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Ancient Egypt and the Materiality of the Sign



Iconicity and World Reference

World Reference and Language Reference

If writing is language made visible (*Visible Language* being the name of a related periodical), then hieroglyphic writing is more than a writing system. It refers not only to the Egyptian language but also to the "world," that is, to objects and events. Hieroglyphics can represent these independently of a specific articulation of a single language. Anyone who expressed this thesis prior to 1822 would have received only a tired shrug of the shoulders. This was the *communis opinio* concerning the function of the hieroglyphic writing system. It was precisely in this that one saw its advantage. Since the system's signs did not have any sound value, it was not bound to any specific language. These signs did not establish the reference to reality by way of a particular language and its "double articulation" but were able to represent "things" directly and abstract concepts via metaphoric and metonymic representations.

In 1822 Jean-François Champollion published his decipherment of hieroglyphics based on his discovery of the sound value of hieroglyphs. This breakthrough established that hieroglyphics is not picture writing but a "visible language" like every other script. From this point on, a thesis such as the one advanced above would have been branded a blatant heresy. The only difference between hieroglyphics and common alphabets lies in the fact that the writ-

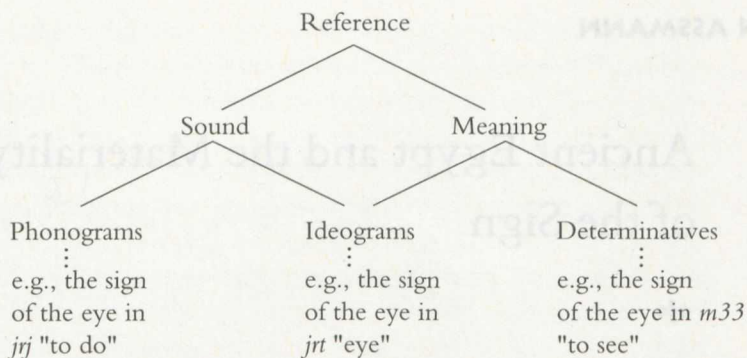


Fig. 1. The principle of double codification

ing does not operate exclusively on the level of phonological articulation but on the level of semantic articulation as well. In other words, there exist not only “sound signs” but also “sense signs” and “sound + sense signs.” Figure 1 presents a representation of the principle of “double codification” (see Schenkel 1971, 1981, 1984).

Ideograms refer to words as units made up of sound and meaning. Phonograms refer to (a complex of) sounds that disregard the meaning. It therefore becomes possible, for example, to transfer the image of the eye with the sound value *jr<.t>** to the word *jr<.j>* “to do,” which has the same sound value. One can also write the image of a house with the sound value *pr* for the word *pr<.j>* “to go out,” that is, for unrepresentable denotations.[†] Determinatives refer to classes of meaning: for example, the sign of the eye refers to everything that has to do with seeing, the sign of the house to all concepts of space, the sign of the sun to concepts of time.

*The <.t> is a feminine ending that is not included in the sound value of the sign.

†The “sound value” of the letters is limited to the consonants and does not include vowels. In this way, the scope of transferability is significantly increased. The practice of writing only the consonants may have appealed to the Egyptians on the basis of the structure of their language. Their language, like other Semito-hamitic languages, binds lexemic meaning to “roots” with fixed consonants and forms inflections by changing the vowels, so that consonants are constants and vowels are variables. H. G. Fischer has drawn attention to the exceptionality of this practice in the history of writing, which was adapted in later consonantal scripts by the Hebrews and Arabs from hieroglyphic writing (see Fischer 1986: 25–26).

