deployment of their specific sign forms or whether they reflect only random stages in the evolution of the sign. And if one includes the spellings of *ḥtr.wy* from Texts E, F and G—regardless of possible regional differences—it is possible to suggest a more deductive global reading:

#### 2.4.2. Scenario B

[PLOWING SCENE] >  > \* >  >  +[dual] >  +[dual]

This scenario sees a purely logographic group like  (which fits comfortably within the Old Kingdom epigraphic culture where human activities were classified with specific depictions of those activities)<sup>62</sup> as a very plausible starting point for the development of our sign group. At some point, the complement *tr* ] would have been added to clarify the reading of the sign, eventually rendering the human actors and the plough obsolete. Indeed, as the evidence stands, the latter seem to

representations most recently described by Vernus 2022.

61 In addition, a large part of the material found by C. Fisher remains unpublished (p.c. Andrea Pillon).

62 Cf. Collombert 2007: 23–24. Examples are to be found in Fischer 1997: 178–179, 185 fig. 5; 2000: 27–30; 2001; 2002; Pantalacci 2005b: 275–278; and Collombert 2010: § 9, § 12–16, § 20–21.



have been replaced by the more abstract dual markers. As a final step, the fusion of the superposed group  $\overline{\text{K}} > \overline{\text{K}}$  may be explained as a simple compounding operation.

### 3. The Decomposition of Conventionalized Compounds

Once a sign group had come together, different processes might come into play that began to modify the visual interaction of its components within the graphetic quadrat. For example, Fischer (1977a: 11–13) observes that ‘connected’ groups (e.g.,  $\overline{\text{H}}$ )<sup>63</sup> tend to transform diachronically into ‘stacked’ groups (e.g.,  $\overline{\text{H}}$ ),<sup>64</sup> whereby the horizontal sign moved to the center of the vertical sign.<sup>65</sup> Less well known is the opposite phenomenon, namely, the process whereby conventionalized compound or composite signs began to decompose. From a systemic point of view, two chains of decomposition operations can be observed in inscriptions from the First Intermediate Period:

a) COMPOSITE SIGN > COMPOUND SIGN (> TABULATED QUADRAT)<sup>66</sup>

- examples:  $\overline{\text{K}} > \overline{\text{K}} > \overline{\text{K}}$  (§ 3.1.a);  $\overline{\text{K}} > \overline{\text{K}} > \overline{\text{K}}$  (§ 3.1.b)
- taxonomy: ‘compound splitting’
- graphetic process: analysis

b) COMPOSITE SIGN > SIGN VARIANT<sup>67</sup>

- example:  $\overline{\text{H}} > \overline{\text{H}} > \overline{\text{H}}$  (§ 3.3)
- taxonomy: ‘component merging’
- graphetic process: reanalysis

The taxonomic difference ‘splitting’/‘merging’ is based on the visual effect that results from the process of decomposition. In (a), the syntagmatic degree of visual interaction across the components of a sign is reduced by (partially or fully) disconnecting the elements of a compounded sign, which are *analyzed* as independent units of one graphetic block. This process not only affected compounds whose semantic value consisted of the sum of their components, but also those whose value applied only to the entire composite (e.g., § 3.1.a–c). Conversely, (b) *reanalyzes* the former graphetic block as a single grapheme, transforming one of the components into a palaeographic feature of the other component.

63 Stela ÆIN 891, l. 11 (Mogensen 1930: 92–93, pl. XCVIII bottom; Clère & Vandier 1948: 45–46, § 32); stela Louvre C252, l. 2 (Clère & Vandier 1948: 22–23, § 26; <https://collections.louvre.fr/en/ark:/53355/cl010022790>, last accessed 11.05.2023; cf. Fischer 1977a: 13, fig. 9a).

64 Examples of this compound are cited by Fischer 1977a: 13 n. 83.

65 ‘Stacked’ sign groups do not necessarily result from ‘compounded’ groups; they could also be used as purposeful ‘calligraphic’ devices, at least in cursive writing, e.g.,  $\overline{\text{H}}$  in *Hk<sup>3</sup>-nht* letter III, r<sup>o</sup> 2 (Allen 2002: 207, O36x19, pl. 12 & 34–35) or  $\overline{\text{H}}$  *Hk<sup>3</sup>-nht* letter III., r<sup>o</sup> 3 (Allen 2002: 195, D29\*, pl. 12 & 34–35).

66 This terminology follows Polis 2018: 327–330; see § 1 above.

67 For a description of sign variants (‘classes’) see Polis *et al.* (2021).

### 3.1. 'Compound Splitting'

The diachronic development of 'compound splitting' during the First Intermediate Period might be understood best by looking at the evidence of those composite signs formed with  $\text{𓂏}$ :

- a) In Old Kingdom examples, the logogram  $\text{𓂏}$  *jyi* "to come" generally presents a thorough fusion of  $\text{𓂏}$  and  $\text{𓂏}$ , as the front jamb is directly attached to the flower of the reed and its stalk is transformed into the rear jamb.<sup>68</sup> Towards the end of this period, the visual interaction of the logogram's components occasionally loosen such that the sign appears to be a mere compound sign, e.g.,  $\text{𓂏}$  in the architrave UPMAA 29-66-682, l. 4 (Fischer 1968, pl. XIV) from Dendera.<sup>69</sup> Interestingly, this is the dominant sign form in 11th Dynasty Dendera<sup>70</sup> and Thebes.<sup>71</sup> What is more, in contemporary expedition inscriptions, the two components are even neatly detached from one another, e.g., CM 114, l. 12 (Cuyat & Montet 1912: pl. XXXI) and Wadi el-Hudi 3, l. 3 (Fakhry 1952: fig. 16, pl. VII.A). Finally, some inscriptions from the 11th Dynasty even separate the sign vertically into  $\text{𓂏}$   $\text{𓂏}$ .<sup>72</sup>
- b) In the case of  $\text{𓂏}$ , the legs  $\text{𓂏}$  are traditionally attached to the two bulges of the door bolt  $\text{𓂏}$ .<sup>73</sup> However, all the examples from First Intermediate Period Dendera<sup>74</sup> and Naqada<sup>75</sup> split the group somewhat into  $\text{𓂏}$ . An even neater example of such splitting ( $\text{𓂏}$ ) occurs on stela CG 1598 from the Eighth Nome (Brovarski 2018: 387, pl. 12.17, l. x+2). The sign group was plainly perceived as two different signs in this region; this is demonstrated further by the fact that a

68 Collombert 2010: 38, § 59.

69 Cf. Collombert 2010: 38, § 59.

70 Text D, l. 4 (see § 2.1 above); UPMAA 29-66-585 (<https://www.penn.museum/collections/object/218>, last accessed 21.04.2022); Edinburgh A.1910.96, l. 7 (Fischer 1968: 210, fig. 43).

71 BM EA 614, l. 18 (Leprohon 2015); Louvre C14, l. 9 (Delange 2015a); Moscow I.1.a.5603, l. 8 (Hodjash & Berlev 1982: no. 26); TN 13.4.22.2, l. 4 (Selim 2001: 259, fig. 1, pl. 41); sanctuary of Mentuhotep II, Deir el-Bahari (Arnold 1974: 49). A skirt and a knife were added to the sign in Pittsburg, Carnegie Museum, Z9-497, l. 9 (Patch 1990: 22–23, no. 14), possibly under the influence of the composite sign  $\text{𓂏}$  — the cursive forms of the signs are nearly homographic! — which seems to appear in the reign of Mentuhotep II, e.g., Louvre C15, l. x+8 (Delange 2015b) and Turin Cat. 1513, l. 8 (Donadoni Roveri 1988, figs. 139–140). A notable exception is the stela MMA 57.95, l. 3 (Fischer 1960: fig. 1, pl. VII) where the presence of the traditional form  $\text{𓂏}$  might be due to the influence of northern models. In fact, Fischer 1959 demonstrates that several of the motifs on that stela reflect northern traditions, though he did not examine whether this influence also applies to its palaeography. Cf. the sign forms at Assiut in Kahl & Shafik 2021: 148.

72 CG 20796, l. 3 & 4 (Clère & Vandier 1948: 20, § 24; Pitkin 2017: pl. CCXXXII, no. 72); stela of *Jdw-dw-jkr*, Abydos, l. 14 (Wegner 2017–2018: 164, fig. 5 & pl. X).

73 Collombert 2010: 39, § 62; Callender 2019: 77, § 117.

74 UPMAA 29-66-608 (Fischer 1968: pl. XV, l. 3); architrave of *Htp.j* (Petrie 1900: pl. XI, t2r2; Fischer 1968: fig. 31, l. 2); Edinburgh A.1910.96, l. 7 (Fischer 1968: 210, fig. 43).

75 Swansea EC 148, l. 4 (Pitkin 2017: pl. CCXLVI, no. 398).

skirt is joined to this sign on the coffin Melbourne obj. reg. 23-12-179 (𓆎; Hope 1983–1984). Henceforth, the split group 𓆎 became characteristic of 11th Dynasty Theban palaeography.<sup>76</sup>

- c) A similar phenomenon affected the logogram 𓆎 *jtj* “to seize,”<sup>77</sup> which is spelled 𓆎 on Gebelein stela CG 20001, l. 5 (Lange & Schäfer 1902: pl. I). Note that, during the 11th Dynasty, the verb is regularly spelled 𓆎 at Dendera<sup>78</sup> and Thebes.<sup>79</sup>

The foregoing survey of the three composite signs 𓆎, 𓆎, and 𓆎 shows that the first split variants appeared at the end of the Old Kingdom (𓆎) or during the First Intermediate Period (𓆎, 𓆎)<sup>80</sup> at various provincial sites, and that their development followed a common evolutionary pattern. Interestingly, the process of compound splitting seems to have been especially common at Dendera,<sup>81</sup> where we also find 𓆎 > 𓆎<sup>82</sup> and optionally 𓆎 > 𓆎.<sup>83</sup> Eventually, 𓆎, 𓆎, and 𓆎 became the standard forms during the 11th Dynasty.

In comparison, the sign 𓆎 (W25), which was formed according to the same pattern, underwent a different development. During the early First Intermediate Period, the vase was either transformed into a skirt<sup>84</sup> or simply omitted<sup>85</sup> at Nag ed-Der, while at Gebelein it occasionally appears

76 Stela of *Htp.j* from el-Kab, caption (Gabra 1976: 48 fig. 2, pl. 14); stela Pittsburg, Carnegie Museum Z9-497, l. 10 (Patch 1990: 22–23, no. 14); stela CG 1759, l. 3 (Borchardt 1964: 181, pl. 100); stela Boston, MFA 25.680, l. 3 (Fischer 1964: pl. XXXVI); stela MMA 14.2.6, l. 7 (Winlock 1943: pl. XXIVb); stela of *Iḥw*, Edfu, l. 10: 𓆎 (Alliot 1935: pl. XIV.3).

77 For the Old Kingdom forms, see Collombert 2010: 39, § 63.

78 UPMAA 29-66-618, l. 4 (Fischer 2006: 23, fig. 1).

79 Turin S. 1310, l. 8 (Vandier 1964: pl. 1); ex Clandeboye Hall, l. 3 (Edwards 1965: pl. XI); BM EA 614, l. 10 (Leprohon 2015).

80 Note that a systematic survey of Old Kingdom sources may show that also these two composite signs were occasionally decomposed in this period.




81 The difference between Dendera and other regions is illustrated by the distribution of 𓆎. Its ‘regular’ composite form is not found at Dendera, whereas it was dominant in First Intermediate Period Gebelein (e.g., MMA 65.107, l. 3: Allen 1921–1922: 56), Naqada (Strasbourg, IE 344 = Fischer 1964: pl. XVI top, no. 16), Nag ed-Der (Brussels, MRAH E. 5864, l. 3 = Brovarski 2018: pl. 12.18: cursive spelling!), and Akhmim (Callender 2019: 76, § 115).






82 Frieze or *Mrr.j* (Petrie 1900: pl. VIIIc, tr2 & bl).

83 9th–10th Dynasty: frieze of *Šn-st.j* (Petrie 1900: pl. XI.A, b2l2); architrave of *Šn-st.j* Manchester 2891 (Petrie 1900: pl. XI.B, t2r); 11th Dynasty: architrave of *Htp.j* Chicago, ISAC Museum E5014, l. x+4 (Petrie 1900: pl. XI.B, t3l2); architrave Chicago, ISAC Museum E5017, l. 4 & 5 (Petrie 1900: pl. VII.A, bl, l. 2; bl2). This process of analysis also appears at other sites. Nag ed-Der: Stela Stockholm MM 11419, l. 4 (Wångstedt 1961: 48–49); Stela el-Sheikh Hamad 325, l. 2 (Madkour 2016: 220, fig. 1, pl. 41). 11th Dynasty Thebes: CG 20003, l. 6 (Lange & Schäfer 1902: 3–4; Clère & Vandier 1948: 2, § 2: 𓆎); stela of *Htp.j* from el-Kab, l. 6 (Gabra 1976: 48 fig. 2, pl. 14). Another composite sign that was only optionally decomposed is 𓆎 (Fischer 1987–1988: 18 n. 16).

84 Berkeley PAHMA 6-11468, l. 9 (Lutz 1927: 16, pl. 10, no. 18); Berkeley PAHMA 6-1655, l. 2 & 3 (Lutz 1927: 18, pl. 20, no. 39).





85 Cf. Brovarski 2018: 351, 369, 417.

as a skirt<sup>86</sup> or as a horizontal stroke.<sup>87</sup> The latter variant, which closely resembles the corresponding cursive grapheme,<sup>88</sup> is also found at 11th Dynasty Dendera ()<sup>89</sup> and in the inscriptions of the Wadi el-Hudi ().<sup>90</sup> In contrast, Theban palaeography retained mostly .<sup>91</sup>


Another instructive case of ‘splitting’ is to be found in the group  in the title *jmy-rʿ ʿw.w* “overseer of the interpreters.”<sup>92</sup> This group makes its first appearance as a compound sign during the 9th–10th Dynasty in the Gebelein-Moalla region (fig. 6.a–f).<sup>93</sup> The original fusion of the group (which has no evident grapho-semantic motivation) is perhaps best understood if one compares the hieroglyphic spelling of the group to hieratic spellings of *ʿw* from Qubbet el-Hawa, where groups of two signs  (Edel 1971: pl. 29, no. 520) and different ligatures like  (Edel 1967: pl. 104A, no. 281),  (Edel 1971: pl. 78, no. 568), or  (Edel 1971: pl. 30, no. 521) alternate.<sup>94</sup> The same hieroglyphic form continues to be found in later Theban epigraphy of the early 11th Dynasty








86 Berkeley PAHMA 6-19911 (Lutz 1927: 19, pl. 24, no. 47; on the Gebelein provenance, see Morenz 2010: 270); Turin S. 13115 (Donadoni Rovieri *et al.* 1995: 48–50, fig. 58).

87 Coffin Turin S. 13268 (Brovanski 1976: 32–33, fig. 9–10).

88 See James 2002: 214, W25. The cursive variant is found even on the stela Chicago, ISAC Museum E12195, l. 7 (Fischer 1964: 64–65, pl. XVI) and in the inscription G. 57, l. 4 & 6 (Goyon 1957: 79, pl. XIX), and the form appears to reflect a transposition of the corresponding cursive grapheme. As such, it is possible that the other three signs separated under the influence of the graphetic norms of cursive scripts. Indeed, the components of  are regularly separated in older and contemporary hieratic sign forms (Goedicke 1988: 29a–b, O35/367; Backes 2020: 635, O35/367), while the hieratograms of  fluctuate between split and linked forms (Goedicke 1988: 43a–b, V15/529; Backes 2020: 647, V15/529; cf.  in the Architrave Chicago, ISAC Museum E5017, l. 5: Petrie 1900: pl. VIIA, bl). Conversely,  is fraught with more difficulties as its hieratic correspondent regularly groups the signs in a more synthetic manner (Goedicke 1988: 22a–b, M18/284). Note, however, that some cursive texts from the 11th Dynasty superpose the signs (Roccati 1970: 50, M18/284; Backes 2020: 626, M18/284; cf. Petrie 1900: pl. XXXVII, top line, col. 263; pl. XXXVII.B, col. 385 & 398).

89 UPMAA 29.66.625, l. 2 (<https://www.penn.museum/collections/object/217660>, last accessed 11.05.2023).

90 Wadi el-Hudi 3, l. 3–4 (Fakhry 1952: 20–21, fig. 16, pl. VII.A); Wadi el-Hudi 4, text 2, l. 7 & 9 (Fakhry 1952: 21–22, fig. 17–18, pl. VII.B). Note that, in line 14 of the latter inscription, the traditional form  is used.

91 But note its trapezoidal shape in the fragment T. 1859 (Postel 2004: 14, 302, doc. 5 & 409, fig. 4) which Philippe Collombert pointed out to me. It is possible to offer three explanations for this unexpected adherence to the traditional composite shape : (1) The sign was perceived to be structurally different from other composites formed with  because its two components were not simply joined: its legs were also lengthened. (2) The vase was simplified to a horizontal stroke in the cursive form of , whereas the upper components of , , and  retained their distinctive shapes in this written norm (see n. 88 above). (3) The prominent use of  in the name *Jni-*jt=f** lent the vase a certain figurative value that was relevant to concepts of royal ideology.

92 For the lexeme *ʿw* “interpreter,” see Kraemer & Liszka 2016: 171–177.

93 For the group in general, see Polotsky 1929: 13, § 20; Fischer 1977a: 11 n. 68 & 12, fig. 6.c–d.

94 For all attestations of the sign at Qubbet el-Hawa, see Edel 1967: pl. 103–106, nos. 280–288; 1971: pl. 28–34, nos. 519–525, pl. 78–87, nos. 568–577; 1975: pl. 101, no. 249. For further cursive spellings, see Kraemer & Liszka 2016: 173–174.

(fig. 6.g–h), after which it apparently split (fig. 6.i–k).<sup>95</sup> It is even possible to trace this process in contemporaneous expedition inscriptions, where it seems to have occurred in slightly belated fashion: while CM 114, l. 12 from the time of Mentuhotep II exhibits the ligature (Couyat & Montet 1912: pl. XXXI), those from the reign of Mentuhotep IV in the Wadi el-Hudi split the signs.<sup>96</sup> In sum, the development of this group confirms the diachronic tendencies sketched above and shows that ‘splitting’ also affected less common compounds during the First Intermediate Period.

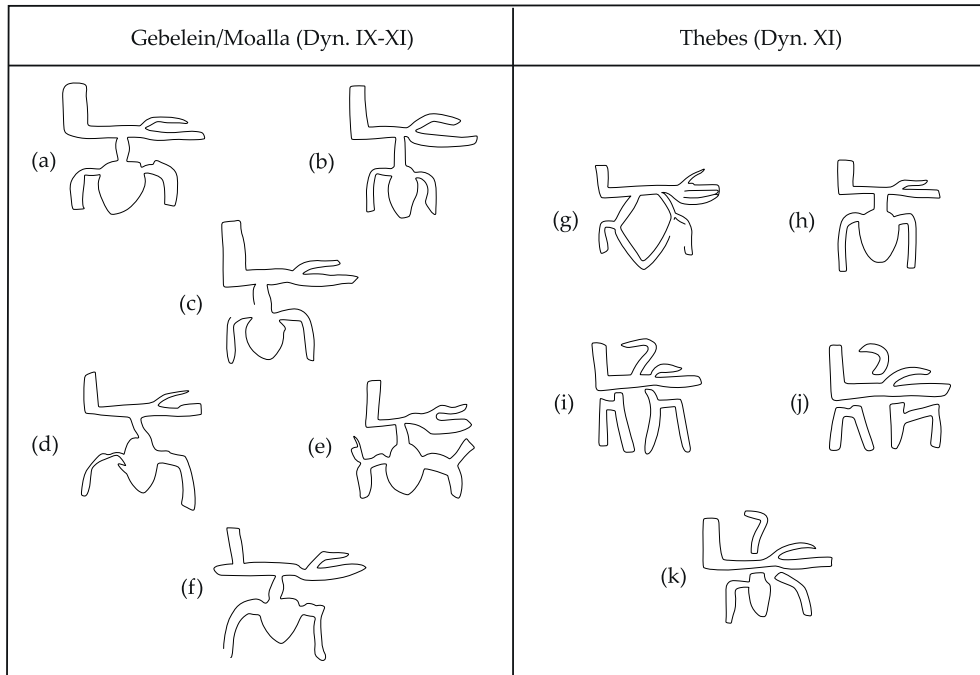


Fig. 6. Variants of the compound group  from the First Intermediate Period and the 11th Dynasty<sup>97</sup>

- |   |   |
|---|---|
| (a) Ankhtyfy I,a,1 (Vandier 1950: 162)*                             | (g) Cleveland 1914.543, l. 2 (Berman & Boháč 1999: 142–143, no. 82; Pitkin 2017: pl. CXLIII, no. 175) |
| (b) Ankhtyfy II,a,1 (Vandier 1950: 185)*                            | (h) Strasbourg IE 345, l. 1 (Fischer 1996: 90, pl. 10a).  |
| (c) Ankhtyfy VII,1 (Vandier 1950: 256)*                             | (i) Cairo, JE 41437, l. 2 (Petrie & Walker 1909: pl. II right)*                                       |
| (d) Hildesheim RPM 4590, caption (Sternberg 1978: 60–61, fig. 1–2)* | (j) Brussels MRAH E. 4985, l. 2 (Petrie & Walker 1909: pl. II left)*                                  |
| (e) Hildesheim RPM 4590, l. 1 (Sternberg 1978: 60–61, fig. 1–2)*    | (k) Cairo, JE 41437, caption l. 1 (Petrie & Walker 1909: pl. II right)*                               |
| (f) MMA 65.107, l. 1 (Allen 1921: 56)                               |   |










95 Cf. Morenz 1998c: 19 who proposes that this form might go back to “ein unverstandenes hieroglyphisches Vorbild, das benutzt wurde.”


96 Wadi el-Hudi 1, l. 3 (Fakhry 1952: 19–20 fig. 14, pl. VI.A; Wadi el-Hudi 3, l. 4 (Fakhry 1952: 20–21, fig. 16, pl. VII.A); Wadi el-Hudi 4, l. 7 (Fakhry 1952: 20–21, fig. 17–18, pl. VII.B); cf. Shaheen 1996: 92, 103 tab. 7.

97 In figs. 5–6, drawings made after my own photographs are marked with a \*; drawings to which I made significant changes on the basis of the published photographs are marked with a °.


### 3.2. 'Component Merging'











In comparison with the abundant examples of 'splitting' known to us, the reduction of sign groups to a single grapheme appears to have been a relatively rare phenomenon, and one that involved complex processes. In all cases known to me in this regard, the phonologically (or semantically) significant element absorbed the other sign (which merely served as complement).

A good first example is the sign , which can be described as composite from a *synchronic* perspective.<sup>98</sup> It is important to stress the synchronic dimension here, as the component  originates in a reinterpretation of the bird's wattle in cursive forms like ,<sup>99</sup> where it resembles the short variant of  ~ .<sup>100</sup> The composite sign  is first attested in 6th Dynasty (as well as later) royal decrees.<sup>101</sup> Currently, our evidence indicates that it became the regular form of the sign at Nag ed-Der,<sup>102</sup> Dendera,<sup>103</sup> and Akhmim<sup>104</sup> during the First Intermediate Period, while we find both  <sup>105</sup> and  at Gebelein/Moalla.<sup>106</sup> The subsequent merging process can be observed in inscriptions from the Theban 11th Dynasty: the monuments of the Intef kings use ,<sup>107</sup> but the length of the

- 98 Cf. Fischer 1977a: 9–10, fig. 4g. On the common Old Kingdom sign form, see Collombert 2010: 68 § 119; Beaux 2004: 24 fig. 3.
- 99 Hieratogram ID 18400, AKU-PAL 2023: <https://aku-pal.uni-mainz.de/signs/18400>, last accessed 11.05.2023; cf. Goedicke 1988: 15a–b, G21/229. In cursive writing, the excessively long wattle may have served as diacritic that helped to differentiate this bird from  ~  (Hieratogram ID 9618, AKU-PAL 2023: <https://aku-pal.uni-mainz.de/signs/9618>, last accessed 11.05.2023); cf. Goedicke 1988: 14a–b, G4/190.
- 100 Hieratogram ID 21238, AKU-PAL 2023: <https://aku-pal.uni-mainz.de/signs/21238>, last accessed 11.05.2023; cf. Goedicke 1988: 43a–b, V28/476. Further aspects of the sign's cursive origin are discussed by Morenz 2006: 396; 2010: 261; and Brovarski 2018: 370.
- 101 Decrees A II-1763 and A III-002 from the necropolis of Pepy I (Legros 2018: 287, pl. LXII.2; 288, pl. LXIII.3); Mycerinos decree of Merenra, frg. no. 3 ii-a, l. 4 (Reisner 1931: pl. A); Decree Coptos B = JE 43052, IV.2, IX, XI.4, XIII.1, XV.2 (Weill 1912: pl. V; sections cited after Goedicke 1967); Decree Coptos C = JE 41891, IV.2, IX, XI.4, XIII.1 & 3 (Weill 1912: pl. VI); Decree Coptos G = JE 41892, III.2 (Weill 1912: pl. XI); Decree for *Mr-s-nh* and *Nj.t* col. IV (Goedicke 1967: fig. 16).
- 102 Harvard, Semitic Museum 2354, l. 3 (Dunham 1937: 91–92, pl. XXVIII.1; Brovarski 2018: 370).
- 103 Burial chamber of *Mnj* (Petrie 1900: pl. IV, l. 4, no. 5).
- 104 Callender 2019: 152–153, § 228–229; cf. the Assiutian form in Kahl & Shafik 2021: 108.
- 105 BM EA 1671, l. 7 (Polotsky 1930: pl. XXIX); CG 20001, l. 3 (Lange & Schäfer 1902: pl. I). Interestingly, the same sign appears as  in line 5 of the latter stela. This alternation may be explained by the fact that the dimensions of the signs are considerably reduced in l. 4–9 of the stela, a circumstance which might have led to the use of a more cursive variant. An intermediary form between  and , with a line of dots replacing lappet (), is found on the cylinder seal Philadelphia E621. The dating of this seal to the 6th Dynasty is uncertain, despite the royal name (Kaplony 1981: 424–425, pl. 114, *Nfr-kʿ-rʿ* 12).
- 106 Ankhtyfy V,a,4 (Vandier 1950: 232).
- 107 CG 20512, l. 12 (Polz 2019, 44 fig. 26, 50 fig. 27); Turin S. 1310, l. 9 (Vandier 1964: pl. 1).






wattle was progressively reduced () during the reign of Mentuhotep II;<sup>108</sup> in the rock inscriptions of the Wadi Hammamat, however, the sign retained a long undulating wattle.<sup>109</sup>

A second, even more intriguing, case of ‘merging’ is represented by the group . From the end of the Old Kingdom, namely the time of the late Coptos Decrees, the foot of this bird was occasionally fused with the round sign in front of it (fig. 7.a–d).<sup>110</sup> As with  in the same documents,<sup>111</sup> this fusion appears to go back to a cursive ligature.<sup>112</sup> At some point, diacritic strokes were added to the sign  in cursive writing, e.g.,  (Michael C. Carlos Museum, Emory University, Atlanta, 2014.33.1, v<sup>o</sup> 3; Nyord 2021: 8, fig. 6).<sup>113</sup> If this change was instantiated in order to mark  as a separate cursive sign, it failed, as the fused group  eventually became a hieroglyphic sign in the 11th Dynasty as well (fig. 7.e–f).<sup>114</sup> In at least two cases, the circle with the diacritics was detached from the feet of the bird (fig. 7.g–h.1), but note that, in Louvre C14, l. 5, the junction is present in the preliminary drawing in red ink (fig. 7.h.2).<sup>115</sup> When /o was finally merged into the group, the strokes remained attached to the bird’s feet  (fig. 7.i–k)<sup>116</sup> so that the sign variant  and derived forms like  (Louvre C3, l. 13, 16 & 18; Vernus 1973: pl. 13) abound in later inscriptions.

108 BM EA 1164, l. 14 (Lange 1915, pl. IV); Copenhagen, ÅLN 891, l. 4 (Mogensen 1930: 92–93, pl. XCVIII bottom); ex Clandeboye Hall, l. 5 (Edwards 1965: pl. XI).



109 CM 110, l. 6 & 9 (Couyat & Montet 1917: pl. XXIX); CM 113, l. 13 (Couyat & Montet 1917: pl. XXIX); CM 191, l. 10 (Couyat & Montet 1917: pl. XXXVI); CM 192, l. 15 (Couyat & Montet 1917: pl. XXXVII).



110 Another 11th Dynasty example is Moscow I.1.a.5603, l. 3 & 7 (Hodjash & Berlev 1982: no. 26).

111 Decrees L, O, and R (Fischer 1961, 65–66; Fischer 1977a: 11 Fischer 1977b, 59–60). Fischer may be correct to assume that this is a visual clue designed “to clarify the reversal (Fischer 1977a: 11),” or to highlight that the sign , which is ambivalent in terms of orientation, marks the beginning of the reversed text. Indeed, the decrees preserved on papyrus from the funerary temple of Neferefra demonstrate that this combination might go back to real administrative documents: the foot of the bird is normal-sized in Decree A, r<sup>o</sup> 1 (Posener-Kriéger 1985: pl. I) and Decree B, r<sup>o</sup> 1 (Posener-Kriéger 1985: pl. III), nearly touches the bottom of the sceptre in Decree C, r<sup>o</sup> 1 , and then finally merges with it in Decree E, r<sup>o</sup> 1  (Posener-Kriéger 1985: pl. VI).

112 Cf. the nearly complete fusion of the signs in the Letter to the Dead from N3737, r<sup>o</sup> 2 (Simpson 1966: pl. IX).

113 Other examples are found in the coffin Berlin ÄS 13772 (Steindorff 1901: pl. VII, l. 2); G1T (Hornung 1973: pl. II); and the jar stand Chicago, ISAC Museum E13945, l. 4 (Gardiner 1930: pl. X.1–2); cf. Brovarski 2018: 392 n. 13, 472.

114 This form also appears in CM 114, l. 6 & 7 (Couyat & Montet 1912: pl. XXXI); on this sign in general, see also Polotsky 1929: 10, § 10; Meeks 2017: 6. On the stela CG 20543, two different variants of the group appear,  in l. 18 & l. 22 and  in l. 18 (Petrie 1900: pl. XV, l; personal observation). Note that the cited drawing of CG 20543, which was made by Davies, is imprecise.

