

The Two Inner Directions of the Ancient Egyptian Script

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Abstract

This article explores some implications for the study of the human writing-reading process from the perspective of the ancient Egyptian script. Upon consideration of a paradoxical passage by Herodotus (II,36,4), the author resumes, under a new approach, Henry Fischer's suggestion that Egyptian culture considered script direction from the signs' point of view, in contrast to Greek culture, which considered script direction from the writer's or reader's point of view (the writing-reading process). Two distant facts confirm this interpretation: one is the ancient Egyptian textual mark, usually considered a colophon or end mark, which literally reads 'That (means) that it (= the text) comes (to the reader)'; the other is the writing direction of banners used in current-day audio-visual media. Though Western culture and science have retained the Greek point of view, to approach the writing systems of other cultures through its focusing lens may result in misunderstandings like that of Herodotus.

Introduction: outer and inner directions of the ancient Egyptian script

Perhaps the primary feature of Egyptian hieroglyphic script is its versatility of use. Its sign arrangement provides a good illustration of this feature. Such arrangement was anything but simple, given the almost ubiquitous presence of script in the ancient Egyptian culture. More specific to the interest of this paper, several scholars have demonstrated that Egyptian hieroglyphs' direction (i.e. the specific arrangement of the signs with respect to a reference point) is highly attuned to factors significant to the written text but apparently alien to it, and that this can affect the signs' direction to different degrees. As we will see below, these scholars similarly propose that script direction is modified by the relationship of the written space (i.e. the space occupied by a given inscription on a given material support) with other significant spaces, such as representation scenes or cultic landscapes. Since this phenomenon depends on factors outside the written space, they only affect what can be called the *outer direction* of the Egyptian hieroglyphic script. At least three different kinds of factors have been identified that are relevant to the outer direction of the hieroglyphic script.

First, aesthetic factors such as script disposition according to a frame: for

¹ Much of my interest for the directionality of the ancient Egyptian script derives from the long conversations I had with Beatrice Galgano during the years 1998 and 1999 in Paris: I am most grateful to her for them. I also thank the two reviewers of the *Birmingham Egyptology Journal* for their critical reading, which has much improved the text.

instance, it is well known that inscribed jambs in false doors are read from inside to outside, i.e. symmetrically with respect to a vertical axis that belongs to the architectural space, not to the written space.² This implies that script on the right jamb faces left, contrarily to the dominant orientation of Egyptian script, which faces right.³ This pattern is so systematic that, where reversals of particular signs occur in this context, i.e. when these particular signs are written rightwards within a general leftward-orientated inscription, Henry Fischer recurred to a more systematic phenomenon (the dominant rightward orientation of Egyptian writing), and admitted 'an occasional tendency to retain the prevalent rightward orientation in inscriptions that face left'.⁴

Second, religious factors such as the orientation of particular signs according to the dedication of the temple in which they are inscribed, and its relationship to other temples. For instance, the signs of a god's name may be redirected to point to a statue of that god, even if both objects are located far away from each other.⁵

Third, other cultural factors such as general consistency between textual sequence, support arrangement, and geographical orientation, which can be the cause of the peculiar retrograde script (in which all signs are reversed with respect to the script direction). According to Fischer, the first two factors (textual sequence, and support arrangement) are essential to what he calls the 'concordant' type of retrograde script, as illustrated by the Middle Kingdom coffins, which would have then been applied to all 'religious' texts, 'medical' texts included, as a way of marking their secret character:

L'orientation des textes sur les cercueils du Moyen Empire est d'un intérêt exceptionnel à plusieurs points de vue. Tous les textes s'accordent avec la position dans laquelle gît le défunt, qui repose sur le côté gauche. Ainsi les textes à l'extérieur sont-ils normaux (tournés à droite) sur les côtés avoisinant la face et les pieds, tandis que ceux au dos et à la tête sont tournés vers la gauche. À l'intérieur du sarcophage l'orientation est forcément inversée. Cependant le retournement des signes devenait plus difficile, sinon impossible, du moment qu'il s'agissait des textes religieux en écriture cursive. Dans ce cas-là, pour suivre la direction des hieroglyphes tournés vers la gauche, ces textes plus ou moins hiératiques sont rétrogrades. Ainsi, peut-être, est née une prédilection pour une disposition rétrograde dans les textes religieux, y compris les textes médicaux (la médecine étant toujours un mélange de remèdes efficaces et de charmes magiques). Quoi qu'il en soit, il est bien compréhensible que ces arts secrets aient été un peu voilés.