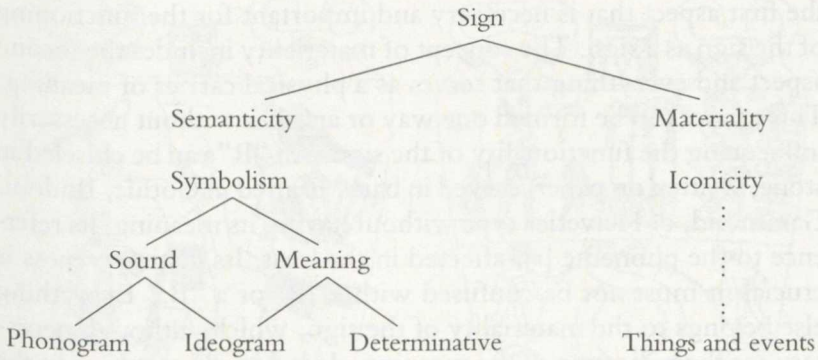


Fig. 2. The semanticsity vs. the materiality of the sign

The system can manage with about 700 signs by combining these three functions. Compare, on the other hand, the incredible number of signs in scripts such as Chinese, where the ideographic element is stronger. "World reference" is not included in this scheme. All functions, including ideograms and determinatives, refer to the language. It is a common mistake to see a direct, extralinguistic reference to reality in these signs (as does, e.g., te Velde 1985/86). Sense is also a linguistic category. Sense signs refer either to "sememes" (word meanings, ideograms) or to "classemes" (word-class meanings, determinatives). They refer in any case to language and to the level of its semantic articulation of reality, not directly to reality itself. We would like to keep this basic distinction in mind and keep the scheme free of any language-independent world reference. Wherein, then, lies the assumed "world reference" of Egyptian hieroglyphic writing? It lies in the *materiality* of the sign and not in what we call its *semanticsity*. We will accommodate this reference not within but outside the scheme, which, with its three functions, is limited to semanticsity (see Fig. 2). It may seem surprising to interpret the iconic reference of Egyptian hieroglyphics as materiality. The concept of materiality brings to mind the purely material, such as stone or paper, engraving or coloring, rather than a characteristic such as iconicity. What I mean is this: every sign has two aspects, the aspect of its function within a sign system, by which it can refer to a specific meaning, and the aspect of its physical manifestation, by which it can indicate this meaning. The concept of semanticsity includes everything from

the first aspect that is necessary and important for the functioning of the sign as a sign. The concept of materiality includes the second aspect and everything that serves as a physical carrier of meaning. This carrier can be formed one way or another without necessarily influencing the functionality of the sign. An "R" can be chiseled in stone, written on paper, carved in bark, printed in Gothic, Bodoni, Garamond, or Helvetica type without having its meaning, its reference to the phoneme [r], affected in the least. Its distinctiveness is crucial: it must not be confused with a "P" or a "B." Everything else belongs to the materiality of the sign, which, although necessary for the indication of the meaning, does not add anything to the meaning by its specificity. In this sense, the iconicity of hieroglyphs is an aspect of their materiality that can be shed with no change to their language-referential meaning. Egyptian cursive scripts took this path and developed within the independent laws and paths of graphic systems. Hieroglyphic writing maintained its pictorial realism. This shows that this sign system is not a "visible language" in the complete sense, but is more than just a script, involving more than just language reference. This "more" is based on its pictorialness; it is therefore "world reference."

The Origin and Development of Hieroglyphs

It is a mistake to believe that writing was invented to record language. This possibility only gradually presented itself after hundreds if not thousands of years of experience with scriptlike recording systems. Sumerian writing goes back to "calculi," or counting stones. These were small clay models that had numerical or objective meaning and were used to record not linguistic but rather economic communications and transactions and to register ownership and other claims on land, animals, and grain (see Schmandt-Besserat 1982a, 1982b). Iconicity did not play a particularly great role since the signs were very abstract from the beginning.

In contrast to the Sumerian case, Egyptian hieroglyphic writing had its origins in a recording system in which iconicity was important from the beginning. Its purpose was political rather than economic communication, the recording of acts of special political significance (see Fig. 3). Two goals were of primary importance. The first was to secure the result of these acts permanently by

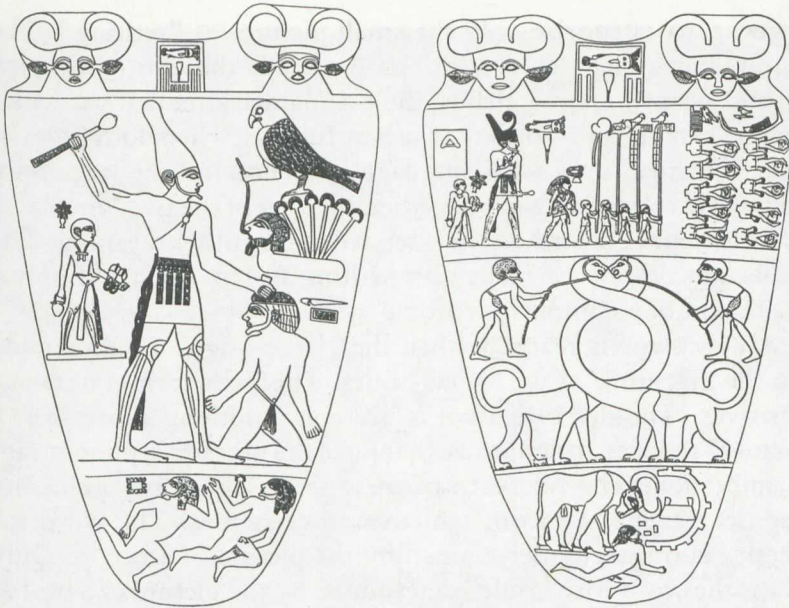


Fig. 3. Ceremonial slate palette of King Narmer (ca. 3000 B. C.) (SOURCE: H. Müller-Karpe, *Handbuch der Vorgeschichte II*, Munich, 1968, pl. 26)

depicting them in stone and depositing them in a sacred place. This placed the record in a physical situation that was both permanent and open to the divine world. The second was to create a means for chronological orientation by recording the major event of a given year and naming the year after that event. This is the origin of Egyptian chronography and the recording of history. The first goal is also the origin of all monumental architecture and pictorial art. The only meaning of such art was to expose and to develop the physical situation as a “sacred space of permanence.” And it is also the origin of hieroglyphics that remains a genre of pictorial art. It is reserved for the “writing of divine words,” as it is called in Egyptian, for recordings in the sacred space of permanence.¹