115 A similar graphetic change is found on the sarcophagus of Queen K<sup>3</sup>wy.t (= JE 47397) where  is sketched in the preliminary drawing of the divine name Ws<sup>3</sup>jr “Osiris” before the sculptor went on to engrave  (personal observation).

116 Transitional cursive forms are found on the coffin of queen ‘šy.t (= JE 47335; Backes 2020: 620, G25/204).

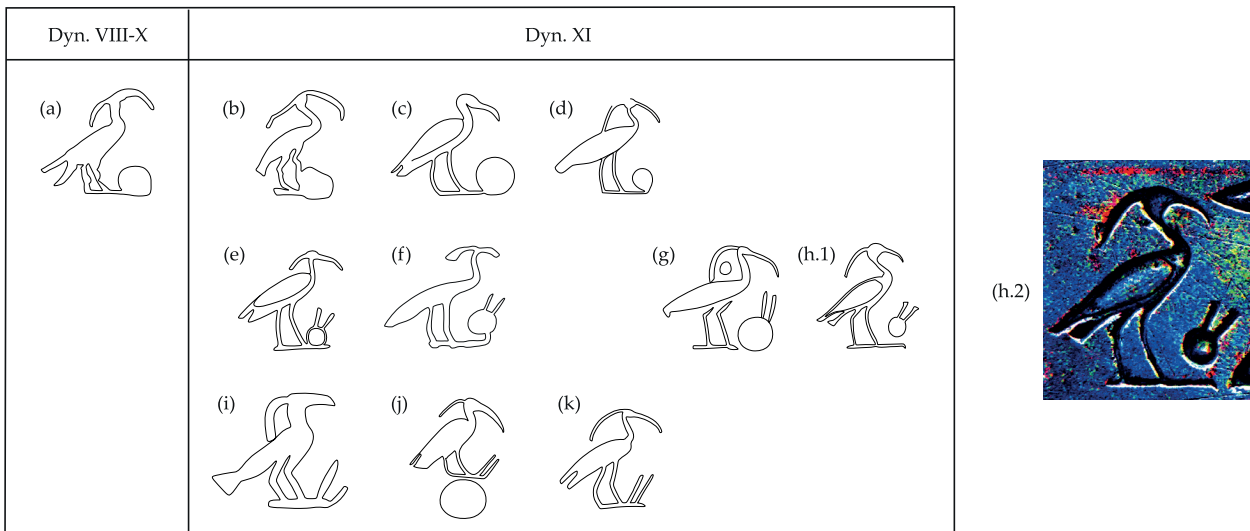


Fig. 7. Transformation of the group ⲙⲓ during the First Intermediate period and the 11th Dynasty.

- |  |   |
|--|---|
| (a) Decree Coptos R, III.14 (bottom left, col. 4; Weill 1912: pl. IX; Goedicke 1967, fig. 28)* | (g) MMA 14.2.7, l. 2 (Freed 2015: 44, no. 2)                                |
| (b) CG 20005, l. 5 (Clère & Vandier 1948: 3, § 3)*   | (h) Louvre C14, l. 5 (Delange 2015a)*; photo: Ph. Seyr; D-Stretch, mode lds |
| (c) Louvre C15, l. 9 (Delange 2015b)*  | (i) Chicago, ISAC Museum E16953, l. 4 (Dunham 1937: pl. XXX.1, no. 81)      |
| (d) CG 20512, l. 10 (Polz 2019, 44, fig. 26)*  | (j) Louvre C15, l. 6 (Delange 2015b)*                                       |
| (e) Copenhagen ÆIN 963, l. 3 (Mogensen 1930: pl. XCIX)*  | (k) MFA 25.680, l. 7 (Fischer 1964: pl. XXXVI, no. 43)                      |
| (f) Luxor Magazine no. 45, l. x+2 (Gabolde & El-Nubi 2000: 263) <sup>c</sup>                   |   |

## Conclusion

In § 2.4, I proposed two evolutionary scenarios for the development of the compound ⲙⲓ in the epigraphic material from Dendera during the First Intermediate Period:

*Scenario A*: inductive local




- a) graphetic analysis: ⲙⲓ (Text A) > ⲙⲓ (Text B)
- b) copy (with morphographic enrichment): ⲙⲓ (Text A) → ⲙⲓ/ⲙⲓ (Text C)








*Scenario B*: deductive global





[PLOUGHING SCENE] > ⲙⲓ > ⲙⲓ > ⲙⲓ > ⲙⲓ<sup>+</sup>[dual] > ⲙⲓ<sup>+</sup>[dual]

Because *Scenario B* contradicts the relative chronology of the Denderite sources, it is necessary to hypothesize that the systemic evolution under discussion had already taken place before the creation of ⲙⲓ (Text A) and that ⲙⲓ (Text B) testifies to a more ancient spelling that was retained in certain inscriptions. While this option is possible in theory, I have shown that ‘compound splitting’ was a regular graphetic process in early First Intermediate Period Dendera (§ 3.1), while

‘compounding’ was apparently much less common before the 11th Dynasty (§ 2.1). These systemic observations speak strongly in favour of *Scenario A*.

As such, if my interpretation of the sign in Text G above as  (§ 2.2) is correct, it is possible to propose that the sign group underwent a different process of development in the Eighth and Ninth Nome to the process at Dendera. That is, the group retained the plough and the driver while the pair of oxen were reduced to one with a dual mark:  (Text F) >  (Text G).

On the other hand, *Scenario A* does not satisfactorily explain the circumstances that led to the creation of . This is because no similarly ‘innovative’ compounds that merge two signs vertically are attested from 9th–10th Dynasty Dendera, while its logographic value *htr* cannot be explained by its phonographic component *tr* () only. Thus, if  did not refer only to *tr* “team-bull” (§ 2.3), it may be explained as an early and isolated case of “visual poetry” (Morenz 2008).<sup>117</sup> Following this line of thought, one might suggest that the values of both components were simply added together: *jh* () + *tr* () > *jhtr* (> *htr*). If one chooses to read *jhtr*, it is possible to argue that the spelling  may have been intended to account for the vocalic onset of the dual \**h̄t̄ʳw̄y*.<sup>118</sup> Alternatively, one might posit the reduction of  *jh* > *h*, which would follow a well-known mechanism of sign creation: the so-called consonantal principle.<sup>119</sup>

As evidenced by Text C, the sign  eventually succeeded in catching the attention of possible viewers to the point that it was reproduced. This is not surprising within the epigraphic culture of the 11th Dynasty, as other contemporaneous texts also exploit the principles of ‘visual poetry.’<sup>120</sup> In visio-semantic terms, the combination  may at first have evoked the seasonality ( *tr.w* “time”) of ploughing.<sup>121</sup> But it is also possible (though somehow speculative) that the resemblance to 

117 Only a few isolated examples of this scriptural practice are known from the Old Kingdom, e.g., CG 1696 (Capart 1929; Drioton 1935–1938; Weill 1936: 1–4; Morenz 2008: 77–78; 2020, 67–92); see also Morenz 2008: 23–25.

118 Cf. sg. \**h̄t̄ʳ* > Coptic ετο<sup>s</sup>; pl. \**h̄t̄ʳw̄* > Coptic (ε)ετωω<sup>s</sup> (CD 723; Khwb. 393; Osing 1976: 221; Quack 2007: 535). Note that the vocalization of the singular is based on the lexical equation to Coptic ετο<sup>s</sup> (Roquet 1976: 61). The reconstructed vocalization that I propose follows the pattern of *mnd.wy* > μπνοτε “two breasts”; cf. Sethe & Gardiner 1910: 43. In addition, this option seems to necessitate a reduction of \**h̄t̄ʳj/w* (if this is the antecedent of Coptic εεε<sup>s</sup>; Osing 1976: 413, modified according to Peust 2016) to simple \**h̄*, which is only rarely attested, e.g., in the composite nouns (\**p̄*)-*tp-jh.w* > Coptic πετπηε “Atfih” (Peust 2010: 15) and *jmy-r̄ jh.w* > Coptic ελοιε (Peust 2016: 92), where *jh* is, however, a plural and in the position of the nomen rectum. If Coptic εεε<sup>s</sup> goes back to the feminine *jh.t*, which may have remained marginal in writing (Vernus 2017), the masculine form might simply have been \**h̄*.

119 This principle was used prolifically during the formative phases of Egyptian writing (Kahl 1994: 53–55; Morenz 2004a: 42–45) and in enigmatic writing in New Kingdom (and later) inscriptions (Roberson 2020: 5–6).


120 E.g., Morenz 1998b; 2003: 114–117; 2004b; 2011; Stauder 2023: 69–73.

121 Cf. Chantrain 2020: 159.






(phono. class. of *ʿms*)<sup>122</sup>—provided that this sign already existed at the time—reinforced the notion of caretaking (*ʿms*)<sup>123</sup> in this specific phraseological context.

To conclude, a short remark of a diachronic nature on the motivation for the logographic spelling of *ḥtr.wy* seems appropriate. Throughout this case study, I have noted that seven out of eight attestations of *ḥtr.wy* during the First Intermediate Period (exception: CG 20012, l. 5; § 2.3) spell the word by means of logograms, whereas later occurrences of this lexeme exhibit more analytic spellings with mono-consonantal signs. An explanation for this remarkable contrast may not necessarily lie in a change of ‘eugraphic’ norms. Indeed, *skʿ m ḥtr.wy* “ploughing with the span” seems to have superseded the Old Kingdom phrase *skʿ m hb* “ploughing with the plough” (Hannig 2003: 748) that was used, for example, as a caption for corresponding scenes.<sup>124</sup> In view of the elaborate phraseology of First Intermediate Period self-presentations, it is important to note that the possession of a span was certainly not a trivial matter at this time: it would have been fundamental to elite self-definitions, perhaps to such a degree<sup>125</sup> that it was highlighted in writing with the most visually salient spelling possible.

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122 Stela Louvre C167, l. 9 (Freed 1996: 322 fig. 8b; <https://collections.louvre.fr/ark:/53355/cl010010841>, last accessed 11.05.2023).

123 The sign  is evidently a functional variant of , which may have been influenced by spellings of the theonym *Hẓʿ.t* “Hezat” with , e.g., Pittsburg, Carnegie Museum Z9-497, l. 5 (Patch 1990: 22–23, no. 14). For , see Goldwasser 2002: 17–18. Another similar compound with a cattle sign is  *kʿ hd* “white bull” in CT III, 263 (B2L).

124 Montet 1925: 185–190; Stoof 1984.

125 Moreno García 1999: 248–250; 2009.

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

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# A Brief Note on the Cretan Hieroglyphic Signs 044 and 056

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**Abstract.** This paper builds further on the persuasive proposal of Ferrara & Cristiani 2016 that the Cretan Hieroglyphic sign 044  represents a seal of the “Petschaft” type. Drawing a comparison with the better understood Anatolian Hieroglyphic material, it tentatively proposes that on seals this sign may have functioned as a logogram with the meaning ‘seal’, and that the Cretan Hieroglyphic sign 056  may have been used in a similar manner.

**Keywords.** Cretan Hieroglyphs, Anatolian Hieroglyphs, seals, seal legends.



## 1. Introduction

The publication of the monumental *Corpus Hieroglyphicarum Inscriptionum Cretae* (hence: CHIC) by Jean-Pierre Olivier and Louis Godart in 1996 was a pivotal milestone for the study of the Cretan Hieroglyphic script, which to this day remains undeciphered.<sup>1</sup> Though the volume was very much welcomed, it also faced criticisms, notably because of the exclusion of signs that were rather arbitrarily classified as “ornamental.” In her new sign classification Anna Margherita Jasink (2009) reinstated no less than 30 signs to the sign list that were omitted by CHIC because of their alleged decorative function.







In the last decade the classification of Cretan-Hieroglyphic signs and the problematic partition between “script” and “art” on Cretan Hieroglyphic seals have enjoyed renewed attention.<sup>2</sup> In the following, I would like to offer a modest addition to this important debate by discussing the possible

1 I would like to thank Silvia Ferrara and the anonymous reviewers for their helpful remarks and suggestions. Needless to say, I alone remain responsible for the views expressed here and any errors that may remain.

2 See, e.g., Ferrara & Cristiani 2016; Ferrara *et al.* 2016; Decorte 2017; Ferrara *et al.* 2021a; Ferrara & Weingarten 2022. For recent studies about the origins of the Cretan Hieroglyphic script, see Ferrara *et al.* 2021b; 2022.

meaning(s) of the signs CH 044  and 056 . Due to the limited state of knowledge of the Cretan Hieroglyphic script, however, the suggestions presented here remain inevitably speculative.

## 2. The Cretan Hieroglyphic signs 044 and 056

In 2016, Silvia Ferrara and Diego Cristiani proposed a new reading of the Cretan Hieroglyphic sign no. 044 (, see fig. 1). This sign is frequently attested as the first element of the two most common sign sequences or “formulas” on Cretan Hieroglyphic seals; 044–005 ( ) and 044–049 ( ). These two formulas are mostly also accompanied by other signs, omitted in CHIC because of their supposed ornamental function (cf. Ferrara & Cristiani 2016: 32–33; Decorte 2017: 39). Ferrara and Cristiani make a convincing case that the sign 044  does not represent a “trowel,” but rather a seal of the “Petschaft” type, which is well-attested in the archaeological record (see, e.g., Kenna 1966: 134, no. 103; Yule 1979: 86–87, type 31j, pl. 40; Krzyszkowska 2005: 90–91; Ferrara & Cristiani 2016: 27).<sup>3</sup> This identification is appealing from both an iconographic and semantic perspective.

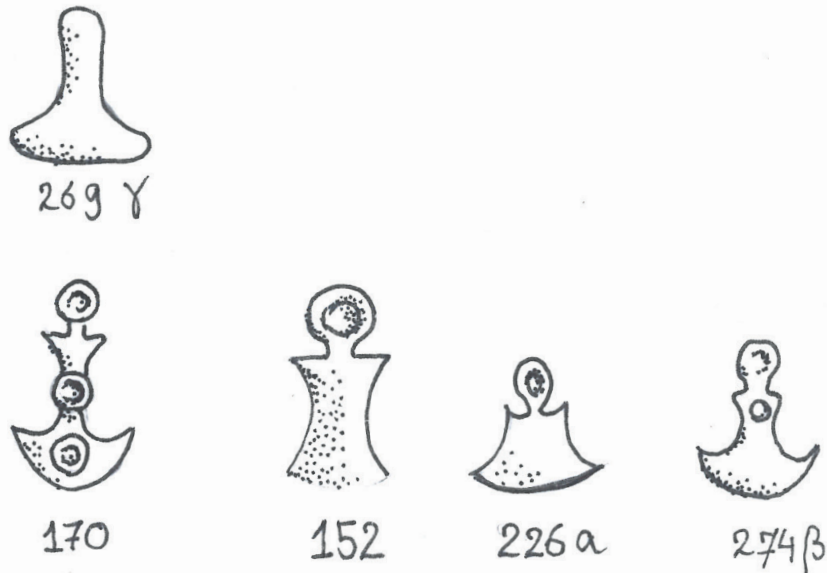




























Fig. 1. Cretan Hieroglyphic sign 044 (drawing: Jorrit Kelder after CHIC).


The most recent discussion of the possible meaning(s) of the sign 044  is provided by Silvia Ferrara and Judith Weingarten 2022. Following earlier proposals (e.g., Jasink 2009: 128; Ferrara & Cristiani 2016: 28–30), they argue that the above-mentioned formulas 044–005   and 044–049  , which are interpreted as syllabic writing by CHIC, are in fact to be understood as logographic



3 For the relation between animate and inanimate objects from the natural and human environment and Cretan-Hieroglyphic signs and, see, e.g., Karnava 2015.


writing.<sup>4</sup> Since the sign 044  is almost always separated in some way from 049  or 005  mostly by the presence of “decorative” signs (cf. Ferrara & Cristiani 2016: 32–33; Decorte 2017: 39), they suggest that the sign sequences should be decoupled and treated as logograms. As for its meaning, they propose that the sign 044  “seems a pan-Cretan way of stamping transactions” and that it “indicates an area of administration or possibly an act of administration of the basic kind” (Ferrara & Weingarten 2022: 117).<sup>5</sup> As they point out, the combinations 044–005   and 044–049   can appear on different faces of the same seal,<sup>6</sup> which suggests to them that the seal owner could oversee “both tasks at different times” (Ferrara & Weingarten 2022: 117).


Since it is indeed plausible that the sign 044  is somehow connected to administrative procedures, it is attractive to consider the possibility that the sign 044  on seals is to be read simply as a logogram meaning “seal.” In this interpretation, the other elements might indicate the title and/or perhaps the name of the owner (“Seal of..”). Considering the frequent occurrence of the signs 049  and 005  together with 044 , these signs could represent a common type of title. The multi-faced seals mentioned above, which have both the combinations 044–005   and 044–049   would then be used by more than one individual, or perhaps one individual with different functions and responsibilities. The signs accompanying the formulas 044–005   and 044–049   might represent (part of) the names of the seal owner, or perhaps a further specification of the title.<sup>7</sup> Whether these signs function as logograms, phonetic complements, fully phonetic spellings, determinatives or a combination hereof, is impossible to establish.<sup>8</sup> In addition to the fact that the script is not deciphered, the picture is complicated by other factors. Considering the limited available space on seal surfaces, the signs may reflect conventional abbreviations and/or incomplete spellings, and the sign order may have been adjusted to create an aesthetically more pleasing spatial arrangement. Moreover, of course, not all symbols on the seals necessarily always reflect writing.

A comparison with Anatolian seals, which in some respects present similar challenges, may be informative. From the beginning of the second millennium onwards, seals with symbols are attested in Anatolia. If, and to what extent, these symbols can be related to the Anatolian Hieroglyphic

4 Note that Ferrara & Cristiani 2016: 28–30 propose that the sign 044  functions as a syllable when it is an integral part of the two above-mentioned formulas, and as a logogram when the sign is disconnected from the other sign of the formulas by means of decorative fillers, the insertion of additional signs, or rotation.




5 Cf. Ferrara & Cristiani 2016: 33. See also Weingarten 1995: 303 who has suggested that 044–005   and 044–049   refer to two branches of palatial administration.




6 See, e.g., CHIC #247, #253, #255, #259, #261, #264, #266, #274, #277, #283 (on the same face), #287, #295, #297, #299, #301, #305, #308, #311. In addition, the sign 044  is attested on different faces of CHIC #314, #255, #300, #302, but in combination with other signs.

7 With respect to the attestations of 044  in inscriptions, they could either be read logographically, in the meaning “seal,” or perhaps more metaphorically “approved” or “authorized,” or function as a syllabogram with an unknown phonetic value. For a suggestion of their possible phonetic reading, see n. 20 below.

8 For their possible functions, see also Decorte 2017: 49.



writing system is tied to the much-debated date of the origin of this script. According to some, the Anatolian Hieroglyphs were already in use from the early second millennium onwards, but written on wooden documents that are no longer extant, whereas others date the origin of this script just before or around the first secure examples of phonetic writing, around the fourteenth century BCE.<sup>9</sup> From the Old Hittite period (ca. 1650–1400 BCE) onwards, three symbols figure prominently on seals: \*369  (VITA), \*370  (BONUS<sub>2</sub>) and \*326  (SCRIBA).<sup>10</sup> The meaning and function of these signs, which may occur together or in isolation, is unclear; they are usually taken to represent some kind of “auspicious symbols,” but this is by no means certain.<sup>11</sup>

A handful of Anatolian seals contain the formula “(This is the) seal of PN (+title),” expressed with the Anatolian Hieroglyphic sign \*327 ( SIGILLUM, fig. 2),<sup>12</sup> which would form a nice parallel to the here proposed interpretation of 044  as “seal.”<sup>13</sup> Needless to say, one should in general be careful to extrapolate too eagerly from (later) parallels from neighboring societies, and in this case there is additional reason for caution. The formula is attested on only a very limited number of seals; the majority of the Anatolian seals and seal impressions feature the name and/or title of the owner, without being preceded by the remark “(This is the) seal of...” Bearing these *caveats* in mind, the use of this formula on Anatolian seals is nonetheless instructive for our interpretation of the Cretan Hieroglyphic seal inscriptions. The small sample at our disposal shows a variety of spellings; the Anatolian Hieroglyphic sign \*327 ( SIGILLUM) may function as a logogram without any phonetic complement,<sup>14</sup> it may be accompanied by a phonetic complement (SIGILLUM-*za/i*),<sup>15</sup> or it

9 For the first view, see most recently Waal 2022; for the second view, Van den Hout 2020: 24–34, 120–134, both with references to previous literature. For evidence of phonetic spelling in Anatolian Hieroglyphs already in the late 19th–18th century BCE, see now Poetto 2018.

10 For the problematic dating of the early Hittite seals, see Weeden 2018. The sign numbers of the Anatolian Hieroglyphs are according to Laroche 1960.

11 The sign \*369 VITA is supposedly derived from the Egyptian sign *ankh* (cf. recently Weeden 2018: 58), but a closer inspection of the two signs shows that their resemblance is not very strong. The sign \*326 SCRIBA is usually taken to refer to the profession “scribe.” However, as remarked by Weeden (2018: 52 n. 1), its co-occurrence with the signs “goodness and “life” make it unlikely that it refers to a scribe, and recently Van den Hout 2020: 341–374 has persuasively demonstrated that this interpretation is indeed no longer tenable.

12 For the identification of this sign as “seal,” see Gelb 1949.

13 The sign \*327 SIGILLUM can also function as a syllabogram, representing the phonetic value *sa<sub>5</sub>*.

14 See, e.g., the *bullae* found in Khorsabad and Nineveh (see Hawkins 2000: 581–583), and probably BO 21 (see Alp 1950: 49). The sign is further possibly attested on seal impressions on two tablets from Ugarit, RS 17.371+18.20 (see Mora 1987: 247, plate 69) and RS 18.263 (see Schaeffer 1956: 55–57, 63–64, figs. 88–89; Laroche 1956: 157).

15 See, e.g., Gelb seals *a–b* (Hawkins 2000: 580–581), the cylinder seal KH.11.O.65 (see Dinçol *et. al.* 2014) and the cylinder seal Istanbul no. 6948 (see Dinçol & Dinçol 1986: 83).

may function as a determinative, marked by logogram markers 𐀓, <sup>16</sup> followed by the Luwian word for “seal” spelled out phonetically (“SIGILLUM” *sa-sa-za*). <sup>17</sup> This eloquently shows how a “standard formula” can be spelled in various ways, and it should not be excluded that similar processes were at play in the Cretan Hieroglyphic seal inscriptions, thus clouding our view.



Fig. 2. Anatolian Hieroglyphic sign 327 (drawing: Jorrit Kelder after Laroche 1960).

On a final, conjectural note, it is of interest that some of the variants of the Anatolian Hieroglyphic sign \*327 𐀓 (SIGILLUM) bear a visual resemblance to sign 056 𐀆 (fig. 3) in Cretan Hieroglyphic, which was identified as a “mallet” by Arthur Evans and listed in the category *écriture, musique* by CHIC. <sup>18</sup> Intriguingly, the sign 056 𐀆 sometimes appears to behave in a similar manner as sign 044 𐀄. We find, for instance, the formula 056–049 (𐀆 𐀅), which may be considered a variant of 044–049 (𐀄 𐀅). Of special interest is the inscription CHIC #302a, which consists of the following signs: 057–034–044–049 (𐀇 𐀃 𐀄 𐀅). As observed by John Younger 1998: 399, this appears to be a conflation of the sequence 056–034–057 (𐀆 𐀃 𐀇), which is attested several times, <sup>19</sup> and the well-known formula 044–049 (𐀄 𐀅). In #302a, the sign 056 𐀆 is omitted and replaced by the sign 044 𐀄, which would imply that the signs 044 𐀄 and 056 𐀆 could be used interchangeably. <sup>20</sup> There are, however,

16 It would be interesting to explore to what extent some of the symbols which are used to—in the words of Ferrara and Weingarten 2022: 116—formally emphasize sign 044 𐀄 may have served a similar purpose.

17 See Gelb seal c, see Hawkins 2000: 580–581.

18 By comparing these two signs, I am not implying a direct connection between the Cretan and Anatolian hieroglyphic writing systems, or that this sign was somehow borrowed; the resemblance rather results from the fact that similar seal types were used in the Aegean and adjacent Anatolia. As kindly pointed out to me by one of the reviewers, the sign CH 056 𐀆 may represent a cylinder seal, a seal type which does not appear to have been very common in the Aegean. For incidental examples, see, e.g., Pini *et al.* (no. 485) and Krzyszkowska 2005: 55. It is, however, also possible that CH 056 𐀆 is a schematic representation of a generic stamping device.

19 For attestations, see CHIC: 362.

20 John Younger has suggested that the signs 056 𐀆 and 044 𐀄 “have similar phonetic structures.” He sees a morphological resemblance of both signs to the inverted Linear A no. 70 KO, proposing a phonetic reading KO for 044 𐀄 and KU for 056 𐀆 (see <https://people.ku.edu/~jyounger/Hiero/SignNotes.html> s.v. 044 and 056, consulted d.d. 29-04-2023). Note that Weingarten 1995: 301, fig. 7.2 also seems to make a connection between the signs 044 𐀄 and 056 𐀆. The assumption that the signs are to somehow comparable further appears to be confirmed by the fact that the two signs may appear in similar positions on seals, see, e.g., CHIC #260, #283, #295, #297 and #307, but this is by no means always the case.

also instances in which the two signs appear together within the same inscription, which suggests that they are not identical. In one, possibly two, cases we are dealing with two separate inscriptions that were written down on the same surface,<sup>21</sup> but once they appear to be used within the same inscription in a (relatively) long sign sequence.<sup>22</sup> The co-occurrence of the signs 044  $\text{𐀄}$  and 056  $\text{𐀆}$  means that scribes were familiar with both and that their use was not mutually exclusive. Though this does not entirely exclude the possibility that 056  $\text{𐀆}$  also refers to a seal, either as an allograph of 044 or as a distinct sign with a different function, it does make the identification less appealing.<sup>23</sup> The sobering conclusion is that this contribution has raised more questions than it has answered, but, as remarked by Ignace Gelb 1949: 72 when he identified \*327 ( $\text{𐀆}$  SIGILLUM), as the sign for “seal” in Anatolian Hieroglyphs, “such is the fate of scholarship: the more we learn the less we know.”

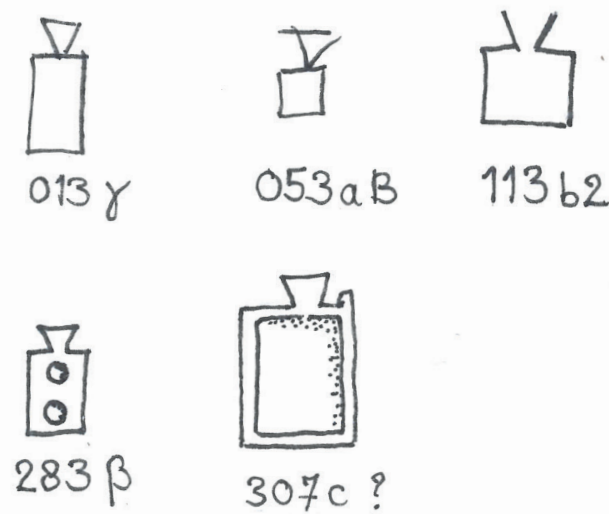



Fig. 3. Cretan Hieroglyphic sign 056 (drawing: Jorrit Kelder after CHIC).

- 21 On CHIC #013, an inscribed clay nodule from Knossos, both the signs 044  $\text{𐀄}$  and 056  $\text{𐀆}$  are present. They are, however, clearly separated by means of a straight vertical line and treated as two separate inscriptions by CHIC. On a round steatite seal (CHIC #180), we find the sign combination 044–049–050–056 (iane), together with several “ornamental” signs, which in all probability form part of the inscription. As also suggested by CHIC, the signs may have to be divided into two inscriptions: 044–49  $\text{𐀄}$   $\text{𐀅}$  (including several “ornamental” signs and 056–050  $\text{𐀆}$   $\text{𐀇}$  (likewise including several “ornamental” signs). Not included here are CHIC #271γ and #056 as the identification of 044  $\text{𐀄}$  and 056  $\text{𐀆}$  respectively is uncertain. In addition, the two signs may appear on the same document, but on different sides, such as the nodule #018 and the bars #049 and #056. For their co-appearance on different faces of the same seal, see below n. 23.
- 22 See face β of the four-sided prism made of white steatite CHIC #294, though it cannot be entirely excluded that the sign identified as 050  $\text{𐀇}$  functions as a divider here. For other examples of seals with more than one “inscription” on a single surface, see, e.g., CHIC #283a.
- 23 If we do accept that 056  $\text{𐀆}$  refers to a seal, this would mean that CHIC #255, #283, #295 and #297 were used by three different persons, cf. n. 6 above. Further, the seals CHIC #244, #260, #296, #298, #307 and #310 feature 044  $\text{𐀄}$  and 056  $\text{𐀆}$  on different faces.

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## The Social Lives of *mdw-ntr*

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**Abstract.** This paper explores the discourses surrounding *mdw-ntr* and the contexts in which they appear. Having been translated as both “hieroglyphs” and “god’s words,” it purportedly reveals the Egyptians’ attitude toward this script throughout Egyptian history. By analyzing its attestations from the Old to the New Kingdoms, this paper highlights shifts in discourses surrounding *mdw-ntr*, especially in how it was employed and by whom.

**Keywords.** Writing, identity, Thoth, Scribes, *hr.j-sšt*, script.

Much ink has been spilled on  *mdw-ntr* and the ancient Egyptian writing system it describes. Standing both for “god’s words” and “hieroglyphs,”<sup>1</sup> the compound noun purportedly reveals the ancient Egyptian attitude toward the hieroglyphic script as inherently potent and divine.<sup>2</sup> The script and its mysteries are thereby only known to a select few and, above all, to Thoth, whose epithet, Lord of *mdw-ntr*, reflects his role in the script’s genesis.<sup>3</sup>

However, ink and papyri continuously appear in ancient Egyptian sources as the media for *mdw-ntr*. The Ptolemaic decrees of Memphis (the Rosetta Stone), Alexandria, and other sites refer to their hieroglyphic section as engraved in writing (*zh<sup>3</sup>.w*) of *mdw-ntr*, while the demotic part is described as done in the writing of letters (*š<sup>c</sup>.t*).<sup>4</sup> Yet, the Demotic, Greek, and Hieroglyphic texts differ in more than just in the nature of their signs, and one would not argue that *š<sup>c</sup>.t* is the Egyptian name for its Demotic script. Moreover, no other sources place *mdw-ntr* on stone, and Neferhotep I unrolls a papyrus to read the *mdw-ntr* at the house where papyri are held (*pr-md<sup>3</sup>.t*), and in the

1 Wb. II, 180–1.

2 See, for example, Goelet 2003; Meeks 2018: 142–145.

3 LGG; Cf. Boylan 1922: 93. More recently, see Stadler 2009.

4 Demotic, *sh-md-ntr* (Lemma ID dm2109; <https://thesaurus-linguae-aegyptiae.de/lemma/dm2109> accessed July 7, 2023); Instead of *zh<sup>3</sup>.w*, one reads *šfd n mdw-ntr*, and other forms in other decrees.



