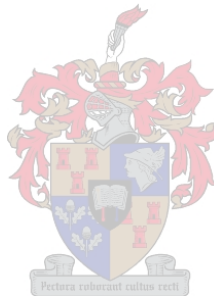


Understanding the Ancient Egyptians:
An Examination of Living Creature Hieroglyphs

by

Corey Carpenter Ray



Thesis presented in partial fulfilment of the requirements for
the degree of

Master of Arts (Ancient Near Eastern Studies)

at the University of Stellenbosch

Supervisor: Prof. I. Cornelius

December 1999

DECLARATION

I, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

Abstract:

In this thesis an exploration is made into whether or not hieroglyphs reflect ideas of the ancient Egyptians themselves. By examining "living creature" hieroglyphs one may contemplate why the ancient Egyptian chose a particular manner of depiction. The manner of depiction can then be examined insofar as what ideas they may reflect. In this way study into other groups of signs such as those of the environment may be used to further illuminate the lives and our understanding of the ancient Egyptian(s).

This thesis begins with an examination of both the problem inherent in such a task and an overview of some of the "processes" involved. By understanding that a reconstructed reality, that of the hieroglyph, reflects both *real* and *perceived* characteristics represented in glyphic form, one may seek out the mental impressions considered relevant to the people themselves.

Next the role literacy played and still plays is discussed. This discussion includes a brief historical overview of both the history of decipherment and the "language" of the ancient Egyptians. The importance of "writing", artistic in nature in Egypt in regards to hieroglyphs, is then discussed as it relates to its use as symbol. Hieroglyphs are then discussed in their role as art, communication, and language emphasizing the multitudinous role(s) which they served. The importance is thus reiterated that hieroglyphs served as a communication of ideas to both the literate and the "illiterate" in at least a menial manner.

After providing a "background" context of both the world and time of hieroglyphs and their subsequent "understanding" and interpretation, there is an analysis of the hieroglyphs for living creatures including the following Gardiner groupings: (1) mammals, (2) birds, (3) amphibians and reptiles, (4) fish, (5) invertebrates and lesser animals. The signs are examined in regards to their function and variations followed by some observations and comments related to the "structure" and perspective of the sign itself. Summary observations and comments are then made about each group.

The thesis is then brought full circle by examining the implications of what hieroglyphs can tell us about the ancient Egyptians, via the perceptive and communicative role which they played. By understanding hieroglyphs as "fingerprints" of/from the mind of the people and subsequently their culture, this framework may provide a new mechanism into understanding the Egyptian via their own visualization and perceptive nature. A case is then proposed that this new "mechanism", if it is indeed considered feasible, can be applied to not only the

physical world consisting of nature such as the environment, but also to groups which depict manmade objects.

Opsomming:

In hierdie tesis is die moontlikheid ondersoek dat hiërogliewe iets van die ideewêreld van die antieke Egiptenare reflekteer. In die bestudering van "lewende wese" hiërogliewe kom vrae op soos waarom die antieke Egiptenare juis 'n spesifieke vorm van voorstelling verkies het. Die vorm van voorstelling kan dan bestudeer word vir die idees wat dit moontlik mag reflekteer. Ander groepe/velde van tekens, soos die van die breër omgewing, kan gebruik word om verdere lig te werp op die lewe van die antieke Egiptenaar(e) en ons verstaan daarvan.

Die tesis begin met 'n bestudering van die inherente probleme in die aanpak van so 'n taak en 'n oorsig oor sommige van die "prosesse" daarby betrokke. By die verstaan van die hiëroglief as 'n gekonstrueerde realiteit, wat *werklike* sowel as *afgeleide* eienskappe reflekteer, ontdek die ondersoeker daarvan iets van die persoonlike/kulturele indrukke wat deur hierdie groep mense as relevant ervaar is.

In die volgende afdeling kom die rol van geletterdheid aan die beurt. Hierdie bespreking sluit 'n bondige historiese oorsig oor die geskiedenis van ontsyfering asook die taal van die Egiptenare in. Die belang van die "skryfkuns" en veral die kunsraad daarvan in die Egiptiese hiërogliewe word vervolgens bespreek. Dit is veral waar soos dit in verhouding staan met die gebruik daarvan as simbool. Die veelsydige rol(le) en belang van hiërogliewe in die kuns, kommunikasie en taal word dan ondersoek en bespreek. Die klem word daarop gelê dat hiërogliewe as die kommunikasie van idees aan beide die geletterde en "ongeletterde" dien.

Nadat 'n agtergrondkonteks van die wêreld en tyd van die hiërogliewe en die daaruitvloeiende "verstaan" en interpretasie daarvan gegee is, word 'n analise van die "lewende wese" hiërogliewe gedoen. Dit sluit die volgende groeperinge van Gardiner in: (1) soogdiere, (2) voëls, (3) amfibieë en reptiele, (4) visse, (5) invertebrata en kleiner diere. Hierdie hiërogliewe word ondersoek in terme van hulle funksie en variasies, gevolg deur waarnemings en opmerkings aangaande die "struktuur" en die perspektief van die teken. Opsommende observasies en enkele opmerkings oor elke groep volg daarna.

Die tesis word afgerond met 'n ondersoek na die implikasies van wat ons kan wys word uit die hiërogliewe aangaande die antieke Egiptenare, via die perspektiwiese en kommunikatiewe rol wat dit vervul. Deur hiërogliewe te verstaan as die "vingerafdrukke" van die begrip van hierdie mense kan hierdie raamwerk 'n nuwe meganisme in die verstaan van die Egiptenaar via die visualisasie en waarneembare aard daarvan, vorm. 'n Voorstel word gemaak dat hierdie nuwe "meganisme", indien dit uitvoerbaar is, toegepas kan word, nie net op die

hiërogliewe van die fisiese wêreld bestaande uit die natuur en die omgewing nie, maar ook op hiërogliewe wat mensgemaakte voorwerpe voorstel.

Acknowledgements

Just a short note to say thanks to those who either stood by me, put up with me, or had to work extra hard during the holidays to help meet the deadlines. I hope my work proves worth the wait, stress, and hassle. Even though I do not lean towards a specific theory of the building of the pyramids and did not have a school master with a whip behind me, I feel I can say that I have experienced a form of ancient Egyptian hardship.

"Written language has traditionally been regarded as the technical conveyor of a spoken language. This is the assumption underlying the whole Champollionian tradition. We suggest to complement it. We perceive written language as the attempt to communicate, explore and improve on our perception of the world-- inner as well as outer."

Orly Goldwasser and Nathaniel Laor
(1991: 50)

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Introduction: Research Problem and Method

1. Research Problem

The interpretation of hieroglyphs has varied and still varies greatly. The earliest inquiries into hieroglyphs revolved around their mysterious and unknown nature. This led to interpretation *extremes* which sought to find meaning in every aspect that hieroglyphs could relate as esoteric symbols. Fortunately, there were a few people along the way who sought new ways of interpreting the mysterious signs. It was as a result of this second "group" that hieroglyphs were deciphered. This decipherment, however, was and has been the opposite "extreme" as the once colorful and symbolic "language" and script became just another writing system. The problem with the latter approach is that one is forced to learn about the people and culture of the ancient Egyptians via a method that was unknown to them, that is a "dead" script. While it is not the purpose of this thesis to analyze the symbolic nature of each living creature hieroglyph, these signs can be used as a source to study how the ancient Egyptians viewed their world. ¹ Although the system of hieroglyphics is full of symbol and symbolism, it is perhaps more important to re-examine the individual image itself. By doing so, one may not only take a closer look at the aesthetic beauty of the script, but also the inherent yet subtle and "hidden" impression(s) that were left by the creators, the ancient Egyptians. ²

The examination of living creature hieroglyphs including mammals, birds, amphibians, reptiles, fish, invertebrates, and lesser animals are focused upon here. While other groups may also provide an insight into the minds, worldview, etc. of the ancient Egyptians, it is believed best to begin such an endeavor by examining that part of the world which they held most sacred, life (i.e. animals). After the selected group of living creature hieroglyphs have been re-examined it may then prove worthy and profitable to re-examine other groups such as the environment. By doing this one may slowly reconstruct both the perceived world and physical world of the ancient Egyptians, seeing what they saw as they saw it, with a focus on that which they felt worthy of emphasizing.

¹ For the purposes of this thesis "living creature" or "living animal" hieroglyphs refers to all *non-human* animals as found in Gardiner (1994) groups E-L.

² It is necessary to state (and reiterate) that even though hieroglyphs were in fact a "codified" script, or written language, handed down through the centuries, it still maintained its relevance in terms of remaining both recognizable (in form and meaning) and a reflection of the worldview of the people.

1.1 Defining a Worldview and Its Importance

The use of the term "worldview" can encompass a broad range of aspects with regards to people and the world itself. A worldview "encompasses the mental functioning that directs human actions. It is the cognitive basis for human interaction with the social and physical environments. But a worldview also represents a perception of those environments. It is a view of the world, a way of looking at reality." (Simkins 1994: 23-24) All of this is very true, however, more importantly are the implications of such a statement to a "reality" reflected by the creation of hieroglyphs. The worldview represents how "people characteristically look outward upon the universe." (Redfield 1962: 85) It is also a term that is "useful in asserting something of what is most general and persistent about a people." (Redfield 1962: 84) For a study of the ancient Egyptians this is all too true. By determining that hieroglyphs are not only "symbols" of a people and their culture, but also remnants of their collective memory one can go the extra step in understanding the way in which the Egyptians saw themselves "in relation to all else" (i.e. their worldview). (Redfield 1962: 86)

Hieroglyphs most certainly reflect some aspect or form of the worldview of the ancient Egyptians. Unfortunately, much of the "psycholinguistic aspect[s]" of hieroglyphs is often lost in its study outside of the realm of the "icon". (Goldwasser and Laor 1991: 44) As a result of both an inability to immerse the modern "scribe" in the physical world of the ancient Egyptians and other practical problems such as not truly knowing the language, the methods of understanding have been altered by means of modern "alphabetic" or "phonetic" systems.

"To move beyond the hieroglyphs, thereby, amounts to the serious loss, not only of the technical reality of lexical objects to which a whole culture is accustomed and attached to, but of the richness of that culture's soul and mode of existence in and constituting the world." (Goldwasser and Laor 1991: 50)

This presents to the modern researcher both the task and the problem at once. And though a physical "time machine" in understanding the ancient Egyptian worldview is not available, there does exist what may be considered a "timeless mechanism" for

traveling backwards in time, the hieroglyph.³

The world of the hieroglyph as well as the world of the ancient Egyptian is a vast and complex reality. This reality, which is hoped to present itself as a representative of a people's worldview, "consists of basic assumptions and images" that may "provide a more or less coherent, though not necessarily accurate, way of thinking about the world." (Kearney 1984: 45) And in order to reflect truly upon the complexities involved "an appreciation of the dynamic tension inherent to the Egyptian culture, the tension between the attraction to the outer world of concrete objects and the excitement over the discovery of abstract ones in the inner psychic space; in our case, object, word, and idea interlaced" must be made. (Goldwasser and Laor 1991: 46)

1.2 The Task at Hand

Analyzing hieroglyphs is a difficult and complex task. Hieroglyphs were and are more than representations of objects and living creatures. They can even be said to be more than writing symbols, for they not only represented something above and beyond for the ancient Egyptian, but also can be said to reflect an inner *dimension* of the people themselves.

"A drawing captures symbolically on paper some of the subject's thoughts and feelings. It makes a portion of the inner self visible. The very lines, timidly, firmly, boldly or savagely drawn, give us some information. More is revealed by the content, which is largely determined by the way the subject, consciously or unconsciously, perceives himself and significant other people in his life." (Klepsch and Logie 1982: 6)

Although in Egypt the system of art and hieroglyphics was "codified" fairly early and can be argued only represented the original "codifiers", it seems likely that in light of the fact that the system was maintained throughout 3000 years of history (even to an extent within the artistic revolution of the Amarna Period) that it was considered to be reflective of the people also. That is not to say that certain changes in perspective could and did not ever occur, but that the evidence leans overwhelmingly to the conclusion and interpretation that the codified system was accepted on multiple levels, thus being a fairly accurate reflection of the people.

³ Collective works such as Frankfort, et al. (1977) *The Intellectual Adventure of Ancient Man: An Essay on Speculative Thought in the Ancient Near East* seek to explore the mind, or worldview, in regards to the analysis of "records" and patterns through a somewhat psychological perspective. This emphasizes both the possibility and necessity to apply such to other "areas" or "aspects" ancient man via *abstract* analysis. Here the case involves the somewhat abstract analysis of or via the hieroglyph itself.

1.3 Perception and Reality

In ancient Egypt art and writing were methods of communication. They communicated directly as words and indirectly as symbols. Hieroglyphs, however, can be said to communicate perhaps more than was intended. The ancient Egyptians may have sought to keep "alive" animals, people, etc., but in so doing they created a system which could be studied and analyzed long after its original intentions faded from memory. The signs and art can be viewed not only as representing life in artistic form, or language in "pictures", but also as a means of investigating the environment in which they lived. Even further one can attempt to analyze psychologically the why of how representations were made and what this may reflect.

Anything that can be said to have been depicted, drawn, or represented must have been done by piecing together and organizing the object and its aspects. (Goodman 1976: 32) In the case of Egypt, the organization of the aspects into a formal representation in hieroglyphs was necessary in order to create (through invention of evolution) a structured and coherent system understandable to all. The problems lies then in the areas of perception and reality.

Perception is a complex process which can be said to be innate and/or learned, the amount or mixture of which need not concern one here. To perceive is essentially to think, to note, and to think once again. When someone sees an object their mind "thinks" or processes the object (perhaps only subconsciously), then the thinker or individual takes notice consciously of the object and of associations. Finally, the two processes merge into perception, or a perceived reality, as the mind "thinks" again and has thoroughly yet quickly analyzed the object(s). Through the whole immeasurably quick process of perception the object is analyzed taking into account memory or experience, cultural background, and socialization to name a few. However simplified this explanation may appear, the complexities of perception are perhaps best illustrated by the following:

"In perception, the interest is in the representation of the world of objects and events that constitute our physical environment. Thus the concern is with the perceived shape, size, distance, direction, orientation, and state of rest or movement of objects. The determinant of each of these aspects of perception is sought and, invariably, the determinants prove to be difficult to isolate..." (Rock 1975: 24-25)

This demonstrates both the possibility of analyzing hieroglyphs in regards to perception- both by the individual and the culture - and the complexity inherent in such a task.

Reality on the other hand is only a part of what is perceived. And how something is depicted represents the amount of "realism" that the image conveys. "Realism is relative, determined by the system of representation standard for a given culture or person at a given time." (Goodman 1976: 37) In this way, hieroglyphs can be said to be relative to the ancient Egyptian(s) thus representing ideas which they standardized and "codified" into both artistic and hieroglyphic forms. Furthermore, traditional writing systems, in our case the hieroglyphic system, can be said to be the standard system. "Realism is a matter not of any constant or absolute relationship between a picture and its object but of a relationship between the system of representation employed in the picture and the standard system." (Goodman 1976: 38)

The difficulty afforded the task of analyzing hieroglyphs as reflections of a people is perhaps the reason very little effort has been made into this matter. Other reasons may include the fact that many may consider the task either too complex, too difficult, and/or too minuscule (can the outcome of such a study outweigh the efforts, i.e. not practical). Whatever the reasoning for not attempting to analyze hieroglyphs in light of the people they represented (even reflected), one is still left with curiosity. And while this curiosity was in the past partially the reason for the popularity of hieroglyphs and hieroglyphics, many of the questions remain unanswered. The fascinating explanations of the past ceased rightfully so, however, an explanation of the why still remains. The curiosity may be answered in broad terms as to why they kept using such a complex and obviously time consuming system, but the curiosity into the individual signs is lacking. Hopefully, a short catalogue (Part II) such as the one included here will help to combine various ideas and interpretations about signs perhaps lending itself to better or at least more thorough answers and investigation. While some answers may be simplistic and others too complex to explain, the hieroglyphic system will be studied in such a way that one will gain insight into their thought and view of the world.

2. Research Method

In order to examine how hieroglyphs may reflect ideas of the ancient Egyptian worldview (see below) it is necessary to try and understand the signs as:

(1) glyphs or pictures (what is the sign supposed to represent), (2) art (the sign is both a part of the written script and often used in artistic representations as the "same"), and (3) writing (that is the "graphic means of communicating ideas"). (Vanstiphout 1995: 2181) The signs will be analyzed in terms of perspective and perception. From this point factors such as language, use in words, etc. also may come into consideration. Since hieroglyphs are to be understood as a reflection of the Egyptian people, it is necessary to analyze the signs in view of historical context, psychological motivation, communication (supra-language) and the ability to (re)construct (represent/reproduce) what is intended realistically in terms of personal/cultural perception. By attempting to understand hieroglyphs in terms of its *context*, the mind of the ancient Egyptian may be explored thus illuminating their (perceived) world.

2.1 Biopsy of the Ancient Mind: How?

While one may agree that it is possible, and even necessary, to delve into the "mind" of the ancient Egyptian in order to understand his/her world, history, etc., the problem still lies in which method should be used. One of the current trends for understanding the ancient mind is what is referred to as cognitive science/studies (i.e. cognitive archaeology and anthropology). Cognitive archaeology represents "the study of past ways of thought as inferred from remains". (Renfrew 1996: 3) Even though hieroglyphs are not necessarily thought of as being "material remains", they are in fact very much so. This of course is rare for a script to be able to fall into the category of "material remains" as opposed to merely a part of the "historical" record. It, however, should not be surprising in light of the fact that hieroglyphs are also art, and art most easily fits this category. And though this approach to the ancient world is fairly new, at least in terms of practice, it may act as an opportunity for validating such an endeavor. For the purposes here, the ancient mind encompasses the area of writing and art (i.e. hieroglyphs). The chart below demonstrates the (re)discovery of the ancient mind.

Within the framework for analyzing the ancient mind via cognitive studies there must be first the realization of the processes which take place for the creation of the object/artifact. "Perception and cognition together constitute the universal interface between the realm of ideas which a human being has internalized and the realm of matter and energy which surrounds an individual." (van der Leeuw 1996: 135) The processes surrounding the "(pre)history" of the object can best be seen by the chart below.⁴

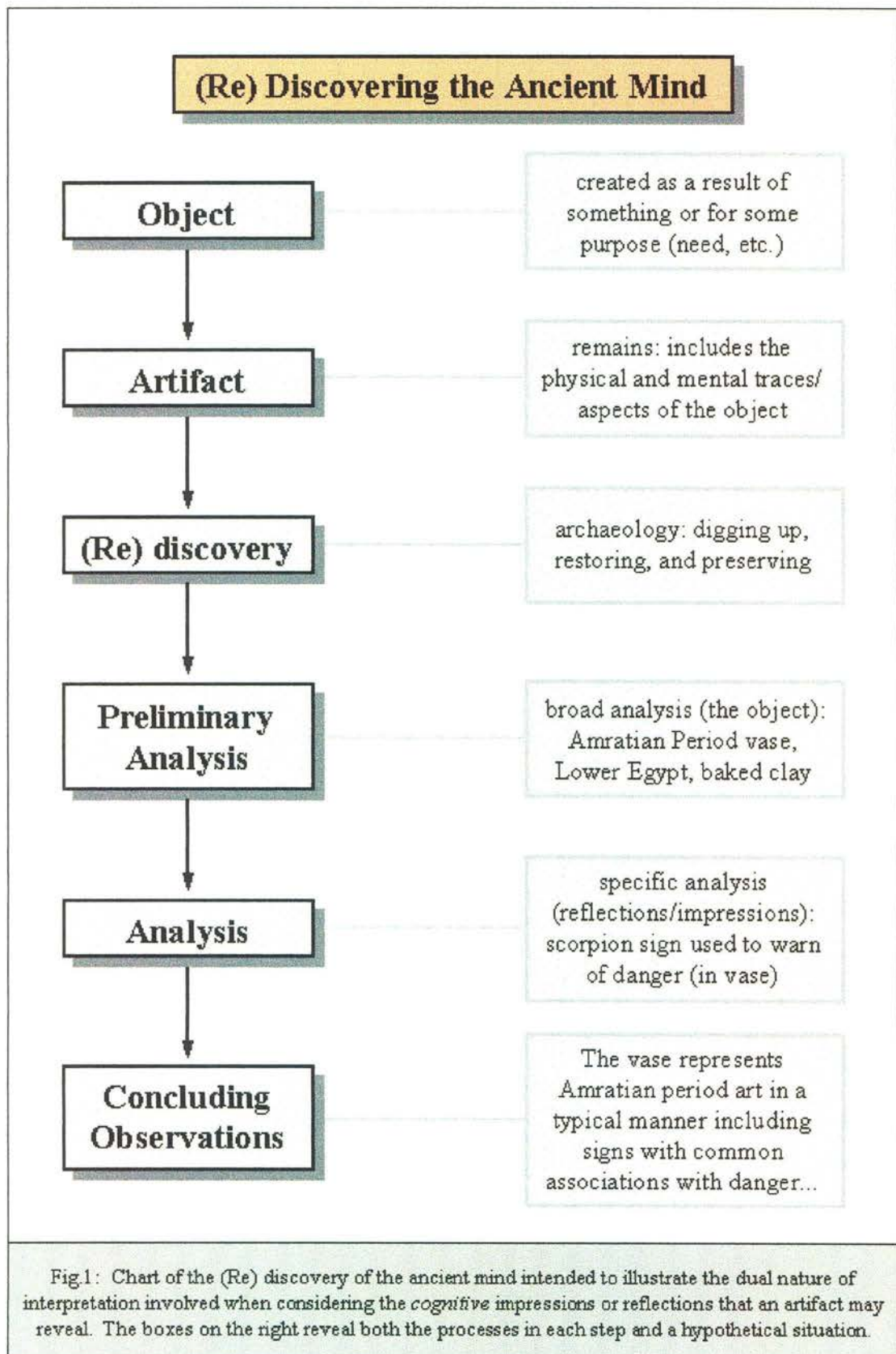
The use of "cognitive" studies in the quest for a better understanding of ancient cultures via the ancient mind may seem perhaps too idealistic and not very realistic. While the methods of analyzing elements related to cognition can be more guesswork than exact science, it is still an important element for understanding culture. Cognitive studies such as cognitive archaeology focus on "what can be learned about perception, attention, learning, memory, and reasoning from the study of past cultures." (Zubrow 1996: 187) By focusing on the mental aspect of the people who make up the historical, archaeological, cultural record, one does not deny the "humanity" of their existence.⁵ Essentially, what one is left with is a need to understand the ancient world via the analysis of not the existing mind (i.e. as psychology might do), but the results of the existing mind (i.e. a physical object/artifact).