Protodynastic pictorial narrative uses picture-signs on two distinctly different physical scales. The large pictures portray a “scene,” and the small pictures identify actors and places by including names. The small pictures therefore refer to *language* (names), the large pictures refer to the *world* (acts). It would be a mistake,

however, to categorize only the small pictures as "writing." The large pictures also act as writing. After all, the entire complex picture "writes" a name, that is, the year named after that particular event. This type of recording is successful only when both types of signs, the small ones with language reference and the large ones with world reference, work together. Neither of the two "media" is self-sufficient in recording the intended or any other meaning. The small signs do not yet make up a writing system but are simply a constituent of a complex recording system.

A new stage is reached when the "large" signs are integrated into the inventory of the "small" ones. This is the origin of determinatives. The determinative is originally nothing more than a "picture" reduced to script size that joins the preceding phonogram as annotation. The reference of these sense signs only gradually becomes generalized from sememes to classemes. The word for "beetle" is originally determined by the picture of a beetle. Only later is the word for "beetle" determined by the picture of a bird as falling into the sense class "flying animals," and even later by the picture of an animal skin as falling into the more general sense class "animal."

Picture and Writing: Interdependence and Complementary Multimediality

A typical example should suffice to make clear to what degree the spheres of world representation and language recording influenced each other. I take this example from the tomb of Count Paheri in El-Kab, dating to the early New Kingdom (middle of the second millennium B.C.), in other words, to the middle of Egyptian history. Figure 4 shows the west wall of the tomb (southern part). Figure 5 replaces the hieroglyphs with translations. Important in Figure 4 are the following characteristics.

1. The complete *flexibility* of the writing. With the change in writing direction (right to left, horizontal to vertical), the writing is able to adjust completely to the composition of the picture and the direction of the figures, that is, to the "sense" of the scene (see Fischer 1977a, 1986; Vernus 1985).

2. The *fluid transition* between caption (the text integrated into the picture) and illustration (the picture integrated into the text) in the framework of mutual "determination."