Book of the Dead, one wishes for Thoth to come with a papyrus (*md<sup>3</sup>.t*) of *mdw-ntr*.<sup>5</sup> Since ancient Egyptian papyri bore texts in various scripts, a unique connection to only one of them seems the exception, not the rule.

*mdw-ntr* could, therefore, hardly serve as the ancient Egyptian name for the hieroglyphic script. Untethered to this function, it invites a reconsideration of its significance in ancient Egypt. Previous pursuits have focused on what *mdw-ntr* might mean,<sup>6</sup> but as this paper will show, it is as significant to inquire by whom it was used and how. Through this vantage point, *mdw-ntr* appears to shift away from an individual's restricted knowledge and prestige to that which is mostly associated with scribal identity and mediated by Thoth, the divine scribe.

In order to explore *mdw-ntr* and its social lives, this investigation will study this compound noun through its occurrences, building on Egyptological dictionaries and lexicons.<sup>7</sup> This approach is bound to miss relevant aspects, especially when *mdw-ntr* is not explicitly mentioned in the text.<sup>8</sup> Other issues, such as the role of lector priests and Thoth or the nature of rituals and writing, will only be dealt with in a cursory fashion through their relationship to *mdw-ntr*.<sup>9</sup> Nevertheless, this approach invites more care in evoking this term in contexts to which it might be foreign. In addition, as the nature of the evidence changes during the first millennium, and especially in the Ptolemaic and Roman periods, these will remain beyond the scope of this investigation.

The sources explored here suggest that *mdw-ntr* is inseparable from its circulation. Far from a dictionary entry with a fixed meaning, its significance was continuously shaped by those who employed it. While a few kings were involved in its dissemination, *mdw-ntr* was most significant in the self-definitions of men and later groups within the elite, thereby countering expected models of restricted knowledge. Rather than reflecting the nature of hieroglyphs, *mdw-ntr* sheds important light on how these men understood themselves and how their thinking changed through centuries of Egyptian history.

## 1. *Mdw-ntr* and the written word

On his round-topped stela, the Overseer of Artisans Irtysen professes his unique skill set and knowledge, among which literacy is clearly indicated:

5 pTurin Museo Egizio 1791, Spell 68, l. 6, Backes 2022 in TLA.

6 Saleh 1969.

7 Hannig 2003, 2006; Meeks 1980, 1981, 1982; Wb., TLA, Ramses Online <http://ramses.ulg.ac.be/>, and LGG.

8 This approach, therefore, differs from that taken by Saleh 1969.

9 Similarly, the paper will not be able to delve into the nature of *mdw* and *ntr* in each period, as each deserves its own separate investigation.

*jm.j-r'-ḥmw.tyw zh'.w qs.ty jr.ty=sn dd*  
*jw rh.kw sšt' n mdw-ntr*  
*sšm.t-'.w n.n.w ḥ'ḥb.yt*  
*ḥq' nb 'pr.n(=i) sw*

The Overseer of Artisans, Scribe, and Sculptor Irtysen (who) says:  
 I know the secrets of the *mdw-ntr*  
 The conduct of festive rituals,  
 All magic—I equipped (myself with) it.<sup>10</sup>

The secret knowledge to which Irtysen is alluding has often been taken to refer to the divine nature of hieroglyphs.<sup>11</sup> However, already a century ago, Patrick Boylan challenged whether *mdw-ntr* and hieroglyphs were as closely tied as one assumes:

There is, indeed, no doubt, that “Divine words” often mean “hieroglyphs” in the texts of the late period. But in the texts of the M.K... the “Divine words” seem to be something other than mere script: they are carefully distinguished from the  $\overline{\text{𓄏}}$  (= the written sign, script) and seem to be what is conveyed or expressed by the written signs, rather than the signs themselves.<sup>12</sup>

Following Boylan, Abd el-Aziz Saleh reaches similar conclusions regarding the mistranslation of *mdw-ntr*, pointing to the medium that is often evoked and its role in scribal education.<sup>13</sup> Despite Boylan’s discussion and Saleh’s paper, the translation of *mdw-ntr* as “hieroglyphs” persists. A closer review of the sources shows that, as Boylan notes above, *mdw-ntr* were primarily not signs but words that bore in themselves divine, or creative, efficacy.<sup>14</sup> The Sixth Dynasty nomarch Idu Seneni, for example, evokes such efficacy when describing his state as an akh, a glorified spirit, in the afterlife:

*jnk 'ḥ jqr mnḥ*  
*jw rh.k(w) sšt' nb n mdw-ntr*  
*'ḥ n=f m ḥr.t-mdw-ntr*

I am an excellent and effective akh.  
 I know all the secrets of the *mdw-ntr*,  
 which are beneficial for me in the necropolis...<sup>15</sup>

10 Louvre C 14, 6–7; See most recently Stauder 2018; Delange 2015.

11 Baines 1990: 9; Bryan 2017: 4.

12 Boylan 1922: 93.

13 Saleh 1969.

14 In a similar fashion, Dimitri Meeks 2018: 143 writes: “L’écrit est étroitement lié à la parole créatrice.”

15 The text literally reads ‘beneficial for him in the necropolis,’ but Idu is clearly referring to himself, and a similar switch from first to third person appears in a similar inscription in the tomb: *jnk 'ḥ jqr rh r=f jw rh.k(w) sšt' nb n mdw-ntr 'ḥ n=f m ḥr.t-ntr*, “I am an excellent Akh who knows his utterance; I know all the secrets of the *mdw-ntr* which are beneficial for him in the necropolis,” cf. Edel 1981: 67, 15–25, Abb. 1 & 4; Strudwick 2005: 188–191; Säve-Söderbergh 1994: 28, 32–33.

Similar notions are called upon in the Coffin Texts of the Middle Kingdom, in which the deceased declares:

*pr=i r p.t m-m ntr.w*  
*jn.t=i whm=i mdw-ntr*  
*hq' pw*

May I ascend to heaven among the gods,  
 May I bring and repeat the *mdw-ntr*.  
 It is magic.<sup>16</sup>

The spell makes reference to an object associated with the *mdw-ntr*, which the deceased will bring with him. Other attestations of the compound noun similarly refer to the close relationship between *mdw-ntr* and textual objects. An inscription on the Coffin of Djehutynakht from the early Middle Kingdom wishes that every good thing would be done for the deceased according to the writings (*zh'.w*) of *mdw-ntr*, which Thoth has made.<sup>17</sup> Similarly, a spell in an Eighteenth Dynasty Book of the Dead tells of Hathor carrying writings of *mdw-ntr*, which it also describes as a papyrus of Thoth.<sup>18</sup> The written aspects of *mdw-ntr* are also explored a millennium later on a Thirtieth Dynasty naos which refers to a papyrus (*šfd*) of *mdw-ntr* alongside a temple-scroll (*'r.t n(.t) hw.t-ntr*).<sup>19</sup>

These connotations of efficacious words, which were written down, seem to fit the context in which the term *mdw-ntr* appears in Irtysen's stela. Knowledge of the hieroglyphic script seems out of place here as the section speaks of rituals and magic. In contrast, it would make perfect sense for him to speak here of his deep understanding of efficacious phrases that allow him to be equipped with magic.

While these aspects of *mdw-ntr* appear throughout Egyptian history, Irtysen's stela is part of this term's changing landscape. The following sections will explore how it was used through its occurrences in the Old, Middle, and New Kingdoms.

## 2. Old Kingdom–First Intermediate Period: High Officials and Lector Priests (27 occurrences)<sup>20</sup>

*mdw-ntr* is predominantly a matter of the elite in the Old Kingdom. The phrase first appears in the Fourth Dynasty in non-royal tombs and becomes more prevalent in similar contexts during the

16 CT Spell 473 (CT VI 15d–f); A similar notion appears in Spell 651, see below.

17 CG 28094 (B6C) from El-Bersheh. A similar text can be found on CG 28089 (B12C); BMFA 20.1822-7 (B1Bo); CG 28085 (B3C) and CG 28086 (B4C).

18 pBM EA 10477 (pNu), Spell 68: *jw=s wd'is r jwn.w hr zh'.w n mdw-ntr md'.t n.t dhwjtj*, cf. Backes 2022 in TIA.

19 CG 70021, DZA 24.480.930, cf. Schumacher 1988: 172.

20 Instances in which similar phrases or titles appear in the same tomb or object are counted as one. Only two instances are documented from the First Intermediate Period, continuing trends described here, and they are therefore counted within this section. For the full list of instances, see the Appendix.

Fifth Dynasty. A sole king of the Sixth dynasty inscribes this phrase on the walls of his pyramid.<sup>21</sup> Otherwise, the term does not reappear in other Pyramid Texts or Old Kingdom royal inscriptions. The rest of the occurrences come from non-royal funerary complexes in contexts that evoke rituals and restricted knowledge.<sup>22</sup>

Among the elite, the phrase overwhelmingly appears within the title *hr.j-sšt<sup>3</sup>-n-mdw-ntr*, “Privy to the secrets of *mdw-ntr*”—in twenty-one of the twenty-seven occurrences of this period.<sup>23</sup> Like many titles of the Old Kingdom, its holder enumerates it alongside a string of similar compounds, rarely revealing much about its meaning, scope, or how and when it was acquired.<sup>24</sup> However, the element of *sšt<sup>3</sup>*, in the title, referring to what is “hidden, concealed,” could speak to one’s access to hidden knowledge and confidential matters, depending on the context.

Kjell Rydström shows that most men bearing these titles had relatively little ties with temples and funerary cults. Therefore, he concludes that *ntr* here refers to the living king and one’s access to the ruler.<sup>25</sup> However, about half of the men bearing this title enumerate it immediately after the title *hr.j-ḥ<sup>3</sup>b.t*, “lector priest,” or in its vicinity.<sup>26</sup> Similarly, Khentika of the Sixth Dynasty notes in his mastaba:

*pr.[k(w)... š]t<sup>3</sup> n mdw-ntr n ḥmw.t hr.j-ḥ<sup>3</sup>b.t*

[I] was equipped...[se]crets of the *mdw-ntr* of the craft of the lector priest.<sup>27</sup>

Khentika’s mention of the secrets of *mdw-ntr* thus suggests it was understood to be relevant to the realm of ritual texts with which lector priests were engaged. Another inscription of this time makes a similar reference to lector priests and efficacious words:

*jr.t n=f ḥmw.t hr.(j)-ḥ<sup>3</sup>b(.t) k<sup>3</sup>.t wt(.j) s<sup>3</sup>ḥ jn hr.(jw)-ḥ<sup>3</sup>b(.t) m zh<sup>3</sup>.w ḥ<sup>3</sup>(.w) n mdw-ntr sm  
mr.w jn rmt*

Making for him the crafts of the lector priesthood, the work of the embalmer, and the transfiguration through the beneficial writings of the *mdw-ntr* and the help of being beloved by the people.<sup>28</sup>

21 Spell 262 in the Pyramid of Teti reads: *jn wp.wt[yw]=tn jnn.t sw mdw-ntr sj<sup>3</sup>(r) sw* (PT 333a). A fragment from the Pyramid of Pepi I suggests this version of the spell was also employed there.

22 Cf. Baines 1990.

23 Jones 2000: no. 2281.

24 See, for example, the discussion on *hr.j-sšt<sup>3</sup>* and whether it is honorific or functional in Baines 1990; Rydström 1994; Beatty 1999.

25 Rydström 1994: 74.

26 Niankhre (Hassan 1943: 151 [5], fig. 108); Ti (Wild 1953: CIII–IV; 1966: CLXX); Iydfefa (Lepsius 1849: II. 101a; Mariette 1889: 133); Mereruka (Sakkarah Expedition 1938: I. 62; II. 159); Rawer (Hassan 1932 [1]: 22–24, pl. XXVIII); Ptahshepses (Verner 1977: no. 30 [34, 146]; 183 [119, 179]) and others.

27 James 1953: 36, pl. 5, I. A5.

28 Mehu’s tomb in Saqqara (Hawass 2002).

Therefore, while many of the men who mention *mdw-ntr* held scribal titles, this phrase seems to be associated in this period more closely with the work of the lector priest. While various men in the Old Kingdom bore the title lector priest, holders of the title *hr.j-sštʿ-n-mdw-ntr* rank relatively high and include at least five heads of departments and six viziers, among which one counts Mereruka, Ptahshepses, and Kagemni.<sup>29</sup>

As John Baines notes, titles built on *hr.j-sštʿ* do not reveal what might be secret. They nevertheless make public the fact that one knew it.<sup>30</sup> In the case of *mdw-ntr*, men of the higher echelons presented it as a sign of distinction. This view of *mdw-ntr* is unparalleled in the following periods.

### 3. Middle Kingdom: Thoth and the Afterlife (31 occurrences)<sup>31</sup>

The primary use of *mdw-ntr* in the title “Privy to the secrets of *mdw-ntr*” continues into the Middle Kingdom. Perhaps due to the nature of documentation preserved from this period, only thirteen men are known to carry this title, mainly among the provincial nobility of Assyut and el-Bershah.<sup>32</sup> Nevertheless, new ideas regarding *mdw-ntr* started appearing, especially concerning Thoth and scribes.

Among the bearers of the title *hr.j-sštʿ-n-mdw-ntr* of this period, one counts the vizier Mentuhotep, one of the most memorable figures of the early Twelfth Dynasty.<sup>33</sup> Another bearer of this title, Ikhernefret, inscribed it on the outer edges of his stela (Berlin 1204), while the main text speaks of a journey he made to Abydos to perform rituals and carry out a festive procession of Osiris’s image between his temple and his tomb.<sup>34</sup> Ikhernefret notes that he had all the priests know the ritual of every day and the feasts of the beginning of the seasons. Ikhernefret also notes that he clothed the god in his regalia in his office as *hr.j-sštʿ*, “Privy to the secrets,” but the text neither explicates to which of the two *hr.j-sštʿ* titles he is referring—“Privy to the secrets of Two Ladies (Nekhet and Wadjet)” or “Privy to the secrets of *mdw-ntr*”—nor that he has specifically either of them in mind.

29 Rydström 1994: 74.

30 Baines 1990: 9.

31 No instances are documented from the Second Intermediate Period.

32 The most comprehensive and up-to-date list can be found in the online database Persons and Names of the Middle Kingdom (title 639; accessed July 7, 2023; <https://pnm.uni-mainz.de/3/title/639>).

33 Stela CG 20539 (Lange & Schäfer 1902: vol. I, 51–54, vol. II, 153); The statues he positioned in Karnak, for example, were restored in the Ramesside Period, see Lorand 2016.

34 Schäfer 1904; For translation and bibliography, see Landgrafova and Dils in TLA 2022.

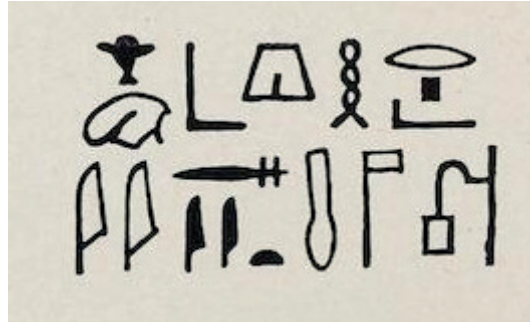


Figure 1: Khety's Rock Inscription with his Title as Scribe of *mdw-ntr* (Winlock 1947: 38E)

In the Middle Kingdom, *mdw-ntr* also begins appearing in scribal titles, although in fewer examples. As with *hr.j-sšt*, it appears as the title of named individuals in a tomb and in a rock inscription in Wadi el-Shatt el-Rigal (see fig. 1).<sup>35</sup> Toward the end of the Middle Kingdom and the beginning of the Second Intermediate Period, the royal stela of Neferhotep I uses this title to describe a group of men rather than a specific person:

*ḏd ḥm=f n s'ḥ.w smr.w wnn.yw m-ḥt=f zh'.w m's n mdw-ntr hr.yw-tp š't.w nb*

His Majesty spoke to the dignitaries, the companions, those who are in his following, the true scribes of the *mdw-ntr* who are upon all secrets.<sup>36</sup>

Neferhotep I specifically addresses the scribes since he wishes to unroll the scrolls holding the primordial texts of the god Atum in order to know the true forms of the god and the Ennead and to fashion an adequate statue and provide proper offerings. The stela is remarkable for its celebration of royal literacy, but in a similar fashion to the Old Kingdom, it is the sole reference to *mdw-ntr* in royal inscriptions of this period.

In contrast, the corpus of the Coffin Texts shows a wide spread of spells in which *mdw-ntr* plays a significant role. For example, Spell 225, an earlier version of the above-mentioned Book of the Dead passage, speaks of Hathor carrying the writings of *mdw-ntr*. The spell appears on one papyrus and the coffins of thirteen individuals from Assiut, Meir, el-Bersha, and Thebes. Other spells with *mdw-ntr* come from Gebelein and Qau el-Kebir, such as Spell 351:

*r' n rdi.t r' n s n=f m hr.t-ntr...*

*jnk jr.j' n mdw-ntr*

35 In the tomb of Djefaihapi in Assiut <https://pnm.uni-mainz.de/3/inscription/4800>; DZA 24.480.880 (and so does Hannig II.21483) cautiously proposes to read Amenhotep's title on CG 20639 as *zh'.w-mdw-ntr*, but Simpson, Franke, and Illin-Tomich read it as *zh'.w-md'.t-ntr*, "scribe of the divine scroll," see PNM (accessed July 7, 2023; <https://pnm.uni-mainz.de/3/inscription/380>).

36 JdE 6307 (Helck 1983: 21); Brose 2023 (in TIA) reads the final epithet as a separate group of men "allen hochrangigen Geheimräten," but the seated man classifier (Gardiner A1) which follows the other groups in this line is missing here according to Mariette's facsimile of the text (Mariette 1880: vol. II. pls. 28–30).



A spell of giving a mouth to a man for him in the necropolis...

(for) I am the keeper of the document of the *mdw-ntr*<sup>37</sup>

Altogether, spells referring to *mdw-ntr* appear on coffins and other objects of about twenty individuals from five different sites, emphasizing the power of these *mdw-ntr* and the ability of the deceased to harness it, as for example, in Spell 651:

*jr rh mdw-ntr pn*  
*wnn=f m p.t hm' R' m-m ntr.w n.t(y)w m p.t*  
*jw di.t(w) n=f m'c-hrw...'*

As for the one who knows these *mdw-ntr*,  
 he shall be in heaven with Re among the gods who are in heaven.  
 Vindication shall be given to him.<sup>38</sup>

A number of these spells, as well as other inscriptions on coffins and stelae, ascribe the *mdw-ntr* to the god Thoth. A Thirteenth Dynasty stela, for example, describes Thoth as saying good (*nfr*) *mdw-ntr*,<sup>39</sup> while the coffin of Iha from el-Bersha wishes for everything good for the deceased according to the writings (*zh'w*) of *mdw-ntr*, which Thoth has made.<sup>40</sup>

This association of Thoth with this phrase is reflected in a new epithet he acquires in the Middle Kingdom. While *nb-hmn.w*, “Lord of Hermopolis,” accompanies Thoth since the Old Kingdom,<sup>41</sup> the epithet *nb-mdw-ntr* appears only four times in the Middle Kingdom. A scribal statue from Karnak represents its patron seated on the ground reading a papyrus. Unfortunately, the text on the papyrus is badly preserved, with the patron’s name now missing, but the offering formula is still readable. It addresses Amun-Re, Ptah-Sokar, Osiris, and Thoth, with his epithet as Lord of *mdw-ntr*.<sup>42</sup>

Another reference comes from the Theban tomb of Senet, in a scene that shows a woman offering a mirror and an ointment vessel to Senet, who was buried in the tomb. The woman, who is presenting the offerings, possibly wishes—the text is also here badly preserved—that Thoth, the Lord of *mdw-ntr*, shows favor to Senet (see fig. 3).<sup>43</sup> While the statue and Senet’s tomb are dated to the Twelfth Dynasty, a single royal reference to Thoth as Lord of *mdw-ntr* comes from the reign of Sobekhotep I of the Thirteenth Dynasty, a forerunner of its much wider distribution in royal sources of the New Kingdom.<sup>44</sup>

37 The red parts of the text reflect red ink in the original; Following the coffin of Henet from Assiut (S14C; CT IV 386a–389a).

38 CT VI 273d, preserved only on a fragmentary coffin from Gebelein.

39 Stela of Sahi, Rio de Janeiro 644 [2434] (Kitchen 1990: vol. III, pls. 9–10).

40 CG 28089 and see also above.

41 LGG III: 716–718.

42 CG 42040

43 Davies 1920: 26, pl. XXX; Another reference arrives from the tomb chamber of Hesu in Kom el-Hisn, see Silverman 1988: 10: 30, l. 21.

44 Cottevielle-Giraudet 1933: pl. VI.



Figure 2: Scribal Statue with Offering Formula Evoking Thoth, Lord *mdw-ntr* (CG 42040)

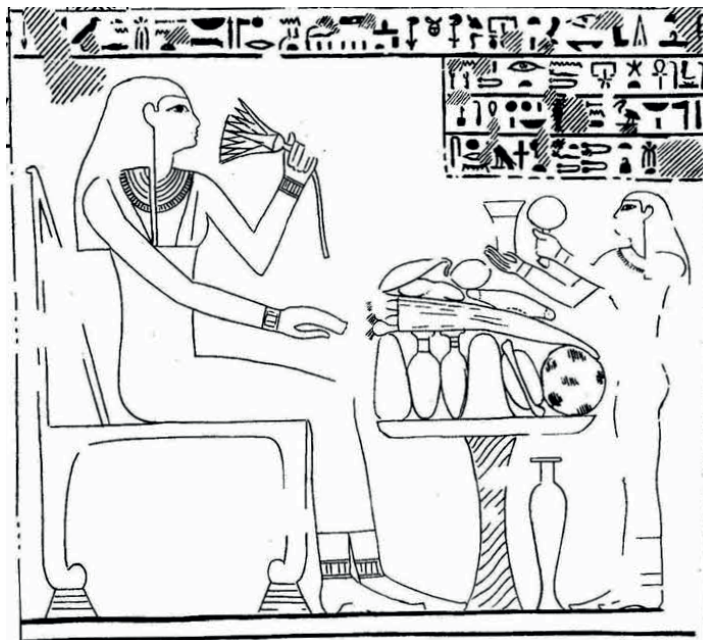


Figure 3: An offering scene naming Thoth Lord of *mdw-ntr* from the Tomb of Senet (TT 60)

As the nature of preservation differs from one period to another, it is often problematic to point at precise moments of new beginnings. As much as the written evidence allows us to say, earlier trends continue into the Middle Kingdom, but elite people of this period expand their exploration of *mdw-nṯr* and its nature, primarily in the funerary literature. Thoth's significance and epithet become even more prominent in the following period.

#### 4. New Kingdom: Scribal Culture and the Lord of *mdw-nṯr* (80 occurrences and counting)

In more ways than one, there is nothing new in the New Kingdom. This period shares all the elements that were present around *mdw-nṯr* in the Old and Middle Kingdoms: bearers of *ḥr.j-sšṯ<sup>3</sup>-n-mdw-nṯr*, its place in funerary literature (the Book of the Dead), its association with scribes, and Thoth as the Lord of *mdw-nṯr*. However, the composition is almost entirely different, highlighting significant shifts in its place in society.

The title *ḥr.j-sšṯ<sup>3</sup>-n-mdw-nṯr* continues into the New Kingdom, but the Eighteenth Dynasty marks the end of its use. Only two men bear this title: Amenemhat, called Surer, who mentions this title in his tomb and on two statues he commissioned, and Nebmerutef, who includes this title on his two statuettes that show him seated with a papyrus under the watching eye of a baboon, one of Thoth's representations in this period (see fig. 4).<sup>45</sup>

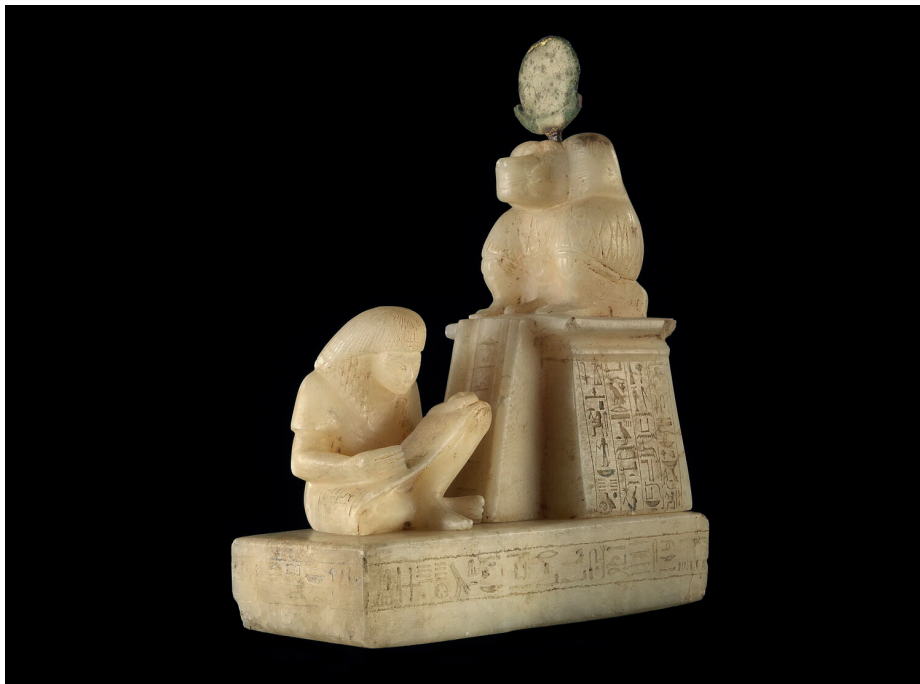


Figure 4: The statuette of Nebmerutef (Louvre E11153)

45 With a variant of *ḥr.j-sšṯ<sup>3</sup>-n-mdw-nṯr*, Louvre A 57; BM EA 123; and the tomb of Amenemhat (Säve-Söderbergh 1957: pls. XLVIII, LX, LXIX, LXXI). On statues of scribes and baboons, see Allon 2013.

Both Amenemhat and Nebmerutef hold scribal titles, but neither associates *mdw-ntr* with these positions. With the disappearance of the *hr.j-sšt<sup>3</sup>-n-mdw-ntr*, no other title incorporating *mdw-ntr* replaces it. Instead, epithets such as wise (*sš<sup>3</sup>*) or skilled (*spd-hr*) in *mdw-ntr* occur throughout the New Kingdom. Early in the Eighteenth Dynasty, Paheri says:<sup>46</sup>

*j nḥ.w wnn.yw wr.w rmt tp.(y)w-t<sup>3</sup> ḥm.w-ntr w<sup>6</sup>b.w jr.yw=sn zh<sup>3</sup>.w nb šzp gstj šs<sup>3</sup> ḥr m mdw-ntr...*

O the living who are great, people upon earth, Hm-priests, wab-priests and theirs, all scribes who receive a palette, who are wise in *mdw-ntr*<sup>47</sup>

Toward the end of the Twentieth Dynasty, Imiseba similarly says:

*j jtj-ntr w<sup>6</sup>b.w hr.yw-h<sup>3</sup>b.t zh<sup>3</sup>.w nb r{t}<h> mdw-ntr šs<sup>3</sup> m drf nb  
'q=sn ḥr s<sup>3</sup> r nḥḥ  
ḏd=sn ḥtp di nswt...*

O god's fathers (a priest), wab-priests, lector priests, all scribes who know *mdw-ntr*, who are skilled in documents,  
May they enter (this tomb) until eternity,  
saying the offering formula (*ḥtp di nswt*)<sup>48</sup>

A similar embrace of *mdw-ntr* as pertinent to scribal identity appears in the Late Egyptian Miscellanies, which following Chloé Ragazzoli's analysis, are texts written by scribes, for scribes, about scribes.<sup>49</sup> In these texts, one is often reproached for abandoning the pursuit of a scribal profession:

*ḏd.tw n=i  
ḥ<sup>3</sup>'=k zh<sup>3</sup>.w  
šm=k m 'b.w  
ḥ<sup>3</sup>'=k ḥ<sup>3</sup>=k r mdw-ntr  
rwj=k j<sup>3</sup>w.t {w} t{w}y <n> ḏḥwtj  
I was told  
You have left writing  
going after (your) desires  
You turned your back on *mdw-ntr*  
You have abandoned this office of Thoth<sup>50</sup>*

Abd el-Aziz Saleh considers such references in the Miscellanies to suggest that *mdw-ntr* encompass the classic literature—broadly defined—of ancient Egypt since students' training was often “of a

46 Mose, Scribe of the Treasury of Ptah, is an exception to this rule, describing himself as *zh<sup>3</sup>.w [wr] m j<sup>3</sup>.t=f jp jb m mdw-ntr*, see Gaballa 1977: 19, pl. XLIV.

47 Tomb of Paheri in Elkab (DZA 481.150); On the so-called Appeals to the living, see Salvador 2014.

48 Tomb of Imiseba, TT 65 (DZA 24.481.160; KRI VI: 546).

49 For a comprehensive study, see Ragazzoli 2019.

50 pBM EA10244 (pAnastasi V), lines 6.1–2.



secular nature.”<sup>51</sup> However, he also acknowledges that a clear definition and division of secular and religious seems almost improbable here. On a more positive note, the father in the Teachings of Hori is a role model for bearing *mdw-ntr* and therefore being in good condition.<sup>52</sup> Therefore, these epithets seldom describe an individual but rather relate to scribes in the plural and their group identity.