In an explanation only partially discordant with Fischer's, Michail Chegodaev gives a more specific explanation for the retrograde script in the Book of the Dead. Contrarily to all New Kingdom papyri rolls (which are rolled from the left and inscribed from the right, with signs facing right), those with the Book of the Dead were rolled from the right and inscribed from the left, but with signs facing right. Chegodaev explains the change of script direction (from left to right) as resulting from the preeminence of

² Fischer 1977: 9 and 13-15.

³ Fischer 1977: 6-8, which he explains by the 'prevalent righthandedness of mankind'.

⁴ Fischer 1977: 112, following Battiscombe Gunn's idea in Firth and Gunn 1926: 147. For these reversals, which are not yet satisfactorily explained, and which concern a small but consistent group of signs, see Der Manuelian 2003: 152 and 189.

⁵ Fischer 1977: 20-26; Vernus 1982: 108 fn. 30.

⁶ Fischer 1972: 22-23.

⁷ Fischer 1972: 22.

⁸ Chegodaev 1996: 19.

the West (which according to the ancient Egyptian geographical orientation is on the right side) during the funerary procession represented at the beginning of the Book of the Dead. In addition to this, the use of the retrograde script is rationalized because the script signs must proceed in the same direction as the representation, from East (left) to West (right), and thus they face right. This results in breaking the reading-writing direction of the script signs ('natural' for us), which would be from left to right since the text of these rolls starts from the left. Such a break is explained by the solid union, on magical grounds, between script and representations in ancient Egypt:

(...) the very position of the procession's picture defines the only conceivable direction in which it is bound to move—from the 'near' [i.e. left] to the 'far' [i.e. right], opposite, edge of the roll. What then happens to the columns of text that describe the funerary train? Being placed beneath the picture, they inevitably move in the same direction as the characters of the train they describe, that is, we must begin reading from the same point whence the procession starts. However, the scribe who had to write under the picture found himself in a nearly impossible position: the hieroglyphs he employed did not face the same direction as the picture above them, which violated one of the main principles of Egyptian writing, viz. that the hieroglyphs always face the same direction as the picture they are attached to. So it was up to the scribe—either leave the things as they are or reverse the hieroglyphs. And the Egyptian—for whom the text and the picture were linked much more inseparably than for us (since they formed a single magic whole)—had to choose the latter of the two options. ¹¹

These examples far from exhaust the use of retrograde script. For instance, Valérie Angenot has proposed that a label describing a grain-counting scene in the New Kingdom tomb of Sennefer was written in retrograde script to indicate to the reader in which order he should read the wall scenes to which that label belongs, and that this was emphasised in the related scene: a man pointing with his hand in the same direction as the retrograde writing. Be this as it may, specific consistency between script and representations must always be taken into account. A good example of this, among many others, is a representation of the *nyny*-greeting, which is performed to welcome someone by pouring water in front of them. In a representation from the temple of Kumma, the greeting is not only written in the text, but also the two *n*-signs (two water waves) composing the word *nyny* are written/depicted pouring from the hands of the welcomer to the ground.

Leaving aside the outer direction of Egyptian script, which only affects the hieroglyphic script, there is a second group of factors that belong to the written space of all varieties of the Egyptian script (hieroglyphic, hieratic, and demotic), ¹⁵ and that act on what can be called the *inner direction* of Egyptian script.

A preliminary warning must be given to note that psychological and technical factors of writing—more specifically spatial invariance, variability and noise—are excluded because of their universality:

⁹ Chegodaev 1996: 22-24.