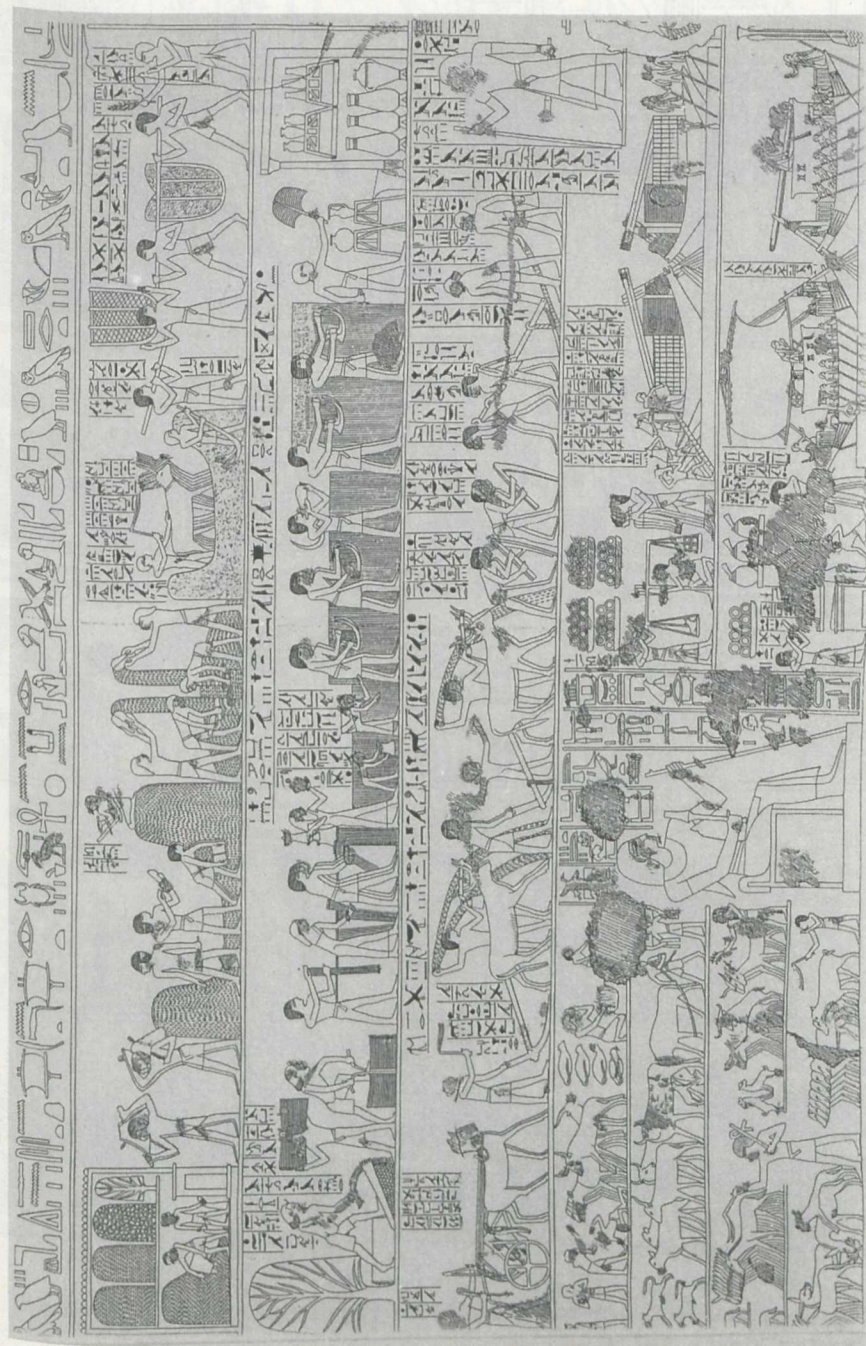


Fig. 4. Mural from the tomb of Count Paheri, in El-Kab (SOURCE: J. J. Taylor and F. L. Griffith, "The Tomb of Paheri at El-Kab," in E. Naville, ed., *Ahmas el Medineh* [*Heracleopolis Magna*], London, 1894)