Many objects relating to scribes and writing evoke Thoth in his epithet as *nb mdw-ntr*. The Eighteenth Dynasty wooden palette of Meryra is inscribed with *htp-di-nswt* formulas on both sides of the slot for pens (see fig. 5). The one on the proper right calls upon Amun-Re while the other one says:

*htp di nswt dhwtj nb mdw-ntr*  
*di=f rh zh<sup>3</sup>.w pr jm=f wb<sup>3</sup>-hr m mdw-ntr*  
*n k<sup>3</sup> n jr.j-p<sup>c</sup>.t h<sup>3</sup>.tj-<sup>c</sup> wr m-h<sup>3</sup>.t šps.w-nswt jm.j-r<sup>2</sup>-pr wr n nswt mr.y-r<sup>c</sup>*

An offering which the king gives and Thoth, Lord of *mdw-ntr*  
 May he grant knowledge of writing that comes forth from him and clear sight in *mdw-ntr*  
 for the nobleman, the nomarch, the great one at the head of the king's nobles, Chief  
 Steward Meryre.<sup>53</sup>



Figure 5: Wooden Palette of Meryra (BM EA5512) © The Trustees of the British Museum

*htp-di-nswt* formulae are often oriented toward the afterlife and ask for provisions. Here, however, Meryre calls upon Thoth and asks to be knowledgeable in his texts and to receive clear sight or deep understanding in *mdw-ntr*, which Thoth, as the divine scribe, could help mediate.<sup>54</sup> This capacity of Thoth comes forth as one of the main reconfigurations of *mdw-ntr* in the New Kingdom.

51 Saleh 1969.

52 oGardiner 2 (Gardiner & Černý 1957: pls. VI–VIa; Dils 2022 in TIA).

53 Glanville 1932: 55–56.

54 Thoth is sometimes described in the New Kingdom as *zh<sup>3</sup>.w-m<sup>3</sup>.t-n-psd.t*, ‘scribe of Maat of the Ennead,’ see for example on the signet ring MMA 26.7.825; see Posener 1963 and Thoth’s role in the Late Egyptian story of Horus of Seth (Gardiner 1932: 37–60; Lichtheim 2006 [1976]: 2: 214–223).

While royal references to *mdw-ntr* in the Old and Middle Kingdoms amounted to three, the New Kingdom saw a large number of references to this phrase. Almost all of these occurrences refer to Thoth in his epithet as *nb mdw-ntr*, and in a few cases, the goddess Seshat also receives the female counterpart of this epithet.<sup>55</sup> With these references to *mdw-ntr* through Thoth's epithet, its occurrences almost double compared to previous periods, with more than half of them appearing within this epithet. This broader distribution in royal and non-royal texts seemingly suggests a greater appreciation of *mdw-ntr*, but its limited repertoire calls for a more balanced view. Perhaps it even became more widespread because of its restricted form, which places Thoth as the mediator of *mdw-ntr*.

Thus, the core connotations of *mdw-ntr* continues to intersect with knowledge, textuality, and efficacy from the Old to the New Kingdoms. Nevertheless, its distribution within royal and non-royal discourses indicates significant shifts throughout time in how it is employed and by whom.

## 5. Three Shifts in the Social Lives of *mdw-ntr*

More than two millennia separate the Roestta stone from Babaef's tomb of the Fourth Dynasty. Both employ the phrase *mdw-ntr* in their inscriptions, but each does so in a very different fashion that a technical translation as "hieroglyphs" immediately obscures. This large span of time, which includes the periods discussed within the more limited scope of this article, mainly allow us to compare the constellations around *mdw-ntr* in each period, rendering any attempt to outline developments and shifts highly tentative. Nevertheless, a few trends seem worthwhile to point out, even if very cautiously.

*From non-royal to royal:* At least at its beginnings, *mdw-ntr* seem to fall neatly along hierarchies surrounding restricted knowledge, with the higher echelons of society being privy to its secrets.<sup>56</sup> However, throughout its history, *mdw-ntr* does not directly draw power from the royal sphere, which is otherwise considered the apogee of restricted knowledge. Kings rarely evoke it in their inscriptions, and they mostly do so in the New Kingdom through Thoth's epithet, which has its roots in non-royal sources of the Middle Kingdom.

*From restricted to limited:* Alongside the shift from purely non-royal to both royal and non-royal sources for *mdw-ntr*, the groups within which it circulates seem to change significantly in nature. In the Old Kingdom, viziers and high officials note it in their titles that celebrate its mysterious nature. In contrast, student scribes in the New Kingdom are reproached for abandoning it. What seemed restricted earlier appears to be more widespread in the New Kingdom while still limited—to scribes.

55 LGG III: 654 & LGG IV: 68.

56 Baines 1990.



*From personal to group identity:* In its growing association with scribes, *mdw-ntr* ceases to serve as a sign of distinction one presents on tomb walls or stelae. Beginning already in the Middle Kingdom with Neferhotep I's stela and growing much stronger in the New Kingdom, one does not employ *mdw-ntr* to define oneself but rather to describe the scribal community, whether in appeals to the living or in the community's own texts.

The three shifts seem to be related as *mdw-ntr* becomes more widespread, less personal, and shared across royal and non-royal discourses in a limited fashion. While many of these shifts come to the fore in the New Kingdom, they seem to be apparent already in the Middle Kingdom when Thoth becomes more central to the notion of *mdw-ntr* and scribes as well. While the mechanisms motivating these shifts would require further study, the hieroglyphic script and its nature do not seem to be at the heart of it.

## Appendix. The Social Lives of *mdw-ntr*: Sources

### a) Old Kingdom–FIP Sources

		Source	Reference
1	It is...the <i>mdw-ntr</i> that cause him to ascend	The Pyramid Texts of Teti, Spell 262	<i>PT</i> 333c; Allen 2015: T186
2	beneficial writings ( <i>zh<sup>3</sup>.w</i> ) of <i>mdw-ntr</i>	Tomb of Mehu	Hawass 2002; Kloth 2002: fig. 3
3	[I] was equipped with... the secrets of <i>mdw-ntr</i>	Tomb of Khentika	James 1953: 36, pl. 5, l. A5
4	I know the secrets of <i>mdw-ntr</i>	Tomb of Idu Seneni	Edel 1981: vol. 67, figs. 2, 11–12; 4, l. 4–5
5	...according to these writings ( <i>zh<sup>3</sup>.w</i> ) of <i>mdw-ntr</i>	Tomb of Desheru	Osing et al. 1982: 28: 24 (no. 14), pls. 3, 57
6	...excellent of <i>mdw-ntr</i>	Tomb of Kagemni	Firth & Gunn 1926: vol. II: pl. 59; <i>Urk.</i> I: 196
7	Privy to the secrets of <i>mdw-ntr</i> ( <i>hr.j-sšt<sup>3</sup>-n-mdw-ntr</i> )	Tomb of Kagemni	Harpur & Scremin 2006: 513; <i>DZA</i> 29.623.940
8	Privy to the secrets of <i>mdw-ntr</i>	Statue Base of Babaef, BMFA 14.1686	Babaef (G 5230, Digital Giza); Sculpture base of Babaef (BMFA Online Collection) <sup>57</sup>
9	Privy to the secrets of <i>mdw-ntr</i>	Tomb of Niankhre	Hassan 1943: 151 (5), fig. 108
10	Privy to the secrets of <i>mdw-ntr</i>	The tomb of Rahotep	Verner 1994: 304, fig. 9
11	Privy to the secrets of <i>mdw-ntr</i>	Tomb of Netjerweser	Mariette 1889: 166
12	Privy to the secrets of <i>mdw-ntr</i> <sup>58</sup>	Tomb of Ankhemakai, Cairo 1485	Mariette 1889: 214

57 Digital Giza <http://giza.fas.harvard.edu/ancientpeople/2020/full/>; BMFA Collection Online <https://collections.mfa.org/objects/453676/sculpture-base-of-babaef%26linkname=Sculpture%20base%20of%20Babaef%26linknote=>; This reference and all following ones were accessed July 7, 2023.

58 Ankhemakai also held a similar title adding a suffix: *hr.j-sšt<sup>3</sup>-n-mdw-ntr=f* (Mariette 1889: 214), similar to Khenu's title (see no. 16)

		Source	Reference
13	Privy to the secrets of <i>mdw-ntr</i>	Offering Stand of Zetefka, CG 57048	Abou-Ghazi 1980
14	Privy to the secrets of <i>mdw-ntr</i>	Tomb of Neferseshempepy, called Seneni (= Alexandria National Museum 20) <sup>59</sup>	Fischer 1968: 119–20; Aman 2018: 51
15	Privy to the secrets of <i>mdw-ntr=f</i>	Tomb of Khenu	Mariette 1889: 185
16	Privy to the secrets of <i>mdw-ntr</i> ; Privy to the secrets of the hidden words of <i>mdw-ntr</i>	Tomb of Ptahshepses	Verner 1977: no. 30 (34, 146); 183 (119, 179)
17	Privy to the secrets of <i>mdw-ntr</i>	Tomb of Mereruka	Sakkarah Expedition 1938: I. 62, II. 159
18	Privy to the secrets of <i>mdw-ntr</i> ; Privy to the secrets of the hidden writings ( <i>zḥʿ.w</i> ) of <i>mdw-ntr</i> of the house of books	Cylinder Seal Impressions from the Tomb of Djati (Sahure)	Junker 1944, 72: 233–36, fig. 96 a–b, pl. 39a
19	...who reads the hidden words ( <i>mdw</i> ) of <i>mdw-ntr</i>	Cylinder Seal Impressions from the Tomb of Djati (Sahure)	Junker 1944: 72: 233–336, fig. 96 a–b, pl. 39a
20	Privy to the secrets of <i>mdw-ntr</i>	Cylinder Seal Impressions from the Tomb of Djati (Neferirkare)	Junker 1944: 72: 236–38, fig. 97, pl. 39b; Kaplony 1981: 3, pl. 65 (7)
21	Privy to the secrets of <i>mdw-ntr</i> ; Privy to the secrets of the hidden words of <i>mdw-ntr</i>	Tomb of Ti	Wild 1953: CIII–IV; Wild 1966: CLXX
22	Privy to the secrets of <i>mdw-ntr</i>	Tomb of Washptah, Copenhagen National Museum 5129	Mariette 1889: 270; Fischer 1996: 3: 10, pl. 1
23	Privy to the secrets of <i>mdw-ntr</i>	Tomb of Rawer, JdE 66626	Hassan 1932: [1]: 22–24, pl. XXVIII
24	[Privy] to the secrets of [ <i>mdw-ntr</i> ] <sup>60</sup>	Tomb of Idu I	Fischer 1968: 99–100, fig. 16
25	Privy to the secrets of <i>mdw-ntr</i>	Tomb of Iydjefa	Lepsius 1849: II. 101a; Mariette 1889: 133
26	Privy to the secrets of <i>mdw-ntr</i>	False door of Irenakhet, Vienna ÄS 8009	Junker 1928: 64, pl. 2; Digital Giza <sup>61</sup>
27	Privy to the secrets of <i>mdw-ntr</i> <sup>62</sup>	Tomb of Mereri, mDundee C9	Petrie 1900: pl. 8

59 Formerly CG 1661= JE 15569.

60 Fischer (1968: 114–16) also suggests correcting Nyibunesut's title "Privy to the secrets of *wḏ'-mdw*" to "Privy to the secrets of *mdw-ntr*," comparing it to those of Idu (OK 26, also called Seneni) and Mereri (OK 29) and noting its rarity among nomarchs. One wonders if its rarity does not lead to the contrary conclusion (*Lectio difficilior potior*).

61 <http://giza.fas.harvard.edu/objects/45375/full/#details>.

62 Jones includes a reference to the tomb of Neferiretnef under "Privy to the secrets of *mdw-ntr*" (Jones 2000: no. 2281). However, Neferiretnef held similar titles—Privy to the secrets of *wḏ'-mdw*, of *nb=f*, and of *ntr=f*—according to Walle's publication, but none that relate to *mdw-ntr* (Walle 1978).

## b) Middle Kingdom Sources

		Source	Reference
1	(according to) this decree ( <i>wḏ</i> ) of <i>mdw-nṯr</i> , which Thoth has made	Tomb of Djehutinakht (el-Bersha, Tomb 10)	Griffith & Newberry 1894: II. 45
2	(according to) these writings of <i>mdw-nṯr</i> , which Thoth has made in the house of scrolls	Coffin of Djehutinakht, BMFA 20.1822–7 (B1Bo, el-Bersha, Tomb 10)	Terrace 1968: pls. 10–11
3	(according to) these writings of <i>mdw-nṯr</i> , which Thoth has made	Coffin of Sathedjhotep, CG 28085 (B3C, el-Bersha)	Lacau 1903–1906: I. 206
4	(according to) these writings of <i>mdw-nṯr</i> , which Thoth has made	Coffin of Kay, CG 28094 (B6C; later inscribed for Djehutinakht, el-Bersha)	Lacau 1903–1906: II. 70
5	(according to) these writings of <i>mdw-nṯr</i>	Coffin of Ihy, CG 28089 (B12C, el-Bersha)	Lacau 1903–1906: II. 26
6	(Hathor) travels...bearing the writings of Thoth's <i>mdw-nṯr</i> <sup>63</sup>	Coffins S2Cb, T1L, T9C, B4C, B2Bo, B4Bo, Y1C, M2NY, B1L, B2L, B1C, S1Cb, T1Be, T2Be, T2L; papyrus Berlin 10482 <sup>64</sup>	CT spell 225 (CT III 240b–241b)
7	I am (his) keeper of the document of the <i>mdw-nṯr</i>	Coffins S14C, K1T	CT spell 351 (CT IV 389a)
8	...reciting this scroll of <i>mdw-nṯr</i>	Coffin M1C	CT spell 405 (CT V 2101)
9	I will bring and repeat the <i>mdw-nṯr</i> . It is magic.	Coffins B9C, B14C, B1C	CT spell 473 (CT VI 15e)
10	As for him who knows the <i>mdw-nṯr</i> , he shall be in heaven with Re...	Coffin G1T	CT spell 651 (CT VI 273d)
11	It is I who sends ( <i>zbi</i> ) the <i>mdw-nṯr</i> to the god.	Coffins B3C, B12C, B1Bo, B2Bo, B4Bo, B4L, B9C, B1C, B1L, B2L	CT spell 1067 (CT VII 328a)
12	writing board ( <i>'n</i> ) of <i>mdw-nṯr</i>	Coffin of Sen, BM EA30842 (B3L; probably el-Bersha, tomb 11)	Taylor 2010: 65, no. 20
13	That Thoth said to him the good <i>mdw-nṯr</i> is so that he might be vindicated	Stela of Sahi, Rio de Janeiro 644 [2434]	Kitchen 1990: III, pls. 9–10
14	I know the secrets of <i>mdw-nṯr</i>	Stela of Irtysen, Louvre C 14	Stauder 2018: 243; Delange 2015
15	This is the standard of the <i>mdw-nṯr</i>	The Eloquent Peasant (pBerlin P 3023; pBerlin 3025)	Parkinson 2012: 277–278
16	May your Majesty read ( <i>mʿ</i> ) the <i>mdw-nṯr</i>	Stela of Neferhotep I, JdE 6307 (Abydos)	Helck 1983: 22

63 A few copies of the spell, such as T1Be and T2L, do not mention Thoth here.

64 A few of these instances are inscribed on the outer and inner coffins of the same owner, e.g. the coffins of Gawa (B1L and B2L) or Mentuhotep (T1Be and T2Be). Similarly, Spell 1067 (MK 13), appears on coffins of Djehutinakht (B1Bo and B2Bo) or Sen (B4L and B3L).

		Source	Reference
17	True scribes of <i>mdw-ntr</i> who are upon all secrets	Stela of Neferhotep I, JdE 6307 (Abydos)	Helck 1983: 21
18	Scribe of <i>mdw-ntr</i>	Rock inscription of Khety (Wadi el-Shatt el-Rigal)	Winlock 1947: 69, pl. 38E
19	Scribe of <i>mdw-ntr</i> <sup>65</sup>	Tomb of Djefaihapi I (Assiut, tomb I)	Griffith, F. L. 1889: pl. 9; Montet 1930: 76
20	Privy to the secrets of <i>mdw-ntr</i> <sup>66</sup>	Tomb of Djefaihapi I (Assiut, tomb I)	Griffith, F. L. 1889: pls. 1, 9; Khadragy 2007: 49–50
21	Privy to the secrets of <i>mdw-ntr</i> <sup>67</sup>	Tomb of Imhotep (Lisht)	Allen 2021: 42–43
22	Privy to the secrets of <i>mdw-ntr</i>	Stela of Sobekaa, BM EA1372 (Thebes)	DZA 24.481.740; BM Online Collection <sup>68</sup>
23	Privy to the secrets of <i>mdw-ntr</i>	Tomb of Djehutihotep II (el-Bersha 2; Florence 7596, 7597)	Griffith & Newberry 1894: I. pl. 8; De Meyer & Willems 2017: 37–44
24	Privy to the secrets of <i>mdw-ntr</i>	Stela of Mentuhotep, CG 20539 (Abydos)	Lange & Schäfer 1902: vol. I: 51–54, vol. II: 153
25	Privy to the secrets of <i>mdw-ntr</i>	Stela of Ikhernefret, Berlin 1204	Schäfer 1904
26	Privy to the secrets of <i>mdw-ntr</i>	Tomb of Khnumhotep II (Beni Hasan 3)	Kanawati & Evans 2014: I: 54, pls. 613a, 132
27	Privy to the secrets of <i>mdw-ntr</i>	Statue and stela of Khentikheti, Barracco 11 & Berlin 1191 (Abydos)	Simpson 1974: 20 (ANOC 40), pls. 58–59
28	Privy to the secrets of <i>mdw-ntr</i>	Relief fragment	PNM <a href="https://pnm.uni-mainz.de/inscription/6322#38370">https://pnm.uni-mainz.de/inscription/6322#38370</a> <sup>69</sup>
29	Thoth, Lord of <i>mdw-ntr</i>	Scribal Statue (CG 42040; JdE 34625)	Legrain 1906: 24, pl. XXV
30	Thoth, Lord of <i>mdw-ntr</i>	Tomb of Antefoker	Davies 1920: pl. XXX
31	Thoth, Lord of <i>mdw-ntr</i>	Tomb of Hesu	Silverman 1988: 10: 30, l. 21
32	(Thoth)...Lord of <i>mdw-ntr</i> <sup>70</sup>	Medamud, Sobekhotep I's chapel, JdE 56496B	Cottevielle-Giraudet 1933: pl. VI

65 In the literature (Lange & Schäfer 1902: 51–54: 276), it is proposed that the owner of CG 20639 was also a Scribe of *mdw-ntr*. However, the hieroglyphs seem to write *md<sup>3</sup>.t-ntr*, as read by Simpson 1974: ANOC 27.

66 It has been suggested that one of Djefaihapi II's titles also referred to *mdw-ntr* (DZA 24.480.690), but the sign read as *mdw* has been interpreted elsewhere in varying ways (Griffith 1889: pl. 10; Montet 1930: 88). A recent study of the tomb has suggested it should, instead, be read as *ntr* '3, "great god," (Becker 2012, 84).

67 Arnold 2008: 33–34 lists [Scribe?] *mdw-ntr* (no. 9) and *hr.j [s<sup>2</sup>]š<sup>3</sup> n...* (no. 11) among Imhotep's titles. However, the two comprise one title, as shown in Allen 2021: pl. 43; Allen's transcription on pl. 42 reads Imhotep's title as *hr.j sš<sup>3</sup> n md<sup>3</sup>.t ntr* (𓇨𓇱𓇳𓇰𓇱) but the photograph on the next plate suggests it should be read *hr.j sš<sup>3</sup> n md<sup>3</sup>.t ntr* (𓇨𓇱𓇳𓇰𓇱𓇱).

68 [https://www.britishmuseum.org/collection/object/Y\\_EA1372](https://www.britishmuseum.org/collection/object/Y_EA1372)

69 Current location unknown; First published in L'Oeil, Revue d'Art Mensuelle, Nr. 314, September 1981.

70 The inscription appears above the image of an ibis-headed god who is also called "Lord of Hermopolis."

## c) New Kingdom Sources

		Source	Reference
1	Privy to the secrets of <i>mdw-ntr</i>	Statuettes of Nebmerutef, Louvre E11153 & E11154	Delange 1996 <sup>71</sup>
2	Privy to the secrets of <i>mdw-ntr</i>	Statues of Amenemhat Surer, BM EA123; Louvre A51	Säve-Söderbergh 1957: LXIX, LXXI <sup>72</sup>
3	Privy to the secrets of <i>mdw-ntr</i>	Tomb of Amenemhat Surer (Theban Tomb 48)	Säve-Söderberg: 1957, pls. XLVIII, LX
4	O the living...all those who are wise in <i>mdw-ntr</i>	Tomb of Pehsukher (TT 88)	DZA 24.481.270 <sup>73</sup>
5	O...all scribes who receive a palette, who are wise in <i>mdw-ntr</i>	Tomb of Paheri (Elkab)	Francis. L. Griffith & Tylor 1894: pl. 9
6	O...all scribes who receive a palette, who are wise in <i>mdw-ntr</i>	Tomb of Nebamun (TT 24)	Urk. IV: 151; DZA 24.481.310
7	O the living...all those who are wise in <i>mdw-ntr</i>	Tomb of Menkheper(reseneb) (TT 79)	Guksch 1995: 153–54, pl. 34
8	... all those who are sharp-sighted in <i>mdw-ntr</i>	Tomb of Khaemhat (TT 57)	Tanbouli 2017: 213 (G.2)
9	O...all scribes who receive a palette, who are wise in <i>mdw-ntr</i>	Tomb of Senemiah (TT 127)	Urk. IV: 509
10	O...all scribes who kn<ow> <i>mdw-ntr</i>	Tomb of Imiseba (TT 65)	KRI VI: 546
11	... all those who are wise in <i>mdw-ntr</i>	Stela of Nakhtmin, Louvre C55	Barbotin 2005: 167–169 <sup>74</sup>
12	O all men...all scribes who interpret scrolls ( <i>drf</i> ) and who enter in <i>mdw-ntr</i>	Stela of Bakaa, BM EA164	KRI II: 387 <sup>75</sup>
13	O.. all scribes...who are clear-sighted in <i>mdw-ntr</i>	Stela of Pay, BM EA156	KRI III: 210 <sup>76</sup>
14	O all scribes who are wise in <i>mdw-ntr</i>	Stela of Tia, Florence 2532	Martin 1997: pls. 27, 140 (no. 40)

71 <https://collections.louvre.fr/en/ark:/53355/cl010004935>; <https://collections.louvre.fr/en/ark:/53355/cl010005947>.

72 [https://www.britishmuseum.org/collection/object/Y\\_EA123](https://www.britishmuseum.org/collection/object/Y_EA123); <https://collections.louvre.fr/en/ark:/53355/cl010013459>.

73 Most of the painted stela's text was damaged before the end of nineteenth century (Piehl 1886: Pt. 1: 104; Virey 1891: 300). The dictionary slip (DZA 24.481.270) notes the reconstructed text is based on Dümichen's copy, though his referenced publication includes only six lines from a different section of the text (Dümichen 1866: pl. 104B).

74 <https://collections.louvre.fr/en/ark:/53355/cl010022054>.

75 [https://www.britishmuseum.org/collection/object/Y\\_EA164](https://www.britishmuseum.org/collection/object/Y_EA164).

76 [https://www.britishmuseum.org/collection/object/Y\\_EA156](https://www.britishmuseum.org/collection/object/Y_EA156).

		Source	Reference
15	Your father is carrying <i>mdw-nṯr</i>	Teachings of Hori (oGardiner 2)	Gardiner & Černý 1957: pls. VI–VIa; Dils 2022 in <i>TLA</i> <sup>77</sup>
16	You have turned your back on <i>mdw-nṯr</i>	Late Egyptian Miscellanies (pAnastasi V = pBM EA10244)	Gardiner 1937: 64; Dils 2021 in <i>TLA</i> <sup>78</sup>
17	You have turned your back on <i>mdw-nṯr</i>	LEM (pChester Beatty IV = pBM EA10684)	Dils 2022 in <i>TLA</i> <sup>79</sup>
18	You have [tu]rned your back on [ <i>mdw</i> ]- <i>nṯr</i>	LEM (pChester Beatty XVIII = pBM EA10698)	Popko 2021 in <i>TLA</i> <sup>80</sup>
19	May he (Thoth) grant wisdom in writing and sharp-sight in <i>mdw-nṯr</i>	Scribal Palette of Tena (Berlin 8042)	Roeder 1924: 304
20	May he (Thoth) grant...clear sight in <i>mdw-nṯr</i>	Scribal Palette of Meryra (BM EA5512)	Glanville 1932: 57 <sup>81</sup>
21	Guard yourself from your fingers nearing <i>mdw-nṯr</i>	Satirical Letter of Hori (pAnastasi I = pBM EA10247)	Fischer-Elfert 1983: 99
22	A craftsman of <i>mdw-nṯr</i> —there is nothing he does not know.	Satirical Letter of Hori (pAnastasi I; oDem 1070)	Fischer-Elfert 1983: 11; Dils 2022 in <i>TLA</i> <sup>82</sup>
23	A scribe who is experienced ( <i>jp jb</i> ) in <i>mdw-nṯr</i>	Tomb of Mose	Gaballa 1977, 19: pl. XLIV
24	[according] to these writings of <i>mdw-nṯr</i>	Tomb of Amenhotep	<i>DZA</i> 24.481.050
25	[according] to these writings of <i>mdw-nṯr</i>	Tomb of Iamnedjeh (TT 84)	<i>DZA</i> 24.481.030
26	All writings of <i>mdw-nṯr</i> he institutes (them) in Lower Egypt	Great Hymn to the Nile (pBM EA10222, pBM EA10182 and other copies)	Plas 1986: 40
27	As for every efficient scribe who knows <i>mdw-nṯr</i> ...	Tutankhamun's outermost gilded shrine (Cairo JdE 60664)	Hornung 1982: 30

77 <https://thesaurus-linguae-aegyptiae.de/sentence/IBUBd3WJmWxLMEvtKOo3zeElnY>.

78 <https://thesaurus-linguae-aegyptiae.de/sentence/IBUBd2LYkYw4KUAojZHak8Luk1E>; <https://thesaurus-linguae-aegyptiae.de/sentence/IBUBdQWafvRaeE28mIWmLI8dRk4>; [https://www.britishmuseum.org/collection/object/Y\\_EA10244-6](https://www.britishmuseum.org/collection/object/Y_EA10244-6); [https://www.britishmuseum.org/collection/object/Y\\_EA10244-2](https://www.britishmuseum.org/collection/object/Y_EA10244-2).

79 <https://thesaurus-linguae-aegyptiae.de/sentence/IBUBdQEY506YnEZAxB9i7zrZjFo>; [https://www.britishmuseum.org/collection/object/Y\\_EA10684-3](https://www.britishmuseum.org/collection/object/Y_EA10684-3).

80 <https://thesaurus-linguae-aegyptiae.de/sentence/IBgBkByrcQ8VWUuehTAm5mDykFQ>; [https://www.britishmuseum.org/collection/object/Y\\_EA10698](https://www.britishmuseum.org/collection/object/Y_EA10698).

81 [https://www.britishmuseum.org/collection/object/Y\\_EA5512](https://www.britishmuseum.org/collection/object/Y_EA5512).

82 <https://thesaurus-linguae-aegyptiae.de/sentence/IBUBd2ffwu3tkbhqZsCOsbx4Y>.



		Source	Reference
28	May Thoth himself come to you with a scroll of <i>mdw-nṯr</i>	Book of the Dead, pParis Louvre 3092, Spell 170	Backes 2019 in <i>TLA</i> <sup>83</sup>
29	These <i>mdw-nṯr</i> are to be spoken over (6 divine figures) written upon a fresh papyrus-sheet	Magical papyrus (pDeM 36)	Sauneron 1970
30	...of the throat...names...with <i>mdw-nṯr</i> so that he might live	Magical Text (pBM EA 9997)	Stegbauer 2022 in <i>TLA</i> <sup>84</sup>
31	...this scroll looses the legs, being sealed by a scribe of <i>mdw-nṯr</i>	Berlin Medical Papyrus, pBerlin P 3038 (163a)	Brose 2022 in <i>TLA</i> <sup>85</sup>
32	The Royal Scribe, Overseer of the Treasury... who is clear-sighted in <i>mdw-nṯr</i>	LEM (pSallier IV = pBM EA 10184)	Gardiner 1937: 98
33	One says your <i>mdw-nṯr</i> to god's fathers	Book of the Dead of Spell 177 (pNebseni = pBM EA 9900)	Backes 2022 in <i>TLA</i> <sup>86</sup>
34	... which the writings of the <i>mdw-nṯr</i> say: Act against him!	The Morgan Library, Amherst Egyptian Papyrus 5	Newberry 1899: 22
35	His Majesty found[...]of <i>mdw-nṯr</i>	Stela of Ramesses IV, Cairo JdE 48831 (Abydos)	<i>KRI</i> VI: 21
36	(Thoth says: I am)... scribe who is excellent in <i>mdw-nṯr</i>	Tomb of Nefersekeru (TT 296)	Feucht 1985: 2: 44, pl. XVI
37	Lord of <i>mdw-nṯr</i>	Karnak Inscription of Thutmose III	<i>Urk.</i> IV: 872
38	Thoth, Lord of <i>mdw-nṯr</i>	Stone Scribal Palette, Louvre E901	Louvre Online Collection <sup>87</sup>
39	Thoth, Lord of <i>mdw-nṯr</i>	Scribal Palette, Louvre N3023	Tallet 2002 <sup>88</sup>
40	O Thoth, Lord of <i>mdw-nṯr</i>	Ritual Text (pChester Beatty IX = pBM EA 10689)	Dils 2022 in <i>TLA</i> <sup>89</sup>
41	Thoth, Lord of <i>mdw-nṯr</i>	Cubit Rod of Amenemope (Museo Egizio, Turin 6347)	Monnier, Petit, Tardy 2016: 5
42	Thoth, Lord of <i>mdw-nṯr</i>	Nauri Decree of Seti I	<i>KRI</i> I: 46

83 <https://thesaurus-linguae-aegyptiae.de/sentence/IBUBd5ziqvFDkELVg3GTjzQu3R8>.

84 <https://thesaurus-linguae-aegyptiae.de/sentence/IBkBmEWMBbKSaUTmibYj7EUWVg0>.

85 <https://thesaurus-linguae-aegyptiae.de/sentence/IBcAVe7chW5WBkSTgK5cpBT8kc4>.

86 <https://thesaurus-linguae-aegyptiae.de/sentence/IBUBdymWu5t7tOYQoaoIQFIVAsc>.

87 <https://collections.louvre.fr/ark:/53355/cl010007394>.

88 <https://collections.louvre.fr/en/ark:/53355/cl010008826>.

89 <https://thesaurus-linguae-aegyptiae.de/sentence/IBgDNObIZaYVvUB4oHQN3ggWB8g>.