¹⁰ On this, and more specifically on the origin of the 'vignettes' in the Book of the Dead, see Vernus 1985: 57 fn. 33 and 34.

¹¹ Chegodaev 1996: 21-22.

¹² Angenot 2010: mainly 13-15 and 22, with fig. 1.

¹³ The main reference on the topic is Fischer 1986.

¹⁴ Caminos 1998: pl. 18; Galgano 1999: 58 and fn. 188.

¹⁵ Stadler 2008: 158 uses the term 'triscript system', which reflects very adequately the essential unity of the ancient Egyptian writing system.

Consistent spatial output fits well within the notion of prestructured writing movements. Basically the idea is that movement features, concerning the involved muscles, the shapes of the letters and the temporal structure of the execution, are set prior to movement onset and become manifest during execution (...). It is commonly observed that when the production of a single writing sequence is repeated, each occurrence varies as to the time it takes and the muscles involved. Hence, temporal and muscle aspects are supposed to be generated anew prior to each occurrence of the sequence. In contrast to the temporal and muscle aspects of a single writing sequence, planning of shapes may be equal for each repetition. Spatial features are, therefore, supposed to be permanently centrally represented, and need merely to be selected from an already existing storage (...). Therefore, the observed constancy of shapes produced with a variety of muscle systems (...) in addition to the finding that shapes vary less than temporal writing features (...) give substance to the idea of permanent central representation of spatial information. (...). The smaller variation of shapes relative to temporal aspects of writing does, of course, not imply that shapes do not vary at all. Moreover, the activation of centrally stored representations of spatial features does not guarantee consistent shapes during writing performance. To the contrary, it is feasible that the peripheral manifestation of central instruction varies over replications (...). It is reasonable to believe that the mere fact that movements are made results in the superposition of, what is termed, basic spatial noise on top of the centrally induced instructions (...). Thus, close measurements should, and indeed do indicate that spatial features in handwriting are not totally invariant across replications, but rather vary within a tolerance range (...). It is often proclaimed that the shapes remain invariant across replications even when a writing task is performed in changed circumstances (...). One might argue that the invariance of spatial features in handwriting is not violated under changed circumstances as long as basic spatial noise does not increase and the tolerance range is not exceeded. 16

Also excluded are those factors specific to the ancient Egyptian script that are not directional such as the signs' disposition within graphic words (i.e. their arrangement in the ideal written square, or 'quadrat') according to their 'graphic' size: $\frac{1}{4}$ -quadrat signs such as p and t, $\frac{1}{2}$ -quadrat-signs such as p, and 1-quadrat signs such as A50, for instance in $\frac{1}{2}$ $\frac{1}{4}$.

It can thus be proposed that Egyptian script, unlike alphabetic script, has two inner directions. These are, on the one hand, the direction of the writing-reading process (considering both skills as strongly interrelated)¹⁷—the linear disposition of signs when written or read, typically from right to left—and on the other hand, the signs' direction, typically from left to right. Following a recent study stating that writing-reading direction is unrelated to the orientation of static images such as photographs (since literate people slightly prefer right-oriented static images independent of the script direction they use to read and write),¹⁸ the relation between the two inner directions must be understood as a cultural phenomenon, proper to the Egyptian script.

As in the case of the outer direction modifications, this inner direction can be reversed for pure textual reasons. An exemplary case of this is the marking of a quotation by reversing the signs of the introductory diction verb $\underline{d}d.f$ 'he says', as Gérard Roquet has demonstrated. Proquet's analysis is more particularly relevant to

¹⁶ Van Doorn and Keuss 1993: 281-282.

¹⁷ Fletcher-Flinn et al. 2004: 635.

¹⁸ Treiman and Allaith 2013: mainly 1384-1386.