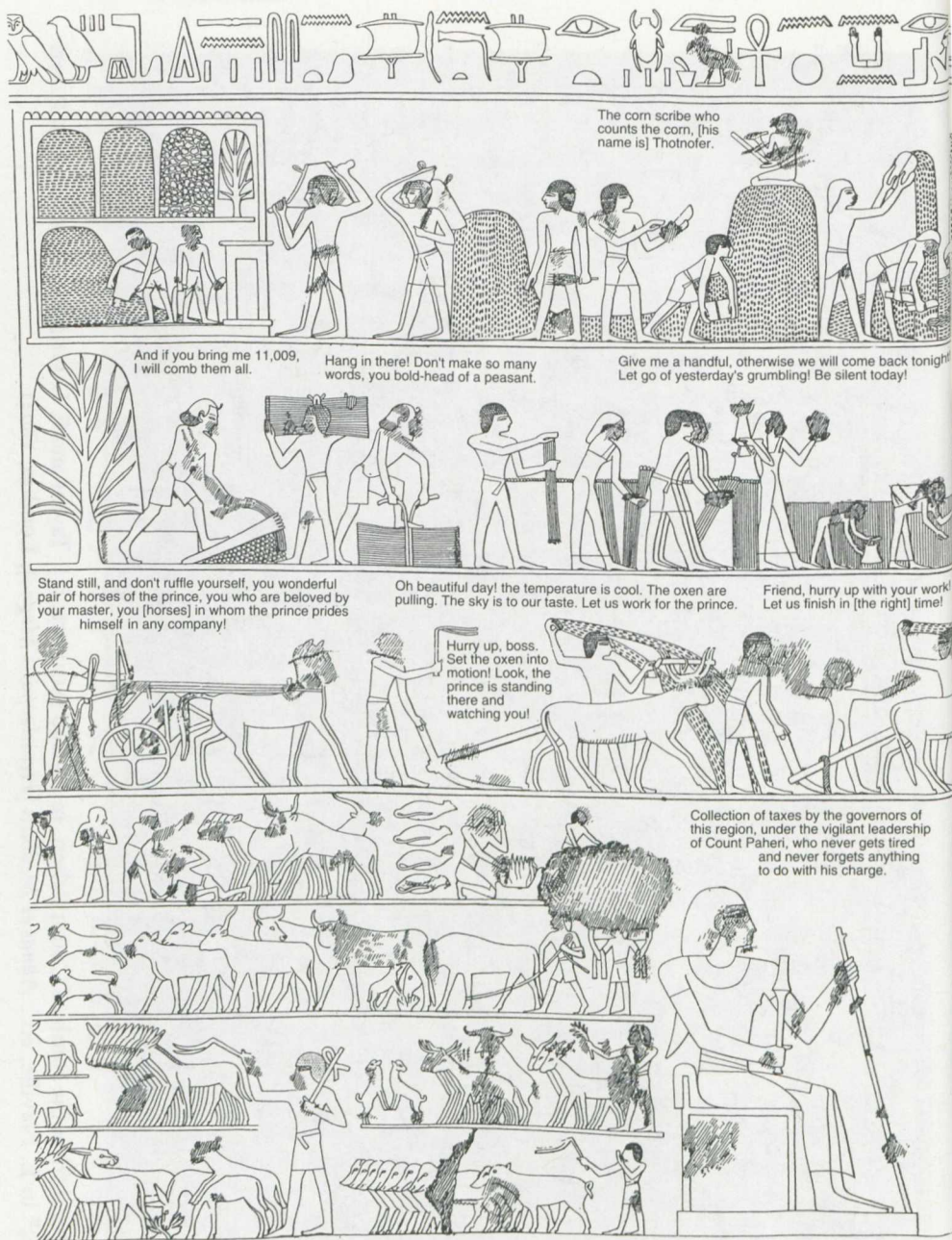


Fig. 5. Mural from the tomb of Count Paheri (Fig. 4), with English captions



Thresh for yourselves, oxen, thresh the straw for your fodder, and thresh the corn for your master! Don't give any rest to your heart! [After all] the weather is cool.

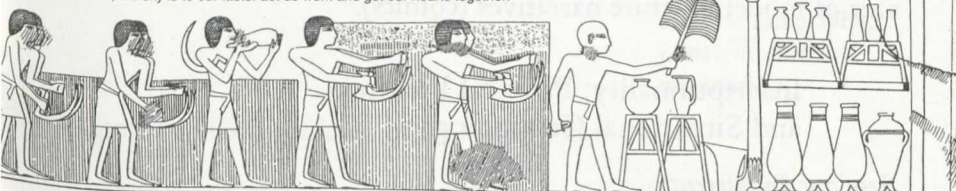
The carrying pole does not spend the day on my shoulder! How strong is my heart!

The sun is hot! How good it would be to receive the value of the corn in fish.

Hurry up! Take your legs into your hands! The water has come and will soon reach the sheaves.



(In antiphony) This day is beautiful! Come out to the field! The north wind has risen, the sky is to our taste. Let us work and get our hearts together.



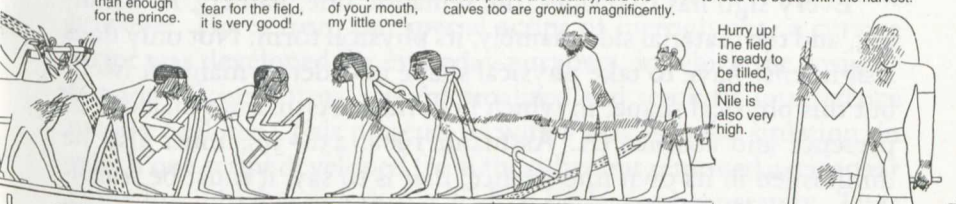
I will continue to work more than enough for the prince.

We do it! Here we are! Don't fear for the field, it is very good!

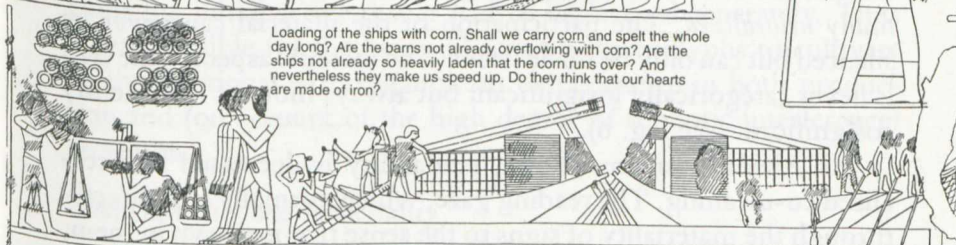
How beautiful is the expression of your mouth, my little one!

The year is good, free from damage, all the plants are healthy, and the calves too are growing magnificently.

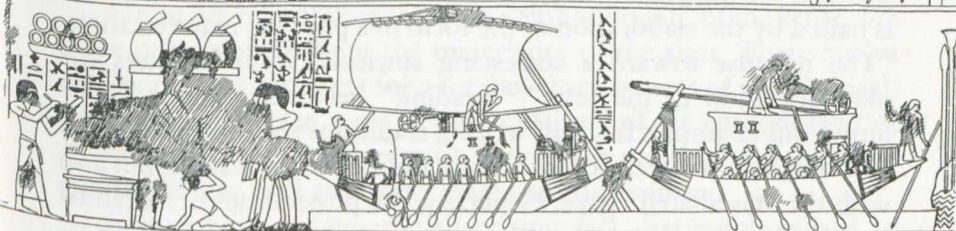
Departure of Count Paheri in order to load the boats with the harvest.



Hurry up! The field is ready to be tilled, and the Nile is also very high.



Loading of the ships with corn. Shall we carry corn and spelt the whole day long? Are the barns not already overflowing with corn? Are the ships not already so heavily laden that the corn runs over? And nevertheless they make us speed up. Do they think that our hearts are made of iron?