Pictures exist as symbols, as communication, and on a simplistic level visual pleasure. Their ability to communicate can not be taken for granted. In Egypt, images could be powerful, dangerous, and beautiful at the same time. Hieroglyphs thus were complex and simplistic. They were complex as a language and even as symbol, yet they were also simplistic as a mechanism for visualizing life, where even the so-called ugly could be perceived as beautiful.

In art the pictures and images come alive. But more than that, the images come alive around us. "The phenomenal world of objects is three-dimensional with ourselves at the center." (Rock 1975: 10) Mankind exists as both the observer and

⁴ The idea of the objects "(pre)history" is meant to emphasize that the object had a form of existence prior to its actual creation. This then provides the framework for recognizing that cognitive processes are applied during but also before an object's *actual* creation.

⁵ This is perhaps best illustrated by examples such as when a company has a good product and attempts to sell it without looking at the people, their language, and even mental connotations. The best example of this is when a automobile manufacturer (in the U.S.A.) attempted to sell their latest car named the "Nova", (named after the type of star) in Latin America. However, for Spanish speaking peoples the one-word "Nova" read as "*No va*", literally "No go". Needless to say the cognitive, or connotation element, which was neglected, proved a disaster.



the (re)creator of life through art at the same time. To observe places one at the center of the "experience" of viewing what is to be seen. Whether the image is far or near, big or small, the observer remains the center, focusing on what is "ahead" and "beyond".

Art is at once powerful and soothing and reflects something about the creator. In Egypt, the creator worked with a codified system to represent objects and creatures as hieroglyphs. For the purposes here, the hieroglyphs which represent living creatures can be used to look into the lives and through the eyes of the ancient Egyptians. "Some connotations of animals may seem to the members of a particular society to be fixed and inevitable, almost human universals..." (Morphy 1989: 14) It is for this reason that hieroglyphs can be examined as reflecting Egyptian thought despite being a codified system even years after their initial codification. Art, including hieroglyphs, "has the potential both to differentiate between species and to show what they have in common." (Morphy 1989: 15) By analyzing hieroglyphs one can see reality, or perceived reality, and what was considered important, thus experiencing the world in which the ancient Egyptians lived. "For animals in art do not provide a window to the world but a selection from the world, a selection that tells us as much about human societies and human concerns as about the animals themselves." (Morphy 1989: 14)

More importantly, art is a conscious effort to represent the world and/or thoughts of people. It does so by processes which involve a combination of the subconscious and conscious as they merge *data* through perception.

"The transformation of natural scene into a mental image, and thence into a concrete rendering on a wall or portable medium, has the inevitable consequence, inherent in all of art, of stylization and reduction (Ucko and Rosenfeld 1966: 48), if only because an infinite amount of raw information is condensed into a necessarily limited set of lines or forms (Layton 1977: 52; Lorblanchet 1977). It is here that the choice of the artist intervenes, in the form of his aims and also of the conventions of his time and place. It is these that determine the degree of realism or rather, of naturalism, of the work." (Morphy 1989: 24-25)

So art can be seen as a psychological process in which factors such as subconscious and conscious memory and conscious state of mind/being assume their roles to create and depict. And though the Egyptian form limited individuality and the ability/possibility of analyzing specific hieroglyphic texts, and perhaps even walls painting and other art, it still can be said to be the result of mental processes. These

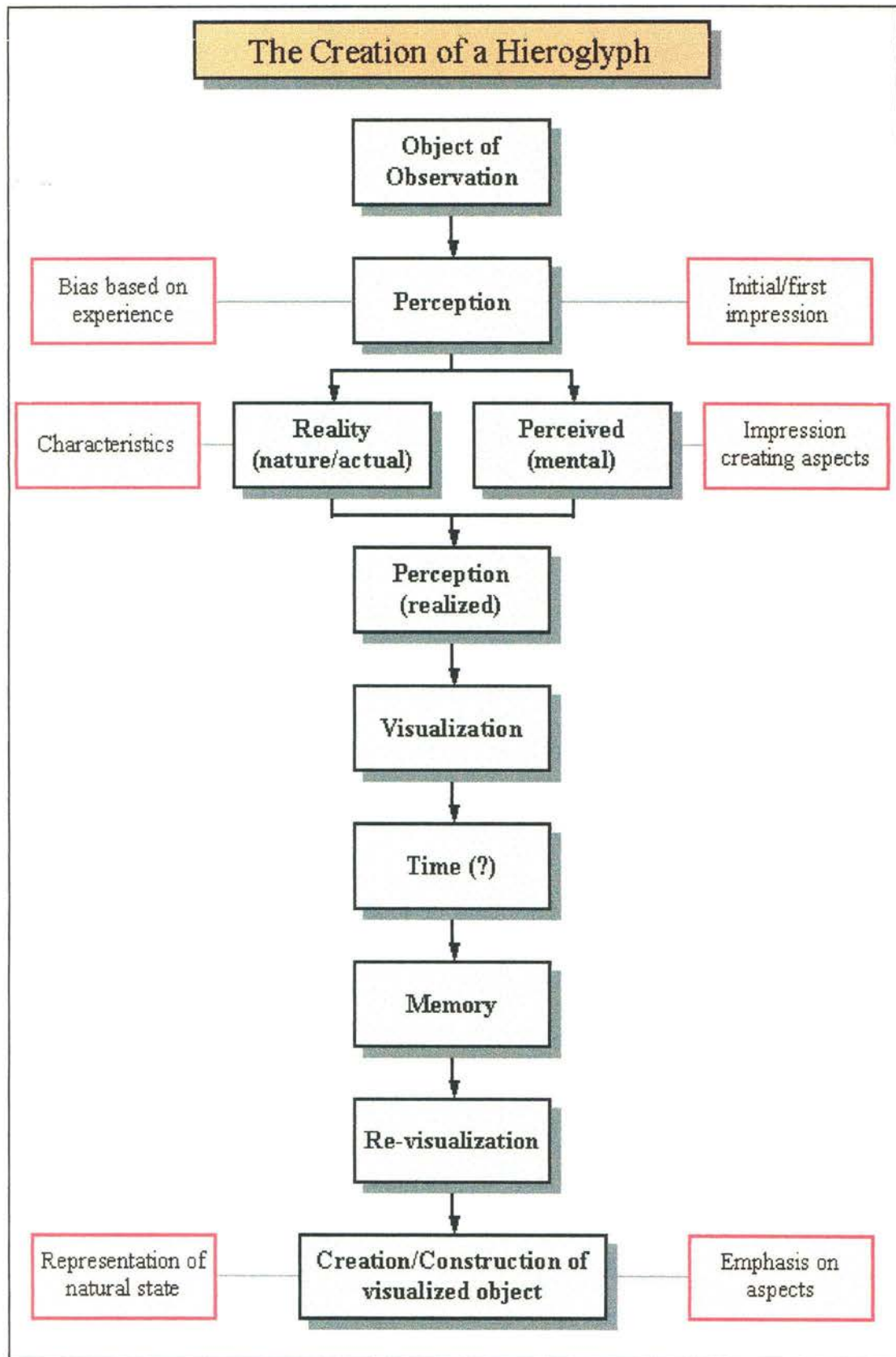


Fig.2: Chart of the mental steps required for the creation of a hieroglyph. The boxes to the sides are examples of what the particular step typically considers. This chart is applicable to other creative processes which entail re-creating an object which has been seen (or exists in memory).

mental processes are of course a reflection of the person creating the hieroglyph,

and thus can be examined in such a way not necessarily being limited by its historical age.⁶

3. Research Procedures

The examination begins (Part I) by discussing perception and perspective with regards to hieroglyphs. From here, a historical introduction to the importance and role of literacy is made. Next, there is an overview of the historical attempts at understanding hieroglyphs and the system of hieroglyphics including its development and history. After providing a historical background, there is a discussion of hieroglyphs as symbols in varying aspects of life such as art, religion, and politics. Once the idea of symbol has been examined, hieroglyphs are discussed in their role as art, communication, and language concluding with some notes on their value and importance. The main analysis (Part II) includes a short catalogue examining the hieroglyphs for living creatures, after which observations and conclusions are made including some interpretations on their perceived world. This includes general "observations" about various hieroglyphs from which interpretation is made concerning the reasoning as to "why" an animal was depicted in such a way. And by understanding the mental processes perhaps utilized by the ancient Egyptian progress may be made in illuminating at the very least the *visual* aspect of their worldview.

⁶ What is meant here is that although the hieroglyphs are not necessarily created in "present time", having been codified perhaps centuries earlier, their continued and persistent use most likely support the interpretation that the codification still reflected the institutions, creators, and people themselves. This is not necessarily undermined by conservative government or societal tendencies, and in fact can be said to be reinforced by such.

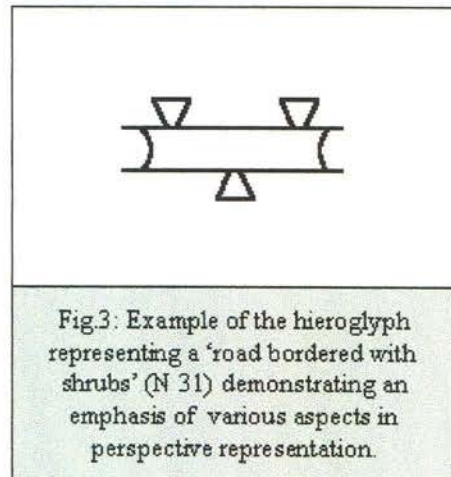
Part I
Hieroglyphs and Writing: History, Role, and Importance

Part I: Hieroglyphs and Writing: History, Role, and Importance

1. Some Notes on Aspective and Perspective

It may seem quite reasonable to study hieroglyphs in view of the particular perspective given by the individual sign. This, however, is only part of the picture given both by the people and the sign itself. And in order to properly inquire into whether hieroglyphs may reflect something about the people themselves it is imperative that one examine the signs not just in relation to perspective but as in relation to what Brunner-Traut called "aspective".¹

An individual hieroglyph is most often thought of as a single representation. Hieroglyphs, impart not only language but also what may best be understood as features. These features, combined in one *single* representation are in fact *multitudinous*. Each hieroglyph is the result of various aspects deemed relevant, important, and perhaps essential by the original creator.² These aspects are then represented in a manner which is portrayed in perspective in



what is *perceived* to be a single representation. This is in part the reason why the term "aspective" was needed. It works to solve the problem of both multitudinous representation of many or multiple aspects and conveys the idea that the sign is at once essence and being. Therefore, the "aspective" serves as a means of communicating ideas which "perspective" lacks.

Perspective representation is essentially another way of terming representational art. With the Egyptians, their perspective representation, including both predynastic and dynastic art and hieroglyphs, is often compared to that of a child because of its seemingly simplistic manner of "representing" living and non-living objects. This misunderstanding is in part based upon a narrow understanding of the role art and hieroglyphs played to the Egyptians themselves. As is demonstrated by Gay Robins:

¹ Emma Brunner-Traut in Heinrich Schäfer's (1974) *Principles of Egyptian Art* sought out and conceived this term to clarify and differentiate what is implied by the perspective and vantage point of the ancient Egyptian. It is essentially a way of delineating the idea that the "perspective" given was that which was the result of viewing various "aspects".

² By "original creator" what is meant is that regardless of the historical evolution, etc. the hieroglyph at some point reached its most conservative and lasting form, thus being "created".

"Superficially, much of the art appears familiar to western eyes, so that we can often look at a scene and comprehend it intuitively. This leads people to ask why the Egyptians failed to take what seems like the obvious next step and discover perspective. But such a question is misplaced and arises from a lack of understanding of Egyptian art, since its basic principles differ completely from western artistic conventions." (1990: 11)

The misunderstanding of purpose, and even perhaps the process of *reasoning* and thought for creating art from mind, visualization, or sight to paper, carving, or painting is explained further by Robins (continued from above quote):

"Essentially, a set of accepted symbols was used to encode information for the viewer to read, so that drawings of figures and objects can be regarded as diagrams of what they represent. If these were to be immediately comprehensible and unambiguous, they had to communicate an objective truth, independent of time and space. The artist, therefore, showed what were regarded as their real forms, and there was no place for what would have been seen as the distortion of perspective. Thus, the use of foreshortening and the adoption of a single uniform viewpoint for an entire picture, which are the basis of western perspective, were irrelevant to the artist's purpose. In this sense, Egyptian art was conceptual rather than purely perceptual. The tantalising feeling of realism results from the use of a mosaic of percepts, put together in a semi-realistic manner." (1990:11)

The "objective truth" mentioned by Robins can be merely a learned associative perception such as a culture focusing on the stinger of a scorpion and thus making every effort to represent it, or even a common human condition which is persistent, i.e. the sun as being a circle. "If we wish to define more closely which surface the artist chooses we must content ourselves with saying that it is almost always one in which the subject presents itself in its most characteristic form." (Schäfer 1974: 97)³

The Egyptians are often seen as being ignorant of perspective altogether having never discovered it. (Robins 1994: 1) But what exists is not the lack of "perspective", or even the lack of understanding how to represent perspective, but an unwillingness to have such a technique (in the modern sense of perspective) as the "focal point" and technique in which to represent life. Scenes where figures are sized according to importance are said to lack perspective, but in fact accomplish a form of perspective by placing multiple planes of separate scenes into one compressed scene, thus only giving the impression of not knowing perspective. What exists is a *different type* of perspective, which combines the ideas of focal

³ Whether the characteristic is learned or commonly perceived is to a large extent irrelevant for the purposes here since the fact that it exists is the primary concern. The "filtering" question is the next step of analysis after concluding that the representations are perceptions.

point (i.e. the larger image) and distance perspective (i.e. smaller figures placed most often within close proximity).⁴ "In many situations, one object in the field assumes the role of *frame of reference*. That object will generally be one that encloses or is larger than other objects in its vicinity." (Rock 1975: 563) A typical analysis of Egyptian art emphasizes the fact that size is not used when an object is "perspectively" distant or near. "Egyptian drawings do not give us an

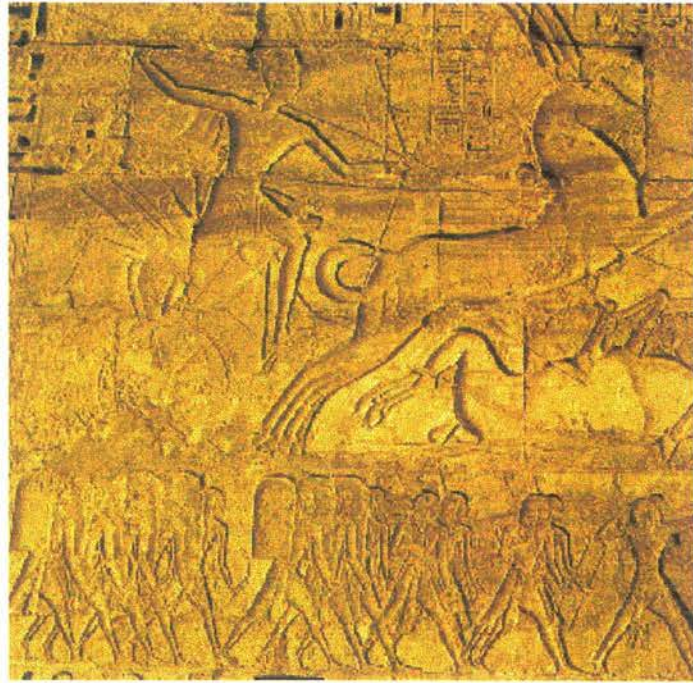


Fig.4: This example of Ramesses III being escorted by a line of young princes shows Ramesses as the central figure (focal point) while the princes are shown smaller not only for scene (artistic) importance and general status importance, but also to indicate perspective of space (spatial) and perhaps arguably even that of depth.

(Siliotti 1998: 242-243)

impression of the depth of any individual object, since there are no lines or surfaces that direct our gaze into depth; they are all spread out on the picture surface." (Schäfer 1974: 101) Perspective may have existed in a different form for the ancient Egyptians.⁵ The evidence that size was not used for depth perspective, but physical distance is not lacking. Though a scene with smaller figures may not necessarily indicate perspective separation, the suggestion is not without its validity. It is argued that perspective "reproduces visual impressions faithfully, basing itself on the visual image built into the structure of the human eye, and which, far from avoiding foreshortening, seeks it out." (Schäfer 1974: 269) While perspective is lacking in the modern/Western understanding of the word, and can be argued that it never existed in the works of the ancient Egyptian artist, it is perhaps too strong a

⁴ While size plays a role in the importance of a figure, it does not necessarily reflect both importance (and power) of the figure and importance in the scene. It may reflect *only* the importance of a figure within a scene. An example of this can be seen where gods, presumably more important than *any* human, are depicted as less substantial or smaller figures (i.e. the statues of Ra at Abu Simbel in contrast to the colossi of Ramesses II).

⁵ It seems likely that the Egyptians knew not only of perspective in a familiar/ancient sense, but also in the modern sense. If one looks at the common aspects of scenes one can see that the use of modern/Western perspective would contradict most of what and who the Egyptians were.

übergreifenden Ganzen vereinigen und ob sie sich überhaupt vereinigen, bleibt offen." (Brunner-Traut 1996: 5-6)

What one is left with is the complex task of identifying not only aspects which are depicted or represented, but the examination and questioning of "why" the Egyptian chose to do it in such a manner. This is perhaps because "representation is not a reproduction of what the eye sees; visual material is in any case processed, in a highly complex fashion, through the brain. Representation is therefore doubly processed, in the input of visual information and in its transformation into depiction ..." (Baines 1985: 3) However the way one views Egyptian art and writing, and even the terminology sought to use as a "technique" of examination, one is left with a task of *identification* through the use of multiple methods employed by various fields, particularly psychology. The significance, or why, has no simple solution since "the mental basis of representation" and "the relationship between two-dimensional rendering and sculpture" (i.e. the techniques and procedures) are both difficult to access and "best studied by experimental psychology." (Baines 1985: 2) All of this culminates into the task of identifying the why of representative art (including hieroglyphs) in terms of the aspects depicted via perspective.⁷ Finally, the analysis and inquiry into whether or not aspects and perspectivity can be examined as a basis of understanding must be done incorporating the socio-historical context, the surviving records (both physical examples and what the Egyptians themselves perceived as the "reasoning" behind things such as art), communication (as art and through a psychological understanding), and through general psychological reasoning and speculation.

2. Writing, Reading, and Its Importance

Writing, the culmination of ideas into symbolic form, has carried with the words of oral tradition a world which can be re-experienced as long as they survive the test of time. While writing in the modern world is taken for granted, its importance, especially in ancient times, was not underestimated and neither was its 'power'. "Writing was held in the highest regard in the ancient world." (Knapp 1988: 53) The 'power equation' was not just reflected by the Egyptians who went as far as to destroy or not record or recognize a name in order to "erase" one's existence.⁸ The

⁷ The use of the phrase "aspects depicted via perspective" is intended to illustrate better the relationship between the parts and the whole. Aspect must be seen as the plural "aspects" in order to acknowledge both its complexity and simplicity at the same time while perspective is used in its singular state to limit the idea that the art is/was *necessarily* a collection of puzzle pieces.

⁸ An example of the latter is the exemption of Hatshepsut's name from the Abydos Kings List.

statement to make that they were ignorant of such a technique. Distance could also have been perspectively represented and implied by size.⁶ And though the ancient Egyptian artist does not demonstrate this technique of drawing within the Western framework (i.e. smaller birds to indicate birds far away, "depth perspective"), smaller figures in certain scenes may imply a form of distance perspective therefore representing a manner of perspective different yet not nonexistent. This difference in understanding and "decoding" may only represent differences between the ancient and modern/Western world. An effort to use perspective in the Western sense may have been known but not practiced since in Egypt the artist was concerned with life, and focused upon life by avoiding at all costs the simplification of such, avoiding destroying or perhaps even distorting (via creation/drawing) what really existed.