¹⁹ Roquet 1997: 120-122 with fn. 1 on page 122.

the present study because it explicitly recognizes the writing-reading direction as being, precisely, one given direction of the ancient Egyptian script:

Le scribe égyptien signale cette rupture contextuelle (= the quotation) par un 'opérateur' graphique aussi simple et néanmoins plus économique que nos guillemets. Cet 'opérateur' en assume les fonctions contrastives et pausales:

		texte	\rightarrow	\leftarrow
<u>d</u> d.f		opérateur inversable	←	\rightarrow
"	_;;	énonciation	\rightarrow	←
orientation type	du		(A)	(B)

Les flèches marquent *le sens de la rédaction et de la lecture* (encodage/décodage) des textes examinés. ²⁰

Only the two inner directions of the ancient Egyptian script, writing-reading direction and the signs' direction will be discussed in this paper, starting with a reflection of the ancient Egyptians on their own script, which puzzled Herodotus 2,500 years ago.

Herodotus's paradox regarding the direction of ancient Egyptian script

According to Herodotus II,36,4, the Greeks thought that the Egyptians wrote from right to left, contrariwise to them. Nevertheless, when the Egyptians were asked about it, they disagreed and claimed that they wrote from left to right, and that it was rather the Greeks who wrote from right to left. In his own words:

γράμματα γράφουσι καὶ λογίζονται ψήφοισι Έλληνες μὲν ἀπὸ τῶν ἀριστερῶν ἐπὶ τὰ δεξιὰ φέροντες τὴν χεῖρα, Αἰγύπτιοι δὲ ἀπὸ τῶν δεξιῶν ἐπὶ τὰ ἀριστερά

The Greeks write and calculate by moving the hand from left to right; the Egyptians do contrariwise; yet they say that their way of writing is towards the right, and the Greek way towards the left.²¹

This misunderstanding is based on a different perceptual/ontological criterion for the Greeks and the Egyptians: whilst the Greek *point of view* is that of the observer (reader/writer), the Egyptian point of view is rather placed *in the inside of the script*, which is considered to be a world of signs apart, a world closed and alien to the observer, as Henry Fischer wrote: 'While Herodotus had in mind the direction followed by the hand and eye, his Egyptian informants evidently were thinking of the direction of the writing itself, as expressed by the orientation of the hieroglyphs, which troop rightward'. Fischer is following here J. Gwyn Griffiths's explanation to Herodotus's paradox, even if Griffiths objected to his own explanation by alleging that this 'is added to complete the series of contrasts' Herodotus wanted to stress

²⁰ Roquet 1997: 122. Italics are mine.

²¹ Herodotus II,36,4.

²² Fischer 1977: 6, following Griffiths 1953: 142-143. See also Galgano 2003: 150.

²³ Griffiths 1953: 144.

between Greeks and Egyptians. Here is Griffiths's explanation about Herodotus's paradox:

Whereas Egyptian writing was usually from right to left, yet the hieroglyphs (or their counterparts in hieratic and demotic) *faced* in the other direction. For an Egyptian to have stressed the fact that Egyptian writing always faces in the opposite direction from which it moves is quite likely, especially as the large number of human and animal figures gives prominence to the question of the direction faced, a prominence wholly or partly lost in scripts which do not preserve vividly the originally pictorial nature of the letters. It should be noted also that this feature is present in all forms of Egyptian writing, although demotic is a good deal removed, in its cursive abbreviations, from the original shape of the hieroglyphs.²⁴

Griffiths's explanation deserves to be quoted *in extenso*, not only for the merit of being the first in finding the solution to Herodotus's paradox, but also because it explicitly recognizes the essentially 'pictorial nature' of the Egyptian script, even in its more cursive forms (hieratic and demotic), which supports the explanation proposed here about the inner direction of ancient Egyptian script *in all its forms*.

At a more general level, Herodotus's paradox is but one example of the Egyptian point of view, which is characterized by its *immanence*. In the Egyptological literature this point of view has been referred to as *Aspektive*, a term coined by Emma Brunner-Traut.²⁵ Sylvie Donnat has noted a good example of what *Aspektive* exactly

means.²⁶ She suggests that the graphic association $\overline{\Box}$, which is typical on top of stele pediments (see fig. 1), possibly represents *one* referent (a magic bowl full of water), from three different points of view. From top to bottom, Ω represents the bowl seen from above; $\overline{\Box}$ the same seen from inside; and \square the same seen from the outside and laterally (see fig. 2).