3. The *three functions* of the writing. The first is to *explain* the picture (scene titles in the infinitive, e.g., "Departure of Count Paheri to load the ships"). The second is to *identify* the persons (annotations of names, e.g., "the grain accountant, who counts the grain, Thotnofer"). The third is to supplement the rendering of speeches, that is to *record sound*, in multiple media.

In this way, these complex reading pictures are produced as a unique phenomenon in art history. They address not only the inner eye but also the inner ear² and, in the richness of the connection between picture and writing, go far beyond what is possible in the area of modern picture narratives (comics).³

Inscriptionality: Physical Presence and Situational Grounding

Semiotic Interference

Every sign has two sides: the semantic side, namely, its meaning, and the material side, namely, its physical form. Not only does a sign sense have to take physical shape in order to manifest itself, but this physical shape, in which lies Aleida Assmann's dialectic of presence and absence (A. Assmann 1988: 238–39), must also be diminished in its own importance; that is to say, it must be *semantically neutralized*. The participation of the material can never be silenced but can only be made latent. The material aspect of the sign is never categorically insignificant but always more or less latently cosignificant (see Fig. 6).

As Aleida Assmann shows, readability is decreased by actualized co-meaning. The reading gaze, which normally sees directly through the materiality of signs to the sense that is shown in them, is halted by the elaboration of the form in a physical manifestation. "The impulse toward a coalescing spiritualization counters the materialization of the text." "Reading" becomes "gazing." The numerous examples from all writing traditions show, nevertheless, that writers have been concerned not only with the reading but also with the "fascinated" gaze. Generally, the possibilities of a gradual actualization of a latent material cosignification lie within the normal writing system of a culture and are not differentiated as a

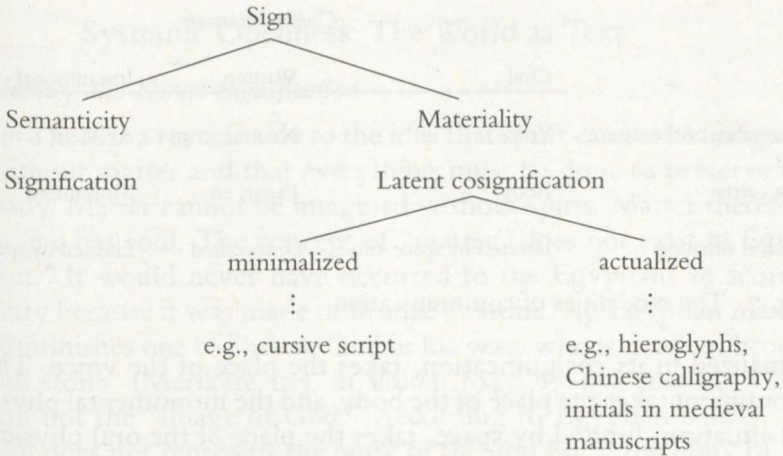


Fig. 6. The cosignification of the material sign

special script. Such differentiation is precisely the case in Egyptian, however. Here, from the special script of hieroglyphs, a cursive script was developed for everyday purposes, in which the cosignification of sign forms was minimalized and semiotic interference mostly nullified. This presents us with a real *digraphic* situation, in which one script developed from the other but removed itself so far from the initial script that it had to be learned separately. Thus it was possible for the “sacred” script of hieroglyphs to cultivate its dysfunctional extravagance, an extravagance in both production and (on account of the high degree of semiotic interference) reception.

Monumentality and Immortality

Up to now, in dealing with the “embodiment” of the sense, we have only spoken about the materiality of the sign. There are an additional two elements for a total of three aspects of the physical. Here we see that, in view of the modalities of the embodiment of communicative sense, we must distinguish oral and written communication as well as inscriptional communication.

Figure 7 illuminates the surprising fact that, with regard to physical presence and specificity, the inscriptional situation is much closer to the oral than to the written. The aestheticized script,

	<i>Communication</i>		
	Oral	Written	Inscriptional
Materiality of the sign	Voice	Neutral script	Aesthetic script
Sign carrier	Body	Paper, etc.	Monument
Physical situation	Limited by space-time	Unspecified	Limited by space

Fig. 7. The modalities of communication

actualized in its cosignification, takes the place of the voice. The monument takes the place of the body, and the monumental physical situation, limited by space, takes the place of the oral physical situation, restricted by both time and space. This monumental context can more or less be specified and limited in spatial terms (e.g., churches, mausoleums, squares). The three aspects of oral communication—voice, body, and limited situation—are neutralized and minimized in everyday, utilitarian writing. This is made possible by a legible script, easily transported carrier material, and the situation-unspecific, arbitrary receptivity that such material allows. The three aspects of orality are carefully reconstructed by other means in the inscriptional situation.