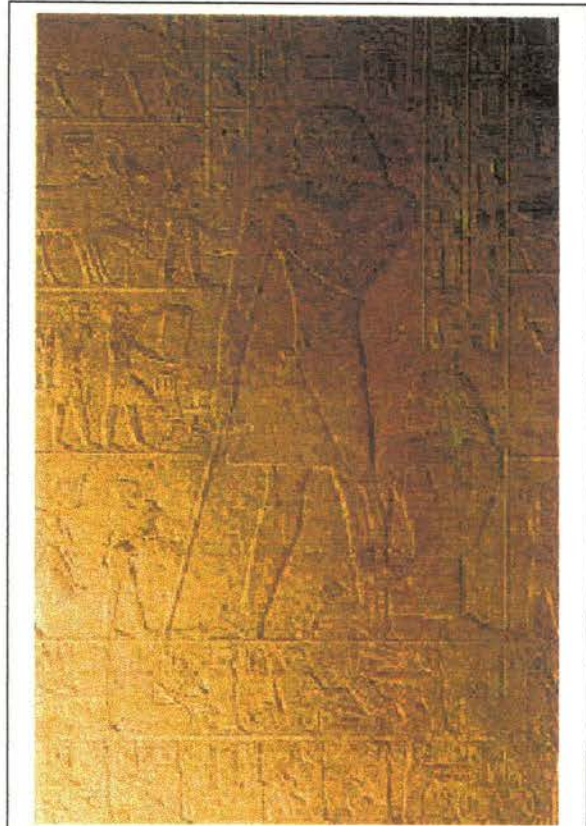


Fig.5: This example shows an obvious use of planes for spatial perspective. Ty and his wife (5th Dynasty-Saqqara) check the produce of their estate. There are workers on different planes (left) indicating spatial perspective as the figures are obviously not in that close of a proximity in reality, while scribes are shown on another plane (below) recording accounts. (Silverman 1997: 95)

The "aspective" element, however, is part and parcel of Egyptian and of such importance that Brunner-Traut has dedicated full works to the subject. "Aspective",

⁶ Depth perspective would not have fit the ancient Egyptian artist's purpose, fit into their worldview, or even have been practical. For instance, if the Egyptians chose to represent depth perspective they would most likely have sought out a wider or larger "canvas". In order to maintain the realism of the scene (in the Egyptian point of reference) a smaller figure representing depth perspective would have *needed* to be spatially apart from the central figure. However, a figure being used in spatial perspective would not have (and did not) require physical space between the central figure(s) and those apart. A modern study on perspective with some Kenyans found that in a scene where an elephant was placed in depth perspective between a hunter and an antelope (which was in the same depth as the hunter) 9 out of 10 did not recognize that the antelope was the target of the spearing. (Morgan and Welton 1992: 78) What this suggests is that it is conceivable for some people to recognize depth perspective while others do not. Therefore being aware of perspective is possible even if no conception in physical form is made.

in fact, may be seen in opposition to the "perspective" view but co-exist with perspective as being both a part of the whole and the whole part. (Brunner-Traut 1975: 474) They function within art as perceptions conceived and represented. The term "aspective" represents "die erkenntnistheoretische Bezeichnung der äg. Geisteshaltung." (Brunner-Traut 1975: 474) It is perhaps best seen as a method used in part as taking a singular aspect, or many singular aspects, perceived or conceived and representing them as a whole or singular entity. This entity is often seen as inaccurate, distorted, or lacking realistic reproduction and thus representation. The representation is multiple impressions seamed together into a singular *idea* as art, life, and/or hieroglyph.

Brunner-Traut also argues that: "Whatever position scholars take up they are agreed on one point, that Egyptian art ... is characterized by an intellectual attitude, which Schäfer calls a 'basis in frontal images' [*Geradvorstellung*], which differs from perspective, and [should be called] 'aspective.' " (1974: 423) She goes further differentiating perspective as reflecting "the observation of the world from a 'higher' human standpoint, and the object is seen in the context of mankind's separation from the inanimate world" while aspective "describes a restricted viewing, a gaze at one individual part." (1974: 426, 428) But while seeking out a singular word term for the Egyptian artistic depiction process(es), the term aspective lends itself to shortcomings and perhaps misunderstandings as well. Aspective by its description focuses on an "individual part" which neglects the whole, or the essence of the object depicted. It also implies a simplification of attitude and mind by the artist. The artist did seek out aspects, a part of the aspective, but then sought to seamlessly tie the pieces together as one. In this way it is suggested here that it may be best to understand the practices of the Egyptian artist as being the depiction of aspects via perspective. And though there are certainly canonical rules established and continued, the perspective and the aspects depicted via perspective did change such as can be seen in the depiction of the scorpion (Brunner-Traut 1975: 475) The complexity and objective of Egyptian art can be explained best by the following statement by Otto Fr. Bollnow:

"Aspekte, zumal in der Mehrzahl gebraucht, sind nur einzelne Anblicke, in denen sich die Sache jeweils von einem bestimmten Gesichtspunkte aus...darstellt. Im Aspekt liegt ein Ordnungsprinzip ... Im Aspekt ist immer enthalten, dass er einer unter anderen ... ist. Es liegt in ihm ein Moment der Ergänzungsbedürftigkeit. Er verweist auf diese anderen Aspekte...Jeder ist einseitig. In jedem treten bestimmte Dinge schärfer hervor als in anderen und werden bestimmte Zusammenhänge deutlich ... Keiner erhebt Anspruch auf Vollständigkeit. Ja, wie sich die einzelnen Aspekte zum

idea is also reflected in the very name the Egyptians gave their writing, *mdw ntr*, or the "god's words". The equation goes further when we look at the equation of the word 'Logos' whose definition in its original or passed down form follows the following pattern:

1. pre-Socratic philosophy = "the principle governing the cosmos"
2. Stoicism = "the active, material, rational principle of the cosmos, identified with God and constituting the power of reason in the human soul"
3. biblical Judaism = "the creative word of God, which is God's medium of communication with the human race"
4. Hellenistic Judaism = "a hypostasis associated with divine wisdom"
5. Theology of Saint John's Gospel = "the creative word of God, which is itself God and incarnate in Jesus" (Costello 1993: 797-798)

All of these definitions not only reflect the nature of the 'word' (logos), but also of what 'words' together represent (i.e. sentences), ideas/creation through being written and read.

The power of writing and literacy even became synonymous with civilization. "Civilization, until recently, was equated with literacy..." (Kamil 1996: 28) The ideas of progress and development were closely attached to reading, and though not implicitly stated, often implied by older books stating: "Each age learns from the one that has gone before." (West and West 1934: 1) James Henry Breasted goes further stating: "The invention of writing and of a convenient system of records on

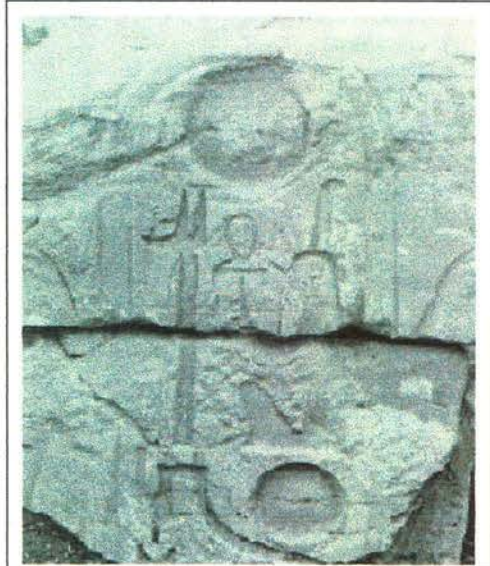


Fig.6: Example of a damaged/ usurped cartouche.
(Hari 1985: pl. XLI, c)



Fig.7: "Apep was so dangerous that even his name had to be magically killed. Here a knife severs the neck of the hieroglyphic determinative of his name."
(Davies and Friedman 1998: 154)

paper has had a greater influence in uplifting the human race than any other achievement in the life of man." (1944: 66) This idea is also conveyed in more recent works: "No invention has been more important to human progress than writing." (Saggs 1989: 62) Writing, the alphabet, and the literacy associated with it is truly taken for granted in the modern world. "Today we take the alphabet so much for granted that we forget what an extraordinary invention it is." (James and Thorpe 1994: 499) Furthermore, "being literate provided the only access to careers beyond farming, laboring and basic soldiering, and to be a 'scribe' meant that you had made it in the ancient world." (James and Thorpe 1994: 479) As one can see, writing, etc. reflected not only the symbolic or 'abstract' idea(s) of power but perhaps even a 'concrete' idea of power reflected in its ability to lift one's status, both as a people and as an individual. "Writing was quickly recognized as a powerful skill" (Manguel 1996: 179)

The power of reading what has been written is perhaps best illustrated by Alberto Manguel's recollection of his experience:

"What that word was on the long-past billboard I no longer know ... but the impression of suddenly being able to comprehend what before I could only gaze at is as vivid today as it must have been then. It was like acquiring an entirely new sense, so that now certain things no longer consisted merely of what my eyes could see, my ears could hear, my tongue could taste, my nose could smell, my fingers could feel, but of what my whole body could decipher, translate, give voice to, read." (1996: 6)

Manguel also states what seems like an obvious statement but which implies more within its thought: "Reading begins with the eyes." (1996: 28) This simple statement not only reflects the basics of reading, but provides the foundation for a question in which Manguel questions the theories on 'how' we read asking if we "reach out and capture letters [and/or images] on a page...? Or [do] the letters [and/or images] reach out to our senses ...?" (1996: 32) These simple statements demonstrate the major achievement of writing and reading, a reflection into what we see, what we perceive to see/have seen, and what we experience.

The idea of perception, an aspect of reading both words and art, is also reflected by a thirteenth century scholar named al-Hasan ibn al-Haytham (or Alhazen) who postulated the idea that "all perception from the outside world involves a certain deliberate inference that stems from our faculty of judgement." (Manguel 1996: 33) If this is true, at least in part, then what we can infer from this statement is that what the ancient Egyptians 'wrote' or 'drew' may reflect what they perceived about their outside world. Whether or not this perception is learned via

social behavior (i.e. socialization) or some form of indoctrination into how to view the world (i.e. religiously learned perception) is of no consequence here. The fact that there exists a probability that what we see and how we communicate these ideas may stem from a much deeper 'consciousness' may allow us to see the ancient world in, if not a different light, from a more clear perspective of what they may have actually "experienced."

3. Hieroglyphics

3.1 (Re)Discovery and Decipherment

The (re)discovery of hieroglyphics begins not by discussing its early history, but by discussing how this world of mystery began to be unraveled. The power of this knowledge which was soon to be deciphered is clearly expressed by Manguel stating: "the scribes must have been aware of the extraordinary power conferred by the reader of a text ..." (1996: 183) And as with the case of hieroglyphics, the lost ability of reading the ancient Egyptian language was as powerfully silent as it once was boisterous. "As the scribe knew, as society discovered, the extraordinary invention of the written word with all its messages, its laws, its lists, its literatures, depended on the scribe's ability to restore the text, to read it. With the ability lost, the text becomes once again silent marking." (Manguel 1996: 184) As the result of Emperor Theodosius' orders to close pagan temples in the late fourth century AD, the knowledge of hieroglyphics would disappear finding its latest remaining traces with the priests at Philae. (Betrò 1996: 19)

The millennium that followed would see to it that any effort to (re)discover the script would be made more difficult by 'popular' misconceptions about the script. Some of the first efforts at understanding the language of the ancient Egyptians were made in the fourth century AD by a supposed native of Upper Egypt named Horapollo. The work only survives in Greek, having probably been originally written in Coptic. (Gardiner 1994: 11) This work focused on the presumption that hieroglyphs were full of symbolic meaning, and to a large extent only symbolic (i.e. not alphabetic or phonetic). Alan Gardiner states that Horapollo "combines correct notions of the meanings of many hieroglyphic signs with the most allegorical reasons for those meanings" resulting in "fantastic explanations". (Gardiner 1994: 11) The ideas purported by Horapollo may seem to us farfetched, but others such as Philo the Jew in the first century AD wrote that "Egyptian discourse constitutes a philosophy that is expressed by means of symbols, a philosophy that is revealed by letters which they term 'sacred' " while a philosopher

named Plotinus wrote in the third century AD that " 'Egyptian sages showed their consummate science by using symbolic signs' ".(Jacq 1998: 10)

Interest in Egyptian antiquity was rekindled in Europe with the publication of *Hieroglyphica* by a man named Giovanni Pierio Valeriano Bolzani (also known as Pierius Valerianus) in 1556. (Budge 1989: 186; Pope 1999: 24) The work contained some of the works of Horapollo but is only recognized in terms of Egyptian studies as far as its reawakening of interest and not for any of its content as such.

The next noteworthy attempt at understanding hieroglyphics are the result of interpretations by a 17th century Jesuit named Athanasius Kircher who was responsible for the first Coptic grammar. (Murray 1977: 193) His interpretations, as Horapollo's, were based on the misperception that hieroglyphs and the system of hieroglyphics represent a "purely ideographic and symbolic" thus paving the way for "many fanciful [and] completely erroneous" translations of hieroglyphic texts surfacing. (Watterson 1981: 17) (Mis)interpretations such as these "prevented any true decipherment [from] being made." (Watterson 1981: 17) All of these misinterpretations about ancient Egypt, its language, and heritage would change with a war.

Our road to our "understanding" begins quite oddly enough with the war between the French and English in 1798. Napoleon Bonaparte decided to take a strategic chance and set out for gaining possession of Egypt rather than invading the British Isles. But most importantly for our purposes here, was the idea Napoleon had for discovering and opening up Egypt. This involved the assembling of an "academic army" composed of scholars, scientists, artists, and the like. (Watterson 1981: 9) Militarily the expedition would be a failure with Napoleon fleeing back to France after some disastrous battles on land and at sea. In terms of a reawakening, discovering, and opening of a "forgotten land" the expedition would prove far more successful than could have been imagined.



Fig.8: Napoleon Bonaparte, possibly the most famous Egyptophiliac.
(Saglamer 1996ff)

It is amazing to think that all of this was accomplished by not a series of events, but in essence one seemingly minor one. This occurred with the accidental discovery of what was to become known as the Rosetta Stone. The stone was discovered by French officers digging outside of a fort near the town of Rashid (Rosetta) in August of 1799. (Budge 1989: 21; Parkinson 1999: 20) The importance of the stone was soon realized upon examination by some of Napoleon's "academic army". The stone appeared to be composed of three languages, namely hieroglyphics, demotic, and Greek. (Gardiner 1964: 12) The stone itself, originally considered to be black basalt, is actually quartzite (containing feldspar, mica, amphibole) and measures approximately 3 ft. 9 in. by 2 ft. 4 1/2 in. (114 cm x 67 cm) and is damaged on both the top left and right corners and also on the bottom right corner. (Watterson 1981: 13; Parkinson 1999: 23) The text was identified early, from translating the Greek, as being a "decree issued by the priests of Memphis to commemorate the coronation of Ptolemy V, Epiphanes in 196 B.C." (Watterson 1981: 13) The deduction was then made that perhaps the other two languages represented on the stone were composed of the same information and thus possibly the "key" to unlocking the mysterious language of the ancient Egyptians. The stone itself would, with the loss by the French to the British, end up in British hands under the Article XVI of the Treaty of Capitulation and is today on display in the British Museum. (Budge 1989: 23; British Museum 1999)

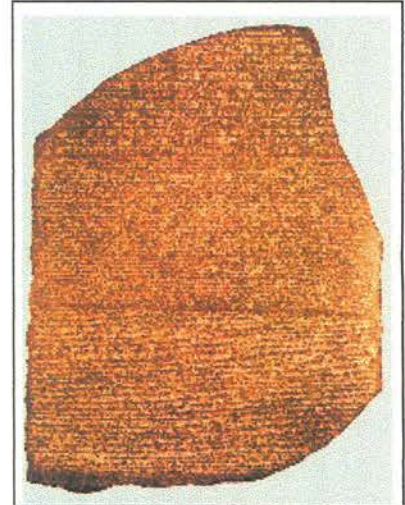


Fig.9: The Rosetta Stone, the key to the decipherment of Egyptian hieroglyphics. (Putnam 1997: 88)

The first steps at deciphering hieroglyphics that led scholars in the right direction would begin with three men and their theories about hieroglyphics.⁹ First, a Frenchman named Joseph de Guignes pointed out that hieroglyphics contained some groups of signs which appeared to have signs that pointed to their meaning called determinatives. (Budge 1989: 191; Watterson 1981: 18) Then Georg Zoëga concluded that some hieroglyphs represented alphabetic letters and proposed that the cartouches or "circles" contained royal names. (Watterson 1981: 18)¹⁰ The

⁹ There were many others who attempted decipherment but these three remain as the "first" at heading in the right direction.

¹⁰ He is credited with the idea since it seems to be the one which spurred on the attempts at translating that lead to our understanding of hieroglyphics (J J Barthélemy published the same theory in *Explication d'un Bas-Relief Égyptien* in *Mémoires de l'Académie des Inscriptions*). (Budge 1989: 191)

final preliminary step in the decipherment of hieroglyphics was made by a Swedish diplomat named Johan David Åkerblad. (Gardiner 1964: 12) Åkerblad recognized the proper names (specifically Ptolemaios or Ptolemy) within the demotic text in relation to the Greek, further concluding that demotic was linked to

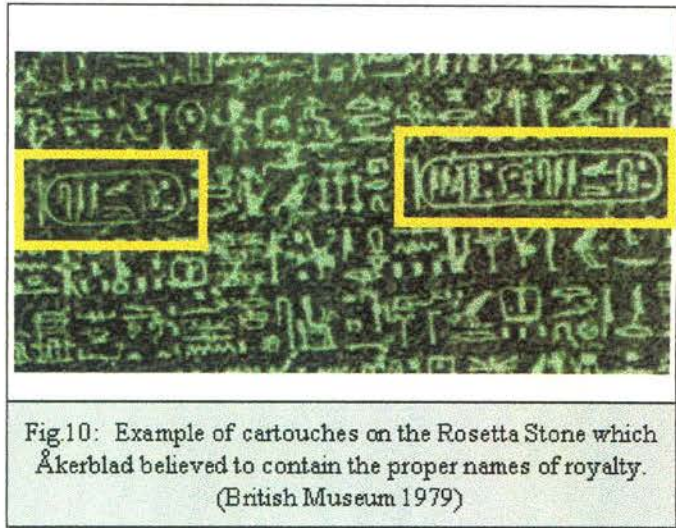


Fig.10: Example of cartouches on the Rosetta Stone which Åkerblad believed to contain the proper names of royalty. (British Museum 1979)

Coptic. (Watterson 1981: 20; James 1979: 84) He then published a work containing what he believed to be the demotic alphabet, although not entirely correct.

The next major step was made by an Englishman named Thomas Young. Young built upon the work of earlier "scholars", among them Åkerblad. One of his major achievements was concluding that Åkerblad's demotic alphabet was not entirely accurate as it contained signs that were more probably phonetic. He then broke up the Greek and demotic sections of the text and matched "words" creating a Greek-demotic vocabulary. (Watterson 1981: 18-19) ¹¹ Young also concluded that hieroglyphs were also phonetic among other accurate "guesses." F Llewellyn Griffith states: "All this was mixed up with many false conclusions, but the method pursued was infallibly leading to definite decipherment." (Gardiner 1994: 13)

The final step in the decipherment of hieroglyphics was made by a Frenchman named Jean-François Champollion (the younger). He is recognized by many as "the virtual founder of Egyptology as a serious discipline". (Aldred 1998: 18) Champollion had concluded that the three scripts were merely variations of one another. (Gardiner 1994: 14) He then set out to master Coptic as an aid in deciphering the stone. Next, he took the theory of Åkerblad's a step further and began to identify more royal names by using Roman alphabetic equivalents. He identified and equated demotic signs with the Ptolemaios cartouche thus reinforcing the idea that hieroglyphs could be alphabetic. (Gardiner 1994: 14) Champollion then used this information to decipher other cartouches such as that of Cleopatra and Alexander. (Budge 1989: 222; Allen 1999: 8-9) The only question that

¹¹ Although much of his conclusions were correct, his attempts at Coptic equivalents were for the most part mistaken. (Gardiner 1994: 13)



Fig.11: Thomas Young, arguably the decipherer of hieroglyphics. (Parkinson 1999: pl. 5)

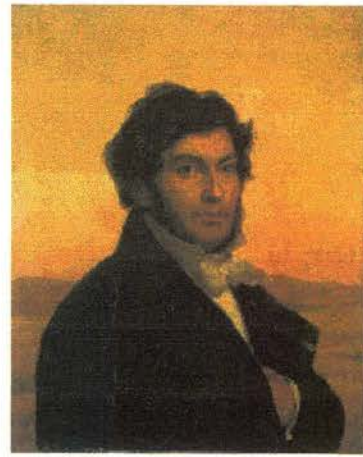


Fig.12: Jean Francois Champollion (the younger), the man credited as the decipherer of hieroglyphics. (Louvre Museum 1997ff)

remained was whether this interpretation would fit older inscriptions. He would later receive copies of bas-reliefs from Egyptian temples which confirmed his suspicions, finding the name Ramesses. (Gardiner 1994: 15) Champollion's work "ended" with a more accurate understanding of hieroglyphics built on top of earlier work: it could be both alphabetic and phonetic, there were signs called determinatives, and the language was not purely symbolic as was precisely argued.