		Source	Reference
43	Lord of <i>mdw-ntr</i>	Stela of Bakaa, BM EA166	<i>KRI</i> II: 389
44	Thoth, Lord of <i>mdw-ntr</i>	Tutankhamun's Restoration Stela (CG 34183)	Lacau 1909–1926: vol. II. 226
45	Thoth, Lord of <i>mdw-ntr</i>	Stela of Neferhotep (Louvre N297)	<i>KRI</i> III: 219 <sup>90</sup>
46	Thoth, Lord of <i>mdw-ntr</i>	Stela of Mery (Louvre N229)	Louvre Online Collection <sup>91</sup>
47	Thoth, Lord of <i>mdw-ntr</i>	Statue of Haremhab (MMA 23.10.1)	Winlock 1924: pl. IV
48	Thoth, Lord of <i>mdw-ntr</i>	Hori's Letter to Ahmose of Peniati (pBm EA 10103)	Glanville 1928: pl. XXXV
49	Lord of <i>mdw-ntr</i>	Thutmose III, Karnak, Festival Hall	<i>Urk.</i> IV: 860; Grallert 2001: I. 277 (T3/Wf048)
50–80	LGG lists 31 additional sources, to which more can be added		

## References

### Abbreviations

- DZA* Digitalisierten Zettelarchiv des Wörterbuches der ägyptischen Sprache.
- LGG* Leitz, C. 2002–2003. *Lexikon der ägyptischen Götter und Götterbezeichnungen*. *Orientalia Lovaniensia Analecta* 110–116; 129. Leuven: Peeters.
- CG* Catalogue général des antiquités égyptiennes du Musée du Caire.
- CT* Buck, A. de. 1935–1963. *The Egyptian Coffin Texts I–VII*. *Oriental Institute Publications* 34, 49, 64, 67, 73, 87. Chicago: University of Chicago Press.
- PT* Sethe, K. 1908–1922. *Die altaegyptischen Pyramidentexte: nach den Papierabdrücken und Photographien des Berliner Museums*. Leipzig: J.C. Hinrichs.
- TLA* Thesaurus Linguae Aegyptiae, Corpus issue 17, Web app version 2.01, 12/15/2022, ed. by Richter T. S. & Werning, D. A. by order of the Berlin-Brandenburgische Akademie der Wissenschaften and Fischer-Elfert, H.-W. & Dils, p. by order of the Sächsische Akademie der Wissenschaften zu Leipzig.
- Urk. I* Sethe, K. 1903. *Urkunden des Alten Reichs*. *Urkunden des Ägyptischen Altertums I (1–2)*. Leipzig: J.C. Hinrichs.
- Urk. IV* Sethe, K., Helck, H.W. et al. 1903–1984. *Urkunden der 18. Dynastie*. *Urkunden des aegyptischen Altertums, Band 4*. Leipzig & Berlin: J.C. Hinrichs & Akademie-Verlag.
- Wb.* Eрман, A. & Grapow, H. 1926–1963. *Wörterbuch der ägyptischen Sprache*. Leipzig: J.C. Hinrichs.

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



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# The Egyptian Hieroglyphic Sign for the Sky


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**Abstract.** After refuting previous interpretations, it is argued that the Egyptian hieroglyphic sign for the sky  represents the two closed lower hinges of a door. The sky itself, infigurable by nature, would therefore only be represented by the entrances through which it could be reached. This hypothesis fits perfectly with the standards of the Egyptian iconographic and scriptural repertoire from the earliest periods, when the sign first appeared, while at the same time echoing the sign  that represents a concrete element of the material world, the door hinge. It also resonates with conceptions of the Egyptian imaginary world as revealed in ancient texts (the famous motif of the “doors of the sky”).



**Keywords.** Egyptian hieroglyphs, hieroglyphic repertoire, sky, doors of the sky, hinge.

Most of the signs in the Egyptian hieroglyphic repertoire reproduce the concrete realities of the physical world and are therefore easily identifiable, even to the untrained eye. This is true, for example, of most of the signs representing animals,<sup>1</sup> or those reproducing elements of material culture. Others, more exclusively linked to Egyptian iconographic codes, are no less easily identifiable once these codes have been penetrated.

However, the interpretation of a number of hieroglyphs, including some representing some of the most fundamental Egyptian concepts, remains controversial to this day, at least in part of their details. This is the case, for example, of the sign of the divine , which most researchers agree to interpret as a mast surrounded by a piece of cloth,<sup>2</sup> but no absolute proof of this interpretation has

1 In a more nuanced presentation of the facts, it should be pointed out that certain signs representing animals remain difficult to identify, both because of the imprecision of the representations available to us and because of certain deceptive iconographic “effets de réel” (according to a Western conception of the image); the difficulty of interpretation is of course just as obvious in the case of hybrid or stylised animals.

2 See Meeks 2004: 167, § 452. Newberry 1947: 90–99 described the sign as “a pole wrapped round with a band of cloth, bound by a cord, the end projecting as a flap or streamer.” The identification is repeated in more or less the same way thereafter (see for example Hornung 2005: 22–24, who describes it more simply as “Stab mit Bändern”

yet been produced.<sup>3</sup> The same is true of the sign , the symbol of life in Egyptian culture, which is now proposed to be understood as a knotted cloth,<sup>4</sup> or the sign , standing for the concept of “stability,” which should probably be interpreted as the stepped representation of four columns, one behind the other.<sup>5</sup> Throughout the history of Egyptological research, all these signs have been interpreted in very different ways. In the course of their millennia-long history, the ancient Egyptians themselves reinterpreted certain signs and discussed their interpretation.



The sign , which represents the sky in both Egyptian iconography and the hieroglyphic repertoire, is one of these commonplace motifs, so commonplace that we often forget to wonder about the origin of their iconography. The sign is one of the well-known components of scenes symbolising the cosmos, in association with a motif representing the ground or earth, and separated by two “w’s-signs,” the whole delimiting the space in which figurative scenes are inscribed (fig. 1). In most lists of signs in modern grammars, the sign  is simply referred to as the “representation of the sky.”<sup>6</sup>



Fig. 1. Scene symbolising the cosmos  
(after Schäfer 1928: 114, fig. 40).

[“rod with bands”], and who cites other similar interpretations). It should be noted that Schäfer 1896: 159, n. 3 already suggested that the sign should be understood as “vielleicht wirklich ursprünglich eine Fahne?” (“perhaps really originally a flag?”). See Baines 1991: 29, who presents and comments on all these references. See also the still relevant comments of Petrie 1892: 32. It should be noted that in the early days of Egyptology, J.-Fr. Champollion had interpreted the sign as an axe (Champollion 1841: 345, published posthumously).

- 3 There is still a degree of imprecision regarding the exact interpretation of each of the sign’s components: is the vertical element a mast or a simple stick? Is the surrounding fabric a strip or a simple cloth? The answers to these questions are fundamental to our understanding of the ancient Egyptians’ relationship with the divine.
- 4 See Meeks 2004: 206, § 563; Meeks 2019: 3–10 (listing numerous previous interpretations).
- 5 See Bergerot et al. 2018: 31–40; Fissolo 2022: 201–208.
- 6 See, for example, my own description of the sign: Collombert 2010: 96, § 170: “représentation imagée, avec les pointes à chaque extrémité qui permettent au ciel de s’appuyer sur les étais qui le soutiennent” (“a pictorial representation, with the spikes at each end allowing the sky to rest on the supports that hold it up”).

In a strange attempt at empiricism, some Egyptologists have occasionally tried to imagine how this motif/sign could fit into a three-dimensional reality, blending physical realities and Egyptian representations (fig. 2)! And so appears the question of the three-dimensionality of the motif/sign: rectangular or circular? Flat or curved? With or without a continuous extension of the terminal spikes? (figs. 3 and 4).<sup>7</sup> It is doubtful whether such perspectives would have seemed really relevant to ancient Egyptian thinkers. What is more, the multiplicity of approaches so characteristic of the ancient Egyptians' system of thought and representation does not mean that all the representations composed with the sky motif are coherent; we know that the Egyptian pictorial system accommodates—and even proposes—assemblages of motifs that are often quite different, as long as these compositions remain aesthetically acceptable.

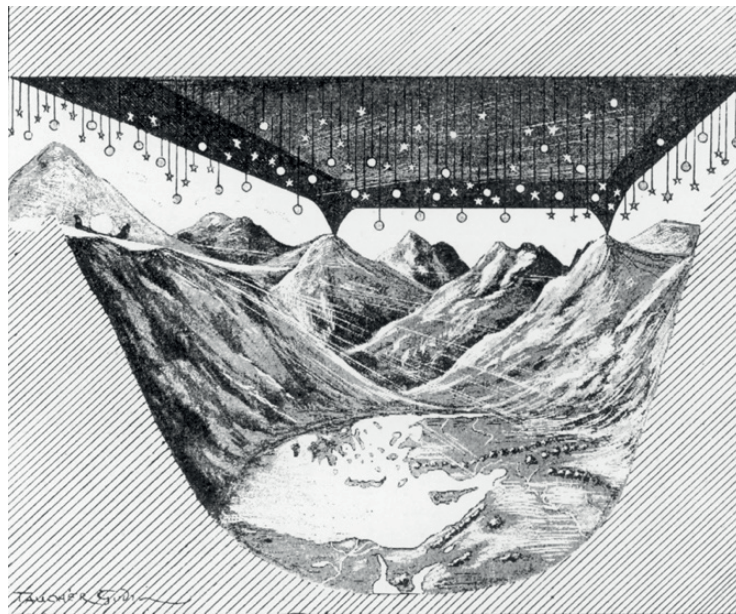


Fig. 2. A free attempt to match the Egyptian representation of the sky with actual representation of the earth (after Maspero 1895: 17).

7 Schäfer 1928: 95. See also Maspero 1895: 17–18: "*Le ciel s'étendait au-dessus, pareil à un plafond de fer, plat selon les uns, voûté selon les autres. La face qu'il tourne vers nous était semée capricieusement de lampes suspendues à des câbles puissants, et qui, éteintes ou inaperçues pendant le jour, s'allumaient la nuit ou devenaient visibles à nos yeux. Comme il ne pouvait demeurer arrêté au milieu des airs sans être appuyé de quelque support, on avait inventé de l'assurer au moyen de quatre colonnes, ou plutôt de quatre troncs d'arbre fourchus, semblables à ceux qui soutenaient la maison primitive; mais on craignit sans doute qu'ils ne fussent renversés dans quelque tourmente, car on les remplaça par quatre pics sourcilleux, dressés aux quatre points cardinaux et reliés par une chaîne de montagnes ininterrompue.*" ("The sky stretched out above like an iron ceiling, flat according to some, vaulted according to others. The face which it turned towards us was capriciously strewn with lamps suspended from powerful cables, and which, extinguished or unnoticed during the day, lit up at night or became visible to our eyes. As it could not remain stationary in mid-air without some form of support, it was invented to secure it by means of four columns, or rather four forked tree trunks, similar to those that supported the original house; but it was doubtless feared that they would be toppled in some storm, for they were replaced by four supercilious peaks, erected at the four cardinal points and linked by an unbroken chain of mountains.")

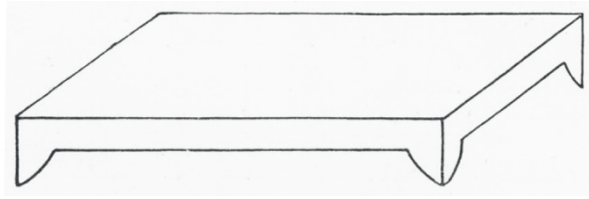


Fig. 3. A free interpretation of the three-dimensionality of the motif/sign 𐀀  
(after Schäfer 1928: 95, fig. 13).

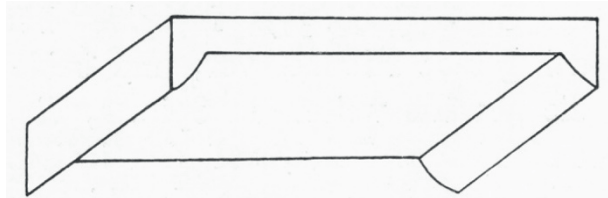


Fig. 4. Another free interpretation of the three-dimensionality of the motif/sign 𐀀  
(after Schäfer 1928: 95, fig. 15).

At the very least, could the sign 𐀀 not refer to any concrete reality? In fact, the ancient Egyptians themselves, in the famous list of signs they collected in Roman times, defined the sign 𐀀 as nothing other than “sky.”<sup>8</sup> However, this lapidary formulation cannot be taken as definitive; we know that the origin of a great many signs at this very late date had long since been lost or reinterpreted. Furthermore, this papyrus does not aim to give a precise description of each of the signs it lists, especially those whose interpretation was probably obvious to the majority of hierogrammates. This brief description of the sky sign—which is not, after all, a description in itself—is also found elsewhere in the same papyrus for other signs.<sup>9</sup>

Finally, refusing to look for a more or less material origin for the sky sign should be a last resort: the ancient Egyptians overwhelmingly preferred to represent concepts or elements of their imaginary world through motifs that referred in one way or another to a concrete element. To illustrate this point, consider once again the examples of the signs 𐀁, 𐀂 and 𐀃 mentioned above.

From this perspective, the sky sign 𐀀 has nevertheless been the subject of some research into the origin of its iconography, interpretations that can be grouped under four main headings, which I discuss in turn:

- the sign 𐀀 represents, or is at least inspired by, the image of a ceiling (§ 1);
- the sign 𐀀 represents, or is at least inspired by, the image of an upside-down world (§ 2);
- the sign 𐀀 represents, or is at least inspired by, the image of an item of furniture (§ 3);
- the sign 𐀀 represents, or is at least inspired by, the image of a canopy (§ 4).

8 Griffith & Petrie 1889: 15 (XIII, 5) and pl. III.

9 Thus, for example, the horizon sign 𐀄 is simply described as “horizon” (Griffith & Petrie 1889: 15 [XIV, 2] and pl. III) and not as a “sun rising between two hills,” which it obviously was for any hierogrammate.



## 1. The sign 𐀀 represents, or is at least inspired by, the image of a ceiling

The interpretation of the sky sign that seems to prevail today is that it represents a ceiling. In his posthumous dictionary, J.-Fr. Champollion<sup>10</sup> began his list of Egyptian hieroglyphic signs with this one, and was the first to analyse it as a “plafond” (“ceiling”), completing its definition as a “caractère symbolico-figuratif, signe de l'idée ciel” (“symbolic-figurative character, sign of the idea of sky”). He was followed by many authors.<sup>11</sup>

There is in fact a word *h<sup>3</sup>.t* that undeniably means both “roof, ceiling” and “sky,”<sup>12</sup> attested with both meanings from the Middle Kingdom onwards. The second word in the title *smsw h<sup>3</sup>y.t*, attested from the Old Kingdom onwards and most often translated as “elder of the gate,” a judicial title,<sup>13</sup> is clearly based on the same root. The term *h<sup>3</sup>y.t* is commonly translated as “porch, gate” and variants.<sup>14</sup>

It seems clear that these two words, *h<sup>3</sup>.t* and *h<sup>3</sup>y.t*, stemming from the same root, are linked to the roofing of a building and that the term *h<sup>3</sup>y.t* refers to a “roofed structure, a portico or the like.”<sup>15</sup> Both *h<sup>3</sup>.t* and *h<sup>3</sup>y.t* are attested with the sign 𐀀 as a determinative, from the Middle Kingdom onwards. However, the earliest attestations of the root (attested only in the title *smsw h<sup>3</sup>y.t*), in the Old Kingdom, do not show this sign, but an elongated rectangle 𐀀<sup>16</sup> (see for example fig. 5 here, with a formally analogous, but probably different, sign for writing the root *m<sup>3</sup>ʿ*).



Fig. 5. Examples of the elongated rectangle 𐀀 in the mastaba of Hetepherakhty (Museum of Leiden) © Philippe Collombert.

10 Champollion 1841: 1.

11 See, for example, Regulski 2010: 147: “sky hieroglyph representing heaven as a ceiling.”

12 Wb. II, 476, 12–13: “Himmel; Dach eines Gebäudes”; Gardiner 1947, II: 210\*–211\*.







13 See Jones 2000: 902–904.






14 Wb. II, 476, 4–11: “Halle, Vorhalle.”


15 Gardiner 1947, I: 61\*.


16 See the attestations listed by Fischer 1996: 228–229.



It should be noted that a very rare variant from the late Old Kingdom uses an exceptional sign , which H.G. Fischer has convincingly interpreted as representing a bag filled with magistrates' staffs, a symbol of their power and of the function of this *h³y.t*.<sup>17</sup> However, this exceptional variant cannot be used to help identify the more common one , which clearly has nothing to do with this sign ; the latter should rather be considered as a hierogrammate's "sportive writing," with no descendants. Although it has parallels in the figurative representations of the period, it differs in that it is used horizontally () and not vertically as in the more realistic iconographic representations, as if an attempt had been made to adapt the general layout of the rare sign  to the more usual spellings using .

So what might this sign  represent? Even if H.G. Fischer "doubt[s] that its subsequent transformation into  provides a clue to its original significance,"<sup>18</sup> it seems to me that A.H. Gardiner's proposal<sup>19</sup> to interpret this sign  as a wooden beam or a stone roof slab is a simple and convincing solution, which resonates with the notion of a ceiling.<sup>20</sup> Interpreting it as a representation of a "baton, i.e., a short stick," as H.G. Fischer seems to suggest<sup>21</sup>—particularly in view of the variant with the determinative of the wood sign  attested in at least three examples from the Old Kingdom<sup>22</sup>—is certainly not impossible, but we would more readily expect a vertical rather than a horizontal sign in this case. The other variants of the determinative attested for this word *h³y.t* in the Old Kingdom are entirely consistent with the interpretation, proposed here, of the sign as a wooden beam: the determinative of the sign for wood  (see above); in the Middle Kingdom, we also find the representation of a roofed structure.<sup>23</sup>

From this long digression, it is worth remembering for our purposes that the sky sign  has no recognised link, in the hieroglyphic system of the Old Kingdom, with the notion of a ceiling, which seems to use a sign  instead.

Finally, if we should consider that the sign  represents a ceiling, how should we interpret the two spikes at the ends of the sign? It is not clear what architectural reality these essential elements might relate to.<sup>24</sup> An abstract representation, with no link whatsoever to an architectural reality,

17 Fischer 1996: 227–232.

18 Fischer 1996: 232.

19 Gardiner 1947, l: 60\*–61\*.

20 Despite the arguments to the contrary, which in my view are not decisive, put forward by Fischer 1996: 232, n. 446. Of course, we should not group together all rectangular signs with a similar appearance under the same identification of "beam," as they may refer to many different realities despite their similarity, given the basic nature of the rectangular sign.

21 Fischer 1996: 229.

22 Examples listed by Fischer 1996: 229 and n. 418.

23 See CGC 20017, mentioned by Gardiner 1947, l: 60\*.

24 My own earlier interpretation, recalled above, n. 6, is not based on any parallel.

simply indicating the downward direction, would remain pure speculation, with no attested parallel in the iconographic and hieroglyphic repertoire.

While the interpretation of various ceilings as representations of the sky is undeniable in Egyptian symbolism, this connection does not seem to be at the origin of the creation of the sign. On the other hand, it is possible, even probable and logical, that the connection between “sky” and “ceiling” *subsequently* led to the use of the sky sign  $\equiv$  in a number of architectural terms involving the notion of covering. Similarly, Egyptian iconography contains many representations of buildings in which the sky sign serves as a ceiling.

## 2. The sign $\equiv$ represents, or is at least inspired by, the image of the world turned upside down

H. Schäfer,<sup>25</sup> in his study of the representation of the world according to the ancient Egyptians, seems to think that the sky sign  $\equiv$  is inspired by the representation of two hills, which would represent the earth *par excellence* and which appears in the hieroglyphic repertoire ( $\cup$ ); it is also found in certain models of granaries (from the Middle Kingdom). This sign would simply have been reversed to represent the sky. It should be noted, however, that the correspondence would only be very loose, given that the two signs, beyond a vague formal resemblance, differ so much from each other.

## 3. The sign $\equiv$ represents, or is at least inspired by, the image of an item of furniture

W. Westendorf sought to demonstrate in a long article that “die geschichtliche Form des sogenannten ‘Himmelsdaches’ [...] sei wie das Raubkatzenbett eine Nachbildung der Himmelsraubkatze, allerdings inzwischen bis zur Unkenntlichkeit vereinfacht und entstellt” (“the historical form of the sky sign [...] would be, like the feline bed, a reproduction of the celestial feline, but in the meantime simplified and deformed beyond recognition”).<sup>26</sup> This idea is based on the (hypothetical) recognition that the sky, before being imagined by the Egyptians in the form of a cow or a woman, would have been thought of as a giant feline. The sky sign would represent a (very) stylised bed, itself a representation of the celestial feline.

The explanation as a whole remains convoluted, to say the least, and is based on a series of interpretations of rather obscure texts that are not supported by contemporary iconography. All the iconographic representations and hieroglyphic signs of beds, chairs and tables attested in the Old Kingdom are always very different in every detail from the sky sign. The variants closer to the

25 Schäfer 1928: 91–95; Hornung 1977: 1215–1218.

26 Westendorf 1991: 426. See already Westendorf 1980: 61 and Westendorf 1966: 12–14.

Middle Kingdom cited by W. Westendorf, most of which are derived from hieratic (!) signs in the *Coffin Texts*, cannot be taken into consideration, as they are far removed both in time and in the writing system from the necessary original hieroglyphic patterns.

An example such as seal Kaplony, no. 393 (fig. 6), presented by W. Westendorf as a convincing indication of the accuracy of his identification, seems far too crude (just compare the sign with the other motifs on the seal, which are just as crude) and too isolated to be taken into consideration in a demonstration.<sup>27</sup>



Fig. 6. Seal no. 393 (after Kaplony 1963: n° 393).

The main problem remains this supposed stylisation, which W. Westendorf is obliged to propose as there is nothing in contemporary iconography to validate his theory.

#### 4. The sign $\Rightarrow$ represents, or is at least inspired by, the image of a canopy

Very recently, J.-L. Fissolo suggested that this sign  $\Rightarrow$  should be seen as a representation of a canopy, set on four uprights; the triangular ends would represent the shape taken by the fabric at the four corners of such an utensil (fig. 7).<sup>28</sup>

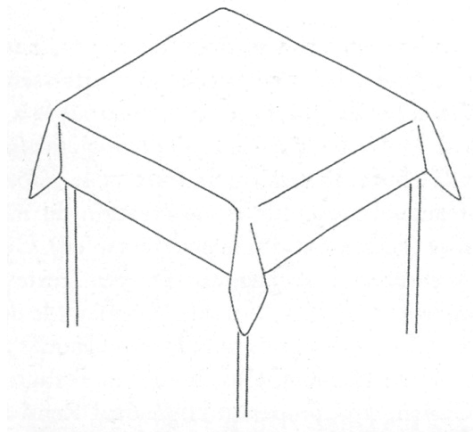


Fig. 7. Free representation of a canopy as model for the sign of the sky (after Fissolo 2022: 203, fig. 2).

27 Finally, H.G. Fischer, a great specialist in hieroglyphic palaeography, explains in a footnote that he “cannot believe, with Westendorf, that the hieroglyph for *pt* represents a bed, seat or table” (Fischer 1996: 207, n. 232).

28 Fissolo 2022: 201–208, and especially 203.

However interesting this interpretation may be, it is not reflected in the material culture (which could easily be explained by the fragility of the material) or, more problematically, in Egyptian iconography, despite the wealth of sources. The only similar device attested in Egyptian iconographic documentation is that of the portable one-sided sunshade, present in certain scenes as early as the Old Kingdom, but which bear no similarity to the sky sign<sup>29</sup> (for example, fig. 8).<sup>30</sup>

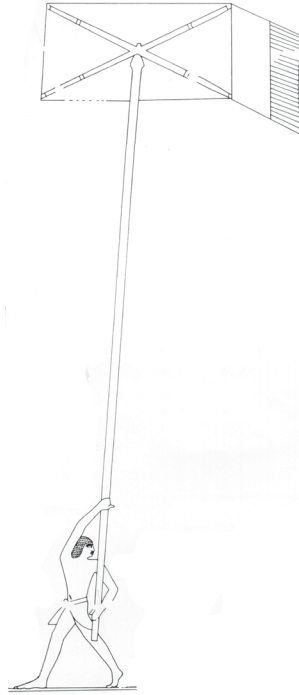



Fig. 8. Representation of a portable sunshade from the mastaba of Hesi at Saqqara (after Kanawati & Abder-Raziq 1999: pl. 55).

The variant  that the author invokes in support of his theory, which is closer to what we would expect if the sign really represented a canopy with drooping sides, is no more in keeping with certain Egyptian representations of sunshades, and is only attested from the end of the Old Kingdom; it cannot therefore be considered original.<sup>31</sup> At the very most, the Egyptians could have come up with a new interpretation of the sign from this period onwards, but I find this hypothesis itself unlikely: this particular form is most often interpreted as an influence of hieratic writing.<sup>32</sup>

29 See Fischer 1972: 151–156 (= Fischer 1977: 63–68 and 182–183) and the other references cited by Fissolo 2022: 208, n. 24.


30 Kanawati & Abder-Raziq 1999: pl. 20 and 55.

31 See Fischer 1968: 86, n. 383; Vernus 1973: 226, n. 1.

32 See Callender 2019: 215, § 314.

## 5. Yet another hypothesis

As we have just seen, none of the hypotheses put forward so far seems to stand up to close scrutiny, especially if, as is necessary when trying to trace the genesis of a sign, we take into account both the date of attestation of the various pieces of evidence and the iconographic and conceptual contexts in which they are found.

In the iconography of early Egyptian history, the sky may have been represented by a crescent. This is attested by the group , which depicts a sky surmounting a snake/flash. The group-sign appears both engraved on certain labels from the U-j tomb<sup>33</sup> and painted as a mark on almost contemporary pottery.<sup>34</sup> The motif also seems to have survived into the 3rd Dynasty, on both sides of the enigmatic pillar of Netjerykhet.<sup>35</sup> Here, the zigzagging snake is again associated with the curved sign;<sup>36</sup> it should be noted, however, that the curved sign is not used in association with the snake in the lower part, but is instead used above the *serekh*, as if it were topping the inscription.<sup>37</sup>

On the famous ivory comb dated to the reign of King Djet (1st Dynasty) (fig. 9), the sky appears to be represented by a pair of curved wings, whose evolution can be followed up to the famous winged solar disc of later times. Above it sails a divine bark carrying a falcon god. Beneath the wingtips, on either side, two “w’s-signs” are reminiscent of those found, in later periods, at the edge of the frame, beneath the definitive sky sign (see above and fig. 1).

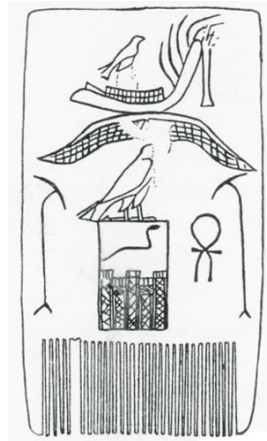



Fig. 9. Ivory comb of the reign of King Djet (Cairo Museum JE 47176)  
(after Schäfer 1928: 113, fig. 39).

33 Dreyer 1998: pl. 33, n° 142 et 143.

34 Dreyer 1998: fig. 55, p. 82; Randall-Maciver & Mace 1902: pl. XVII (30). Regulski 2010: 147 interprets it, following G. Dreyer, as an ancient form of the hieroglyphic sign , defining it as a “combination of crescent with lightning,” which Morenz 2004: 93 doubts. For a detailed study of this group-sign, see the article to be published soon by Fr. Förster, St. Hendrickx, M. Eyckerman & A. Stauder, in *ArchéoNil*.

35 See Hawass 1994: 45–56 (monument kindly pointed out to me by A. Stauder).

36 Hawass 1994: 46, fig. 1.

37 Hawass 1994: 47, fig. 2.

These motifs seem to show a certain variation in the way the sky was represented in these early periods of Egyptian history, if the sky is to be seen here at all.

On the contrary, once the hieroglyphic system had been fully codified, the sign/motif ☰ appeared as it would later be attested throughout Egyptian history; the first attestations currently recorded date from the 2nd Dynasty; the motif is used as an iconographic element on a doorpost from the time of King Khasekhemwy (late 2nd Dynasty) found at Hierakonpolis (fig. 10)<sup>38</sup> and as a hieroglyphic sign on certain seal impressions from the time of Nynetjer<sup>39</sup> and, later, Netjerykhet (fig. 11).<sup>40</sup>



Fig. 10. Door jamb of the reign of King Khasekhemwy (Cairo Museum JE 33896) © Dominique Farout.

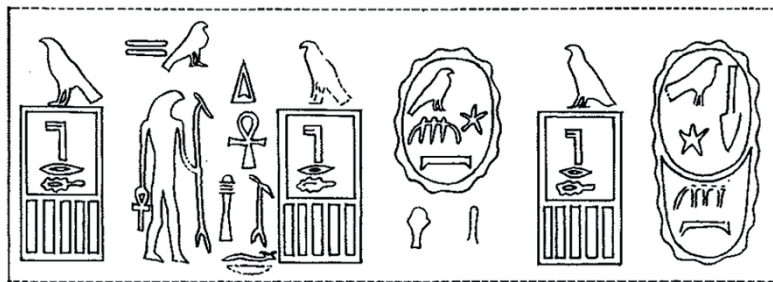


Fig. 11. Seal no. 304 (after Kaplony 1963: n° 304).

38 See Quibell 1900: pl. II. My warmest thanks to D. Farout for the photograph and the permission to publish it. Ph. Seyr kindly points out to me that there may exist an early Dynastic relief fragment from Gebelein, which possibly antedate the door post of Khasekhemwy and may depict a sky full of stars (but the broken relief doesn't show the two ending spikes): see Morenz 1994: 217–238.

39 Regulski 2010: 514 (N1). Unpublished.

40 Kaplony 1963: no. 304. Note also seal no. 568 (fig. 12), difficult to date, but more or less contemporary with these first attestations (see Kaplony 1963: no. 568; Engel 2021: 28 and 126).





Fig. 12. Seal no. 568 (after Kaplony 1963: n° 568).

These examples all represent the sign in what will henceforth be the usual form:  $\equiv$ , with the exception of a few insignificant variants. However, there is a contemporary sign/motif whose shape represents exactly half a sky  $\equiv$ . The motif is attested on the six panels of Netjerykhet, behind the king;<sup>41</sup> it should be noted that it is represented twice each time (fig. 13). It is also found carried by various officiants during ceremonies depicted in the reliefs of the solar temple (fig. 14)<sup>42</sup> and the funerary temple of King Niuserre (fig. 15);<sup>43</sup> here too, the motif is represented twice.