Fig. 1. Round-topped limestone stele of Qeh (British Museum EA303). Abydos?, 18^{th} - 19^{th} dynasty. © The Trustees of the British Museum

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²⁴ Griffiths 1953: 142-143.

²⁵ Brunner-Traut 1996 and 2002. See recently Nyord 2013.

²⁶ Donnat 2002: 220.

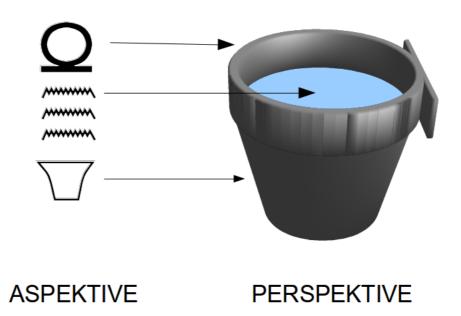


Fig. 2. Funerary water bowl: *Aspektive* and *Perspektive* representations (following Donnat's interpretation). © The author

This kind of representation has two aims. First, to present the parts of an object clearly separated from one another, but only the parts fundamental to its function and/or ideological value. Second, to show these parts from a more pregnant point of view, because they must be recognized to be effective. This is why the first sign (a circular rope with a knot and its two straight endings) is shown from above in order to be easily read šn, meaning the 'protection' and 'constraint' assuring the ritual effectivity;²⁷ the second sign (water) is shown from the inside and laterally, to be immediately recognized as water, which is essential to the mortuary cult; and the third sign (a bowl) is shown laterally from outside, as being the easiest way to represent the whole container. The main—maybe the only—aim of this representational mode is object clarity.

Contrary to this mode of depiction, modern Western ontology is highly dependent on epistemology as it was defined by Descartes, and before him, the Greeks. This ontology is characterized by its *transcendence*, which takes into consideration the whole situation of a representation, including the subject. This approach can also be termed *Perspektive*, in opposition to *Aspektive*. *Perspektive* and *Aspektive* are thus two opposite terms for two opposite ways of contemplating the visual process of creating and/or understanding images; and Herodotus's quote is one of the older, if not the oldest, conscious reflection on this opposition. Although this hypothesis cannot be fully developed in this paper, the transcendent approach must be linked to the origin of the alphabet.

This does not mean that there are not subjective or objective elements in the Egyptian and Greek approaches, respectively, for both approaches can appear in any culture. A good example of the latter is Ronald Langacker's deictic scale from

²⁷ Donnat 2014: 215-216.

subjectivity to objectivity in linguistics. This author stresses the essential asymmetry between the *observer* (or SELF) and the *observed entity* (or OTHER) in any perceptual situation. Langacker considers that this asymmetry is maximized in an 'optimal viewing arrangement', illustrated in fig. 3, where the observed entity (O) is clearly placed in an *objective scene* (broken-line circle), which excludes the observer (S), as in a 3-person utterance ('S sees O').²⁸

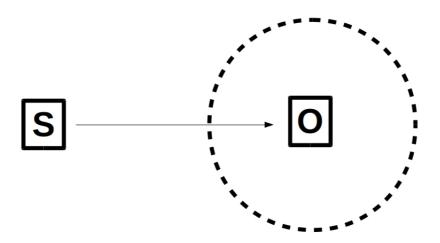


Fig. 3. Langacker's optimal viewing arrangement. © The author

This is what I have called here an *immanent point of view*, which the Egyptians adopted when describing their script to Herodotus. To use Langacker's own words, in the Egyptian immanent approach, 'what S observes (...) is O, not S observing O'.²⁹

According to Langacker, this situation is contrasted by the 'egocentric viewing arrangement', in which the observer is included into the objective scene, as in a 1-person utterance ('I see O'), as shown in fig. 4.³⁰

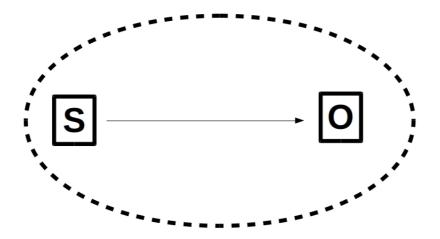


Fig. 4. Langacker's egocentric viewing arrangement. © The author

²⁸ Langacker 1985: 120-122 and fig. 3a.