The work done after Champollion would be long and hard as scholars from

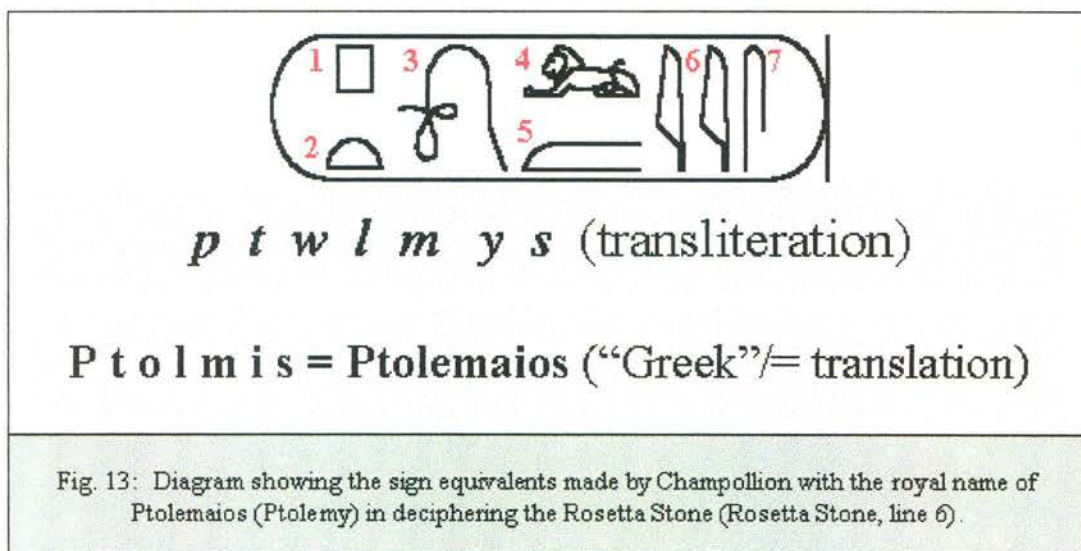


Fig. 13: Diagram showing the sign equivalents made by Champollion with the royal name of Ptolemaios (Ptolemy) in deciphering the Rosetta Stone (Rosetta Stone, line 6).

throughout Europe took what was learned and attempted to bring to life ancient Egypt. It is not my intent to discuss their work, but a short list of some of those early "explorer's" is worth mention: the Italian Ippolito Rosellini, the Germans Richard Lepsius, Adolf Erman, and Heinrich Brugsch, Englishmen W M Flinders Petrie,

Robert Hay, James Burton, Alan Gardiner, and John Gardner Wilkinson, and Frenchmen Etienne de Rougé and Auguste Mariette.

3.2 Development and History

The history of hieroglyphs and the system of hieroglyphics begins long before even their earliest remnants which have survived. When the cultures which were to develop into "Egyptians" began to use physical or concrete representation as a means of communication, the resulting development of writing would change the course of "life" as pre-history dawns into history. While those like Maria Carmela Betto speculate that writing in ancient Egypt may have had much earlier precursors which have long since disintegrated, the earliest inscriptions are on incised ceramics, stone palettes and tools, and rock reliefs themselves. (1996: 12) Her speculations are the result of the fact that hieroglyphics "seem to break into history ... ready for use". (1996: 11) This is relevant insofar as the seemingly short pre-existence of a limited symbol system as communication that appears as a fairly developed system. ¹²

The invention of hieroglyphs and the system of hieroglyphics was attributed to the gods, specifically Thoth, the god of wisdom and writing. (Wilkinson 1994: 149) ¹³ As one of the oldest surviving written languages, recognized as finding its earliest traces between 3500 and 3100 BC, hieroglyphics stands as one of the few pictographic systems to sustain the particular form throughout its 3000 year history. (Kamil 1996: 28) ¹⁴ It began as "rudimentary writing ... appear[ing] on artifacts toward the end of the fourth millennium." (Hoffmeier 1996: 254) The script itself was only written by a small percentage of the population, though the shorthand version hieratic is believed to have been more widely known and understood. The result in any case was that only a "small percentage of the population was literate". (Nicholson and Shaw 1995: 254)

¹² The speculation into this matter will not be developed here but I feel it is necessary to at least make a brief mention of this phenomena.

¹³ The goddess of writing, Seshat, is not credited with the same importance in regards to writing in general, but is credited and venerated in matters dealing with the temple and pharaoh (specifically the recording of regnal years). (Lurker 1995: 109)

¹⁴ Some like Denise Schmandt-Besserat argue that forms of writing (including "precursors") were in existence long before generally accepted: "Clay tokens with standardized markings existed as early as 8000 B.C. ... and were used as markers of debt." (Mitchell 1999: 29)

The origin of hieroglyphs lies with pictures. These pictures were, however, never discarded by the ancient Egyptians. (Murray 1977: 194) The earliest drawings were based on a simple idea known as pictographs. (Watterson 1981: 25) The "symbols" represent most often "simple" concrete objects at first. "The representation of concepts, however, is not so simple" and thus the need for representing abstract ideas via other means was developed. (Grimal 1996: 33) The script

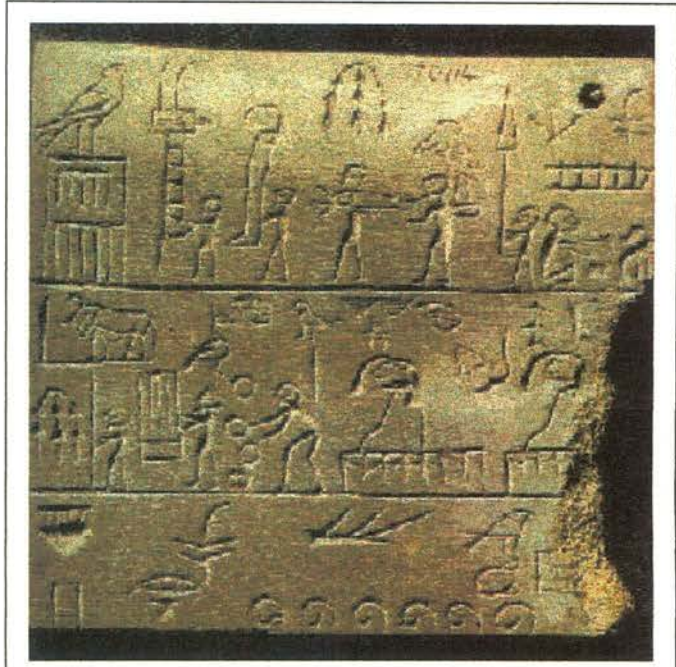


Fig.14: Early hieroglyphic sentences on ivory tablet of King Zet (Wadji) from Abydos, Dynasty 1 (Egyptian Museum-Cairo).
(Michalowski n.d.: 65)

quickly developed an essence which bridged this gap of concrete ideas symbolized by concrete images. The script then evolved into a combination of a phonographic and a pictographic script demonstrating a key difference from other pictographic systems which more readily and quickly evolve into a more simplified alphabetic system, albeit often derived as shorthand pictographs. The limitations of such seem obvious. The solution was the use of signs, or pictures, to represent abstract ideas by means of sounds associated with the sign. (Watterson 1981: 27) ¹⁵

Writing explodes into Egyptian history in the first dynasty quickly as a complete or "near-complete" system, when both a hieroglyphic and hieratic script appears. (Murray 1977: 194) It is for this reason that many look to outside influences for this "sudden" development. "From its inception in Egypt hieroglyphic writing seems to have consisted of a combination of ideograms (signs representing ideas) and phonograms (signs representing sounds) put together in a fairly complex way." (Watterson 1981: 36) Though we can speculate whether writing was borrowed from some Mesopotamian link or contact, it is probably best to conceive

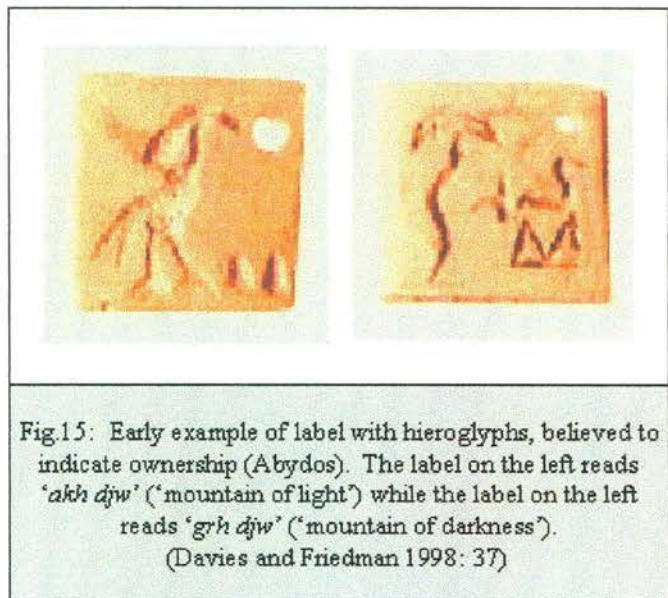
¹⁵ Examples of this later in section 6. *Hieroglyphs as Communication and Language*.

of this development as a purely Egyptian event apart from a cross-cultural exchange. ¹⁶ Betrò points to differences stating that in Egypt (c.3300 BC):

"although it is archaic and rudimentary, the Egyptian writing of this time differs from the Sumeric tablets in that it has all the characteristics of the mature hieroglyphic system. The already fixed code recapitulates a nearly complete panoply of alphabetic and multiconsonantal signs, as well as other categories of graphemes: ideograms, and determinatives (classifying signs which have no phonetic value)." (1996: 11) ¹⁷

Also, "unlike Mesopotamian writing, which can be shown to have gradually evolved through a number of stages, Egyptian writing appears to have been deliberately invented in a more-or-less finished form, its underlying principles fully in place from the outset." ¹⁸ (Davies and Friedman 1998: 36) The similarities and differences may reflect a commonality of development (seen in the ideas of the psychology of man) in which the same structure exists within man and thus a common logic in development is highly likely, or most probable. It is therefore perhaps irrelevant as to dating of earliest writing, and to an extent the "advanced" state of the earliest examples. ¹⁹

The early stages of Egyptian hieroglyphs can be seen as a "formative period, shaping cultural, religious, and political concepts that would appear fully developed at the dawn of history." (Hoffmeier 1996: 254) These "archaic hieroglyphs...show almost all



¹⁶ John Ray leans towards the theory that the Egyptian's received the idea of writing from Mesopotamia, adapting it and then "almost entirely discard[ing] [it] as soon as Egypt found its self-confidence and identity." (1986: 309)

¹⁷ This denial of cultural exchange is in fact a denial of the tendency in which scholars look for one cultures prominence, dominance, and perhaps "advanced" state as evidence of giving influence to those behind or below. In essence, it is preferable from the historical perspective to seek evidence from before to substantiate one's hypothesis and ideas. "Because we see most clearly in the past what is most of interest to us moderns, we are being selective." (Barton 1995: xvii)

¹⁸ A comparison is also given with the how "in AD 1444 the Korean script (still regarded as one of the world's most efficient) was invented by order of the king, who assembled a group of scholars for the purpose." (Davies and Friedman 1998: 36)

¹⁹ The reason for this is that throughout the history of the hieroglyphic writing it maintained differing connotations and associations with its script than in Mesopotamia.

the characteristics of the latter system." (Ray 1986: 314) The "canon" used throughout the dynastic history in Egypt was developed and was established in the formative era of the archaic era. (Bunson 1991: 31) Early examples of hieroglyphs are found on the following: jar-labels, ivory or bone, stamps, cylinder seals, ceramics, pottery vessels and sherds, and later funerary equipment. These objects usually contain "symbols for commodities, place names of administrative institutions," pictographic signs, "names", or other associations which point to some ownership.²⁰ (Mitchell 1999: 29) The objects themselves have designs which include birds, animals, plants, boats, hills, and objects associated with the environment. (Murray 1977: 115) Many of these early "signs" find their way into the hieroglyphic system of the dynastic period. The signs are often *less* grammatical, and thus more difficult to interpret, due to the abstract nature of motifs. The motifs are, however, stylized and become even more so as the dawning of historic Egypt approaches.

The main use of hieroglyphs most probably developed out of needs of administration. This administration may have been more commercial in use than political. (Nicholson and Shaw 1995: 15) The differences and overlapping nature of such need not concern us here. And though the spread of the use of hieroglyphs may have been "largely pragmatic", this need not suggest that these were the initial or first uses of "this powerful new technique." (Manchip White 1970: 87; Betrò 1996: 13)

Historically the script appears first as signs called hieroglyphs, or in essence pictographs.²¹ The script is then suddenly seen as a system called hieroglyphics which would span some 3500 years of history with only the most conservative of changes.²² The hieroglyphic system is accompanied by the appearance of hieratic, an abbreviated



Fig.16: Early example of King Djet cartouche surrounded by future "hieroglyphic" signs. (Forman and Quirke 1996: 13)

²⁰ Stamps and seals are most often associated with kings or high officials.

²¹ More details on this in section 6. *Hieroglyphs as Communication and Language*.

²² The changes sometimes seen reflect changes in the popular language and construction (i.e. grammar). The main stages of the Egyptian language represented by the various scripts are discussed in section 6. *Hieroglyphs as Communication and Language*.

cursive-like script which lasted over one thousand years, which was used for writing administrative details, correspondence, and other items preferably written on papyrus.²³ The next script to develop was demotic, called so because it reflected the language of the people (*demotikos*). This script is considered a late form of hieratic and lasting from c.350 BCE to c.450 CE. (Grimal 1996: 34) The final stage of Egyptian language was a mixture of sorts called Coptic. This script reflects the political happenings as it is a combination of the Greek alphabet and six signs from demotic.²⁴ This was in the end the script Champollion used to help piece together the puzzle of hieroglyphics.

Finally we see that the developments which occur prior to the historic period in Egypt had a much further and deep root than often assumed or understood. The precursors, whether borrowed or independent, existed in Egypt as early cultures such as Naqada, Amratian, and Badarian as a means of communicating, both concrete and abstract ideas. While the script appears to have been used to represent concrete ideas firstly via pictures, it quickly became a representation of language

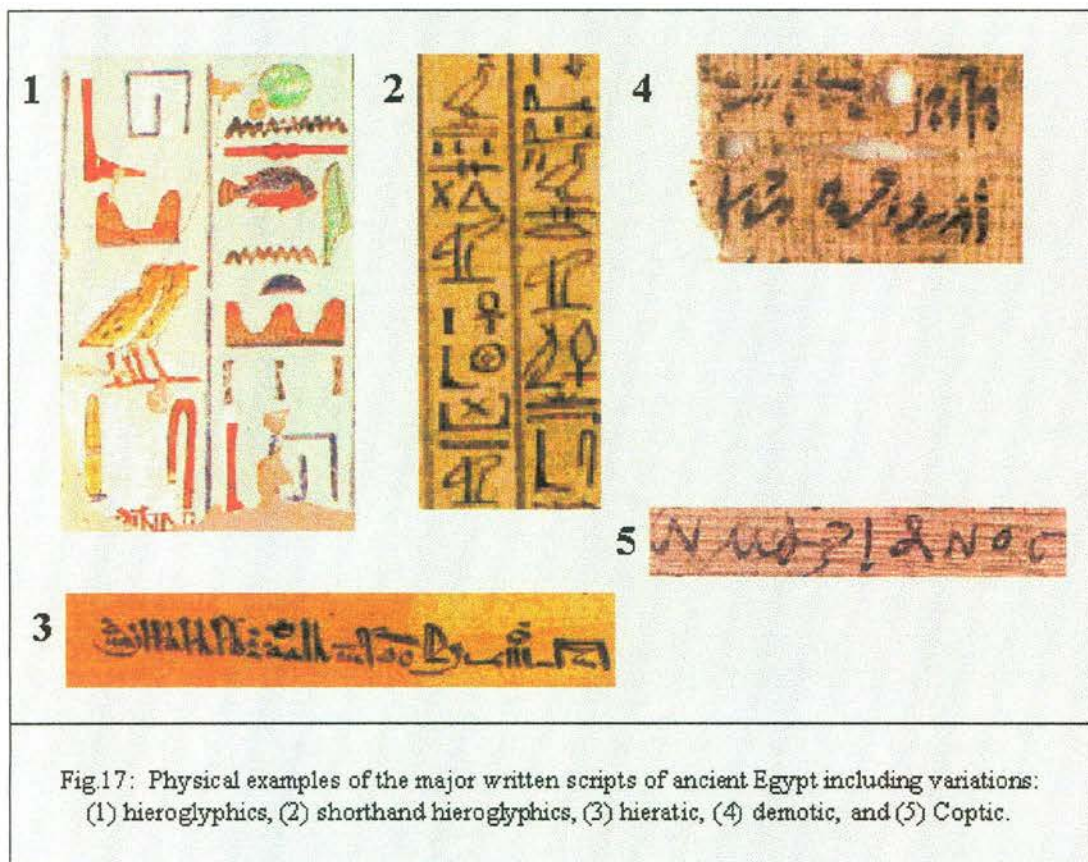


Fig.17: Physical examples of the major written scripts of ancient Egypt including variations: (1) hieroglyphics, (2) shorthand hieroglyphics, (3) hieratic, (4) demotic, and (5) Coptic.

²³ Hieratic should not be confused with a variation of hieroglyphic writing which is a shorthand version that retains the shapes of the figures. This particular "shorthand" script is often found on papyrus such as versions of the Book of the Dead.

²⁴ The Coptic script survived due to its use by the Coptic church in Egypt via Biblical texts and liturgies. (Nicholson and Shaw 1995: 72)

connecting ideas both concrete and abstract by a mixture of ideograms and phonograms. In this way, the script demonstrates a key difference from other pictographic systems which more readily and quickly evolve into a more simplified alphabetic system, albeit often derived as shorthand pictographs.

3.3 Medium and Materials

The signs used by the hieroglyphic script might have developed and/or evolved differently had they done so elsewhere. Though it is difficult to speculate on such a matter since so many factors are involved, there can be little doubt that the medium (surfaces "written" on) and the materials employed affected how the script changed and evolved. ²⁵ "Writing instruments and material also played a large role in shaping the forms of writing and in developing script styles." (Gosline and Yanhu 1998: 116)

The medium and materials used by the ancient Egyptians varied from the archaic period through the predynastic and dynastic periods. There were, however, a general set of "materials" employed throughout ancient Egyptian "history". These are the "materials" that will be discussed here. ²⁶

The first aspect that should be briefly discussed is the artist, often the scribe. Although some variations were the result of adaptations for the medium, such as stone work or reliefs being silhouettes, the script was still inherently the result of the initial work of the scribe. ²⁷ The scribe held a high status in ancient Egyptian society. Such was his status that it was seen as *the way* for raising ones status and to keep from manual labor. ²⁸ From the scribe who balanced the script to the stone mason and painter who finished the work, hieroglyphs were created in a manner that merged medium and material. And though the script had its conservative characteristics, each script can be said to reflect an individualistic nature demonstrated by the craftsmen who "created" it.

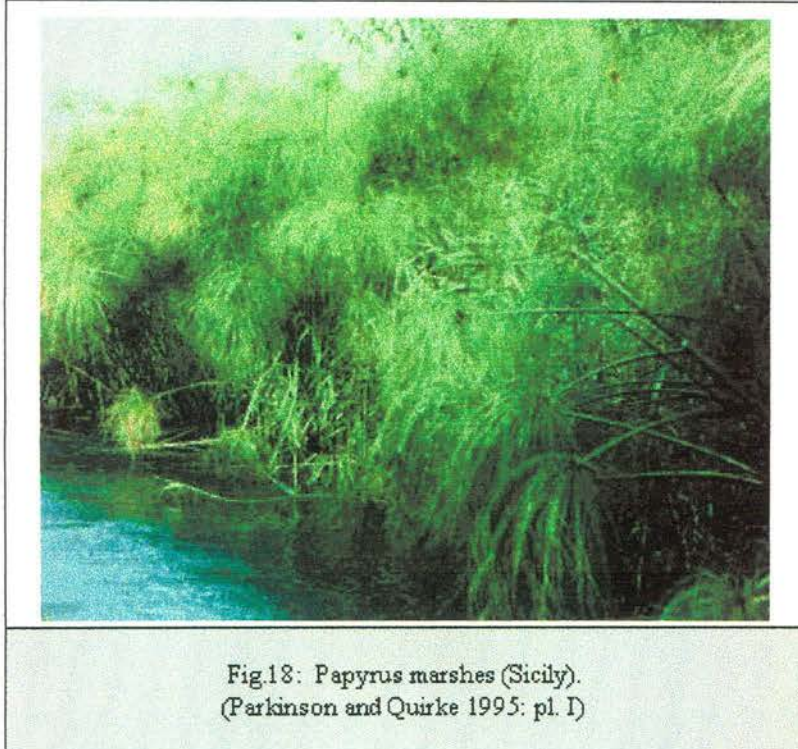
²⁵ A discussion of influence(s) on writing on the script will only be discussed insofar as it is relevant since it is readily acknowledged that the materials used played a role in the beginning and often in the continuation of a particular method of writing, though not necessarily limiting or confining the evolution of such. (An example is a comparative analysis with places such as Mesopotamia and its evolution of writing.)

²⁶ Discussions on changes throughout periods of Egyptian history are not discussed here, nor are the actual processes of painting, carving, etc.

²⁷ Even though it is possible, even likely, that many artisans who placed the finishing touches (the workers who followed the scribes "writings") were "literate" their work was probably most often follow-up to the initial.