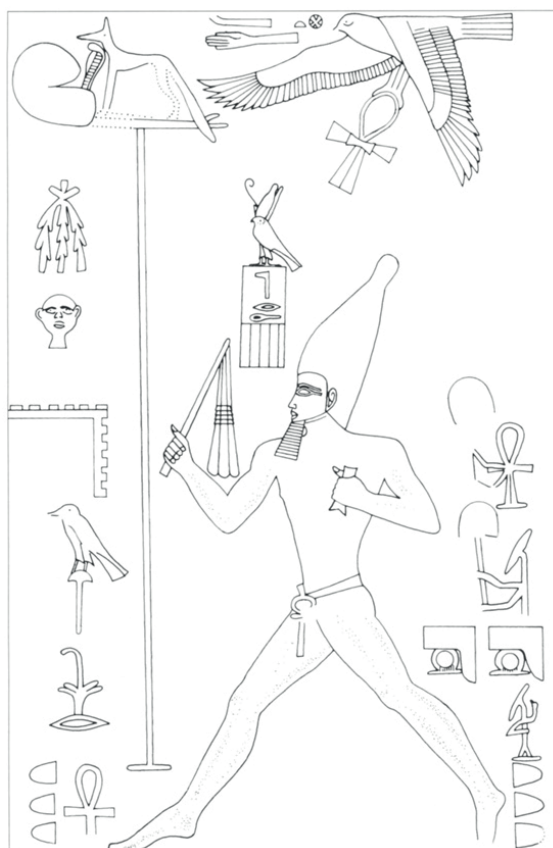


Fig. 13. Relief Panels of King Netjerykhet at the Step Pyramid Complex (after Friedman 1995: 30, fig. 17).

41 Friedman 1995: 22 and fig. 2 on p. 3.

42 von Bissing & Kees 1923: pl. 16, 18, 19, 21, etc.

43 Borchardt 1907: 85, fig. 62a.

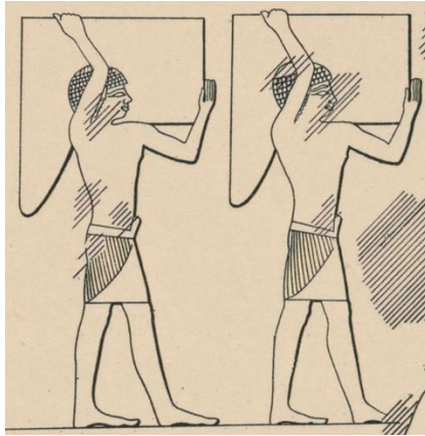


Fig. 14. Relief of the solar temple of King Niuserre (after von Bissing & Kees 1923: pl. 18).

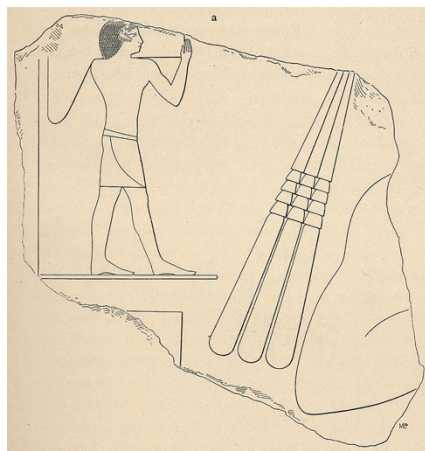


Fig. 15. Relief of the funerary temple of King Niuserre (after Borchardt 1907: 85, fig. 62a).

This strange motif, still often reused after the Old Kingdom in the same type of scene, has been the subject of numerous interpretations; the most recent and most solid one, by J. Spencer, concludes that the object represented “a part of the sky.”<sup>44</sup> The fact that this motif sometimes alternates, albeit relatively late, with a complete sky sign ☰ would seem to support this view.<sup>45</sup>

Before J. Spencer and as early as 1905, G. Jéquier had also suggested interpreting them as the two halves of the sky.<sup>46</sup> L. Borchardt, for his part, proposed interpreting these elements as the “Thürangeln des Tempels” (“door hinges of the temple”)<sup>47</sup> or “die großen Zapfenbeschläge der

44 Spencer 1978: 54–55; the bibliography on the sign is given on p. 52, n. 2 and p. 54, n. 15. See also the more recent study by Miatello 2022: 100, who translates the two signs as “the two limits of the sky” and thus adopts J. Spencer’s conclusions for these symbols.

45 Under the reign of Thutmose III: *LD III*, 36b; see also the references cited by Kees 1912: 129 and 237, n. 111.

46 Jéquier 1905: 174–175.

47 Borchardt 1900: 97.

Tempeltore” (“large pivot fittings for the temple doors”).<sup>48</sup> In 1911, G. Jéquier agreed, describing the two elements as “deux gonds de porte” (“two door hinges”).<sup>49</sup> The following year, H. Kees, in a fundamental study, confirmed this interpretation, relying in particular on the use of this same sign in certain spellings of the word *tph.t* “cavern, niche, chapel,” as early as the *Pyramid Texts*.<sup>50</sup>

In fact, the two interpretative hypotheses (door hinge fittings *vs.* half of the sky) are not contradictory, if we consider that the sky sign, poorly defined until now as we have seen, actually represents two door hinges facing each other. In other words, *the sign*  $\rightleftharpoons$  *would evoke the sky as a space that is closed, but capable of opening up. The sky itself, infigurable by nature, would therefore only be represented by the entrances through which it could be reached.*

## 6. Archaeological parallels

This type of fitting, which was inserted into the lower and upper parts of wooden doors in Egyptian buildings in order to reinforce the wood structure and acted as hinge, is well attested in archaeological material, albeit mostly from the Late Period (see for example fig. 16); some surviving examples may date back to the 18th Dynasty.<sup>51</sup> However, O. Koenigsberger, in his book on the Egyptian door, assumes that these elements existed as early as the Predynastic period. He also explains that he found some traces of green shavings in a door-socket from the funerary temple of Userkaf (5th Dynasty), which he interprets as the remains of these bronze elements.

As can be seen from the examples found, the lower fitting was distinguished from the upper fitting by a curved angle rather than a 90° angle. This difference is due to a practical necessity: the lower pin, on which the entire weight of the door leaf rests, has a slightly curved angle that allows it to pivot more easily on the door-socket (see fig. 17).<sup>52</sup>

The sky sign would therefore refer to the lower hinge, given this particular feature.

48 Borchardt 1907: 85.

49 Jéquier 1911: 183, n. 3.

50 Kees 1912: 128–131. See also Westendorf 1992 (reference kindly provided by Ph. Seyr).

51 See Koenigsberger 1936: 20–23 on these elements.

52 See Lacau 1954: 73–74; Collombert 2010: 115, § 216.



Fig. 16. Bronze hinge of the 26th Dynasty (Louvre Museum N 659)  
© 2018 Louvre Museum / Christian Décamps.

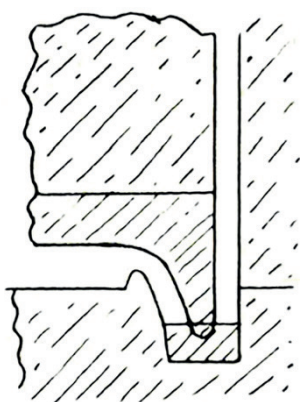


Fig. 17. Representation of the mechanism of the Egyptian door hinge (after Lacau 1954: 74).

## 7. The hinge sign and textual evidence

As we have said, the hinge sign  $\text{𓆎}$  is also attested in the *Pyramid Texts*, as a determinative of the word *tp̄h.t* “cavern, niche, chapel” (fig. 18).<sup>53</sup>



Fig. 18. Inscription with the word *tp̄h.t* from the pyramid of Pepy II (© Philippe Collombert).

There may be textual evidence of the object dating from the Old Kingdom. In the Abusir papyri, mention is made of a door and its component parts, namely two leaves, eight closing rings and two *ʾm̄.t*, which the editor has translated as “hinge”<sup>54</sup> because of the material of which the latter are made—copper; the radical *ʾm̄*, which seems to convey the notion of articulation, would be entirely appropriate to designate such an element.<sup>55</sup> The editor had initially opted for a hieroglyphic transcription  $\text{𓆎}$  for the hieratic determinative used in both *ʾm̄.t* and *db̄*, apparently defined as “closing ring,” but later preferred to transcribe it as  $\Omega$ , given the open space present in the lower part of the sign in some of the examples (fig. 19). This sign is therefore not that of the hinge  $\text{𓆎}$ , but it does bear a strong resemblance to the sign  $\text{𓆎}$  which is sometimes found placed below it ( $\text{𓆎}$ ).<sup>56</sup> Could it be the representation of an element related to the hinge (the hole of door-socket or something else)?



Fig. 19. Hieratic determinatives for the words *ʾm̄.t* and *db̄* (after Posener-Krieger & de Cenival 1968: pl. XII Pal).

53 As Ph. Seyr kindly points out to me, it is noteworthy that a similar sign  $\text{𓆎}$  appears as classifier of the *np̄n.t*-cloth in the Pyramid of Pepy I (see Pierre-Croisiau 2015: 117 & 121).

54 Posener-Krieger 1976: 442; Posener-Krieger 1971: 77–78.

55 Breasted 1930: 215–216 and 293–294; von Deines & Grapow 1961: 7–8.

56 As early as the Pyramid Texts, see *Pyr.* 810c (N).

## 8. The door leaf motif/sign

The difference in the design of the lower (curved angle) and upper (90° angle) rotary axes is also clearly visible, both in iconography and in the somewhat detailed examples of the hieroglyphic sign of the door leaf, from the earliest times.<sup>57</sup>

The importance attached by scribes to what might appear to be a mere detail can be gauged from its insistent presence in hieroglyphic inscriptions from the earliest periods. The first recorded example, which is particularly remarkable and detailed, appears on the Narmer palette (fig. 20). The same characteristic can be found even in some cursive examples, in the inscriptions painted on Thinite-period vases found in the galleries underneath Netjerykhet's pyramid (fig. 21).<sup>58</sup>



Fig. 20. Sign of the door leaf on the Narmer Palette (© Philippe Collombert).



Fig. 21: Cursive sign of the door leaf on a Thinite-period vase (after Lacau & Lauer 1965: fig. 148).

57 See Regulski 2010: 548. See Kahl 1994: 638–639 for attestations of the sign.

58 See Lacau & Lauer 1965: 10, and some well-marked examples in pl. X.3 and p. 76, fig. 148.



Fine examples can also be found in representations of Old Kingdom tombs (fig. 22).

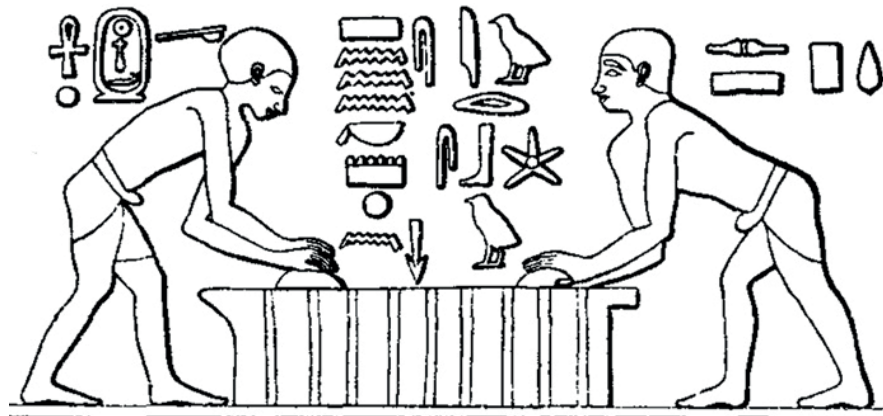


Fig. 22: Representation of a door leaf in the mastaba of Wepemnefert at Giza (after Hassan 1936: fig. 219, after p. 190).

The technical necessity of this shape for the lower hinge ensures that a reverse development of use, where the hinge would take on its characteristic shape by imitating the pre-existing shape of the sky sign, cannot be envisaged under any circumstances.

## 9. Opposite door leaves

The depiction of two door leaves facing each other is attested on a seal from the time of King Djed (fig. 23).<sup>59</sup> This makes the connection with the sky sign even more striking.

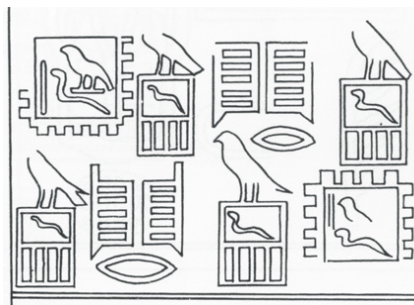


Fig. 23: Seal of the time of King Djed (after Kaplony 1963: n° 176).

The representations of palace façade with false doors that surround the sarcophagus of King Merenre in his burial chamber also show, at the level of the lower part of the leaves, an aspect that is absolutely identical to that of the sign of the sky, taken in isolation (fig. 24).

<sup>59</sup> Kaplony 1963: no. 176 = Petrie 1900: pl. XVIII (4). The supposed example of the sign cited by Petrie 1927: pl. 21 (481) (= Petrie 1900: pl. VIII [6]) comes from a context that is too incomplete to be used; is it really the sky sign?



Fig. 24. Representation of a false door on the palace façade in the pyramid of King Merenre (after Pierre-Croisiau 2019: pl. VII).

In certain three-dimensional representations of false doors in Old Kingdom mastabas, such as those of Mereruka (fig. 25) or Seshemnefer II (fig. 26), the similarity is just as remarkable.

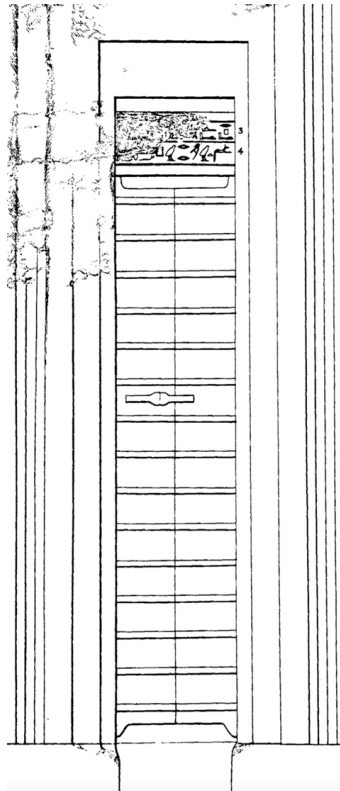


Fig. 25. Representation of a false door in the mastaba of Mereruka at Saqqara (after Sakkarah Expedition 1938: pl. 107).

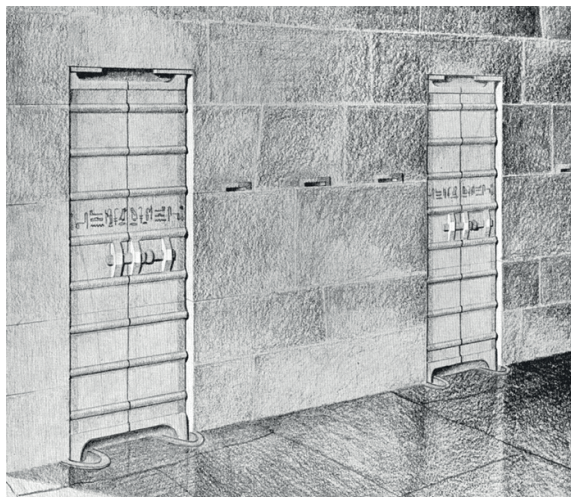


Fig. 26. Representation of false doors in the mastaba of Seshemnefer II at Giza (after Junker 1938: fig. 34, after p. 190).

## 10. An iconographic detail

Another palaeographic detail could well support the proposed comparison: in certain representations of doors from the Old Kingdom, the two lower hinges at the ends of the door are distinguished from the upper part of the leaf by a different colour.<sup>60</sup> A particularly interesting example can be found in the representation of the false doors painted around the sarcophagus in the burial chamber of Queen Behenu: the appendages are painted black, and thus clearly distinguished from the upper part of the leaves (fig. 27); the black colour most likely refers to the metal of which the hinge was made (see below). The same feature is found in the tomb of Khuy, dated to the 5th Dynasty, in the cemetery of Djedkare (fig. 28).<sup>61</sup>



Fig. 27. Representation of a false door on the palace façade in the pyramid of Queen Behenu at Saqqara (© MAFS - Emmanuel Laroze).

60 Jéquier 1929: pl. XII, XIV, XVI. As Ph. Seyr kindly points out to me, black-coloured lower door hinges occur already in the 3rd Dynasty. See Quibell 1913: pl. X, XV, XXI, XXII.

61 My warmest thanks to Mohamed Megahed for the photograph and the permission to publish it.





Fig. 28. Representation of a false door in the tomb of Khuy at Saqqara (© Djedkare Project).

A separating line, which may recall the difference in colour, appears on some examples of the sign 𐀀, although this detail seems to have only been spotted in hieroglyphs from the Middle Kingdom onwards.<sup>62</sup> Given that the only evidence of this difference of treatment in the Old Kingdom can be found on representations that have retained their colour, its absence in the hieroglyphs may be explained by the disappearance of colour on signs for this period.<sup>63</sup>



Fig. 29. Inscription from the temple of Sethy I at Abydos (© Philippe Collombert).

- 62 Blackman 1915: pl. 11 at the top (incorrectly indicated as pl. 9 in Collombert 2010: 96, § 170, n. 2). As Ph. Seyr kindly points out to me, this peculiarity already appears in certain examples on coffins of the late First Intermediate Period or early Middle Kingdom, see for example Steindorff 1901: pl. XIX. This horizontal dividing line is still sometimes found later (see for example Servajean 2011: 62, § 117; Epigraphic Survey 2009: pl. 47 and 121, where the line is attested both for the sign of the sky and for the two hinges). See also here, fig. 29 (New Kingdom: Temple of Abydos, Sety I).
- 63 I have identified one example of the sky sign in blue colour (see Mysliwiec 2004: 179 and pl. LXXIV), but in a context where the colours of the signs are more in opposition to each other in the general motif of the inscription than used to echo a material reality. Another example, in red colour (see Smith 1946: 367), is equally uninformative. In our case, the question of the sign's colour does not shed any decisive light on the origin of the motif.

In another iconographic example from the Old Kingdom at Deshasha, the dividing line is drawn a little higher up on the leaf, in order to highlight, perhaps even more accurately in the representation, the element of metal reinforcement that must necessarily have engaged in the lower part of the leaf, in whole or in part (fig. 30).<sup>64</sup>

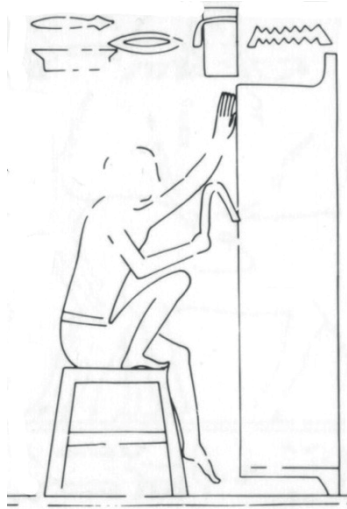


Fig. 30: Representation of a door leaf in the tomb of Shedu at Deshasha (after Kanawati & McFarlane 1993: pl. 49).

## 11. The doors of the sky

If we accept the hypothesis put forward here that the sign of the sky represents the two lower hinges of a door—or at the very least two bottom of door leaves—facing each other, the symbolism conveyed by this choice of figuration becomes transparent: it can be linked directly to an extremely common concept in Egyptian religious thought, namely the fact that, for the ancient Egyptians, the sky was a place that was reached after passing through its gates.

The “doors of the sky” are indeed a recurrent motif in religious literature, from the *Pyramid Texts* to the end of Egyptian history.<sup>65</sup> Suffice it here to quote the refrain so often heard in the *Pyramid Texts*: “The doors of the sky are open; the doors of the Cold Region are pulled open.”<sup>66</sup>

The opening of the doors of the sky is also an Egyptian topos with many possible variations. One famous example is the identification between the doors of the sky and those of the naos, which are opened in the privacy of the sanctuary in order to enter into contact with the divine forces.<sup>67</sup> Our proposed identification may also open up new avenues of interpretation; we know, for example,

64 Kanawati & McFarlane 1993: pl. 49 (line not figured in Petrie 1898: pl. XXI).

65 See Brunner 1986: 782–783; Zivie 2009: 16–23; Berlandini-Keller 2009: 27–43; Bergerot et al. 2020: 3–28.

66 PT 325, 479, 563, 573, etc.

67 See, for example, Brovarski 1977: 107–115; Černý 1948: 120.

that the doors of the sky are sometimes said to be made of metal;<sup>68</sup> and if the sky itself is often said to be made of *bj*, could this not be an allusion to the material from which its hinges were made?<sup>69</sup>

In the end, although not totally certain, the hypothesis proposed here has the advantage over previous interpretations of satisfying two important premises. Firstly, it fits in perfectly with the standards of the Egyptian iconographic and scriptural repertoire from the earliest periods, when the sign first appeared, while at the same time echoing the sign  $\overline{\text{𓂏}}$  that represents a concrete element of the material world, the door hinge. And it resonates with conceptions of the Egyptian imaginary world as revealed in ancient texts.

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68 See Almansa-Villatoro 2019: 76.

69 See also the interpretation, not necessarily exclusive of the one proposed here, of Almansa-Villatoro 2019: 73–81.



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# Anatolian Hieroglyphic Writing and Meta-Writing

## The Name of Kubaba

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**Abstract.** This contribution discusses the writing of the name of the goddess Kubaba. In its fullest form, her name is marked with the classifier for “god” next to full phonetic writing of Kubaba as *ku-pa-pa-*. Curiously, most spellings include a bird sign (AVIS) after the first syllable, *ku*. This paper addresses the spelling, which seems to break with the current understanding of how Anatolian hieroglyphic writing functioned. It is argued that this particular writing exceeds the recording of linguistic content with the bird sign, which is to be understood as meta-writing, i.e., a visual comment on the writing.<sup>1</sup>

**Keywords.** Kubaba, Anatolian Hieroglyphic, Sign use and Function, Meta-Writing.

### 1. Introduction

The Anatolian hieroglyphic (AH) script is a mixed logo-syllabic writing system. Accordingly, the signs of writing have semantic and/or phonetic value. Semantic signs function as either logogram—to be read phonetically—or classifier—a silent marker of a semantic category. Syllabic signs are used to indicate phonetic sequences ranging from parts of to full words. Semantic and phonetic signs may be used on their own or in combination. Words can thus be represented in multiple ways

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across the semantography-phonography continuum. As the following picture illustrates, a single word (here: Luwian *hawis*, sheep), can be expressed in several ways (fig. 1):

- either by a semantic sign functioning as a logogram: OVIS
- in a mixed logo-syllabic writing of varying length, with the phonetic writing always starting from the word end: OVIS-*sá*; OVIS-*wa/i-sá*
- in phonetic writing only: *há-wa/i-sá*
- or, last but not least, combining a semantic sign functioning as a classifier with full phonetic writing: (OVIS)*há-wa/i-sá*

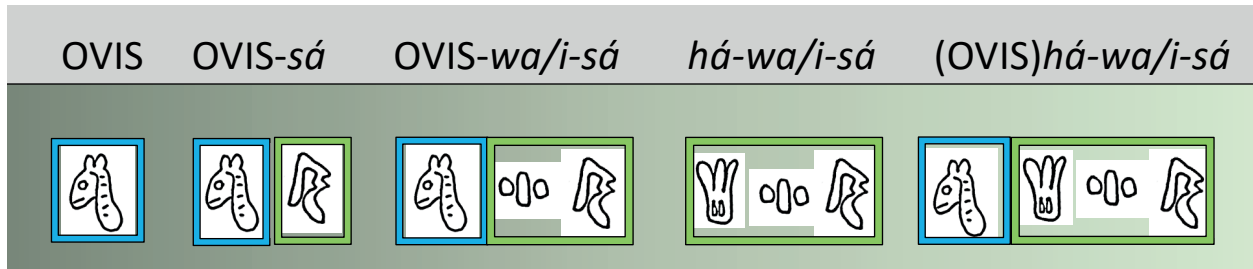


Fig. 1. The Semantography-Phonography Continuum

The fact that the historical development of the script attests full phonetic writings before their combination with a semantic classifier suggests that the original users of the script probably arrived through trial and error at an understanding which has recently been proven by modern neuroscience: namely that combining semantic and phonetic information offers more support for an effective reading process than using just one of these two channels.<sup>2</sup>

## 2. Breaking the Pattern

Despite a high level of regularity, at a closer look, the surviving AH text corpus clearly preserves instances where writing deviates from the standard principles elucidated above. This article will address one particular writing which, while understandable, has long been acknowledged as awkward, yet not been examined from the vantage point of writing systems research. The name of the goddess Kubaba is commonly spelled as (DEUS)*ku-AVIS-pa-pa*-[plus nominal ending]. The divine classifier DEUS at the beginning of the word is unproblematic, as is the phonetic spelling *ku-pa-pa* for Kubaba, given that the AH script has no option but to use the voiceless series for the (otherwise non-existent) voiced counterparts, i.e., *pa* for */ba/*. Curious, meanwhile, is the use of the bird sign AVIS (L128), both as regards its position and its use in the first place. Phonetic writings are not normally interrupted by other signs—how should the bird be read? Normally, hieroglyphic signs have a maximum of two readings, namely a semantic value, and derived from it by acrophony, a

2 On the historical development, cf. Payne 2015: 32–34; on the reading process, cf. Dehaene 2009, esp. 38–41.

phonetic value. Given that the writing of the name of Kubaba appears complete without the bird sign, one might even entertain a heretical approach: should it be read? If we allow this last question, we are faced with three options:

1. The bird sign represents a phonetic syllable to be read
2. The bird sign represents a semantic sign: (a) a logogram, to be read in Luwian; or (b) a classifier, to indicate a category, guiding the reading process
3. The bird sign is not a sign of writing, and should not be “read.”

Let us first address option (1). The established late phonetic value,  $zi_4$ ,<sup>3</sup> for the sign L128 makes little sense in reading the sequence (DEUS)*ku*-AVIS-*pa-pa*-, and thus cannot be intended here. Postulating another phonetic value for the sign, either as an addition or a precursor to the established one, would simply exchange one problem of this reading for another. How, then, about option (2)? If the bird was a semantic sign, could it represent a logogram?<sup>4</sup> The existence of full phonetic writing rather suggests that it should function as a classifier, just as the sign DEUS, which indicates that *Kubaba* belongs to the “divine” category. In general, it would not be unusual to have two classifiers, i.e., DEUS and AVIS. Yet in the writing under discussion, the unparalleled position of a second classifier AVIS outside a linear sequence with the first classifier, instead placed within the phonetic spelling, would need explaining.

### 3. Ligatures

Before returning to the question of how to read the bird sign, the question of ligature writing and its relevance in this spelling needs addressing. The standard transliterations of the name of Kubaba in inscriptions and on seals indicates instances of ligature and of clear separation, indicated with either a plus or a hyphen. Having checked all instances against the publication photos, I cannot concur everywhere with the standard transliterations but arrive at the following pattern for the 91 examples studied:

3 Cf. Hawkins 2000: 32.

4 Within the context of a personal name on a seal, it has been argued that the sign represents the *kukula*-bird, thus to be understood as a logogram with a Luwian reading of *kukula*- (D’Alfonso 2009). While this works for the seal in question, *kukula*- would be problematic in reading *Kubaba*, and a derived value *ku*- alone would conflict with  $zi_4$  and is thus no viable option. Even if accepted as a redundant repetition of the syllable *ku*, the rare parallel for redundant double writing of the phonetic sequence in the use of another bird sign (\*133), *ara/i*, (cf. Payne forthcoming) differs in some significant details. The redundancy of this spelling is emphatic, as is the differential iconicity of integrating the double bars of the vowel *a* into the bird’s wing (on differential iconicity, cf. Stauder 2018). In my opinion, the use of the sign AVIS in the name of *Kubaba* does not conform to the same pattern, as even the instances which show ligature of *ku* and the bird, do not result in an integration into a single shape but rather show distinctly single signs, albeit touching. It will be argued that the bird serves a different function altogether.



24 show ligature (of which 2 seals) <sup>5</sup>	24 %
45 do not show ligature (of which 5 seals) <sup>6</sup>	51 %
10 possibly show ligature (photo not good enough to decide) <sup>7</sup>	12 %
12 remain uncertain (no or bad photo) <sup>8</sup>	13 %

Thus half of all attestation do not show ligature whereas only a quarter do. If we exclude the uncertain examples from the equation, the percentages are even more strongly in favour of non-ligature writing (two vs. one third). There are several possible ligatures, not all of which can be indicated by the transliteration, i.e. when the ligature occurs between the classifier DEUS and a following sign:<sup>9</sup>

(1) DEUS+ <i>ku</i> +AVIS	15 examples	most frequent ligature
(2) DEUS+ <i>ku</i>	4 examples <sup>10</sup>	possibly but not necessarily a question of space (two or three signs above each other)
(3) DEUS+AVIS	2 examples	only attested in handwritten writing
(4) AVIS+ <i>sa</i>	2 examples	the bird sits with its feet perched on the archaized <i>sa</i> -sign <sup>11</sup>
(5) <i>ku</i> +AVIS	1 example	The DEUS sign is placed to the left of this sequence

The variety of ligatures attested across the samples studied, as well as the dominance of non-ligature writing suggests that existence and form of ligature were not used to encode relevant meaning. Furthermore, the fact that option (4) seems to explore the pictorial potential in using another sign of writing as the perch for the bird, as a tree branch might serve in real life, could also be taken in support of this interpretation.

5 KARKAMIŠ A21 § 1; 3; A24a2+3 § 9; A13a–c § 1; 5; A18i; A29k; A12 § 3; A13d § 7a; A14a § 9; A14b § 4; A11b+c § 9; 16; 18c; 25; A2+3 § 23; A6 § 21; POTOROO 2a; 6b; GULBENKIAN seal; BEIRUT § 3; ALEPPO 2 § 26; BOROWSKI seal 1; MALATYA 13.