²⁹ Langacker 1985: 121.

³⁰ Langacker 1985: 122 and fig. 3b.

This is what I consider to be a *transcendent point of view*, which the Greeks employed when discussing the Egyptian script direction.

To summarize, the transcendent approach explains why for the Greeks, and for us, the script moves from the beginning of the text: we scan from the text origin and the signs proceed from it, as we read. On the contrary, for the Egyptians the script moved from the end of the text: they scanned from the text end and the signs proceeded from it, i.e. contrariwise to the *reading direction*. To say that 'the hieroglyphs look to the beginning of the text', as is often asserted to the absolute beginner in reading Egyptian hieroglyphic script, is to describe this script system from our Western (i.e. Greek, or alphabetical) way of perceiving our own script system. Quite interestingly, the end of the text can serve as the starting point in a particular instance of alphabetic script, as in the case of a left-handed woman who could write backwards and in a non-mirror way with her right hand, but also with both hands in both directions.³¹

The two inner directions of the ancient Egyptian script

The two inner directions of hieroglyphic script are important from an ideological point of view, because they seem to exhibit two uses of the hieroglyphic script (although they are only one, as we will see). More surprisingly, even if the relevance of Wittgenstein's thinking for the study of ancient Egyptian script is not totally new,³² these two uses can be found, *mutatis mutandis*, in his *Tractatus*:

Der Satz zeigt seinen Sinn.

Der Satz zeigt, wie es sich verhält, wenn wahr ist. Und er sagt, daß es sich so verhält.³³

First, and using Wittgenstein's terms, the script *shows* itself, and then proceeds in a given way, the way of the script. But at the same time, and in parallel, the script *says* itself: it is readable.

In the first case, strictly speaking *in Western terms*, there is no use of script. In the second case, there is such a use: the Egyptian reader's use. It is a relevant fact that Egyptians distinguished these two functions (Wittgenstein's showing and saying) of the hieroglyphic script through its two inner directions. If this were not the case, it would be impossible to explain why the signs are written 'the other way around', i.e. why the Egyptian scribe had to write the signs facing the reading direction, contrary to what happens in alphabet scripts. (Incidentally, this is a fact that is not considered when alphabets are compared to non-alphabetic scripts: alphabet signs are not oriented inside the writing flux, even if they tend to open to the end of it.)³⁴

Alphabetic signs are hints that the reader recovers: they come from the writer's hand, and they belong to it. In contrast, hieroglyphic signs are entities that the reader must get through: they are in the written text, and they belong to it. In other words, hieroglyphic signs are entities with a permanent real existence, which happen also to be readable, while alphabetic signs are elements of reading whose real existence is momentary, as they merely last the time it takes to read a given sign: their existence is exhausted in its very function.

32 Bonino 2003: 111-121.

³¹ Ardila 1989: 196-197.

³³ Wittgenstein 1923: § 4.022.

³⁴ Griffiths 1953: 143 and fn. 1.

A totally unexpected proof of the script's two inner directions is found in its treatment in a very special case in the audio-visual medium *par excellence*: television. In the banners appearing at the bottom of the television screen, which usually convey information unrelated to the one provided by image and sound, the script moves against the reading direction. In other words, it moves in a manner similar to the ancient Egyptian signs' direction. Therefore, in Arabic audio-visual media, the script banner runs from left to right, because Arabic is read from right to left. On the other hand, in Western audio-visual media, with scripts reading from left to right, the banners run from right to left. Comparing ancient Egyptian script to written banners in audio-visual media should not be too surprising, because, as we know, the very nature of the reading mechanics in ancient Egypt was highly dependent on the reading support. Peter Parsons has recently explained this relationship in a masterly way:

Sheets once made were pasted up into rolls, each sheet overlapping the one to its right, in such a way that all the fibres ran east-west on one side of the roll (the good side), and north-south on the back. A complete roll would be used for a book or a long document; for a smaller item a suitable piece could be cut off. The longer texts were written column by column along the length of the roll. You read them by rolling out the roll with your right hand and rolling it in with your left, so that the columns passed before your eyes like the frames of a videotape.³⁵

The relevant difference seems to be that when one writes or reads a text, one moves his/her eyes in the writing-reading direction; but when one watches a moving text, one's eyes focus on the beginning of the script: the point from which script comes out. At this point, it is worth comparing a remark by Hsuan-Chih Chen and Chi-Kong Tang on Chinese reading direction following an experiment they conducted using not a moving, but a one-after-one appearing sign, text: '(...) the perceptual span of Chinese readers is biased towards the direction where the new information is coming from'. ³⁶ This statement matches what has been observed in alphabetical scripts. ³⁷ It is this opposition between writing/reading and watching processes which can explain Herodotus' paradox: an ancient Egyptian considers script from the text's point of view, and not from their own eyes' (or hands') point of view, when they have to describe the direction of their script system. Ancient Egyptians did not pay attention to the writing-reading direction (although this does not mean they ignored it), but watched the text as if it would move to the beginning of the text: this is the sign's direction. In this regard, it is of utmost interest, because of the scarcity of this kind of evidence, to consider Stephen Kidd's recent 'visual' interpretation of a passage on 'bigraphism' in a bilingual (Greek – Demotic) dream papyrus, made by the papyrus' writer, Ptolemaios, to its reader, Akhylles:

(...) when Ptolemaios wrote the line 'aigyptisti de hypegrapsa, hopôs akribôs eidêis', what precisely did he mean? There are two points of pressure in translating this Greek sentence in this particular context, two points where a reader might play with translation. The first is this verb 'hypegrapsa' a compound of the verb 'graphein': on the one hand, it can mean 'to write', on the other it can mean 'to paint, draw'. The second is this verb 'eidêis': on the one hand it means 'to know', on the other it can mean 'to see'. In other words, if one wanted to be perverse, one could translate the sentence as 'I have sketched out below in Egyptian, in order that you see accurately'.

³⁵ Parsons 2007: 40. Italics are mine.

³⁶ Chen and Tang 1998: 246 with fig. 1.

³⁷ Chen and Tang 1998: 252.

This is, of course, not what Ptolemaios had in mind but it raises the question: where exactly does Egyptian lie on that spectrum of meanings for graphein, where between writing and painting? When Akhilles read the Demotic part of the letter, did he change positions on this hypothetical scale of reading versus seeing?³⁸

It is most interesting to note that Kidd considers his interpretation inconclusive because of the cursive nature of the Demotic script, whose visual property was inferior to that of the hieroglyphic script.

Finally, an additional confirmation for the existence of the signs' direction may be provided by a well-studied textual mark, usually called 'colophon' because it appears at the end (according to the reading direction) of some ancient Egyptian texts.³⁹ It must be carefully noted that the feature of the colophon which is going to be discussed here exclusively concerns its linguistic content and not its formal characteristics such as relative position (horizontal-vertical), 'highlighting' properties (rubricated-retrograde), or type of writing (hieroglyphic-hieratic-demotic) in a given text.

The colophon structure basically reads $\sqrt[4]{} \sqrt[4]{} \sqrt[4]{} \sqrt[4]{} (w).s \ pw$, literally 'This (means) that it comes', usually translated by 'This comes to an end', or simply 'The end', or other similar expressions. It is generally agreed that the 'it' refers to the text preceding the colophon, and that this text has been copied on the actual document and the colophon added. Given that the signs in the ancient Egyptian script system are oriented to the point from where the writing-reading process starts, usually the right, it seems that the colophon expresses *literally* the end of the signs' motion to the writer/reader, i.e. from the end of the text to its beginning, where the writer/reader is located. In other words, the direction indicated by the sentence which we call 'colophon', 'This means that it comes', is from left to right, and here again we find the signs' direction, contrary to the writing-reading direction (see fig. 5).