²⁸ Although female scribes are attested to, the numbers are believed to have been so minimal that is a safe assumption that the scribe was most often a male. For more information on this see section 7. *Hieroglyphs: Role, Importance, and Value.*

Hieroglyphs were depicted on a variety of mediums probably ranging from the sands of the ground which blew away to the stone which refused to budge. The list of materials which have been found with hieroglyphs or "signs" is long: bone, clay, ivory, leather, linen, metal, papyrus, parchment (from sheep and goat skin),



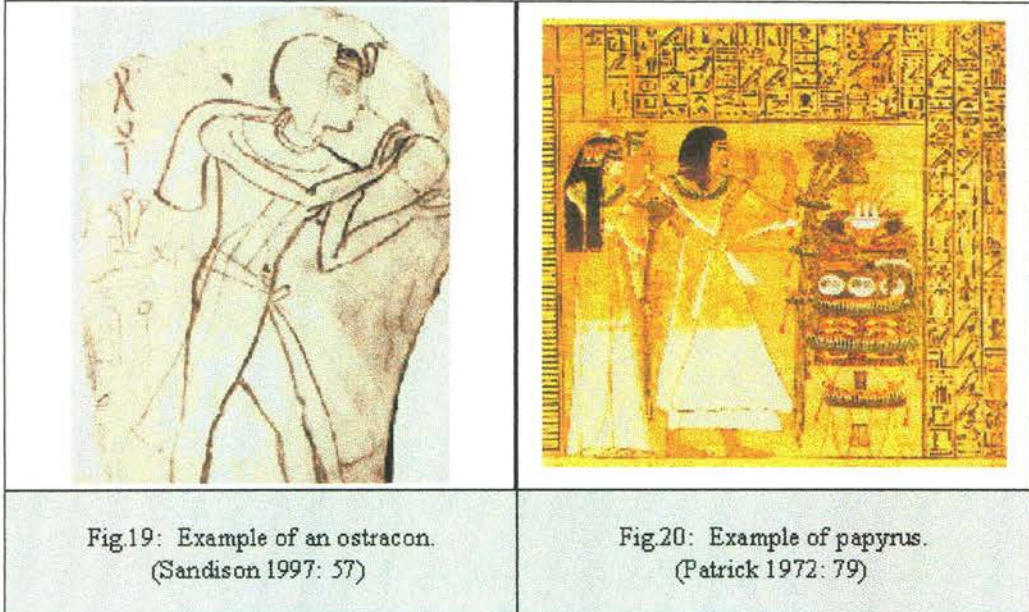
vellum (young sheep/goat skin), pottery, pot sherds, reed, stone, wax, wood, and chips of limestone or other stone (ostraca). (Harris and Lucas 1962: 364) ²⁹ The choice of medium was mostly determined by the use for which it was intended. The choice was also often influenced by the person's status in society. Such was the expense of some mediums that even the practicing scribe or artist was influenced to train and practice on other materials. "Writing had to be practised on cheap materials until the budding scribe could be trusted with papyrus. Like the artist the scribe began on pieces of limestone picked up on the desert, or on broken potsherds from the village dust-heap." (Murray 1977: 73)

Our word for paper is derived from the Greek word (παπυρος) for the "most important writing material" in ancient Egypt, *papyrus*. (Liddell and Scott 1994: 519; Harris and Lucas 1962: 365; Breasted and Robinson 1920: 18) ³⁰ Papyrus was chosen in part because of its durability. It was manufactured seasonally from stalks

²⁹ Some of the items were used only in certain periods and others are not necessarily attested to in great numbers.

³⁰ "The origin of the word 'papyrus' itself is not known, but it may derive from a late Egyptian phrase *pa-en-peraa*, 'material of Pharaoh', perhaps because trade in the writing material was under royal control in the third century BC. However, no Egyptian text ever uses the phrase." (Parkinson and Quirke 1995: 11)

measuring from 3-6 meters long. (Wente 1995: 2212; Bunson 1991: 201) ³¹ The stems were cut and the exteriors stripped. Then, the stalks were immersed in water and cut into thin strips. (Nicholson and Shaw 1995: 219; Bunson 1991: 201) The strips were then beaten until the fibers were flat. Next, a layer of fibers was laid horizontally, resin applied, and then a second vertical layer was placed on top. The layers were then beaten together, pressed, and put in a place to allow the "paper" to dry. (Bunson 1991: 201) The papyrus itself was usually made into sheets not



exceeding 48 cm high and 43 cm wide. These sheets were sometimes joined together into rolls. (James 1979: 92) The sheets themselves were primarily written on the horizontal sides. ³²

Although many other materials were employed by scribes and artists alike, only a quick mention of one other will be mentioned. Stone is probably one of the most visible remains which bear the marks of hieroglyphs. Originally stone was shaped with various motifs. Later, quarrying of various stone for monuments, tombs, and other buildings helped change the face of hieroglyphs as signs used in motifs could be expanded into language. Stone was quarried from various parts of the country including Tura and Gebel el-Silsila. (Bunson 1991: 214) The type of stone quarried included limestone, quartzite, sandstone, alabaster, and black and red granite. (Bunson 1991: 214)

The tools or utensils employed most often for writing hieroglyphs are the chisel and the brush. The chisel was not only employed for quarrying and shaping

³¹ Papyrus, *cyperus papyrus*, was common throughout Egypt in ancient times but has nearly completely disappeared.

³² There are numerous examples of hieroglyphs/hieratic on the vertical stripped side, though most is due to the re-use of old papyrus.

the stone, but also for carving out the hieroglyphs themselves. The glyphs chiseled were sometimes just silhouettes (some with detail within) while others were often carved in great detail, including the beaks and feathers of birds.

The brush employed is often identified as a reed brush, but is actually a rush brush.³³ Reed brushes or "pens" were not employed until the Late Period (post-pharaonic Egypt). (Gosline and Yanhu 1998: 119) "From the Graeco-Roman period onwards the rush pen was superseded by a piece of reed." (Harris and Lucas 1962: 365) The rush used, *juncus maritimus*, grows in salt marshes. (Harris and Lucas 1962: 364-5) The rush was cut diagonally into pieces usually 15-25 cm long. (Wente 1995: 2211; James 1979: 94) The tip was then chewed to give it a bristle like modern brushes. (Wente 1995: 2211)



Fig.21: Example of a stone relief (raised) with detail hieroglyphs. (Sandison 1997: cover)



Fig.22: Example of a stone relief (sunken) with silhouette forms of hieroglyphs. (Forman and Quirke 1996: 100)

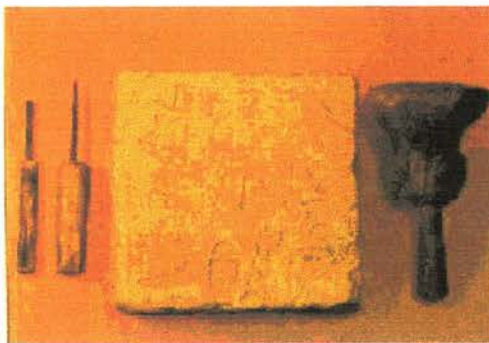


Fig.23: Example of chisel and tools of a stone mason. (Putnam 1997: 91)



Fig.24: Example of scribal brush with palette and pigments. (Silverman 1997: 233)

³³ The argument over this can be examined in Harris and Lucas (1962) *Ancient Egyptian Materials and Industries*.

The tools of the trade employed by the scribe are seen best by the hieroglyphic sign associated with scribe and related objects. The sign was used as both an ideograms and the determinatives for "writing" and "scribe". (Gosline and Yanhu 1998: 119; Nicholson and Shaw 1995: 218) Among the objects "within" the sign are a small palette with two depressions for ink/pigment cakes, a water jar, a rush brush, and a cord connecting the set.³⁴

Although the hieroglyphic sign used for scribal associations contains a palette, it is perhaps a representation of the average palette used, an older variation, or a simplified version. Examples of some scribal palettes that have survived were made of ivory, stone, wood covered with gold, or wood alone. (Harris and Lucas 1962: 366) The most common version was made of wood and varied in size from 20-43cm long, 5-8cm wide, and 1.5cm thick. (James 1979: 94) The palettes themselves usually had a carved out groove which had a small piece of wood glued over the groove to hold the brushes, presumably for making carrying the kit easier. (Bunson 1991: 201) There are also typically two, although sometimes more, depressions on the palette for holding the ink cakes.

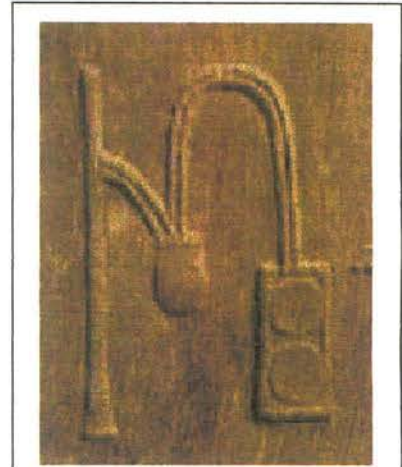


Fig.25: Hieroglyph (*sesk*) associated with writing and scribes. (Forman and Quirke 1996: 90)

The final material aspect to be discussed is the colors used for pigments. The

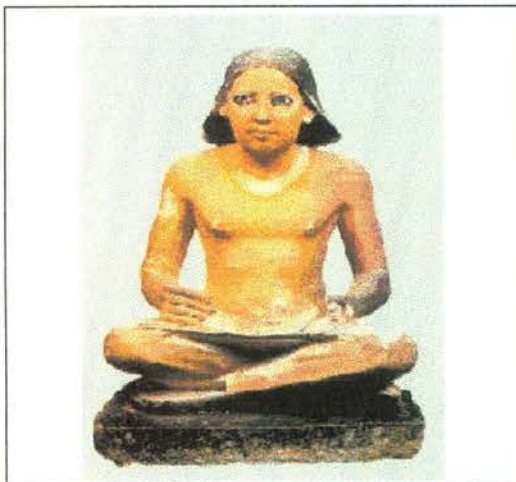


Fig.26: Statue of a scribe. (Silverman 1997: 233)

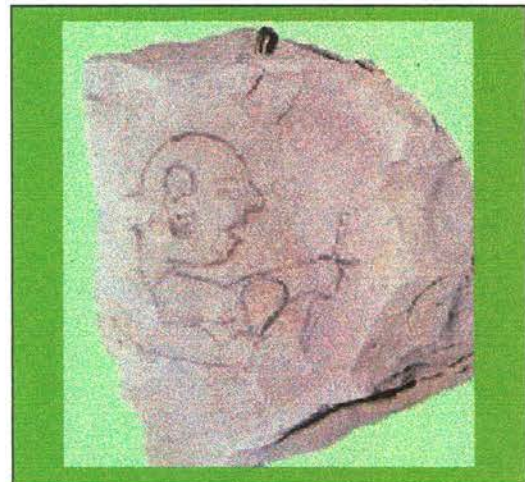


Fig.27: Drawing of stone mason on an ostracon. (Hayes 1998: 55)

³⁴ The jar is believed to have held water for both rinsing the brush and wetting the pigment cakes for painting. (James 1979: 94; Harris and Lucas 1962: 366)











colors used cover the spectrum. The pigments used for the colors are "mostly from mineral substances or naturally occurring minerals which were finely ground." (Harris and Lucas 1962: 339) The specific uses of colors for symbolism, etc. will be discussed in the next section.³⁵ The inks used were in many ways similar to modern watercolors. The ground pigments were mixed with gum (such as that of acacia seeds) and water and allowed to dry into cakes. (Wilson 1993: 98)³⁶ Then the cakes were placed in the depressions of the scribal kit. The scribe could then use his brush and water-jar in much the same way as we do with watercolors.³⁷ The range of inks includes: blue, brown, green, gray, orange, pink, white, yellow, and the main kit inks of black and red (see Fig. 28 below).

The medium and materials used by the ancient Egyptians played a huge role in not only the development of the hieroglyphic script, but also in the visualization of the script into symbol. The colors reflected an inner or hidden meaning added and secretly revealed, while the perspective of the signs hid perhaps more.

³⁵ For more information on this read Gosline and Yanhu (1998) Redefining the Study of Egyptian Hieratic in *JAC 13/98, 11-130* or Wilkinson (1994) *Symbol and Magic in Egyptian Art*.

³⁶ For more detail on the actual processes see Harris and Lucas, *Ancient Egyptian Materials and Industries*.

³⁷ The two main inks, black and red, were placed in the scribal kit as the main colors as seen in the color versions of the sign. This is probably because the main colors of the hieratic script, the most common ("administrative") script used by scribes, typically employed red and black ink.

 BLACK	carbon black, lamp black, charcoal, pyrolusite
 RED	red iron oxide, red ochre
 BLUE	azurite (chessylite)- a blue carbonate of copper, which is a mixture of a crystalline compound of silica, copper, and calcium (calcium-carbonate silicate)
 BROWN	ochre of iron oxide
 GREEN	copper with powdered malachite, or copper with an artificial frit (such as a calcium-carbonate silicate)
 GREY	mixture of black and white pigments such as gypsum and lamp black/charcoal
 ORANGE	a mixture of red and yellow ochre
 PINK	Old Kingdom- gypsum and ocher, New Kingdom- red and white, Roman period- madder roots
 WHITE	calcium carbonate (whiting, chalk), or calcium sulfate (gypsum)
 YELLOW	yellow ochre, or orpiment (a natural sulfide of arsenic)
*Erasers	wet cloth most often, sometimes small sticks of sandstone
<p>Fig.28: Chart of materials used for making pigments. (Harris and Lucas 1962: 339-351; Wente 1995: 2211; James 1979: 94)</p>	

4. Hieroglyphs as Symbols

4.1 Symbol

Symbols were used by the ancient Egyptians as much as we use them today. ³⁸ (Frankfort 1977: 12) "All symbols ... operate as if they were two-sided coins. On one side are the physical characteristics and on the other side is the meaning, or what the symbol stands for." (Rosman and Rubel 1992: 57) By representing multiple ideas symbols provide a multifaceted means of communication, albeit visually. The symbols employed by the ancient Egyptians were complex in that were often used to both reveal and conceal, even at the same time. (Wilkinson 1994: 8) This may explain why the Greeks had such a seemingly confused impression of the symbolism of ancient Egypt. ³⁹

One of both the misunderstood and important aspects of hieroglyphs is the symbol. Symbol was originally believed to be the entire essence of hieroglyphics. After the decipherment of hieroglyphics most interpretation focused on language not symbol. And while works such as those by Richard Wilkinson in *Symbol and Magic in Egyptian Art* (1994) have sought to explain aspects of symbol that lie within Egyptian art and thus hieroglyphs, the interpretation has mostly focused on the prevailing aspects in religion. Christian Jacq in *Fascinating Hieroglyphs* (1998) has in a sense turned back the clock on symbolic interpretation focusing on perhaps some rather bold assumptions involving links between an animal's nature and its reason for use as a sign. While in many cases there is a certain logic, which may or may not follow ancient Egyptian "logic", it still unfortunately relies heavily on conclusions which are nearly impossible to substantiate. ⁴⁰ Therefore, the role of hieroglyph as symbol must be understood where it may be based more on a heavier foundation reflected by the various aspects of culture and not just on assumptions.

³⁸ Symbols and symbolism are only discussed here very briefly for background and are thusly not reviewed in a comprehensive manner. A discussion on specific examples, detailed evaluation, etc. can be examined in works such as Wilkinson's *Symbol and Magic in Egyptian Art* (1994) and *Reading Egyptian Hieroglyphs* (1992).

³⁹ This is of course not discounting misinformation.

⁴⁰ It must be stated here that this aspect of interpretation may play a role in the idea of being able to interpret "the psychology" of the ancient Egyptian and thus his worldview, but it also points out that a line must be drawn for differentiation between the probable and the sketchy. This is demonstrated in part in the area of assuming similar word-roots for seemingly unrelated concepts or words. The reason is that this may be misunderstood by the modern due to assuming that similar consonants mean similar words. This assumption can be more clearly understood by the example of "bk" meaning either "bake" or "book". While there are perhaps many instances which are easily *proven*, this does not mean that this theory of analyzing hieroglyphs can or should be applied to those which are nearly impossible to *prove*.

This is in part where the difficulty lies in taking the jump from the possibility of interpreting *from* hieroglyphs to interpreting *to* the ancient Egyptian's worldview.

The fact that hieroglyphs functioned as symbols is not in debate here. It is safe to conclude that hieroglyphs, or at the very least representations of hieroglyphs in various forms, served a symbolic purpose to the ancient Egyptians. This symbolic purpose was both hidden and blatant, sometimes at the same time. The ancient Egyptian even could have misunderstood, lost via time, or created *a* specific symbolism associated with a sign. For the most part, however, the ancient Egyptian was engulfed in a world of symbol, a world of life. This life was the very essence of the "what" and "why" of a symbol. The Egyptian did not need to be taught what symbolism was associated with certain "signs" since it was most often a very part of the essence of the object or creature which he/she saw, experienced, and thus understood.

4.2 General Role

Hieroglyphs are by nature as pictures symbols, or something that represents that which it is not. The signs are found in a variety of forms as symbols beyond hieroglyphs such as in art and ornamentation. "In the earliest times, the hieroglyph undoubtedly was a means of representing an idea, a person, or a thing in a concrete, recognizable form." (Silverman

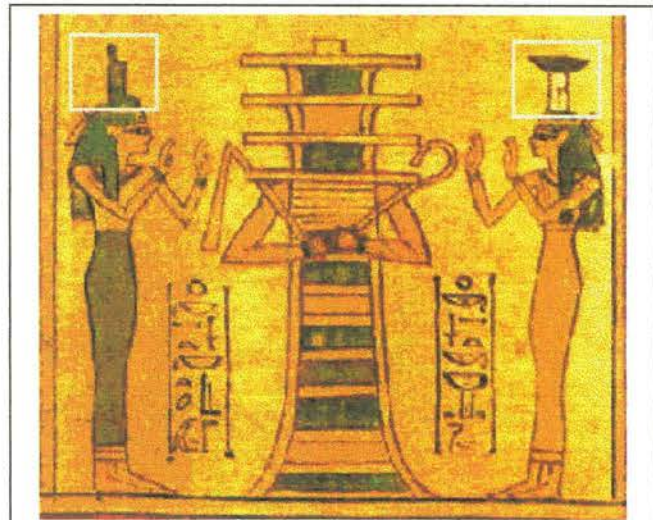


Fig.29: Notice how not only is there a hieroglyphic sign holding two signs, but also the signs on top of the heads of the "ladies" (left-Q1, sign associated with Isis; right-O9, sign associated with Nephthys).
(Patrick 1972: 29, p1.22; Gardiner 1994: 493, 500)

1990: 3) They were believed to be and contain "power" thus imbuing life upon that which they depicted. (Davies 1987: 17) Hieroglyphs also acted as symbols representing powerful forces for the individual carrying them. "Symbolic qualities of the hieroglyphic writing-signs become apparent especially in those hieroglyphs that were used as amulets." (Kippenberg 1985-1986: 65)

4.3 Use in Art

In art hieroglyphs are used quite frequently as symbols. They can be found as symbols on wall murals and reliefs in the form of the signs themselves or often as signs as objects in a scene. The signs are also incorporated into ornamentation such as jewelry. Speaking on ornamentation in the ancient world and specifically applicable to Egypt Manfred Lurker states that ornamentation: "functioned not only as a decorative element but also with symbolic meaning. In Egypt, too, ornamentation cannot be attributed solely to an urge towards artistic style; it is far more a symbol and lifts the object, which conveys it into a higher realm." (1995: 92)

4.4 Use in Religion

Symbol was one of the fundamental essences of ancient Egyptian religion. The deities were essentially "symbols" themselves, even when their representations did not have any extra signs attached. "Yet what appears most significant is not the form the concept of the divine took but the fact that the concept could be manifest in an image." (Silverman 1995: 13) The images of the gods were themselves manifestations of concepts. The manifestations were thus symbols, representing something which they were not. The hieroglyphs which represented the gods were also symbols, often containing multiple symbols and not just multiple concepts. Speaking on deities with hieroglyphs on their heads, Erik Hornung states: "Here the distinction between caption and attribute or between picture and writing becomes blurred." (1996: 117)

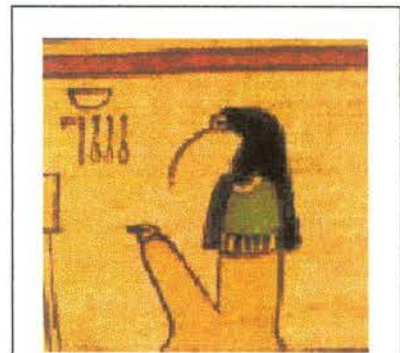


Fig.30: Anthropomorphic deity
(Thoth)
(Forman and Quirke 1996: 141)

4.5 Use in Politics

Symbol played an important role in politics. From the beginning symbols are identified with leaders such as the elephant and scorpion. (Kamil 1996: 29) Symbols are also linked to the developments leading to unification: "Control was achieved by using well-established symbols rather than by inventing new ones." (Gosline and Yanhu 1998: 119) The use of symbol was interweaved throughout politics in ancient Egypt. It encompassed all spectrums of the visualization of power and can be seen in the cartouche of pharaoh "encircling protection" and in reliefs with bound captives. (Nicholson and Shaw 1995: 62) Hieroglyphs also acted as symbol by representing power, life, "god", and the like in associations with pharaoh.



Fig31: Relief showing names of the defeated in cartouches with "bound captives" symbolizing the power of pharaoh. (Hayes 1998: 29)

4.6 Use in Daily Life

Everyday life in ancient Egypt was surrounded by ideas attached to symbols. And although symbolism was prevalent in most ancient cultures, Egypt seems to have embraced it to a much larger extent. Not only could a statue of a man represent a man himself, but also a hieroglyph the actual animal. Animals which were perceived to be dangerous were often cut into parts and subsequently "killed" in the minds of the ancient Egyptian. "Images were not merely lifelike copies, they were imbued with life, or preserved the existence of the person represented for an endless period." (Lurker 1995: 69) Symbol was a part of the people's religion as can be seen by structures such as the pyramids. It was carried by the people as amulets. It







was housed in the homes as statuettes/cult figures. The whole world of the Egyptian was surrounded by symbol, from the hieroglyphs of writing (even for those who were not "literate") to the environment and its contrasts to the cultural-religious society in which life revolved.