6 ANCOZ 1 § 2; ANKARA § 11; BABYLON 2 § 4a; HOGARTH seal 1; PORADA seal; KAYSERI § 11; MARAŞ 10 l. 1; KARABURUN § 8; 10; KARKAMIŠ A11a § 7; 26; A18e § 2; 3; 6; A18j; A31+ § 1; 3; 7; 15; A4a § 13; A15b § 12; KARKAMIŠ fragments A19j1, l. 1; l. 1–2; A27hh, l. 2; ANCOZ 5 § 1; ANCOZ 7 § 4; BOYBEYPINARI 1 § 10; BOYBEYPINARI 2 § 1; 8a; 10; 20; TELL AHMAR 2 § 2; ÇIFTLIK § 9; KÂHTA 1 § 1; KULULU 1 § 11; GELB § 4; DELAPORTE seal; HOGARTH seal 2; NINIVEH seal; SULTANHAN § 32; KULULU 5 § 1; BULGARMADEN § 4; 17; ISTANBUL (“ATHENS”) § 3; SAMSAT 3.

7 KARKAMIŠ A25a § 6; A25b § 3; A30h § 1; A15b § 1; A23 § 3; 10; A26a1+2 § c; A20a1 § 2; A6 § 20; TELL AHMAR 1 § 2.

8 KARKAMIŠ A15e l. 1; A26 d l. 2; A4b § 4; 6; N1 § 4; Stone Bowl § 1; ALEPPO 7 § 3; KÖRKÜN § 3; CEKKE § 24; 27; TULEIL 2 § d; TELL AHMAR 6 § 2.

9 Because in transliteration, the classifier is already separated from other signs by brackets.

10 Two of which break off after the *ku*, so could also have belonged to the first category.

11 It remains impossible to know whether this reinterprets the sign as an object from the real world, i.e., some kind of football, or whether the bird should be understood perched on a sign of writing.

## 4. Birds

The hieroglyphic script contains more than one bird, which the sign list separates into eight entries (L127–L135). It has already been suggested that the signs AVIS<sub>1-3</sub> should be identified with different birds, and thus represent different readings for the logograms.<sup>12</sup> I have discussed the bird renderings of the sign AVIS (L128) collected for this article with Thorsten Trede who draws an even more differentiated picture. According to him, these attestations represent more than a single variety of bird, based on the relationship of wing to tail and the types of feathers, yet might be loosely grouped together as birds of prey. This raises questions regarding sign identity—and at the same time contrasts sharply with their occurrence in stable, repeated instances of the same name, which would lead a reader to expect sign identity.

Is it possible to disregard the graphic differences as free, i.e., meaningless variation? This seems unlikely in the context of the script having several bird signs to represent different logograms according to the bird names behind the animals depicted. One might reasonably expect that also different birds of prey would have had different names, and that these would have been familiar to the ancient scribe. Most likely, such a person would have been more familiar with his natural surroundings than the average modern reader.

## 5. Writing and Meta-Writing

The simplest explanation that integrates the different shapes of birds is therefore one which does not require sign identity. In fact, it does not even require reading, either. The diversity of form is resolved if we adopt a different approach altogether, namely if we understand the bird as *showing*—rather than writing—the domain of the goddess Kubaba as “Mistress of Wild Animals” (cf. the Greek Πότνια θηρῶν). In this interpretation, the bird looks like a sign of writing (and theoretically, it could of course be one) but is in fact not used as such but as a pictorial element, which should be understood as a visual meta-discourse on the written form of the divine name, (DEUS)ku-pa-pa, i.e., it is not writing but a commentary on writing.

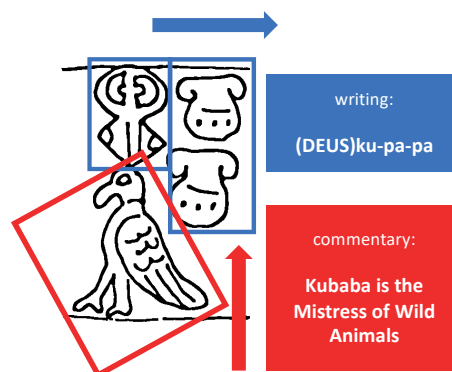


Fig 2. KARKAMIŠ A11b+c, § 18c, Kubaba

12 Hawkins 2005: 298.

As such, it realizes the iconic potential of hieroglyphic signs in the opposite direction to that expected by the reader. For the reader, this is a stumbling block, as it interferes with the reading process. The position within the divine name makes sense on two levels, firstly, it evokes the domain of the goddess as literally being within her (reach). Secondly, the fact that it disrupts the reading process simultaneously indicates its intended function on the level of meta-discourse. Like hieroglyphic signs of writing, the bird explores the tight interrelationship between pictorial writing and representative art, yet in this instance favours the latter. Most likely, it carries some additional connotations on top of this, which escape us: ornamental, ludic and religious come to mind. In fact, this type of visual commentary might be more widely-spread across the surviving text corpus, as it hides behind what looks like “normal” hieroglyphic writing. Another example comes to mind, which shows a similar strategy for writing in the name of another goddess, namely Ba‘alat from Hama (HAMA 8, § 2). One single writing of her name replaces the expected divine classifier with a pair of hands which are shown to encompass the first phonetic sign of her name. As already pointed out by Hawkins, this could plausibly indicate the protective qualities of the goddess.<sup>13</sup>

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13 Hawkins 2000: 410.

# The Proto-Semitic Origin of Tāw and its Meaning

From + and × to † and ׀ (ת > ט)  
to the letter name and its cultural background

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**Abstract.** This article is based on Gardiner’s “acrophonic” and Goldwasser’s “illiterate” hypotheses for the origins of the evolving Proto-Semitic alphabet. It demonstrates that the letter name Tāw originates from the custom of marking/branding animals, a non-linguistic system indicating rights of disposal attested from the 3rd millennium BCE in southern Mesopotamia and still extant with today’s Bedouins in the Levant. This custom is perceived as the point of departure for the evolving concept as an (alphabetical) letter in the 2nd millennium. It is further shown that the culturally determined ancestry of the letter Tāw is reflected also in the sources of the Hebrew Bible, thus providing important insights for Biblical exegetical research.

**Keywords.** letter Tāw; letter names; early alphabet; (animal) marks; mark of Cain; cuneiform script; phonemic segmentation.

## 1. On the acrophonic principle (Gardiner’s and Goldwasser’s hypotheses)

In the following we consider the heuristic value of two outstanding hypotheses on the emergence of the Proto-Semitic alphabet. We may term these the acrophonic principle<sup>1</sup> (based on Alan Gardiner’s ingenious suggestion of 1916; see also Gardiner 1962) and the suggested *illiterati* hypothesis, that

<sup>1</sup> We restrict our elaboration on what Vernus 2015 termed “acrophonie forte,” also discussing deviant opinions of other Egyptologists (Darnell, Morenz, Werning); see Vernus 2015: 162, with footnotes 53–54.

is the non-Egyptian origin of the people involved, as argued by Orly Goldwasser.<sup>2</sup> We also briefly address a complete refutation of these hypotheses by some scholars following Ignace Gelb's systematic account in *A Study of Writing* of 1963. In his seminal work, *The Genesis of the Alphabet and its Development in the Second Millennium B.C.* (1988), Benjamin Sass explicitly discusses Gelb's assertion that "true" consonantal writing was an invention of Greek culture. Like another fundamental hypothesis of Gelb—the logocentric conception of writing<sup>3</sup>—the notions persist in public opinion and beyond. Indeed, scholars like Powell in 2009 tried to save Gelb's hypotheses, generally ignoring the rather convincing arguments by Sass and others.<sup>4</sup> Gelb's hypothesis of a syllabic origin of the pre-Greek scripts was recently promoted again by Peter Daniels in 2023 who lucidly discusses several aspects of Gelb's hypothesis.<sup>5</sup> In the past decades a great number of books and articles have specifically addressed the following issues:

- 2 Orly Goldwasser described this phenomenon in a number of articles from various perspectives: see Goldwasser 2006, 2010, 2011, 2012, 2016a and 2016b, 2017 and quite recently 2022. Needless to say, over time she was able to refine and modify her main thesis which is: *illiterati*, that is people not familiar with the hieroglyphic writing system, invented the Proto-Sinaitic alphabet, most likely at Serabit al-Khadem around 1800 BCE. Her major arguments are succinctly summarized by Ben Haring: "The earliest alphabetic characters persist from the eighteenth until the thirteenth century, when professional scribes developed a standardized linear script. Iconic writing, she proposes, should not be thought of so much in terms of precise graphs, but rather as being worked with recognition cues, making e.g. a human head recognisable as such without sticking to fixed graphic conventions: the signified counted, rather than the precise form of the signifier. [...] For the earliest users of alphabetic notation, who according to Goldwasser were not professional scribes, such a notation was relatively easy to master as long as the signifieds and hence the names of the signs were sufficiently internalised (and for this in turn a fixed alphabetic order, such as *h-l-h-m* or *'-b-g*, would have been a help). But what was the initial inspiration for such an iconic script, in which a limited set of pictorial characters was used to represent the consonants of a Semitic language? Ever since the discovery of Proto-Sinaitic at what is basically an Ancient Egyptian site, and a place very much dominated by hieroglyphic epigraphy, that inspiration has been traced by scholars to Egyptian hieroglyphs" (Haring 2020: 63).
- 3 Compare the discussion in Selz 2022. Gelb's entire concept of writing is formulated from a logocentric view of writing. From a modern, not to say western, perspective, this may be comprehensible in so far as the combination of visual and aural/oral modalities result in the fusion of what we perceive as new medium. Nevertheless, writing is more than fixing sounds, in a similar way as images are more than iconic depictions; see Selz 2022. Especially relevant for our discussion is Haring 2021; see further, e.g., Elleström 2010, who summarizes the issue from the viewpoint of media studies.
- 4 Sass 1988: 161 writes: "The question of which of these two systems (the Semitic *abjad* and the Greek alphabet) should be called alphabetical is thus mainly semantic. [...] Strictly speaking, only the various Semitic consonantal scripts, which *ab initio* have *alep* and *bet*, have the right to be labelled alphabets."
- 5 Basically, this notion depends exclusively on the *definition* of writing. When one accepts the description of Daniels 2023: 10, "Writing, by the way, is a system of more or less permanent marks used to represent an utterance in such a way that the utterance can be recovered more or less exactly without the intervention of the utterer," then one excludes (*via* the alleged single purpose or teleological focus) all non-logocentric (semasiographic) aspects and gets, at best, half of the information conveyed by the earlier scripts of Egypt and Mesopotamia; compare Selz 2022 and Haring 2022.

- the date and place of appearance of the earliest consonantal writing and the problems with the chronological gap in its documentation after ca. 1800 BCE;<sup>6</sup>
- the cultural environment in which these were invented: by (Egyptian) scholarly circles or rather by illiterate Canaanite workers in the Sinai or by “Asiatic” soldiers;
- the ways in which the earliest consonantal scripts relate to their alleged forerunners in Egyptian writing;
- the discussion of the forms of the various *abcedaries* of the second millennium BCE.

These much-disputed topics have found different solutions in the vast scholarly literature. Scholars like Sass<sup>7</sup> insist that greater Egypt was the birthplace of the earliest “alphabetic” scripts: “Only the earliest, pictographic phase of the alphabet has been found in Egypt, including Sinai. So long as this picture is not overthrown by new discoveries, the archaeological data seem to indicate that quite soon after it was born, the alphabet left Egypt and resurfaced in the Levant” (Sass 2005: 152–153). Sass remarked further that these proto-alphabetic inscriptions “‘float’ within the entire time-span ca. 2000–1300 B.C.” (Sass 2005: 149). He is quite positive on Darnell’s scenario that “Asiatic mercenaries in the Egyptian army were exposed to Egyptian writing practiced by the scribes of their units [...] [thus producing] potential prototypes for all Sinai and Wadi el-Hol letters.”<sup>8</sup> This concurs with Goldwasser’s notion that the *form* of the earliest consonantal signs might be derived from the Egyptian script *via* Gardiner’s acrophonic principle (but their “reading” was not), and that the script was invented by the mining community of Serabiṭ el-Khadem (Sarabiṭ al-Ḥadim) around 1800 BCE. I have neither a reasoned opinion on the periods covered by these inscriptions nor whether the inscription on a sherd of a Cypriot milk bowl from Lachish (15th century BCE) eventually bridges the alleged documentary gaps (see Höflmayer *et al.* 2021 and below).

Whether the invention of the alphabet connects to Asiatic soldiers (Darnell) or Asiatic miners (Goldwasser) is of minor relevance in our context as both theories posit a non-Egyptian element in its formative phase. At this point Goldwasser’s hypothesis that the invention of the alphabet should be attributed to “illiterate miners” (in the Sinai) becomes central. Goldwasser was able to show that the letter names of the alphabet are not related to Egyptian words, but instead are strictly connected to Proto-West Semitic nouns, thus confirming Gardiner.<sup>9</sup> The inventors did not care about any representation of the Ancient Egyptian language—it seems clear that *with respect to Ancient Egyptian*

6 An overview of the discussion of dates for the Proto-Sinaitic scripts is provided by Hamilton 2014 and Haring 2020: 56–58.

7 Sass 1988 and 2005, with an extensive revision including the discussion of new finds from Wadi el-Hol (near Luxor) and Serabiṭ el-Khadem (Sinai copper mines); see also Vernus 2015: 143–144.

8 Sass 2005: 150, with reference to Darnell 2003; see also Darnell *et al.* 2005 and now Le Blanc 2017.

9 Compare Hamilton 2006: 21–25; Krebernik 2007: 135–148 with early literature on page 135; for the Greek letter names and their forerunners see Krebernik 2007: 148–161.



*they were indeed illiterate.*<sup>10</sup> In other words, the letter names evolved *via* a “You Get What You See” principle:<sup>11</sup> Although at least partially based on hieroglyphic iconic shapes,<sup>12</sup> they were named/described by the inventors of the script in their own language. In conjunction with Gardiner’s observations of 1916, it is beyond doubt that these “phonemes” (the proto-alphabet) were developed by “Asiatics” using the principle of acrophony.<sup>13</sup> Besides iconic traces the Egyptian influence is therefore restricted to the fact that the inventors of the alphabet must have been aware that *the hieroglyphs represented language somehow*. The acrophonic principle presupposes phonemic awareness,<sup>14</sup> thus clearly transcending a simplified notion of only syllabic representations.<sup>15</sup>

## 2. From syllabic to phonemic awareness. General considerations

By definition alphabetic scripts are based on the notion that words are sequences of phonemes and therefore imply and presuppose an analytical process. Perhaps consequential for the evolution of the Proto-Sinaitic alphabet are the hieroglyphic *uniliterals* or *monoliterals* which Gardiner explicitly put in the context of “alphabet”—a notion often rejected today.<sup>16</sup> Likewise, it is possible that the

- 10 This is my understanding of Goldwasser’s arguments; it does not presuppose that these people had no notion of what writing was about—to the contrary. In this and other respects Colless’ 2014: 79–80 critique of Goldwasser’s hypotheses (7 and 8) does not convince me.
- 11 This can sometimes be rather complicated. As an example we refer to *nūn* 𐤍 (the Phoenician form is more recognisable: 𐤍), which depicts one or two types of a “snake,” a “viper” or “a cobra in repose” (Hamilton 2006: 154–171). Hamilton discussed the problem providing evidence that the original letter name must have been *naḥaš* “snake,” not *nūn* “fish”. The reason why this changed in the course of alphabetic history remains in the dark.
- 12 But only on the surface; see below fn. 21. Highly interesting here is Goldwasser’s 2016 observation on how the Egyptian scribes of Lachish modified the early Proto-Sinaitic alphabet.
- 13 Powell 2009: 181–184 explicitly rejects the acrophonic principle.
- 14 Compare Powell 2009: 170: “If phonemes are not discrete objective elements of speech, but only a way of talking about speech dependent on the historically conditioned and somewhat haphazard structure of the Greek alphabet, the first writing that allowed the reader to reconstruct the actual sounds of speech, West Semitic writing was not ‘alphabetic,’ as described in such common charts.”
- 15 It may well be that in the Ancient Near East neither consonants nor vowels—which are only abstractive elements of speech—were *analytically* and systematically identified. Powell 2009: 172 writes: “Surely they did attempt to indicate phonic aspects of speech, but not consonants in a theoretical sense, because consonants are phonemes that ‘sound along’ (Latin *consono*) with vowels, and ‘vowels’ as separable units that sound along with consonants are a way of speaking about human speech dependent upon the structure of the Greek alphabet.” See also Daniels & Bright 1996: 27: “The Semitic abjads really do fit the structure of Hebrew, Aramaic, and Arabic very well, [more] than an alphabet would [...], since the spelling ensures that each root looks the same through its plethora of inflections and derivations.”
- 16 But compare Powell 2009: 154: “There must be a connection between the Egyptian repertory of around 24 uniliteral signs, artificially abstracted from the whole system, and the highly similar inventory of sounds represented by West Semitic writing.” And further on p. 164: “If the West Semitic repertory is similar to the 24 Egyptian uniliterals—and even modeled on it in some way—and the West Semitic signary was an ‘alphabet’—then an ‘alphabet’ existed already within the Egyptian logosyllabary.” (See Gardiner 1957: 26–28 with table on p. 27.) Nevertheless, Powell strictly opposes this idea; according to Powell 2009: 168–172, our notion of phonemes is a backward “projection

advantages of a consonantal rendering of a language were seen in the sphere of scribes familiar with Akkadian (syllabic) cuneiform or (hieratic) Egyptian, both of which might have helped eventually to spread the new system in the Levant.<sup>17</sup> Even if phonemes are not discrete objective elements of speech, morphophonemic features do play an important role in cuneiform writing. Thus, the combined evidence from Egypt and Mesopotamia suggests that analytical phonemic analyses were *possible* even when there is little direct evidence for their impact in the extant scripts.<sup>18</sup>

This is neither the place nor do I possess sufficient expertise to judge the (possible) role the 22 Egyptian monoliterals had, if any,<sup>19</sup> in the process of isolating consonantal phonemes, an analytical process of historically greatest consequence. Quite recently Powell insisted, as Gelb did, on the syllabic origins of these signs,<sup>20</sup> arguing that their interpretation as ‘consonants’ is a misinterpretation based on our notion of the Greek alphabet projected back into the second millennium BCE. However, I would argue the opposite: it is our Greek based notion which hinders us in accounting for the covert phonemic analyses, and is also the hurdle for accepting that writing is more than just a means to render speech.

We may therefore summarize: the evolution of the West Semitic “alphabet” started (probably in the Sinai) with the Semitic speaking workers of the mines who described or “read” Egyptian signs in their mother tongue. They thus attributed a meaning to an icon with no phonetic reference to any pronunciation in Egyptian. This seems undisputable, even when their iconic interpretation<sup>21</sup>

of Greek Alphabetic Writing.” Orly Goldwasser drew my attention to an article of Pascal Vernus who systematically re-considered the phenomenon of the origin of the Egyptian monoliterals and concluded: “*On peut donc parler de génération du phonogramme mono-consonantique (signe « alphabétique ») à partir d’un logogramme, lequel, le plus souvent, lui coexiste. [...] Il existe, certes, des phonogrammes mono-consonantiques (signes « alphabétiques ») dont l’emploi comme logogrammes n’est pas attesté, mais on s’accorde en général à penser qu’il s’agit simplement d’une lacune dans la documentation*” (Vernus 2015: 152–153).

- 17 For an evaluation of the cuneiform tradition in Canaan see the essays in Horowitz *et al.* 2006 and 2018.
- 18 Paradigm tables attested in the Old Babylonian Grammatical Texts are, however, demonstrating advanced analytical approaches; compare Huber 2008, 2015.
- 19 This remains rather doubtful; see also Colless 2014: 88.
- 20 Powell 2009: 168 “The graphic isolation of the consonantal sounds of human speech in Egyptian writing, associated with an unspecified vowel, was therefore an intellectual achievement of the very highest order, but in spite of alphabetic transliterations from Egyptian into Roman characters, the Egyptian signs never stood for consonants as in the IPA. They stood for syllables whose sounds we cannot recover.” See also Powell 2009: 114–117.
- 21 At least on the surface the situation for cuneiform is quite different from the evolving Egyptian system: even in its earlier phases cuneiform signs show less iconicity than Egyptian ones. Certainly, the difference in materiality—clay (reeds), also stone in Mesopotamia; papyrus and stone in Egypt—contributed to these differences but this does perhaps not provide a sufficient explanation; for an overview on this issue see, e.g., Pollock 2016 and Cancik Kirschbaum 2017, also Pinarello 2018. Be this as it may, the set of iconic relations for the archaic cuneiform signs is restricted and remains often opaque. However, they are probably less abstract than we tend to judge. The assumption that we lack the necessary information for the reconstruction of the underlying semiotic process is often more likely; at least the boundaries between iconic and symbolic (arbitrary) signs seem to be fuzzy.






is presently not always perfectly clear.<sup>22</sup> It is, with Goldwasser, the Semitic reading of these pictograms<sup>23</sup> which—in conjunction with Gardiner’s “acrophonic principle,” with their isolation of an initial phoneme—forms the backbone of all subsequent alphabets. Such a reduction—as it is usually argued—may have implied a theoretical (!) awareness of the salience of the “consonantal root concept” perceived as fundamental of Semitic languages. These people, however, lived on the fringes of the Egyptian and Mesopotamian cultures. Thus it is in fact their ignorance of the Egyptian writing that may have propelled the emergence of the new system.<sup>24</sup> This hypothesis may also help understand why the iconic perception of the miners did not entirely correspond to the iconic background of the hieroglyphs on which their reading was based—not to speak about the discussion amongst modern scholars.<sup>25</sup> And occasionally letter names may even mix up a variety of traditions, as for instance was the case with the letter Nun.<sup>26</sup> A similar phenomenon, the competition ancestry of *d*—the “fish” \**dag*; \**digg* or the “door” \**dalet*—was recently discussed by Goldwasser (2021: 8–10). As the hieroglyphic reference for this letter, the sign Gardiner 1957: O31  is usually provided (Hamilton 2006: 34). On the sherd from the milk-bowl from Lachish the letter has this shape:



Fig. 1. Photo from Höflmayer *et al.* 2021: 713, fig. 7.

- 22 Quite indisputable examples are: *alep* (𐤀), an “ox” (*aluf*); *bet* (𐤁 𐤂 𐤃), a “house” (*bayit*); *yod* (𐤄), a “hand” (*yad*); *mem* (𐤅), “water” (*mayim*); ‘*ayin* (𐤆), an “eye” (‘*ayin*), or *resh* (𐤇), a “head” (*rosh*), and so on; see Hamilton 2006 and Goldwasser 2010, 2016. A detailed overview of the palaeography of the Middle Kingdom hieroglyphic forms from Sinai and the Proto-Sinaitic letters is given by Goldwasser 2011: 6, Table 1 and 2.
- 23 Remarkably, the same phenomenon is also attested for cuneiform: the iconic “water channel” 𒂗 of the earliest Uruk-Period texts (ZATU 432, with the probable Sumerian reading *šitan*) received in the 2nd millennium the syllabic value *rad*/*t*/*ṭ* derived from Akkadian *rāṭu* “water channel; pipe.” Thus even the modern sign name RAD for the later form 𒂗 is based on this Semitic reading.
- 24 See Goldwasser 2011.
- 25 Powell 2009: 181–184 strictly refutes the acrophonic principle in order to understand the evolution of the Proto-Semitic alphabet (and consequently the transition from a proto-syllabic to an Abjad type of script). I remain unconvinced even though some Proto-Sinaitic readings (letter names) may remain questionable; see the following note.
- 26 See Powell 2009: 182. However, I am less convinced that there is a general problem with the acrophonic hypothesis. I think the documentation that connects, e.g., the Aleph sign with an “oxhead” is quite convincing. It is overstressing scepticism and does not concur with the available evidence when Powell 2009: 182 writes: “We do not interpret the sign as an oxhead because it looks like an oxhead—it is an abstract open angle with a vertical slash—but because its name is *aleph*, which means ‘ox’: then we look for face and horns.” The issue is addressed in a number of important articles collected by Rico & Attucci 2015; significant here is the contribution of Pontecorvo & Rossi 2015.

It is tempting to connect this sign with the cuneiform sign  (Akkadian *daltu*) “door.” The original sign was (before being turned 90° anticlockwise)  or . The second alleged antecedent of the letter name \**dag* is Gardiner 1957: K1  (see the discussion by Hamilton 2006: 61, 69–74). Although still hypothetical, the explanation seems clear. Dalet won the “competition” for the letters *name* because it is based, once again, on the “you get what you see principle” of Semitic speaking people: at a certain point the depiction was perceived as the (half-leaf) door in the style of a Western Saloon, well-known from Mesopotamian iconography.

### 3. From syllabic to phonemic awareness: The evidence from early Mesopotamia

A brief look at the at that time rather dominant type of cuneiform writing may help judge this phenomenon properly. *Phonemic awareness* can be traced in the earliest cuneiform scripts,<sup>27</sup> specifically in the well-known rebus principle based on *homophone* words (or syllables) or only on *homophony that is partial homophony* or similar sounding signs.<sup>28</sup> For the evolution of syllabic values it is informative that in Presargonic Sumer (before 2350 BCE) out of ca. 185 syllabic values used over fifty percent of the syllables—all originating from “free morphemes”—show a consonant-vowel structure (CV).<sup>29</sup> From the earliest Uruk period onwards, the arrangement that lexical lists display is, among others, based on *acrographic* principles. The Uruk III period list Archaic Lu-A (Officials; ca. 3000 BCE) provides good evidence for the syllabic structure of the listed words—sometime but not always found in word-initial position (of compounds). This was an important means for ordering the items of the list.<sup>30</sup> We may further mention that the various means to arrange the entries of a list most often relate to their function as mnemonic devices.

In the course of time cuneiform writing developed from its pre-dominantly pictographic and semasiographic (ideographic) origins to a kind of writing that is usually, albeit incorrectly, termed “logo-syllabic.”<sup>31</sup> Chiefly *via* the rebus principle applied to its ideographic sources a syllabary to

27 A good overview for attestations of “phonemic awareness” is provided by Tonietti 2015.

28 Compare Selz 2018 and Krebernik 2021.

29 See Zand 2012: 23. *Syllabic awareness* is fundamental in the evolving script systems.

30 Elaborated syllabic awareness eventually led to the acrostichon as demonstrated by Mesopotamian acrosticha, the most famous found in the Middle Babylonian *Babylonian Theodicy*, where the reading of the line-initial signs gives the name of the compiler: *a-na-ku sa-ag-gi-il-ki-[i-na-am-u]b-bi-ib ma-āš-ma-šu ka-ri-bu ša i-li ú šar-ri* “I, Saggil-kinam-ubbib, the incantation priest, am adorant of the god and king” (Lambert 1966: 63). Although documenting the change from a proto-syllabic to an Abjad type of script, the acrophonic principle is also documented by several Biblical psalms when the first 22 verses in a acrostichon-like manner follow the letter-sequence of the Hebrew alphabet (Psalm 9, 10, 25, 34, 37, 111, 112, 119 and 145).

31 Please be aware that this may still be a minority vote! The current notion of logograms lacks the wanted precision and is applicable only for later stages of the evolving scripts (see Selz 2021). Egyptologists such as Pascal Vernus (Vernus 2003, Vernus 2015: 148–149) submit similar arguments. Cooper 2004: 90 correctly underlines the primacy of the

represent syllabically written words and word forms developed: the isolation of simple phonemes, however, was never a major aim. And, as remarked, even the application of the rebus-principle often lacked the wanted precision. A sign need not have homophonic qualities; often “homoiophony”—that is, partial homophony—would suffice to establish a sign’s use.<sup>32</sup> On a homoiophonic base, permutation of vowels and the occasional lack of distinctions (such as between voiced and unvoiced consonants) are well attested. The reduction of the Old Semitic laryngeals (ʾ, *h*, *ḥ*, *ʿ*, and *ğ*) to alephs (ʾ<sub>1-5</sub>) in the course of the history of cuneiform could also reflect the problem of identifying (Sumerian) phonemes.

The interplay of these two unrelated languages, Akkadian and Sumerian, also resulted in problems in rendering Sumerian phonetics “correctly” in writing. From the viewpoint of phonetic segmentation there is, besides the signs notating vowels (*a*, *i/e* and *u*),<sup>33</sup> a very restricted number of signs—only three in fact—which show a tendency to ignore the vocalic element and therefore almost represent a segmented consonantal phoneme. These are 𒀭 used for the syllables *wa*, *wi*, *we* and *wu* and 𒀮 for *ah*, *eh*, *ih* and *uh*, also for *á*, *é*, *í* and *ú*. The second series is later differentiated with 𒀮 being used specifically for *a*, *e*, *i* and *u*, as well as for *’a*, *’e*, *’i* and *’u*.<sup>34</sup> These rare examples may indicate that cuneiform writing was on the brink of developing *abecedaries*<sup>35</sup> such as known in the late second and first millennium *abecedaries* (including alphabetical cuneiform from Ugarit<sup>36</sup>).

This important change from a proto-syllabic to an Abjad type of writing almost certainly finds further ancestors in cuneiform syllabaries such as *Syllabary B*. Starting with the syllables *tu* – *ta* – *ti*, then *nu* – *na* – *ni*, etc., this shows regular vowel permutations and thus indicates the *notion* of an isolated consonantal phoneme. This may indeed point to the possible deletion of the vowel or perhaps better an approximation of the vowels to a shwa [ə], a mid-central vowel. Hence, a segmented

semasiogram—“logogram” in his terminology—“to write substantives, adjectives, and verbs, and reserves phonetic writing for grammatical particles and affixes.” Most importantly, he sees here a basic difference with the Egyptian system “which is primarily phonetic, with a heavy dose of semantic determinatives.”