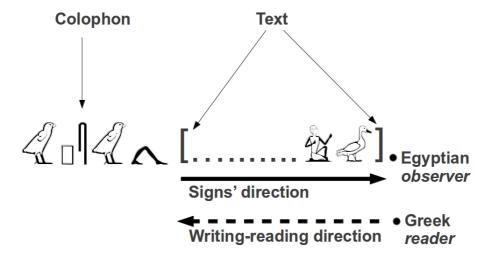


Fig. 5. Signs' and writing-reading directions in Egyptian hieroglyphic texts. © The author

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³⁸ Kidd 2013: 248.

³⁹ See Vernus 2011: 49 and fn. 82, with previous bibliography.

As a matter of fact, the colophon position at the end of the text, which moves from left to right, is just a gloss of the preceding text, no matter how long this might be, which states the achievement of the text copy and addresses its recipient or owner. It consequently has the syntactic structure of a gloss—nominal verbal form (iw(w).s) 'that it comes') + demonstrative as impersonal subject (pw) 'this')—and can be translated 'This (= the act of writing the 'colophon') (means) that it (= the text) comes', as Vernus proposed:

(...) le référent du sujet dont pw est l'indice n'est rien d'autre que l'énonciation, en l'occurrence le fait même que le scribe écrit le colophon: '(Le fait que la présente formule est écrite), c'est qu'il (le texte) est rendu présent (lit.: vient) etc.'. 40

Incidentally, the use of the Thoth-baboon sign for pw in some glosses in the temple of Esna can point to the same direction, as prototypical utterer and interpreter of the writing:

(...) this sign aptly represents the grammatical function of pw, since the baboon was a manifestation of Thoth, not only the god of writing and eloquent speaking, but also the chief interpreter of obscure textual passages and mythological tales, as so vividly recorded in the 'Book of Thoth'.⁴¹

Be this as it may, the relevant finding with regard to the present argumentation is that written text can be the subject of iw(w) 'come', and that this possibility can be interpreted as supporting the existence of the signs' direction.

Ending remark

Ancient Egyptian script possessed two different inner directions: one was the writing-reading direction, usually from right to left; the other was the signs' direction, more often from left to right.

The existence of this phenomenon satisfactorily explains Herodotus's confusion: to his question regarding the direction of the ancient Egyptian script, the Egyptians answered according the signs' direction (from left to right). However, Herodotus believed still that ancient Egyptian script ran from right to left, i.e. according to the writing-reading direction. This paradox has two implications which are important for the general study of writing as a graphic system product of a given culture.

First, the Egyptians were conscious of the signs' direction, and this was completely ignored by the Greeks, whose view of their writing system was centered on the writing-reading process, as to be expected for an alphabetic writing system, which is a system of reflection at the phono-linguistic level.⁴²

Second, the Greek point of view having been retained by the Western culture and science, ⁴³ its approach to the writing systems of other cultures, especially non-alphabetic systems, may give rise to misunderstandings like Herodotus's if those systems are studied through de-contextualized approaches and considered as systems

⁴⁰ Vernus 1994: 339.

⁴¹ Klotz 2014: 56.

⁴² Alves Martins and Silva 2009: 227.

⁴³ Compare Share 2008 on Anglocentrism; and Mahfoudhi et al. 2011, for the Arabic. In general, compare Derrida's critique to Saussure's 'logocentrism' (Derrida 1967: 11, 64, 117, 138, 145-148 and 404-405; Galgano 2003: 141-142).

exclusively to be written/read. As Beatrice Galgano wrote, '(...) if our conception of writing is the consequence of a particular type of writing, the alphabet, how can we apply it to the hieroglyphic writing?'⁴⁴

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⁴⁴ Galgano 2003: 147.

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