The materials used for creating statuettes, amulets, etc. were also symbolic. Gold was seen as "divine and imperishable" while silver and other metals were valued no less in many respects. (Wilkinson 1994: 83) Other materials such as wax, wood, and stones also carried with their use symbolism such as wood figures being burned for destructive magic. (Wilkinson 1994: 91)

4.7 Number, Size, and Color Symbolism

Number, size, and color played an intricate part in the symbolism of the ancient Egyptians. Numbers were grouped according to accepted notations such as the use of dual and triad.⁴¹ Most often numbers reflected the notions of balance. Size was used mostly in terms of distinguishing groups such as classes, peoples, and sex. For instance, pharaoh is seen as a predominating giant amongst others. Color, however, contained set yet flexible connotations. A color could be used alternately within one "text" to emphasize a point, could be used consistently to emphasize another, or could be used merely as a means of differentiating without meaning anything specific. (Wilkinson 1994: 104-5) Opposite colors could be used as "an expression of wholeness and perfection." (Lurker 1995: 41) "Even when the reasons for the use of a certain color are not immediately apparent, it seems that some connection usually existed in the minds of the Egyptians between a given sign and the color used to depict it." (Wilkinson 1994: 111) Colors were used both as a means of depicting naturally and/or symbolically. (Wilkinson 1994: 110) The chart below breaks down some of the basic color associations of the ancient Egyptian artisan, and presumably the people too.

⁴¹ For specific information on the symbolism of numbers see Wilkinson (1994) *Symbol and Magic in Egyptian Art*, 104-147.

	<p style="text-align: center;">BLACK</p> <p>-associated with underworld, funerary deities, and fertility -examples include scarab, amulets of Anubis</p>
	<p style="text-align: center;">BLUE</p> <p>-associated with the heavens, water, concept of fertility, -examples include amulets of Osiris, scarab</p>
	<p style="text-align: center;">GREEN</p> <p>-associated with vegetation and life, health, vitality -examples include amulets of serpents and baboons, eye of Horus</p>
	<p style="text-align: center;">RED</p> <p>-associated with fire, blood, the sun, abstract concepts of life and destruction of physical things -examples include amulets of the heart, scarab, and Red Crown</p>
	<p style="text-align: center;">WHITE</p> <p>-associated with purity and used as a solar hue -examples include the White Crown, sacred cow</p>
	<p style="text-align: center;">YELLOW</p> <p>-associated with the sun -examples include scarabs, Isis knot, and gods/goddesses</p>
<p>Fig.32: Chart of color symbolism with amulet examples. (Wilkinson 1994: 116-117)</p>	

4.8 Summary

Symbol was interweaved in politics, religion, art, and thus the world and worldview of the ancient Egyptians. It was part of nearly every aspect of Egyptian recorded thought in that it *manifested* itself via color, shape, size, number, and association. Hieroglyphs were merely an aspect/manifestation of this form of association. The role of symbol was thusly important in hieroglyphs because it was important in every other aspect of the lives of the ancient Egyptians. And while the multitude of symbols which exist and coexist can be confusing, it is nonetheless a factor of the world of the ancient Egyptians.

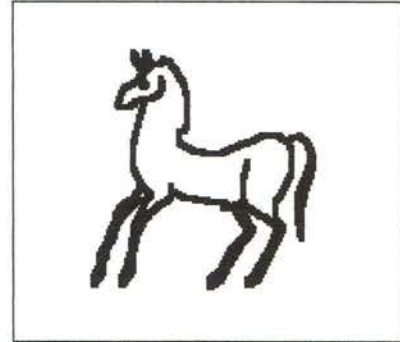


Fig.33: Horse hieroglyph (E6), added when the horse was introduced to Egypt (ca. the New Kingdom).

5. Hieroglyphs as Art

Hieroglyphs and the system of hieroglyphics, which act as the surviving mode of communication of the ancient Egyptians, have been referred to affectionately as an "art of writing". (Aldred 1998: 87) It was truly as much of an art as a written script. "The eruption of the hieroglyphic system onto the Egyptian scene accompanied the birth of a new artistic language, to which it was inextricably tied." (Betrò 1996: 14) And while the system evolved into the historic period of ancient Egypt, many of its earliest forms were highly developed and maintained from then on as an artistic form. Historically, hieroglyphs are found *in* art and *as* art from the earliest times. Their form varied little due to the conservative tendencies of the people. One of the few "disruptions" in the conservative pattern was that during the Amarna period. This disruption, however, passed as quickly as it came. (Krauss 1995: 749-762) Other tendencies and changes were for the most part minimal and not worthy of further analysis. In terms of the hieroglyphs themselves once in the historic period there were little if any changes. The changes that occurred were predominantly only the addition of new signs, like the horse from Asia during the New Kingdom.

Art, as one may refer to it in the modern sense, was found on a variety of materials. This art has survived today on monuments, pottery, papyrus, sarcophagi, sculpture, etc. The art, including hieroglyphs, was drawn/written by means of paints or pigments or by chiseling. It is perhaps because hieroglyphs were a part of art that it has been referred to as being "the most beautiful ever designed" and "one

of the most attractive systems of writing ever devised." (Davies 1958: 9; Mertz 1990b: 249)

Egyptian art was a "carefully and deliberately constructed style." (Kemp 1991: 85) It was "essentially functional [and] intended not merely to imitate or reflect reality but to replace and perpetuate it." (Nicholson and Shaw 1995: 38) Kemp states further:

"The aim of the artist was to render the elements of his pictures truthfully and informatively. The subject matter itself, however, portrayed reality only within frames of reference taken from a world of myths and ideals." (1991: 84)

Art and writing merged in the world of the ancient Egyptians. "The interrelationship between art and writing ... is evident in a number of ways. Most obviously the hieroglyphs were themselves miniature pictures." (Davies 1987: 14) Writing was an art and often portrayed so even when the hieroglyphs were in shorthand. In such cases the "lines" or rows and columns were often balanced around an image. "It is evident from the carefulness with which the Egyptians considered the arrangement and order of the hieroglyphs, that they regarded these monumental inscriptions chiefly as decorative." (Erman 1971: 338) The combination of the two reveal "a powerful impulse towards order and rigorous scansion of the elements, which the adoption of hieroglyphic writing brought into artistic representation, and into many aspects of cultural and social life as well." (Betrò 1996: 14)

On its most basic analysis, hieroglyphs function as a part of art and as an art form on its own. The hieroglyphs reflect attitudes towards the universe which persisted in a conservative form. (Mertz 1990a: 11) And while hieroglyphs mystified many, and still do, in their artistic form apart from their communicative nature, they remain art in both simplistic viewing and complex analyzation of their most hidden meaning.

6. Hieroglyphs as Communication and Language

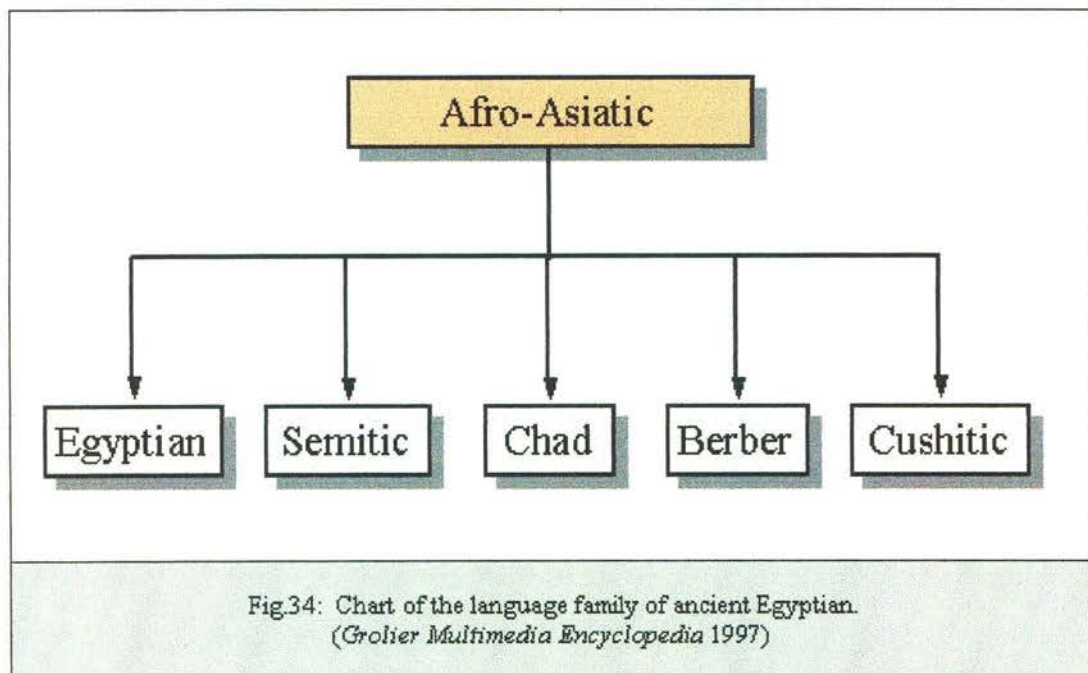
6.1 Communication and Language

Hieroglyphs acted as means of communication from the beginning. Even when the signs were at their most simplistic mode of depiction they were still communicating ideas via the use of visible symbol. "Most primitive ways of communication by means of visible symbols were achieved by means of the descriptive-representational and the identifying mnemonic devices." (Gelb 1965: 191)

Hieroglyphs were only the signs used in a *system* called hieroglyphics. Within this system the signs communicated many ideas via the symbol (as discussed in section 4. *Hieroglyphs as Symbol*) but also as a phonetic and alphabetic script, thus representing language.

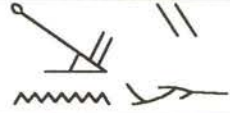




6.2 History of the Language

The language of the ancient Egyptians has been classified as being from the Afro-Asiatic (or Hamito-Semitic) group. (Borghouts 1993: 2) Its relation to languages such as Hebrew has often been noted by loan words such as $\square\eta\eta$ (with Egyptian *htm*- 'seal') and $\eta\eta\eta$ (Egyptian *mdw*'- 'staff/stick'). (Faulkner 1996: 122, 199; Hoch 1997: 262, 278; Holladay 1991: 120, 191) One similarity between Egyptian and both Hebrew and Arabic is the fact that none "express its vowel sounds in written form." (Watterson 1981: 57)



The language survives in its earliest "written" form around 3200 BCE. (Davies and Friedman 1998: 36) The development of the written script may have been for purely economic (individual record keeping), royal-control and administration (bureaucracy), or some religious function, but this is only worth mention here. Perhaps both indicative of the written script's purpose and sacrality is the fact that "hieroglyphs were never used to write any language other than

Egyptian, but Egyptian was written in several scripts." (Mertz 1990b: 250) ⁴²

ENGLISH	INTERMEDIATE		EGYPTIAN
ebony	ebenos (Greek)	<i>hbny</i>	
gum	kummi (Greek)	<i>ḳmyt</i>	
niter, natron	nitron (Greek)	<i>ntr(y)</i>	
sack	sakkos (Greek)	<i>s3ḳ</i> (lit. to pull together, to be collected)	
chemistry, alchemy	al kimia (Arabic)	<i>ḳmt</i> (black land)	
<p>Fig.35: List of some modern English words with roots from ancient Egypt. (Faulkner 1996: 279; Gardiner 1994: 442-629; Knapp 1988: 270-271; Watterson 1981: 50-53)</p>			

The language of the ancient Egyptians went through a variety of changes over the course of its history, although seemingly minimal when looked at in terms of the fact that it was written for 3000 years. "The language was never static; it altered in the course of time, when new words and new constructions were introduced and old forms died out and old words either became obsolete or changed their meaning." (Murray 1977: 193) The major phases of the spoken language include: Old Egyptian, Middle Egyptian, Late Egyptian, Demotic, and Coptic.

⁴² "The need for book-keeping, supplemented by a desire to record royal exploits, appears to have been mainly responsible for the development of writing in Egypt." (Kemp et al., 1987: 58) The royal function may not have been necessarily the reason for its development but is probably responsible for its adoption and further refinement.

<p>Old Egyptian (c.3000-2135 BCE)</p>	<p><i>Early Dynastic – Old Kingdom Dynasties 1-8</i></p> <ul style="list-style-type: none"> -close to the spoken language -literature, official religious texts, inscriptions in tombs and pyramids, some biographical documents -found as hieroglyphs and hieratic
<p>Middle Egyptian (c.2135-2000, 2000-3000 BCE)</p>	<p><i>Dyn. 9-12 (classical) and Dyn. 13-18 (post-classical)</i></p> <ul style="list-style-type: none"> -some changes in verbal system and use of different participles -continued as written language into New Kingdom, some survivals in form in Graeco-Roman period on monuments and as religious formula -religious texts, narratives, poetry, business and administrative documents, later reserved for historical and religious inscriptions -found as hieroglyphs and hieratic
<p>Late Egyptian (c.1550-715 BCE)</p>	<p><i>Dynasties 18-24</i></p> <ul style="list-style-type: none"> -reflects language of the New Kingdom: differs in syntax, grammar, and vocabulary from Middle Egyptian -evidence indicates spoken language different from written -found as hieroglyphs and hieratic
<p>Demotic (c.715 BCE–470 CE)</p>	<p><i>Dynasties 25 – late Roman Period</i></p> <ul style="list-style-type: none"> -language used in books and documents -blend with classical form -written in cursive script known as demotic, derived from hieratic
<p>Coptic (c. 3rd-16th century CE)</p>	<p><i>Coptic Period – present</i></p> <ul style="list-style-type: none"> -language of the Coptic period, surpassed by Arabic c.640 CE, survives in Egyptian Coptic church and spoken by some Coptic Christians, still used in liturgical writings -written in Greek alphabet plus 6 characters derived from hieratic -vowels are written (aids in helping try to reconstruct Egyptian language pronunciation)
<p>Fig.36: Chart of history of Egyptian language. (Bunson 1995: 143-144; Davies 1987: 9; Erman 1972: 2-3; Gardiner 1994: 5-6; Hoch 1997: 3-4; Kinnaer 1997ff; Nicholson and Shaw 1995: 156-157; Watterson 1981: 46-47)</p>	

6.3 Types of Signs and Their Uses

Hieroglyphs were used to write the Egyptian language with three types of signs: (1) phonetic/syllabic (phonograms), (2) ideograms/logograms, and (3) determinatives. It should be noted that a particular sign could function as phonograms, ideograms, and determinatives, albeit not at the same time.⁴³ Among phonetic hieroglyphs are the so-called alphabetic signs which numbers 24. These include signs which represent one transliterated letter and then one/two Roman letters. Other signs in the group represent phonetic values or syllables. These signs are often transliterated as two or three "letters" and are used to help read signs/words (acting as phonetic complements) which could be read differently otherwise. The second group, ideograms or logograms (sometimes called pictograms), are signs which represent the object depicted. The third group, known as determinatives, are used as a method of helping to determine the meaning of written out words which might otherwise be confused with something totally different. These signs may represent concrete objects or abstract ideas for determining the meaning or perhaps reading of a word.⁴⁴ The language was written by combining all of these types of signs. They were then written out but "occasionally the spelling was sacrificed to symmetry." (Mercer 1998: 5)

⁴³ This group includes so-called alphabetic signs.

⁴⁴ Lacking vowels it is impossible for us to know for sure whether or not determinatives were only used for words which had two entities. The reason for this is that if this were the case then words which lacked "doubles" or "twins" in spelling would most likely not have determinatives. Therefore it is safe to conclude that the use of determinatives was an established method, necessary to at least some degree, but not necessarily used because of similar pronunciation or roots.



























	<i>ʒ</i>	a		<i>ḥ</i>	kh
	<i>i</i>	i / a		<i>ḥ</i>	kh
	<i>y</i>	y		<i>s</i>	s
	<i>ʿ</i>	a		<i>z / s</i>	z / s
	<i>w</i>	w / u		<i>š</i>	sh
	<i>b</i>	b		<i>ḳ</i>	q / k
	<i>p</i>	p		<i>k</i>	k
	<i>f</i>	f		<i>g</i>	g
	<i>m</i>	m		<i>t</i>	t
	<i>n</i>	n		<i>t̄</i>	tj
	<i>r</i>	r		<i>d</i>	d
	<i>h</i>	h		<i>d̄</i>	dj
	<i>ḥ</i>	h		<i>r / l</i>	r / l

Fig.37: So-called Egyptian alphabet (included are alternate signs and/or variations plus additional letters “y” and “r/l”). Columns show the hieroglyph, transliterated “letter”, and the Roman equivalent. (Collier and Manley 1998; Fleury 1995ff; Gardiner 1994: 27; Hoch 1997: 7; Iversen 1993: 17-18; Watterson 1981: 60-62)








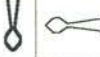
















SIGN	SIGN NAME	VALUE	SIGN	SIGN NAME	VALUE
	(O 1) house	<i>pr</i>		(S 38) crook	<i>hk3</i>
	(U 1) sickle	<i>m3</i>		(R 4) loaf on reed-mat	<i>htp</i>
	(W 19) milk-jug in net	<i>mi</i>		(L 1) dung-beetle	<i>hpr</i>
	(O29) wooden column	<i>3</i>		(P8) oar	<i>hrw</i>
	(Y 5) draught-board	<i>mn</i>		(U 21) adze on wood block	<i>stp</i>
	(F 31) 3 foxes' skins	<i>ms</i>		(Aa 11) questionable?	<i>m3c</i>
	(G 37) sparrow	<i>wr</i>		(O 28) column w/ tenon at top	<i>iwn</i>
	(I 6)	<i>km</i>		(S 34) tie or sandal-strap	<i>3nh</i>
	(G 39) pintail duck	<i>s3</i>		(D60) D58 + A6, water from vase	<i>wcb</i>
	(M 23) plant	<i>sw</i>		(F12) head of canine	<i>wsr</i>
	(R11) column imitating stalks tied together	<i>dd</i>		(F35) heart + windpipe	<i>nfr</i>
	(D 28) arms extended	<i>k3</i>		(R 8) cloth on pole, emblem of divinity	<i>ntr</i>

Fig.38: Chart of some common bilaterals (left column) and trilaterals (right column).
(Collier and Manley 1998: 5; Hoch 1997: 18-21; Gardiner 1994: 442-548; Watterson 1981: 68-72)






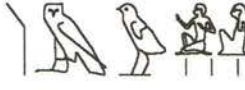



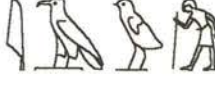







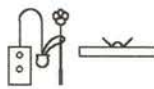

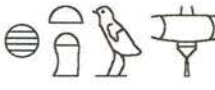

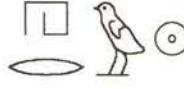
SIGN	SIGN NAME	USED FOR...	EXAMPLE WORD
	(A 1) seated man	man, person, men's names, occupations	man (<i>s</i>) 
	(B 1) seated woman	woman, women's names	woman (<i>st</i>) 
	seated man and woman with plural strokes	people	Asiatics (<i>ʕ3mw</i>) 
	(A 17) child sitting (on lap) with hand in mouth	child, young, youth, sitting	child (<i>ʕri</i>) 
	(A 19) bent man leaning on stick	old, old man, lean upon	old (<i>i3w</i>) 
	(D 54/55) legs walking (forward/backwards)	walking, running, go, motion, come, retreat	send (<i>h3b</i>) 
	(G 37) sparrow	bad, evil, weak, little/small, nuisance	bad, evil (<i>bin</i>) 
	(T 30) knife	knife, cutting	knife (<i>ds</i>) 
	(Y 1) papyrus rolled up, tied, and sealed	book, writing, abstract nouns	write (<i>sʕ</i>) 
	(P 5) sail	air, wind, breath, sail, sail south/upstream	sail (<i>ht3w</i>) 
	(N 5) sun	day, sun, time, light	day (<i>hrw</i>) 

Fig.39: Chart of some common determinatives.
 (Collier and Manley 1998: 5; Hoch 1997: 18-21; Gardiner 1994: 442-548; Watterson 1981: 68-72)

6.4 Sentences: Structure and Composition

The language and thus the written script contain nouns, pronouns, verbs, adjectives, adverbs, prepositions, adverbial phrases, introductory particles, etc. (Silverman 1990: 13-16; Hoch 1997: 12) The language is not composed of articles and vowels were not represented until the introduction of the Coptic script. The structure or

1	
	<p><i>iw</i> <i>r^c</i> <i>m</i> <i>pt</i></p> <p>(is) sun in sky</p> <p>The sun is in the sky.</p>
2	
	<p><i>m³</i> <i>s/z</i> <i>sš</i> <i>m</i> <i>niwt</i></p> <p>saw man scribe in city</p> <p>The man saw the scribe in the city.</p>
3	
	<p><i>gm</i> <i>f</i> <i>s/z</i> <i>hr</i> <i>w3t</i></p> <p>found .he man on road</p> <p>He found the man on the road.</p>

Fig.40: Examples of typical Egyptian hieroglyphic sentences with word order: (1) adverbial predicate (acting as verb), noun, preposition + noun (=adverbial phrase); (2) verb, subject-noun, object, preposition + noun (=adverbial phrase); and (3) verb, subject-suffix pronoun, object, preposition + noun (=adverbial phrase).
(Gardiner 1994: 35; Watterson 1981: 101-102)

order of a typical sentence goes as follows: (1) particle, (2) verb, (3) subject (noun or suffix-pronoun), (4) object (noun), and (4) adverb or adverbial phrase (preposition + noun). (Watterson 1981: 101)

6.5 Types of Literature

The language of the ancient Egyptians was used to write a variety of things. The list of subject matter that the ancient Egyptian wrote on included: wisdom literature, meditations, pessimistic writings, poetry, love lyrics, hymns, magic, stories, travel, letters, business and legal records, scientific literature, astronomical observations, and medical works. (James 1979: 97-126) Most literature as such can be found on papyrus although some can be found as wall reliefs and even in part on ostraca.