In considering Egyptian hieroglyphs, we stand before a sensual presence of the greatest imaginable intensity. Hieroglyphic writing is to be found almost exclusively in the context of monumental carriers and important, limited communicational spaces. The Egyptians realized the monumental embodiment of sense through unprecedented expenditure. Behind this is what Paul Eluard has called “*le dur désir de durer*,” or the stubborn quest for permanence, a desire for eternity that seeks its salvation in the sheer persistence and massiveness of its material. We are also in the land of mummification, that is, the inability to imagine the soul without the body, the spirit without the material. By erecting such monuments the Egyptians created, alongside the everyday, a world of stone in which impermanent existence was made permanent and the material basis for eternal life was prepared. This was the “sacred space of permanence” that, as a communicational situation, was open to the divine. In this space one became physically present through monuments and gained speech and voice through hieroglyphs.

Systemic Openness: The World as Text

Idolatry and Direct Signification

There is a reverse side to the idea that spirit cannot be imagined without matter and that everything must be done to preserve the body. Matter cannot be imagined without spirit. Matter therefore *eo ipso* has soul. The concept of "matter" does not exist in Egyptian.* It would never have occurred to the Egyptians to scorn a deity because it was made of bronze or stone. An Egyptian maxim admonishes one to "honor God in his way, who is made of bronze and stone" (Merikare 125, in Volten 1945: 67–69), that is, "God" and not the "image of God." According to Egyptian beliefs, the idol does not represent the body of the god but *is* the body of the god. One can read in another text that "gold is the flesh of the gods" (Schott 1961: 150, 169–70). Matter as a lifeless, meaningless, and arbitrary substance, from which everything, including even gods, can be made, is an invention of the Israelites:

He plants a cedar and the rain nourishes it.
 Then it becomes fuel for a man;
 he takes a part of it and warms himself,
 he kindles a fire and bakes bread;
 also he makes a god and worships it,
 he makes it a graven image and falls down before it.
 Half of it he burns in the fire;
 over the half he eats flesh,
 he roasts meat and is satisfied;
 also he warms himself and says,
 "Aha, I am warm, I have seen the fire!"
 And the rest of it he makes into a god,
 his idol; and falls down to it and worships it;
 he prays to it and says,
 "Deliver me, for thou art my god!"

(Isa. 44: 14–17, Revised Standard Version)

In Egypt we find ourselves in the opposite world. It occurred to no one that matter was involved in the use of images. The reason for this lies in the fact that Egypt was a culture of "direct significa-

*Significant in this context is the practice in inscriptions within the sarcophagus chamber of avoiding or mutilating certain hieroglyphs that portrayed living beings. Thus they could not threaten or harm the deceased.

tion," in the sense of Aleida Assmann's distinction (A. Assmann 1980: 57-78). This means that the world reveals the godly or sensual in inexhaustible forms. These are then deciphered by the "fascinated glance" of the observer. Hieroglyphs refer to these forms in their iconical "world reference" and in this way offer themselves not only as reading material but for contemplative observation.⁴ If the divine manifests itself in the sensually comprehensible physical forms of the world, then the world reference of the images signifies god reference. The Bible therefore hits the nail on the head when, in the many passages where it fights against graven images, it equates the manufacture of images and the worship of idols. Images are in themselves already idols. Decorative and other harmless purposes are not recognized:

Therefore take good heed to yourselves. Since you saw no form on the day that the Lord spoke to you at Horeb out of the midst of the fire, beware lest you act corruptly by making a graven image for yourselves, in the form of any figure, the likeness of male or female, the likeness of any beast that is on the earth, the likeness of any winged bird that flies in the air, the likeness of anything that creeps on the ground, the likeness of any fish that is in the water under the earth. And beware lest you lift up your eyes to heaven, and when you see the sun and the moon and the stars, all the host of heaven, you be drawn away and worship them and serve them, things which the Lord your God has allotted to all the peoples under the whole heaven. (Deut. 4: 15-19. Cf. Exod. 20: 4; Deut. 4: 23, 25, 5: 8)

The Israelites also lived in a nondisenchanted world. They therefore had to protect themselves from images. Since Jehovah does not appear in this world in any physically comprehensible manifestations or forms (*ʿemunah*), the world reference of images must refer to other gods. Idolatry is therefore equated with the worship of *other* gods.

Crocodilicity: or, The World as Text

The systemic openness of hieroglyphic writing is related to its world reference as well as to the fact that this is a world of direct signification. New signs can constantly be introduced on the basis of both the meaningfulness of the world and the iconicity or world referentiality of the sign. This possibility was restricted until the Late Period by certain valid requirements of legibility. These fetters

were broken in the Ptolemaic Age. The result was an explosive increase in the number of signs from about 700 to over 7,000 (see Janssen 1974; *Catalogue* 1983). But this is not all. Most signs took on various meanings, some a dozen or more. The peak of sophistication was reached in inscriptions that use only one sign, repeated again and again with different meanings (see Vernus 1977).*

The language reference of writing is hardly changed by this increase in the number of signs and sign values. The decisive changes are to be found at the level of world reference.⁵ We are dealing with a kind of literal allegory, with "allography" or "écriture figurative" (Sauneron 1982). With the introduction of new signs, new "things" are introduced into the writing system. The world reference of the system is strengthened, not by the traditional means of iconical realism, but by the new means of increasing the things that serve as signs. The virtual congruence between the corpus of the *signs* and the corpus of *things* is important. Through this, the world is definable as a corpus of signs and writing as a corpus of things. Writing takes on cosmic traits; the cosmic takes on written traits. Both are codifications of signs: the world as "the hieroglyphics of the gods" (Junge 1984: 272), writing as a kind of pictorial encyclopedia.