- 32 The derivation of new free morphemes via homophony is usually called the rebus principle. There is, as far as I see, no exhaustive study on homoiophonic derivations—the quasi-rebus principle. The only exception is Zand 2009 who addresses this phenomenon as “partielle Homophonie”; see further Krebernik 2021 and Selz 2018. Most remarkably, what is termed the quasi-rebus principle here compares to what Vernus 2015: 154–157 describes (systematically) as “rebus « défectif ».”
- 33 The signs for vowels show phonetic values when simply used to indicate vocalic length.
- 34 Here we ignore the complex story of the representation of laryngeals from the third millennium onwards as well as the issue of vowel pronunciation and the glottal stop at the beginning of words.
- 35 We stick to this traditional term ignoring connotations linked to the Greek alphabet; on the terminology see Morenz 2019: 19–26, also Schneider 2018.
- 36 See Pardee 2007. The (unbroken) continuity of the earlier Proto-Sinaitic inscriptions to the later second millennium was questioned by Sass 2005. Nevertheless, it seems beyond doubt that the different writing systems attested in the Levant at the end of the Bronze Age co-existed since several centuries.

phoneme was within analytical reach.<sup>37</sup> Any teaching of the Alphabet, when done orally, leads to similar patterns of consonants and concomitant vowels, which are inseparable in speech. The use of *ba*, *da*, (*a*)*f*(*a*) or *ya* in primary schools instead of the more ‘educated’ forms *ba*, *de*, *eff* or *yod* illustrates the point. Indeed, texts like *Syllabary B* had their place in the first phase of scribal training in the Old Babylonian school. Going even further, the deletion of a vowel from the originally syllabic structure of a sign can now be seen already in the Elba archives, in the third millennium BCE. Tonietti 2015 has correctly observed that the Ebla orthography<sup>38</sup> shows “*une voyelle silencieuse (une solution, au contraire, presque totalement absente en akkadien); c’est à dire une séquence de deux syllabes ouvertes, où la deuxième possède dans son noyau une voyelle qui peut répéter ou non celle de la syllabe précédente* (<C<sub>1</sub>V<sub>1</sub>+C<sub>2</sub>V<sub>1/2</sub>> → /C<sub>1</sub>V<sub>1</sub>C<sub>2</sub>/): *bù-gu-lum/buql-um/ « malt »*” (Tonietti 2015: 58).

Tonietti further discusses a school text from Byblos, published by Dossin in 1969, which shows the vocalic permutation of *lam*, *lim* or *li*, *lá*, *lú*. Concluding her discussion, she remarks that the evidence from Ebla and Byblos “*semble montrer déjà au troisième millénaire av. J.-C. dans la région du Levant la présence d’une conscience segmentale par rapport aux constituants consonantiques et vocaliques de la chaîne phonétique*” (Tonietti 2015: 63). This statement has, of course, the outmost significance for any further discussion of the evolution of writing and finally discredits Gelb’s hypothesis which was outlined above.

#### 4. The letter Tāw as attested in Proto-Sinaitic texts

On the Tāw “mark” Goldwasser 2016b: 134 remarked: “Even if the identification of the specific referent is not evident, the letter presents a manifestation of its name, thus carrying an almost universal ‘recognition cue’.”<sup>39</sup> As we will argue in the following, this “near universal” may be situated not just in concrete or real-life situations from which the inventors of the alphabet drew their “inspiration,”<sup>40</sup> but in the case of Tāw even more precisely in their semi-nomadic background. The assumption is here that the “inventors of the alphabet” belonged to the transhumant people roaming the entire Ancient Near East, a lifestyle that formed the core of their world view even if they could have made carriers as soldiers<sup>41</sup> or miners. The issue is less the original iconicity of the letter—which in any case remains opaque—but rather why this sign received the reading Tāw and

37 An important additional piece of evidence, a school tablet from Byblos (21st century BCE), published by Dossin 1969: 245–248, is discussed by Tonietti 2015: 63; on Byblos role (Tonietti 2015 64–67): “In our opinion Daniels’ discussion on ‘Segments and Alphabets’ has no immediate bearing on our discussion here, Daniels 2018: 15–36.”

38 Most prominent is the Bilingual Vocabulary List with over 1500 entries in in Sumerian and Eblaite Semitic; see Pettinato 1982.

39 On this function see Goldwasser 2016: 148–150; see also Haring 2020: 63–67.

40 This was already pointed out by Goldwasser 2006: 135–146 and 2016: 128–134.

41 Note, that at the turn from the third to the second millennium BCE the supposedly migrating Amorites most regularly started their carriers within the Mesopotamian army.



the meaning “mark” in the context of the evolution of the Proto-Semitic alphabet. In other words, we will show how this “recognition cue” was and remained culturally determined.

The Proto-Semitic—that is, explicitly, the non-Egyptian—reading of the letter is based on the hypothesis that the letter names originated in a 19th century BCE environment as documented in texts from Serabit el-Khadem. In the course of the following argument, we—along with the majority of scholars—adopt this notion and follow, for instance, Hamilton 2006: 22 who writes: “I consider it entirely likely that these names were part-and-parcel of the creation of the Proto-Canaanite alphabet itself.”<sup>42</sup> Their relation to the *abcedaries* seems quite obvious.<sup>43</sup> And as we may note already at this point, both the North-west Semitic or *'-b-g* and the southern *h-l-ḥ-m* variants apparently co-existed in the Levant.<sup>44</sup>

It is generally accepted that the hieroglyphic ancestor of Taw is, as recollected by Hamilton 2006: 246, the sign in Gardiner 1957: Z11 †, described as “two planks crossed and joined” (Gardiner 1957: 539) or “*gekreuzte Stäbe*” (Hannig 1995: 1100). The forms of this letter are conveniently presented in Hamilton 2006, based on his own research:

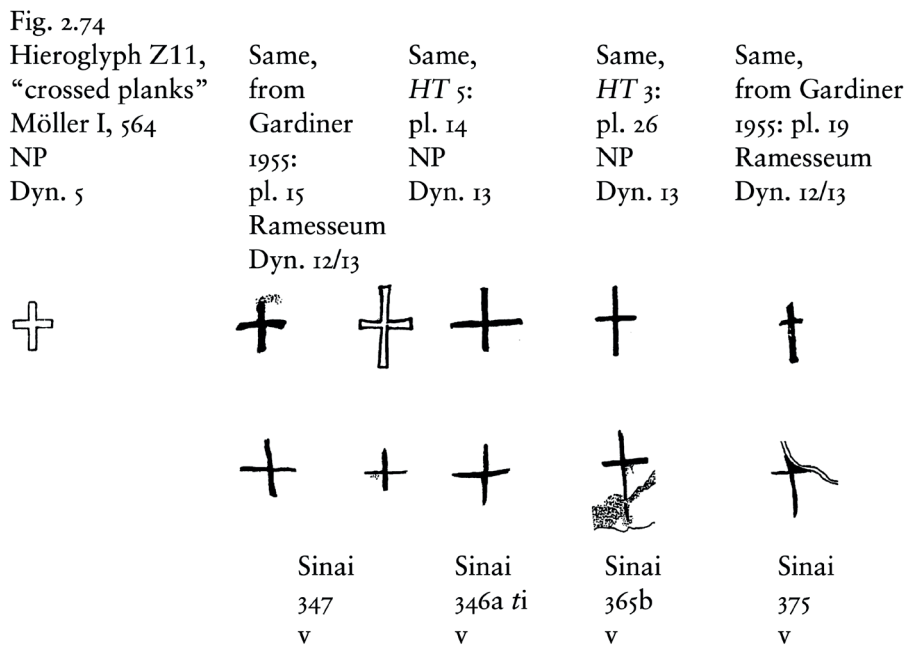


Fig. 2. Hamilton 2006: 248, fig. 2.74

42 See also further bibliographic references provided in Hamilton 2006: 22 with fn. 40; further Demsky 2015: 31–34.  
43 Compare here the ostracon from ‘Izbet Šarḥah (writing exercise, Samaria, 12th/11th century BCE; see the fundamental discussion in Sass 1988: 66–69) which in line 1 perhaps reads: A-B-G-D and A-T “abecedary (from) Aleph (to) Taw” as Morenz 2019: 22–23 has suggested. Line five provides a complete abecedary: *' b g d h (w) ḥ, (z) ṭ y k l (m) n (s) p ' š q q š t* (Sass 1988: 67).  
44 Compare the abecedary from Ugarit (and Bet Shemesh), see Cross & Lambdin 1960; Krebernik 2007: 113–114 (with previous literature); see further Haring 2015; Fischer-Elfert & Krebernik 2016; Schneider 2018.

The development of this sign in the Sinai is summarized as follows:<sup>45</sup>

Fig. 2.76  
Developed *tāws*

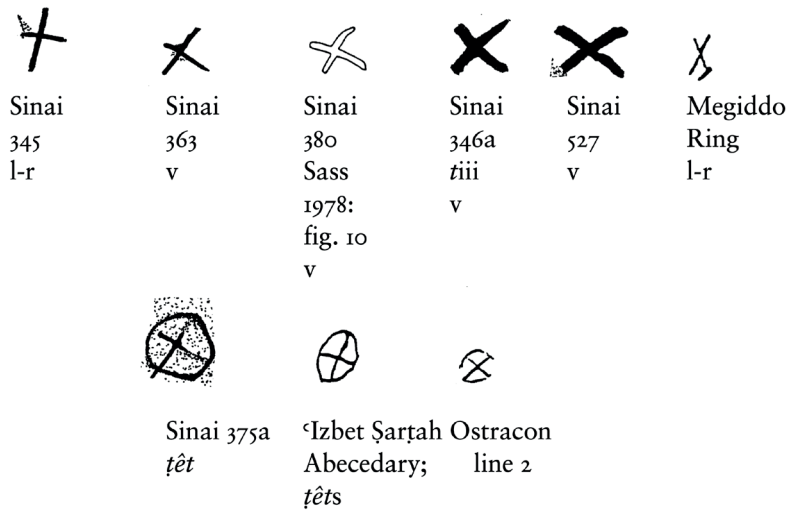


Fig. 3. Hamilton 2006: 249, fig. 2.76

It remains an open question why neither Gardiner 1957: Z9 × nor Z10 ⌘ (understood by Gardiner as a variant of Z9) are usually mentioned in this context, especially as the documented Tāw seems to be closer to the latter's form, which depicts a cross with equal arms, or "decussate" cross.<sup>46</sup> The connection to the rare Biblical Hebrew noun *tāw* תו (Syriac *tawwā*) is generally accepted. According to Hamilton it "is the only certain instance of a letter name whose meaning bears no relationship with that of its Egyptian prototype" (Hamilton 2006: 253). The same, I think, can also be said of the letter Wāw "hook."<sup>47</sup> Both nouns might have received their meaning in relation to the semi-nomadic origin of their inventors. Krebernik 2007: 161 speculated that the word was derived from the letters name, a phenomenon he also supposes for the letter Wāw (Krebernik 2007: 151).<sup>48</sup>

45 Note that the forms given in the second row are similar to some forms of the forerunners of the letter Ṭet; see Hamilton 2006: 103–108; the hieroglyphic is thought to represent a stylized map of city. The origin of this letter's name remains uncertain.

46 Whether the rotation of the sign "came about through assimilation of the crossbars of some Tāws to those of Ṭet" is another question. On the supposed origin of Ṭet see the suggestion in Goldwasser & Naveh 1976.

47 On this see Gesenius 171915: 190. The letter name has no connection to the alleged iconic origin of the letter depicting a kind of mace (hieroglyphic sign Gardiner T3). Note that forms from Byblos and Proto-Sinai resembles a throwing stick more (Morenz 2019: 75 "Wurfstock"). In either case the icon refers to an important tool of shepherds. Is it a pure coincidence that the readings of both Wāw and Tāw point to animal herding? Goldwasser 2016: 128 suggested that the form of the letter was perceived with the "widely used Canaanite toggle-pin that may have been called Wāw in Canaanite." This fits with the Biblical attestations of the noun. In this (likely) case Wāw also follows the "You Get What You See principle" and supports the idea of Semitic readings of the Proto-Sinaitic signs.

48 This is unlikely in the light of (possible) cognates (Hamilton 2006: 253). On the letter Wāw Hamilton 2006: 91 remarks: "It seems more likely, therefore, that the rarely attested noun \*wāw- was generated from this letter's name (and

We suggest here that the depiction of “crossed sticks” or “crossed planks” was indeed perceived by “Asiatic” people (e.g., the miners of Serabiṭ el-Khadem) as a “mark,” and that its form can be derived from the old and still living tradition of marking goats and sheep to indicate rights of disposal or ownership: in other words, to mark the affiliation of an individual animal to a specific flock and its owner. The intention was to secure such animals from unauthorized access, “mark” being in this respect a sign of protection.

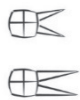
### 5. Marking/branding animals in Mesopotamia

The suggested origin of Tāw as an animal’s marking coincides nicely with the function of the early cuneiform sign for *maš* “goat”  $\text{†}$ , (also  $\text{†}\diamond$ ), and with Sumerian *maš* being homophonic with *maš* “interest” (Akkadian *šibtu*), which probably originates from a form of delivery obligation, a tax on animal herds.<sup>49</sup> Like in the hieroglyphic case the iconic origin of this cuneiform sign remains problematic and the suggestion that both originated from a “tally mark” remains an unproven guess.

The proto-cuneiform sign for goat  $\text{+}$  is often distinguished by additional strokes as  $\text{+}\diamond$ , whereby the rhomboid second element could, as Glassner 2000: 255 suggested, iconically refer to the testicles of a billy-goat. The second and economically even more important type of small cattle is the sheep, represented by an encircled goat sign, that is UDU~a  $\oplus$  or UDU~b  $\oplus$ , which, surprisingly, is quite similar to the developed Tāw sign represented in Hamilton’s chart above.

As with the billy goat, the sheep can be distinguished specifically as ram by adding the same (or similar) rhomboid sign, that is  $\oplus\diamond$  UDUNITA~c. Very systematically the ewe is then rendered

as  $\begin{matrix} \oplus \\ \oplus \\ \oplus \\ \oplus \end{matrix} \begin{matrix} \oplus \\ \oplus \\ \oplus \\ \oplus \end{matrix}$ , in Sumerian U<sub>8</sub>, where the inscribed signs refer to the animal’s udder which has its



parallels with the she-goat  $\oplus$  UD<sub>5</sub>~a.

developed shape) and not *vice versa*.” However, we may note that a wanted explanation for where these “letter names” come from is never provided. The occurrences of Wāw meaning “hook” in the Bible is indeed restricted to Exodus (chapter 26, 27, 36 and 38).

49 Earlier attempts to connect *maš* with Akk. *mišlu(m)* “half” seem less likely. (Selz 2000: 193 stipulates, following Glassner 2000: 254 and based on Glassner 1999, “daß das Homophon *maš* im Sumerischen zum einen „halb“, die „Hälfte“, zum anderen die Tierart „Ziege“ bezeichnet.”) The concomitant lexical evidence is grounded in a later attested confusion between  $\text{L}$  *bar* and  $\text{†}$  *maš* and perhaps further motivated by homoiophony; compare CAD M/2, 126–127.

At first sight these signs for she-goats look as if derived from the sheep sign UDU above, which, absent the wanted systematics, is somewhat surprising. Therefore, it is proposed here that the square (originally circular) frame mirrors semantically the “roundness” of the animal, being a sheep with wool or a pregnant or milk giving goat. The parallel to both major forms of the Proto-Sinaitic Tāw is evident.

A comparison of the various forms of the Proto-alphabetic Tāws with the goat *and* the sheep sign in early cuneiform may suggest a perhaps common, and certainly a comparable, origin of the sign. Considering space and time, a direct graphic dependency seems unlikely but a shared cultural background is highly probable. This background then has to be sought in the environment, in the real life, from which both the cuneiform signs for goat and sheep and the Proto-Semitic Tāw evolved: animal husbandry and livestock breeding.<sup>50</sup>

As early as in the Presargonic period economic documents from Sumer (Lagas), the branding of animals is well attested, the term being *zag – šuš*.<sup>51</sup> The literal meaning of this phrase is probably “to cover the shoulder/side” and the slightly younger phrase *si-im-da – aka* means “To make/provide (with) a sign.” Branding was made by a copper or bronze tool (*urudzag-šuš<sub>2</sub>* or *urudsi-im-da* or *zag-šuš<sub>2</sub>-zabar, si-im-da-zabar*), which proves beyond doubt that that this marking could be made by branding.<sup>52</sup> By De Maaijer’s study (2001) it became evident that the form of these marks was quite diverse, e.g. “fish” mark, “thin boat” mark, “Thunderbird (Anzu)” mark,<sup>53</sup> and, most notably, the marks of several *divinities* (whatever they looked like). Cuneiform sources of the third millennium BCE thus document the right of disposal over animals by economic institutions or temples, but the same procedure must have prevailed in the context of the more tribal-based type of transhumant herding. And in fact, the use of *si-im-da – aka*, an early loan from Akkadian, corroborates this suggestion.<sup>54</sup>

50 Beyond that, animals generally had a prominent position in early Mesopotamian worldview (and elsewhere), see Selz 2019. This ties in nicely with their prominent role in the formation of cuneiform signs as well as in *emic* classification endeavors (see Selz 2023).

51 Note that De Maaijer in his 2001 study begins his observations only with the Old Akkadian period. Highly important in our context is that texts from Umma and Lagas in the Ur III period (in the last century of the third millennium), use, instead of *zag – šuš*, the compound *si-im-da – aka* “an innovation of Ur III Lagas.”

52 The copper and bronze instruments in these contexts imply that the “marking” was done by “branding.” The textual evidence is quite clear, showing *contra* Glassner 2000: 254, fn. 39 and Selz 2000: 193, fn. 193 that the marks could have been realized by branding.

53 Note that the hybrid thunderbird creature Anzu (a conflation of a lion and an eagle) in early images and texts most commonly symbolizes protection!

54 We may further add that one of the Sumerian words for a herdsman, *nagada* (in Akk. *nāqīdu*), is also an early Sumerian loan (widely attested since the Presargonic period). The Hebrew *nōqēd* נֹקֵד is derived from the same root as *naqod* נִקָּד meaning “speckled/marked with points (said of sheep and goat)” and probably refers to marking these animals via puncturing or branding.

Summing up our discussion: as we have seen, it can be assumed that the inscriptions of Wadi el-Hol and Serabit el-Khadem (with its temple of the Egyptian goddess Hathor, *Hwt-ḥr*) testify to the first consonantal script which evolved by a reinterpretation of hieroglyphic and hieratic signs.<sup>55</sup> Remarkably, these signs are based on a Semitic reading of the images and show no connection whatsoever to the 24 Egyptian uniliteral signs.<sup>56</sup> They represent consonants derived from the initial phoneme of these words. When and how by progressing segmentation their syllabic origin was neglected is impossible to assess precisely. Powell's suggestion that their interpretation as "consonants" is a misinterpretation of our notion of the Greek alphabet projected back into the second millennium BCE, I find little convincing.

Thus, the Proto-Sinaitic sign forms—standing iconically at the cradle of many derived writings systems—represent a consonantal script (in Peter Daniels' nomenclature an Abjad).

## 6. Marking (of animals and people): a contextual perspective

In the following I attempt to look at × - ḥ - Ṭ not merely as an icon resembling or possibly imitating a "mark" (תָּו), but at the indexical and symbolic aspects—its cue-like function. It may well be that the Proto-Sinaitic × could be "read" in different ways, the reading *taw* being merely one possibility.

In the Hebrew Bible the noun תָּו *tāw* "mark" appears just three times. In Ezekiel chapter 9, in the narrative of the "slaughter of the idolaters," the attestations are as follows:

וְהִתְוִיחַ תָּו עַל-מִצְחֹת הַאֲנָשִׁים

(And the Lord said [...] put a mark on the foreheads of the people (Ez. 9: 4).

The text continues:

וְעַל-כָּל-אִישׁ אֲשֶׁר-רָעָלְיוֹ הָתָו אֶל-תִּגְשׁוּ

But do not touch anyone who has the mark (Ez. 9: 6).

תָּו here surely designates a sign of protection. The third attestation, in the Book of Job, is less clear<sup>57</sup>:

מִי יִתְוֶה-לִּי | שִׁמְעָ לִּי הַדֹּתָוִי שִׁדְי יַעֲנֵנִי וְסִפֵּר כְּתָב אִישׁ רִיבִי:

Oh, that I had one to hear me! Here is my mark /signature (הַדֹּתָוִי)!

Let the Almighty answer me!

Oh that I had the document written by my prosecutor! (Job 31: 35).

55 Darnell 2005 et al. discuss (with reference to earlier literature) the influence of "lapidary hieratic" on the Wadi el-Hol and related inscriptions; the issue is also addressed in Hamilton 2006: 7–11, 269–275. Hamilton summarizes: "Proto-Canaanite writing is a mixed script composed of derivatives of both hieroglyphic graphic forms (mostly incised, a few in sunk relief, and a considerable portion of semi-cursive) and fully cursive hieratic forms written on stone, metal, pottery, and wood" (Hamilton 2006: 272).

56 See the assessment of Powell 2009: 168, discussed in fn. 20 above. In our opinion Powell misunderstands the whole idea of the Semitic root concept.

57 We may simply refer here to the discussion of Witte 2004 who, after reviewing the theological literature, elaborated on the connection of תָּו and אִוֶּת. Even though lacking the wanted expertise I wonder whether this phrase does not actually refer to a signed (marked) promissory note in the hand of Job's hostile creditor.

## 7. The mark of Cain<sup>58</sup>

Much more common in Biblical sources—and apparently with a broader semantic range—is אֹת, pl. אֹתוֹת “sign” (altogether 79 attestations), which corresponds, also semantically, to Akk. *ittu*, pl. *ittātu*.<sup>59</sup> With the supposed origin of Tāw as an animal “mark” a connection to the “mark of Cain” becomes obvious. The Biblical passage on the cursing and marking of the farmer Cain after he killed his brother, the shepherd Abel, is informative here. As a punishment for his crime Cain receives the verdict of becoming a נָדָד “wanderer” and נָע “fugitive” (Gen. 4: 12, 14).<sup>60</sup> But his fear of being killed is countered by the Lord with לֹכֵן “even though / not so.”<sup>61</sup>

(“Whoever kills Cain will suffer vengeance seven times over”).

וַיִּשֶׂם יְהוָה לְקַיִן אֹת לְבִלְתִּי הַפּוֹת-אֵתוֹ כָּל-מֹצֵאוֹ:

Then the Lord put a mark on Cain so that anyone one finding him should not kill him (Gen. 4: 15).

We note that in contrast to widespread opinions, the Biblical text does not speak of any stigmatization of the farmer Cain. To the contrary, אֹת is here a sign of protection (by the Lord), much in the same way as we have seen with אָוֶן. Both the “sign” and the “mark” denote inclusion: the farmer Cain, despite his capital offense of killing his brother, the shepherd Abel, remains under the protection of the Lord. Cain is marked as a member of the Lord’s flock. Under consideration here is the antagonism between farmers and shepherds with the specific connotation of the latter as killing animals for offerings. The marking of the farmer Cain is not a mere stigmatization of an outcast—while he is marked, he remains a member of the Lord’s flock and must not be killed by others.

Whilst the “pastoral” background of the marking sketched above seems beyond doubt<sup>62</sup> the precise nature of Lord’s mark remains in the dark—as was the case with the Mesopotamian divinities’ “mark” on animals mentioned above. However, at least the Rabbinic tradition supports the

58 A concise account of earlier interpretation is by Westermann 1976: 381–435, especially “*das Kainszeichen*” (p. 424–428). He also refers to earlier scholars who already understood the mark of Cain as a “*Schutzzeichen*” (Westermann 1976: 426–427). Byron 2011 puts his study in a much broader perspective, including Jewish and Christian accounts of the fratricide.

59 Its use has been studied by Cantor 2018.

60 The meaning seems indeed to be that Cain is told to live a nomadic lifestyle. This long lingering interpretation, *pace* its explicit refutation by Westermann 1976: 419, is most likely in the light of earlier cuneiform sources. Despite the fact that in Old Babylonian Larsa or Babylon rulers of Amorite descent wielded power, the picture of the Amorites as roaming vagabonds was propagated by the scholarly cycles of this time; see Selz (in press). The combination נָע וְנָדָד “fugitive and wanderer” is attested only here. נָע means “the one who moves” and נָדָד is indeed “wanderer,” that is, the one who constantly has to move, used still in modern Hebrew. The former farmer will not have a land or place of his own. It is tempting to suggest further that the Cain-Abel narrative (also) provides an aetiology for farmers who in times of economic crises were forced to abandon sedentary lifestyle, a phenomenon which until these days can be observed time and again.

61 With many translators, the phrase has an adversative meaning: “Not so!” Compare Gesenius 171915: 351.

62 The metaphor of the Lord as the ultimate shepherd, is described e.g., in the *Book of Zechariah*, chapter 10.



notion that this mark (אֵת) could have had a *letter-shape* as is evidenced by the following quote from *Pirque Rabbi Eliezer* (El. 21): <sup>63</sup> “What did the holy One, blessed be He, do? He took one letter from the twenty-two letters, and put (it) upon Cain’s arm that he should not be killed, as it is said, ‘And the Lord appointed a sign for Cain.’”<sup>64</sup>

This statement obviously implies the existence of an *abecedary*. We may also recall that in all West-Semitic *abcedaries* Aleph א is the first and Tāw ת the last letter. The word אֵת “sign” in fact alludes to or “mirrors” this order (from א to ת), and presumably this notion stands behind Rabbi Eliezer’s interpretation of the “Mark of Cain” as a letter.<sup>65</sup>

## 8. Additional arguments for the non-linguistic origin of the Tāw “mark”

After having situated the origin of the form of the letter Tāw in the environment of early pastoralists who lived and live at the fringes of the “urban” settled life, we have to mention briefly also the modern research on *wasm* (pl. *wusūm*) of the Bedouins.<sup>66</sup> Until today, the branding of animals is widely in use in the Near East and contemporary evidence demonstrates the broad applications of this non-linguistic animal marking system in today’s tribal communities. In 1952 Henry Field collected some 1000 camel marks and compared them with related *graffiti*. Hayajneh 2016 took a similar path, collecting tribal brands on rock drawings in Southern Jordan, discussing them in the frame of Ancient North Arabian inscriptions. Eisenberg-Degen et al. 2016 demonstrated the historical significance of such marks while Eisenberg-Degen et al. 2018 focussed on their topographical information. Quite interesting in our context is the research of Hilden 1991 who demonstrated how these marking systems showed up in weaving. All this research supports the idea elaborated above: these “marks” are signs of inclusion, ultimately they create identity.<sup>67</sup> They *establish* a community, in the case of the Biblical attestations discussed, the community of the People of God.

## 9. Summary

Our analysis of the origin of the letter Tāw clearly supports Gardiner’s notion of the acrophonic principle as well as Goldwasser’s hypothesis that the early alphabet was invented by Canaanites

63 Attributed to the Tanna (תנא) Eliezer ben Hurcanus who lived in the 1st or 2nd century in Judea.

64 I owe this *trouvaille* to Byron 2011: 120. The single letter, of course, might have been Tāw ת.

65 I refrain here from delving into the often-speculative elaborations of the nature of the Hebrew saying “from Aleph to Tāw” (and related Biblical acrosticha) and the later “from Alpha to Omega” (with reference to Jesus [as shepherd], often used in the imagery together with sheep/lambs and thus metaphorically alluding to his shepherdship). All the forms of this saying (including from A to Z) evoke the notion of completeness: the Alphabet is perceived as the embodiment of the totality of all things which can be named (and therefore exist). See also Isaiah 44: 6: “Thus saith the Lord the King of Israel, and his redeemer the Lord of hosts; *I am the first, and I am the last*; and beside me there is no God.”

66 I am most grateful to Orhan Elmaz (University of St. Andrews) for supplying me with this literature.

67 For ancient Egypt this topic was researched by Haring 2017.

not speaking Egyptian, although in contact with the Egyptian writing system from which they borrowed the notion that this script “somehow” reflects speech. The suggested “You Get What You See principle” occasionally provoked misinterpretations of extant elements of the Egyptian scripts. Still more interesting than the possible iconic forerunners of this new system is its footing in “real life.” The meaning of Tāw connects to Semitic speaking transhumant herding people, which was certainly the background of the miners in the Sinai (and perhaps also of the soldiers in Upper Egypt). We have further argued that the early “alphabet” paved the path to phoneme segmentation, thus making the great Greek invention less amazing than usually thought.

### Appendix: The Brussels busts and their inscriptions



Fig. 4. Photographs of Sinai 347 (left) and Sinai 347a (right) from Morenz 2019: 354 and 356.

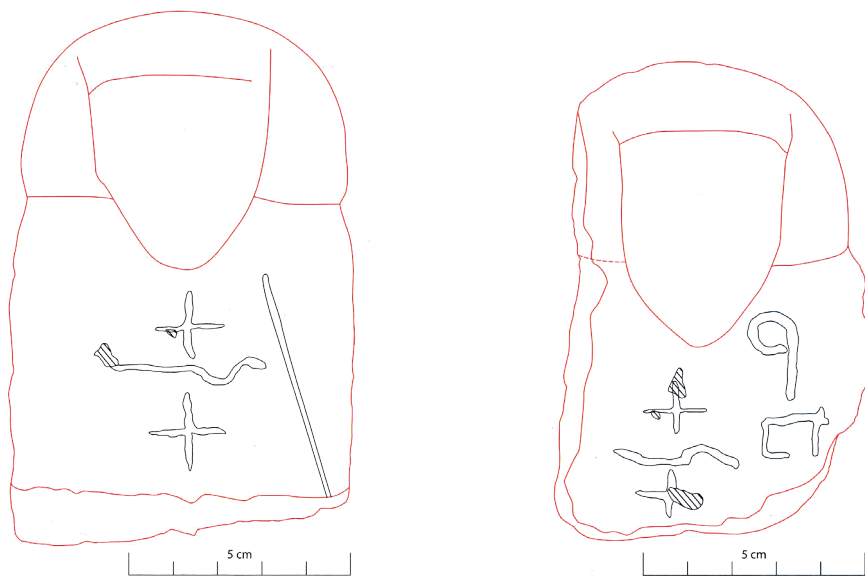


Fig. 5. Drawing of Sinai 347 (left) and Sinai 347a (right) from Morenz 2019: 355 and 357.

The inscriptions of these two busts were probably correctly read by Sprengling 1931: 30, a reading which is supported by the sketch of Sinai 347a (Brussels E.2429) by D. Sabel in Morenz 2019: 357 and by Sprengling 1934: 31. This inscription reads: *tnt lb[ʿlt]* “gift for the L[ady].”<sup>68</sup> It may illustrate the use of the Taw and the Nun signs discussed above.

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68 Neither Sass 1988: 15–16 nor Goldwasser 2022: 34 refer correctly to the inscription on Brussels Sinai 347a. *tnt* is not restored there (pace Hamilton) and can still be seen in the old picture (Fig. 4, right). On both busts an interpretation of *tnt* as referring to the Phoenician deity Tanit or Tinnit becomes contextually extremely unlikely. To be sure, *tnt* is attested as a Phoenician writing for this goddess (see Hvidberg-Hansen 1979 and now Martin 2018); compare further the various possibilities (including the direction of reading) proposed in Morenz 2019: 206 with fn. 668. However, already Sprengling 1931 collected several inscriptions e.g., S 351 (with parallel formulations like *mt*) which clearly support the meaning “gift” or “presentation” for *tnt*. As for the restoration and because of the available space in Sinai 347a, the restoration of a Canaanite personal name beginning with *lb[...]* might be another good possibility; see Morenz 2019: 205–206.

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