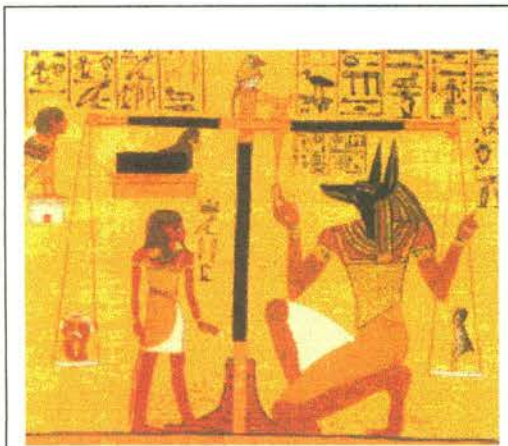


Fig.41: Example of funerary literature—papyrus version of the “Book of the Dead”. (Faulkner 1994: back cover)

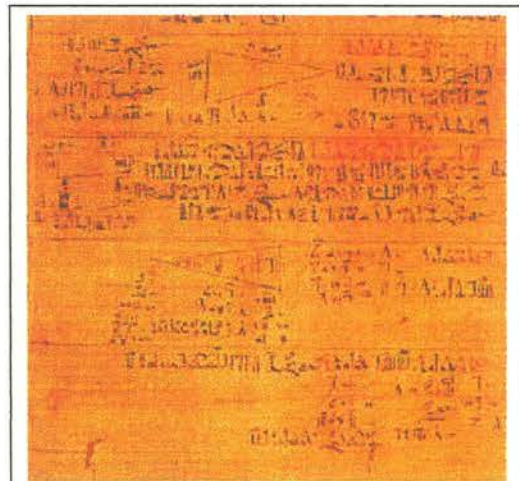


Fig.42: Example of math calculations on papyrus. (Silverman 1997: 94)

7. Hieroglyphs: Role, Importance, and Value

The role hieroglyphs played in ancient Egypt is most easily summarized as being communication. Hieroglyphs, used within the system of hieroglyphics, provided the necessary mechanism for communicating ideas and more importantly, information. Whether by reading or symbol, hieroglyphs communicated ideas above and beyond the average written script. As in this quote which makes a nice distinction between hieroglyphics and other ancient languages:

"We have all heard that Greek and Latin are dead languages, but this is not true of hieroglyphs. Just look at a hieroglyphic text: it is full of animated characters, active men and women, birds, mammals, fish. And they continue to act, much as our duck continues to bite." (Jacq 1998: 19)

The development of hieroglyphs may have been for royal administration, recording commerce, establishing ownership, coordinating of groups of specialists, or for demonstrating political might. (Kemp et al., 1987: 58) None of these, however, acted as the only use. Betrò comments: "While administrative needs were crucial to the development of hieroglyphic writing, they were neither the only nor perhaps the first to use this powerful new technique." (1996: 13) The evidence points to some of the most early uses being for indicating ownership and labeling. (British Broadcasting Corporation 1998) ⁴⁵

Reading and writing were highly valued in both the ancient world and ancient Egypt.

"The Egyptians valued learning because of the superiority which, in matters of this life, learned men possessed over the unlearned; learning thus divided the ruling class from those who were ruled. He who followed the learned studies, and became a *scribe*, had put his feet on the first rung of the great ladder of official life, and all the offices of the state were open to him. He was exempted from all the bodily work and trouble with which others were tormented." (Erman 1971: 328)

The knowledge was thus guarded by priests and scribes. (Murray 1977: 195)

In Egypt, reading and writing was taught in schools attached to government offices and temples. (Michalowski n.d.: 60) It was taught in its hieratic form first. (Wilson 1993: 101) The training was very tough and is illustrated in a text called "Advice to Schoolboys": "Spend no day in idleness or you will be beaten. The ear of a boy is on his back, and he hearkens when he is beaten." (Kaster 1995: 191) The scribes were typically male as mentioned earlier in section *3.3 Medium and Materials*, however, there are known examples of female scribes (see figures below) such as in the five New Kingdom tombs at Thebes. (Bryan 1985) ⁴⁶ Unfortunately, most of the evidence, such as occupations of the scribes, leans towards the interpretation that scribes were predominantly male. ⁴⁷

⁴⁵ See Davies and Friedman (1998) *Egypt Uncovered* (p.37) for examples of some of the early labels from Abydos.

⁴⁶ It should be noted that these Theban tombs span a three hundred year period. (Bryan 1985: 24)

⁴⁷ It is possible that some females from upper classes learned to read and write as a part of their formal education or as an exception to the rule, but in most cases there appears to be few female scribes who used their training as part of government, religious, and business. (Cf. Bryan 1985: 24-25)

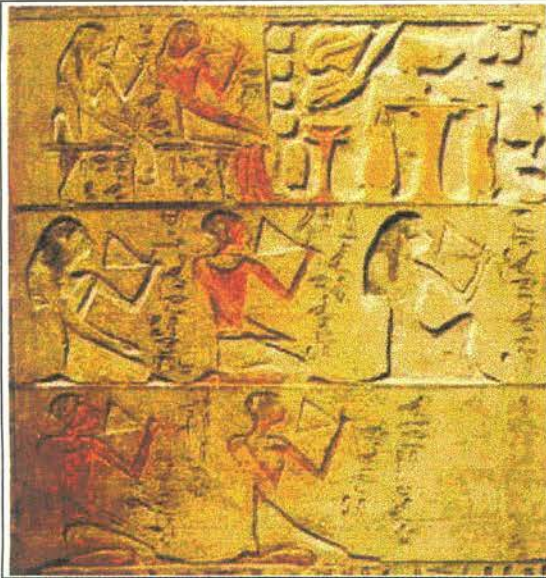


Fig.43: Section of a tablet depicting a scribal school with three male scribes and four female scribes. (Seipel 1989: 129, fig.95)



Fig.44: Relief of a female scribe. (Forman and Quirke 1996: 18)

8. Summary and Overview

Reading and writing (i.e. literacy) were important in the ancient world. Egypt was no exception to this rule. In Egypt literacy was held in the highest regard. "An excellent indication of the attitude of the Egyptians to learning was their name for the school, *per-en-ankh*, 'house of life.' " (Kaster 1995: 188) ⁴⁸ To read and write was power. It also brought with its knowledge the power to excel and rise above the harshest of labor. For this reason it is not surprising that hieroglyphics were both mysterious and powerful at the same time.

Hieroglyphics developed as a means of communication. They communicated ideas via symbols and language at the time. They functioned as communication via symbol in art, religion, politics, and language thus becoming a part of daily life in ancient Egypt.

The signs which composed this system, hieroglyphs, were more than just "letters", they were pictures of the world. And the world that was depicted was done so in a manner that reflects the ideas of the ancient Egyptians themselves. Hieroglyphs not only represented life but were living themselves. They brought to

⁴⁸ For more on this see Lichtheim (1976) *Ancient Egyptian Literature, Vol. II: The New Kingdom*. Here one can read the Papyrus Lansing: A Schoolbook where the scribal profession is compared to other professions highlighting the pros against the cons of not being a scribe. There is also a translation of a work called "A Student's Miscellany" and here "The Immortality of Writers" which illustrates another aspect of the scribe's importance. (Lichtheim 1976: 168-178)

life the world by conjuring up images in the minds of the people. The actual depictions, including the aspects and perspective, reflect even more about the people than perhaps the objects themselves.

A scribe at whatever post in town,
He will not suffer in it;
As he fills another's needs,
He will [not lack rewards].
I don't see a calling like it
Of which this saying could be said.

Fig.45: Excerpt from "The Satire of the Trades".
(Lichtheim 1975: 185)

Part II

Examining Living Creature Hieroglyphs: A New Understanding

9. Introduction: Structure and Format

In this section the hieroglyphs for living animals (Gardiner Groups E, G, I, K, and L) will be examined. (1994: 442-543) Only signs from the Gardiner sign list will be ‘thoroughly’ examined for both practical purposes and as a result of the their commonality (especially during the Middle Kingdom) with little exception. The emblematic signs/variations and parts of living animals, including some “non-Gardiner” signs, are only discussed or referred to on a limited basis and where deemed relevant. Each page deals with a particular sign and where applicable, contains a list of:

- function(s) (including example words);
- variations (including other signs of animal and replacement signs);
- associations (with gods/goddesses, cult centers, and general connotations); and
- some observations.

Associations which may be considered “fascinating”, or perhaps more hypothetical/questionable, such as those by Plutarch and Horapollo are noted with an asterisk (*). Finally, at the end of each Gardiner grouping there is a general set of observations, conclusions, and perhaps questions related to the analysis and examination of the hieroglyphs therein. (N.B. The author acknowledges that the synthesis of material for each sign does not necessarily cover every known possibility but hopes that the material helps provide a broad overview about each living animal. Also, in some cases associations with gods/goddesses may refer to a relationship via myth, etc. and not necessarily implying that the animal is a manifestation of the god/goddess.)

A short reference index is after this section which allows for cross-referencing each sign discussed. This is applicable to the charts alone and not the ‘text’ sections which follow normal bibliographic style. Only some “points” are specifically referenced, all others sources are checkable via the author, title, and page numbers. This is done in part because of space limitations and also due to information which can be referenced in multiple sources.

The organization of each “group” is the same with exceptions occurring in the groups for ‘birds’ and ‘amphibians and reptiles’. Variations of ‘mammals’, ‘fish’, and ‘invertebrates and lesser animals’ are noted most often on separate pages as separate charts with the exception of interchangeable signs. In the group for ‘birds’ and ‘amphibians and reptiles’ variations are listed on following pages with their different uses except where used to denote the same.

10. Mammals: Group E

10.1 Introduction

10.2 Analysis

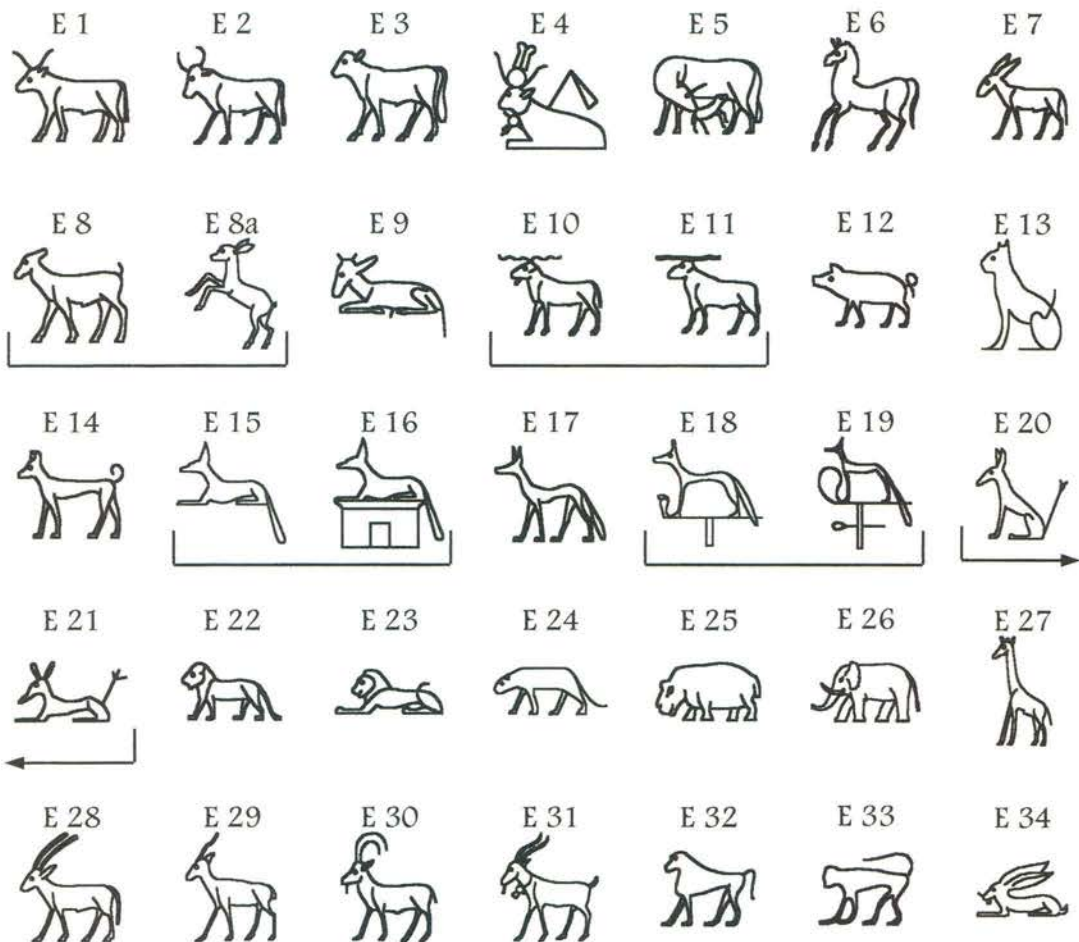
10.3 Comments and Observations about the Hieroglyphs for Mammals

10.1 Introduction

In this section the hieroglyphs for mammals are examined. Signs are discussed on separate pages except where deemed unnecessary. Below is a list of signs that are discussed in this section (including 'groupings'). At the end of the section there will be a general set of observations, conclusions, and perhaps questions related to the particular Gardiner group of signs.

10.2 Analysis

Group E:



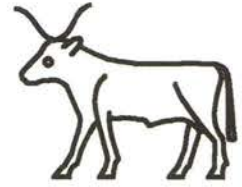
Non-Gardiner sign (also Group E) (Wilkinson 1992: 73):






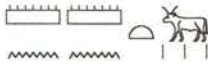



Seated Baboon



E1

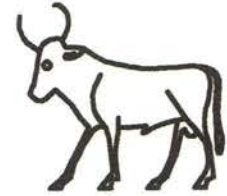
bull



FUNCTION:	<p>(1) ideogram</p> <p>(a) bull- <i>k3</i>   </p> <p>(2) determinative</p> <p>(a) bull- <i>ng</i> </p> <p>(b) ox- <i>iw3</i> </p> <p>(c) cattle, herds- <i>mmnt</i> </p> <p>(d) cattle- <i>ihw</i> </p>
VARIATIONS:	<p>(1)  F1- 'head of ox', often used as replacement for E1 in offering formulas</p> <p>(2)  E2- 'aggressive bull', other depiction/hieroglyph of bull</p> <p>(3) sign can vary according to sex and species (8)</p>
ASSOCIATIONS:	<ul style="list-style-type: none"> • gods: Ra, Amon, Amon-Ra, Atum, Atum-Ra, Tebas, Ptah, Hapi, and Montu, Min, Osiris, Nun, Hathor, A'a nefer, Osiris-Apis (Osorapis) • cult centers: Memphis (Saqqara), Hermonthis (Armant), Amarna, Heliopolis, Merur, Kamutef, Thebes, Tuna el-Gebel • names: Apis, Buchis, Mnevis, A'a nefer • venerated for sexual potency (2) • cosmic waters (Nun), sun, moon, constellation Ursa Major • emblem of Lower Egyptian nomes (13) • pharaoh and titles/epithets to pharaoh: 'Bull of Ra', 'Mighty Bull- Great of Strength', 'Bull of his Mother', 'Bull of Horus' • eyes of Ra- right with sun, left with moon • Nile inundation, fertility, masculinity, strength, work, power • with 7 cows sustain powers of universe (15) • courage with temperance (erect bull) (3*) • hearing (bull knows when cow is in heat) (3*)
OBSERVATIONS:	<p>This sign, typically referred to as the 'bull', could represent a variety of types of bovine (including different domestic/wild species). The legs of the bull imply a creature in motion. The body and head are seen in profile, the detail of which varies according to medium, material, etc. Notable is the horns which are depicted in frontal perspective in contrast with the profile of the animal itself. The rear extends out so that the tail falls straight down. (8)</p>

E2

aggressive bull



FUNCTION:

(1) ideogram


(a) bull in victorious bull– *k3 nht*

(2) determinative

(a) long-horned bull, steer– *ng3w*(b) wild bull– *sm3*

VARIATIONS:

(1) other depiction/hieroglyph of bull:

(a)  F2– 'head of infuriated bull'(b)  E1– 'bull'

ASSOCIATIONS:

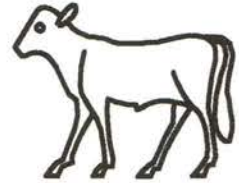
- victorious bull, epithet of pharaoh
- strength, masculinity, fertility, work, power
- pharaoh and titles/epithets to pharaoh: 'Bull of Ra', 'Mighty Bull-Great of Strength', 'Bull of his Mother', 'Bull of Horus', 'Victorious Bull'
- nomes (bull/cow): Lower Egypt– 6, 10, 11, 12 (5)
- (see E1 for more associations)

OBSERVATIONS:

This sign, typically referred to as the 'aggressive bull', could represent a variety of types of bovine (including different domestic and wild species). The legs of the bull imply a creature in motion. The body and head are seen in profile, the detail of which varies according to medium, material, and purpose. Notable is the horns which are depicted in frontal perspective in contrast with the profile of the animal itself. Also noteworthy is the fact that the horns are curved suggesting a specific species of bull– wild, fighting, etc. In contrast with E1 the sign shows a definite connotation of movement such as aggression (perhaps charging) via the somewhat tilted head. Also noteworthy is the attention giving to the portrayal of the bull's testicles. This is especially interesting as it is used as the determinative in the word for "steer", an animal which is castrated before maturity. Such may suggest either a "mistranslation", redundant error by the Egyptians (not likely in this case), or a pun (?).

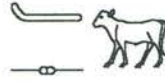
E3

calf



FUNCTION:

(1) determinative

(a) calf– *bḥs* (*bḥz*)(b) short-horned cattle– *wndw*

VARIATIONS:

(1) short-horned cattle hieroglyph, varies only slightly from calf sign

ASSOCIATIONS:

- rising sun (5)
- emerging from between the sycamore trees of the horizon (Book of the Dead) (5)
- nome (calf lying down): Lower Egypt– 12 (4)

OBSERVATIONS:

This sign, typically referred to as the ‘calf’, could represent a variety of types of bovine (including different domestic and wild species). The legs of the calf imply a creature in motion. The body and head are seen in profile, the detail of which varies according to medium, material, and purpose. Also, note the rather large tail in comparison to the ‘bull’ (E1) and the ‘aggressive bull’ (E2).

E4 sacred Hezat/Hesat cow



FUNCTION:

(1) determinative

(a) sacred *H̄z3t* cow– *H̄z3t* (*H̄s3t*)



(b) *H̄z3t* milk– *hz3t*



VARIATIONS:

(1) sign may differ depending on where found (for example around neck may be S18 'necklace', S19/S20 'seal on necklace') (4)

ASSOCIATIONS:

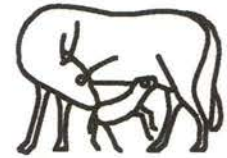
- as the goddess Hezat/Hesat– cow suckling young king (5, 6)
- (see E5 for general associations of cow)




OBSERVATIONS:

This sign, typically referred to as the 'sacred *H̄s3t* cow', could represent a variety of types of bovine (including different domestic and wild species). The cow is lying down, and presumably mummified or representing an emblem or sacred sign instead of the living creature (?). It is interesting to note similarities between this pose (although less "realistic") and sphinxes (?). Nonetheless it is noteworthy that the legs are in front of the creature (naturally) while the horns and head ornamentation perspective is frontal. Some of the objects that are part of the sign include: a flagellum (S45), sun disc (N5), double feathers (S9), and a necklace (S18-S20?) (cf.: sign here with E31).

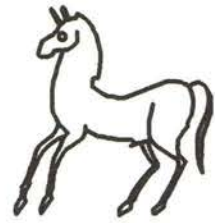
E5

cow suckling calf



FUNCTION:	<p>(1) determinative</p> <p>(a) show solicitude ‘solicitous’– towards child or parent– <i>3ms</i></p> <p style="text-align: center;">  </p>
VARIATIONS:	<p>(1) other depiction/hieroglyph of cow and calf</p> <p>(a)  E 1– ‘cow’ (variation of bull without large ‘horns’)</p> <p>(b)  E 3– ‘calf’</p>
ASSOCIATIONS:	<ul style="list-style-type: none"> • goddesses: Hathor, Isis, Hezat/Hesat, Mekhweret • E4, as Hezat/Hesat– cow suckling young king • cult centers (incl. cemeteries): Dendera, Memphis (Saqqara), Deir el-Bahari • mother: of Anubis, Apis bull (6) • heaven and underworld (netherworld): symbol of hope for a continued existence (6) • 7 with bulls sustain powers of universe (8) • tenderness (1) • beauty and happiness (5*)
OBSERVATIONS:	<p>This sign, typically referred to as the ‘cow suckling calf’, could represent a variety of types of bovine (including different domestic and wild species). The body and head are seen in profile, the detail of which varies according to medium, material, and purpose. The mother (cow) is licking the back end of the calf while the calf is up on hind legs (sometimes on all four) suckling mother. The mother has her head turned backwards towards calf. Although the legs appear to be in motion, one far-front leg may be positioned slightly different by implying balance. In regards to demonstrating the stillness of the cow, a comparison may be made with Mesopotamian variations where the cow’s back legs are depicted as together (see Fig.68). Also, worthy of noting is the horns are in ‘naturalistic’ perspective.</p>

E6

horse
(*Equus caballus*)

FUNCTION:

(1) ideogram/determinative

(a) horse– *ssmt* (*zzmt*)

(2) determinative

(a) stallion– *ibr*(b) team/pair of horses– *htr*

VARIATIONS:

(1) sometimes on hind legs (especially in art– pharaoh's chariot)

ASSOCIATIONS:

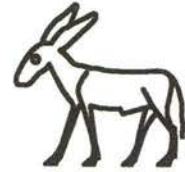
- status symbol: hunting, warfare, and ceremonial processions
- chariots: especially status symbol for charioteers (Note– few depictions where ridden usually are of foreigners) (9)
- prestige gift between rulers (reflecting pomp and power) (9)
- noble animal associated with pride and nobility (2)
- burials near some pyramid tombs (9)
- speed and grace (4)
- efficient armies (5)
- wasps born from dead body (3*)

OBSERVATIONS:

This sign, typically referred to as the 'horse', is depicted typically as above or on rear haunches. The sign was added circa the end of the Second Intermediate Period during the reign of the Hyksos with whom the horse was an important battle "weapon" (the word for horse is also borrowed from the Western Semitic '*sus*'). The animal is more often on rear haunches in artistic scenes (especially with pharaoh as charioteer) depicting battle. The so-called normal stance variation (as the one above– E6), is curiously in a startled demeanor. While the stance could denote a horse about to jump, parts of the horse such as the head tend to lean towards the interpretation of a startled horse.