There is, however, an important difference in the signification mode of things, that is, the way things are able to take on meaning as soon as they are introduced into the framework of hieroglyphic writing. I would like to call the first, normal mode "direct" and the second and more unusual the "metaphoric." In the direct mode the image of a thing represents either the thing itself (as with an ideogram) or its name in its (consonantal) sound value (as with a phonogram). In the metaphoric mode the image of a thing does not represent the thing itself but rather a quality that this thing embodies in a paradigmatic or emblematic way. The sign of the crocodile, for example, can simply mean "crocodile." This is the direct mode. It can also serve as a determinative in words that mean "greed," "to be greedy," "violence," "to attack," and so on. This, I think, is a completely different mode of representation. The thing,

*This intentional encipherment or cryptography of the text is "calligraphy," an aesthetic principle. The main concern is not to protect a particularly sacred text from unauthorized reading but to employ an especially artistic inscription in certain important passages. See Sauneron 1982.

here the crocodile, does not simply represent the word or the concept "crocodile" but a concept of "crocodilicity" as an aggregate of the behavioral qualities of the crocodile transferred to humankind. It is important how the metaphor, applied to the functions of writing, works. Instead of calling a man a "crocodile" on the basis of his greed and aggression, one writes the words for "greed" and "aggression" with the sign of the crocodile.*

The metaphoric mode plays only a supporting role in the classical writing system but it is not entirely uncommon. There are, after all, some twenty signs, all animal images, that are used in the metaphoric mode. The nicest example is the sign of the cow that gives suck to its calf and licks it lovingly at the same time. The word determined in this manner, ³*ms-jb*, means "to be happy." This motif also plays an important role in the bucolic scenes on tomb walls (see Mathiae 1961; Keel 1980: 55–114). The world functions not only as a reservoir of types with such signs but also as a text that conveys meaning.

The metaphoric mode was considerably enlarged in the later period. Only in late antiquity did it achieve its exclusive monopoly on the memory that was left of the meaning of hieroglyphs. In the fifth or sixth century A.D., the Egyptian priest Horapollon gave a description of hieroglyphs that interprets all signs in the metaphoric mode.⁶ Most of the so-called signs have nothing at all to do with real hieroglyphs, but even when he hits the mark, his explanations are false. For example, he connects the picture of the duck with the meaning "son" by pointing out the "sense of family" of the duck, and links the picture of the rabbit with the meaning "to open" by reference to the fact that rabbits never close their eyes.[†] The text of Horapollon is based on and correlates three catalogues: (a) a catalogue of conceptual denotations like "son," "to open," "time"; (b) a catalogue of pictures (of these, approximately 10 per cent are true hieroglyphs); and (c) a catalogue of universal knowledge that is roughly equivalent to the bestiary of Physiologus.

*Of primary concern are the words *zkn* "to be greedy," *hnt* "to be greedy," and *zd* "to be furious, violent, aggressive." The sparse remarks of Grapow 1924: 95–96, do not in any way do justice to the meaning of the crocodile image in Egyptian metaphoric language.

†What is actually taking place is the simple sound transference from *z3* "duck" to *z3* "son" and from *wn* "rabbit" to *wn* "open." This mode had been completely forgotten by the time of Horapollon.

These catalogues are usually correlated according to the following scheme: "If you want to express (a), draw (b), because (c)." All of this is pure fantasy, but it possessed for late antiquity enormous natural authority because it coincided exactly with their biological and above all zoological knowledge, a kind of allegorical ethology. The component (c) in Horapollon's scheme corresponded exactly with the worldview whose validity was unquestioned up until the Renaissance. Horapollon's text was in this way able to gain great influence in the sixteenth and seventeenth centuries (see Iversen 1961; Giehlow 1915; Volkmann 1923). This text led to the development of hieroglyphics or emblematics as systems of communication with metaphoric or allegorical images, an "allography." It also established a hieroglyphic worldview that understood the world as a complex of meaningful signs, the worldview of "direct signification." Not until the deciphering of hieroglyphics by Champollion was this thousand-year-old misunderstanding cleared up through the rediscovery of the "direct" mode of signification. At the same time, all the real knowledge that was a part of this writing system was allowed to be forgotten.