E7

ass
(*Equus asinus*)




FUNCTION:

(1) determinative

(a) ass- 𐤀 (originally- y𐤀) (1)



VARIATIONS:

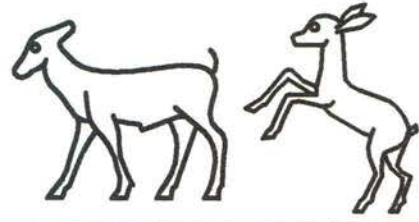
(1)  E20- 'Seth animal', often used as replacement in hieratic script

ASSOCIATIONS:

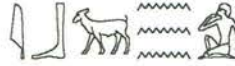
- god: Seth (7)
- sign for nome in Beni Hasan district
- nomadic groups/foreigners (especially riding) (11)
- opponent of divine powers (11)
- in way of sunrise and sunset
- ass-headed demon guards at gates of underworld
- metaphor for beast of burden
- negative: stupidity, laziness, stubbornness, lustfulness, and repugnance
- sometimes with knife in back as counter-charm (11)
- vilified in mortuary texts (especially in Late Period) (5)
- barren women (3*)
- head- man who never traveled (3*)

OBSERVATIONS:

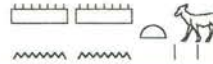
This sign, typically referred to as the 'ass', is depicted with body and head in profile, typical of the mammal group. What is interesting to note is the fact that the ears are depicted in what may be termed "semi-profile" (or semi-frontal perspective) in order to perhaps emphasize this aspect of the ass (compare with: 'kid' E8a, 'cat' E13, 'greyhound' E14, and 'jackal' E17). This may be in part one of the reasons for the early interpretations of the ear (F21) determinative in the verb "to hear" (*sdm*) being that of the ass. The emphasis of this aspect may also be a subtle pun about the stubbornness of the animal. The animal's legs may perhaps imply a creature in motion like most of the other signs in the group for mammals.

E8/8a kid/young goat**FUNCTION:**

(1) phonetic determinative

(a) kid- *ib*(b) thirst- *ibi*(2) phonetic- *ib*(a) *ibh*-priest- *ibh*

(3) determinative

(a) small cattle- flocks, goats- *wt*(b) herds- *mmnt***VARIATIONS:**

- (1)  E8a- on rear haunches, used as replacement for E8 (not prior to Dynasty XIX)
- (2) with small horns or none
- (3) sacred goat usually represented as ram
- (4) upturned tail differentiates from sometimes very similar calf

ASSOCIATIONS:

- greediness, fertility (especially of regeneration)
- small farm animals/small cattle (4)
- common man's sacrificial animal (6)
- cult center: Mendes (Egyptian- Djedet)
- (see also G31)

OBSERVATIONS:

This sign, referred to as the 'kid/young goat', is depicted typically as above or on rear haunches. The kid is sometimes difficult to distinguish from the 'calf' (E3). For this reason the sign usually differentiates itself with the characteristic upturned tail of the kid. The later variation of the kid on its rear haunches has sometimes previously been interpreted as indicating jumping. (Notice the ears (8a) in semi-frontal perspective like the ass (E7) (cf.: E13-14, E17)) This, however, may actually only represent the kid's tendency to eat the leaves of trees by standing (and perhaps also jumping) on its hind legs. Apart from the alternative sign, 8a, the sign demonstrates some of the typical characteristics of depicting mammals (i.e. motion, head and body in profile). One interpretation of the 'bad/naughty' goat standing on hind legs that has not been discussed is the idea of "lean years". It is quite common, for instance, to tell when "deer" are starving by one's ability to see straight through the woods. This means that the animals are having to get on their rear haunches in order to find food. Despite the 'bad' nature of the goat, this possibility for the origin of the "representation" is feasible. Time may be the reason for the loss of this explanation (i.e., time from the origin of sign).

E9

newborn bubalis or
bubal hartebeest
(*Alcelaphus buselaphus buselaphus*)





FUNCTION:

(1) phonetic *iw*(a) conceive– *iwr*(b) inherit– *iw^c*(2) group-writing– *i*

VARIATIONS:

(1) other depiction/hieroglyph of bubalis/hartebeest

(a)  F5– head, with characteristic horns(b)  F6– forepart

ASSOCIATIONS:

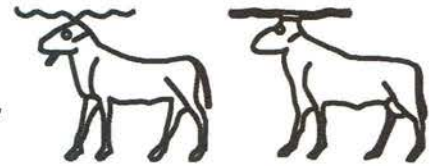
- desert (4)
- mating, giving birth (4)
- nome: Upper Egypt– 11 (5)

OBSERVATIONS:

This sign, typically referred to as the ‘hartebeest’, depicts the young newborn animal. The age of the animal is perhaps reflected by the laying down of the animal. The head and body are shown in profile while the animal’s legs are tucked underneath its body. The nascent horns are, similar to variations of the animal, in frontal perspective. Of interest to note is the tail hanging down (technically below the ground, but for Egyptian purposes probably a way of indicating an above perspective of the tail on the ground). The newborn’s horns are usually omitted in Old Kingdom examples. Of interest also is a comparison between the “pure” profile of the animal’s rather sizable ear to that of the ass (E7). Of question is the “part” hanging down from the middle of the torso (?).

E10/11**ram**

(*Ovis platyra/Ovis longipes palaeoaegypticus, and later Ovis aries platyra aegyptiaca*)

**FUNCTION:**



(1) ideogram/determinative

(a) ram-headed god 'Khnum' – *Hnmw*

(2) determinative

(a) ram– *b3*(b) sheep– *sr (zr)*(c) white flocks– *wt hdt***VARIATIONS:**

(1) other depiction/hieroglyph of ram

(a)  C4/5– ram-headed god (holding S34– 'ankh')(b)  E11– Old Kingdom form of E10(c)  F7– head(d)  F8– forepart**ASSOCIATIONS:**

- gods and goddesses: Khnum, Amon, Osiris, Ba'eb Djedet, Herishef, Ra, Shu, Geb, Kherti, and Ta-tenen, "Mendes"
- cult centers: Mendes, Elephantine, Esna, Herakleopolis, Letopolis, Thebes, Karnak, Luxor
- terrestrial divination (earth god-Book of Gates), fertility, sacrificial offering, resurrection, creation, power, and dignity (that associated with fear– head, F7)
- manifestation of 'ba' (especially Mendes) (6, 12)
- 'the hidden (god)' – Amon (10)
- unclean/impure: not fit for eating by the sanctified or as offering to the deceased (14)
- solar ram (nightly cycle) (14)

OBSERVATIONS:

This sign, typically referred to as the 'ram', depicts a ram with head and body in profile with perhaps the idea of motion. The sign was used to depict a variety of breeds, the original variation believed to have been extinct since the Middle Kingdom. The horns are curved or wavy and shown in typical Egyptian style ('perspective') being in frontal perspective, thus emphasizing this characteristic aspect of the ram. Noteworthy is the use of the male with distinctive beard in depictions such as those in the names of gods.

E12

pig
(*Sus scrofa ferus*, *Sus scrofa*
domestica)



FUNCTION:

(1) determinative

(a) pig- *rrj*(b) pig- *š3i*

VARIATIONS:

ASSOCIATIONS:

- god: Seth (as enemy of Horus)
- scavengers, aggressiveness (male), unclean/impure (especially as offerings), maternal fertility
- myths and eating: eye of Horus (moon) eaten by a pig, celestial pig eats her piglets (the stars) at daybreak (2)
- pernicious man (3*)
- with elephant- king fleeing from a fool (3*)

OBSERVATIONS:

This sign, typically referred to as the 'pig', depicts most probably a piglet. The sign is typical of mammal hieroglyphs with head and body in profile and legs in motion. The snout is long and slender implying that the species is more closely related to the wild boar. While variations may exist the curved tail of the sign is more typical of the piglet than that of a full-grown pig. The tail is arguably also shown in 'frontal' perspective much like the adaptation of emphasizing the aspect of horns on cattle as the curved nature of the tail best seen from directly behind the animal.

E13

cat
(*Felus silvestris*, *Felis chaus*)




FUNCTION:

(1) determinative

(a) cat– *miw* (*mit*)

VARIATIONS:

(1)  F22– hind quarters of lion or leopard(2)   E22/23– lion standing and laying down

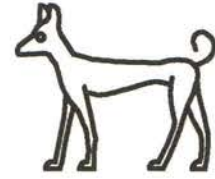
ASSOCIATIONS:

- gods and goddesses: Ra, Bastet, Tuat, Sia, Hathor, Sekhmet, Mut
- cult centers (including cemeteries): Bubastis, Speos Artemidos, Heliopolis, Abydos, Dendera, Koptos, Memphis (Saqqara), Tanis, Tell Basta, Thebes, Beni Hasan
- ‘Great Cat of Heliopolis’ (14)
- protection and defense, grace, funerary, intelligence, understanding, service, hunting, and as pets
- solar: incarnation of sun-god (male), solar eye (female) (12)
- demons of underworld (5)
- enemy of Apophis: protects rising sun from him (Book of the Dead) (12, 14)
- deterrent against mice, rats, snakes (14)
- ‘Daughter of Ra’ (9)
- naked woman, fertility, sexuality, eroticism (9, 13)
- femininity and love (1)
- moon– because of night activity, eyes shaped like crescent (Plutarch) (15*)
- moon, brings forth young in increasing number corresponding with lunar cycle (Plutarch) (15*)

OBSERVATIONS:

This sign, typically referred to as the ‘cat’, depicts a cat in a somewhat typical position of sitting upright. The head and body are in profile while the ears are shown in a semi-frontal perspective similar to the ass (E7) and greyhound (E14) (cf.: E8a, E17). Also notable is the fact that the front legs are depicted as being one, a characteristic more common to signs of emblems, etc. (also characteristic to animals not in motion). The tail of the cat is perhaps somewhat untypical being curled around the hind quarters. A comparison may be seen in sign F22 (above) where the hind quarters (of other “cats”) are shown with the tail up behind the animal.

E14






dog
(*slughi/greyhound*)

FUNCTION:

(1) determinative

(a) dog– *iw*(b) hound– *t_{sm}* (*t_{zm}*)

VARIATIONS:

(1)  C6– god with canine/jackal head(2)  E15/16– recumbent jackal on shrine(3)  E17– jackal(4)  E18/19– jackal on standard(5)  F12– head and neck of canine animal(6)  U16– sled with jackal's head

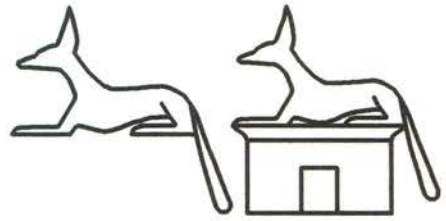
ASSOCIATIONS:

- gods: Anubis, Wepwawet, Khentimentu, Asyut, Kinshu, Horus
- cult centers (incl. cemeteries): Abydos, Memphis (Saqqara)
- hunting, guardians (police and watch dogs), pets/companions (faithfulness), mummified
- despised by villagers as scavengers and animals of the dead
- death and guides (in the netherworld)
- watch/police dogs
- scribe, prophet, embalmer, spleen, odor, laughter, sneezing, rule, judge/magistrate (canines– in general) (3*)

OBSERVATIONS:

This sign, typically referred to as the 'dog', depicts the animal with head and body in profile. The sign could be used to represent a variety of canines/dogs. Notable is the characteristic tail of the greyhound curved upwards. The ears are also depicted in semi-frontal perspective similar to the ass (E7) and the cat (E13) (cf.: E8a, E13, E14, E17)..

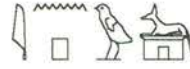
E15/16 recumbent jackal (on shrine)



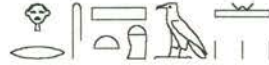
FUNCTION:

(1) ideogram/determinative

(a) Anubis– *Inpw*



(b) ‘he who is over the secrets’, ‘master of secrets’– *hry sšt3*



(2) determinative

(a) Anubis– *Inpw*



VARIATIONS:

(1) C6, E14, E17, E18/19, F12, and U16

(see E17 on following page for more information)

ASSOCIATIONS:

- god: Anubis, Wepwawet, Tentamentio, Duamutef
- cult centers: Assiut, Lykonpolis, Abydos
- hidden/guarded knowledge: “he who is over the secrets”
- death: the dead, judgement (“Weighing of the Heart”), embalming and mummification, destroyer/hunter of desert grave sights (necropolises), canopic jars (held stomach– the east), the underworld, mortuary rituals
- color black: putrefying corpses, fertile black soil, the animal (?)
- high dignitaries and judges (10)
- dragging the solar bark through the night (hence nickname *sšw* - ‘to drag’) (3)
- nome: Upper Egypt– 17 (9)
- (for more see E17)

OBSERVATIONS:

This sign, typically referred to as the ‘recumbent jackal’, depicts a canine with head and body in profile. The animal is lying down with its legs in typical characteristic positioning. The tail is hanging down or perhaps this aspect of the animal is emphasized by depicting it as it might appear when standing (see jackal– E17). The variation of the sign shows the animal on a shrine and is thought to be symbolic of a place holding secrets, an essence associated with the animal. The sign most likely represents the emblem form.

E17

jackal
(*Canis aureus*)

FUNCTION:





(1) ideogram/determinative

(a) jackal (and related words)– *s3b* (*z3b*)(b) dignitary, worthy– *s3b* (*z3b*)

(2) determinative

(a) jackal– *wnš*

VARIATIONS:

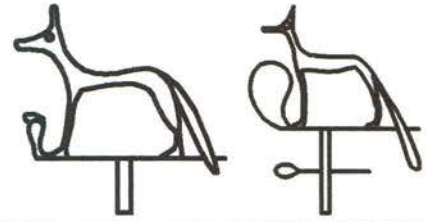
(1)  C6– god with canine/jackal head(2)  E15/16– recumbent jackal on shrine(3)  E17– jackal(4)  E18/19– jackal on standard(5)  F12– head and neck of canine animal(6)  U16– sled with jackal's head

ASSOCIATIONS:

- protective role (Pyramid Texts) (10)
- lead deceased to Osiris (10)
- ‘Lord of the Hallowed Land’ (necropolis), ‘Foremost of the divine [mortuary] booth’, ‘He of the funerary wrappings’ (10)
- *sekhem* scepter (S42), the crook (S38), and flail (S45) (10)
- (for more see E15/16)

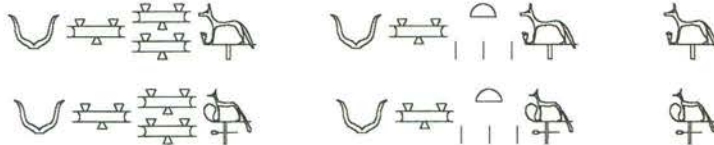
OBSERVATIONS:







This sign, typically referred to as the ‘jackal’, depicts a jackal with head and body in profile and in motion. The tail is shown characteristically hanging down (Old Kingdom versions tend to show a very long tail). The ears are in semi-frontal perspective similar to the greyhound (E14) (cf.: E7, E8a, E13).

E18/19**jackal on
standard****FUNCTION:**

(1) ideogram/determinative

(a) Wepwawet 'the jackal/wolf god',

lit. 'opener/partner of the ways'– *Wp-w3wt***VARIATIONS:**

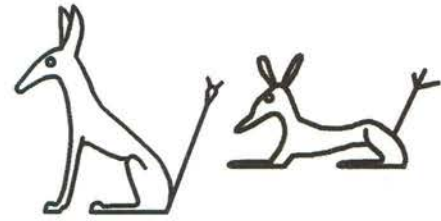
- (1)  E19– jackal on standard (Old Kingdom form with protuberance, and mace (T3) passing through the standard)
- (2)  C6– god with canine/jackal head
- (3)  E15/16– recumbent jackal on shrine
- (4)  E17– jackal
- (5)  F12– head and neck of canine animal
- (6)  U16– sled with jackal's head

ASSOCIATIONS:

- god: 'the jackal/wolf god', Wepwawet– 'Lord of the Dead'
- 'opener of the ways'– epithet for hunting dogs and jackals
- outrider (2)
- emblem placed at head of royal processions for Wepwawet (2)
- (for more see E15/16, E17)

OBSERVATIONS:

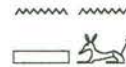



This sign, typically referred to as the 'jackal on standard', depicts an emblem of a jackal (sometimes considered the black jackal, wolf or other canine?). The wolf is shown with head and body in profile and has the somewhat characteristically four legs shown in two representative form of emblems. This slight alteration in the representation of the animal may be a way of differentiating signs that represent a living creature from those that represent images of living creatures (?).

E20/21**animal of Seth,
recumbent****FUNCTION:**

(1) ideogram

(a) god Seth– *Sth*, *Štš* (*Zth?*)

(2) determinative

(a) turmoil– *hnnw*(b) be in confusion– *sh3*(c) storm, rage (v)– *nšni***VARIATIONS:**(1)  C7– ‘Seth-headed god’(1)  E21– ‘recumbent Seth animal’, used as replacement for E20(2)  E7– ‘ass’, often used as replacement for E20/21 in Middle Kingdom hieratic(3)  E27– ‘giraffe’, often used as replacement for E20/21 in Middle Kingdom hieratic**ASSOCIATIONS:**

- god: Seth, Ba'al (determinative in name—see 3)
- desert and foreign lands, led to association as overlords (6, 8)
- evil (particularly with agricultural people of the Delta)
- emblem: 11th nome of Upper Egypt (6)
- patron deity of Ramesside pharaohs (19th/20th Dynasties) (8)
- solar theology: stood on bow of sun god's bark (M.K.) (8)

OBSERVATIONS:

This sign, typically referred to as the ‘Seth animal’, depicts an animal with head and body in profile. The theories on the exact species of the animal covers the spectrum: aardvark, okapi, canine, antelope, and pig. For this reason the animal has been thought of as being mythical in nature. In Old Kingdom versions of the sign the tail is sometimes distinctly represented as a feathered arrow. The seated version of the animal has a posture similar to the cat (E13) with ears in semi-frontal perspective (cf.: E7, E8a, E13, E14, E17). The recumbent version of the creature is depicted in what might be considered a characteristic posture (of what animal?). Noteworthy, however, is the variation between the ears of E20 and this one which is in full-frontal perspective (similar to the horns of cattle such as E1).

E22




lion
(*Panthera leo*)

FUNCTION:

(1) ideogram/determinative

(a) lion- *m3i*(b) lioness- *m3t*

VARIATIONS:

(1)  E23- recumbent lion(2)  F4- forepart of lion(3)  F22- hind quarters of lion or leopard

ASSOCIATIONS:

- gods and goddesses: Aker, Mahes, Pakhet, Shu, Tefnut, Sekhmet, Bastet, Mut, Harmachis, Ruti, Horatkhi, Horus, Hor-em-akhet, Ra, Ra-Atum, Herakhty, Apedemak (Meroe/Nubia)
- cult centers: Lentopolis, Speos Artemidos, This, Meroe, Thebes
- royal and divine iconography (3)
- power, ferocity, protection, sovereignty, strength, valor, regeneration, defensiveness, intelligence, aggressiveness, rage, courage, terror, pharaoh
- patron of medicine (Sekhmet) (7)
- guardian of temple gateways, horizon, pharaoh's necropolis, underworld (entrance and exit), and royal throne (12, 14)
- horizon (yesterday and tomorrow) (15)
- sphinxes (1, 15)
- battle: with pharaoh and his chariot (3)
- door bolts, chairs, thrones, beds, headrests: in order to strengthen or protect (14)
- front half represents someone preeminent (chief, important person) (10*)
- guard, strength, fear, rising Nile, immeasurable danger, conceived woman (lioness) (4*)

OBSERVATIONS:

This sign, typically referred to as the 'lion', depicts a lion standing with head and body in profile and in motion. The tail hangs down and may or may not be longer than characteristic as it hangs on the ground. The glyph represents the male, as seen by the mane, but often is represented as a female.

E23





recumbent lion
(*Panthera leo*)

FUNCTION:

(1) ideogram

(a) lion-*rw*(b) the Two-lion-god Ruty-*Rwty*(2) phonetic-*rw*(a) gate-*rwyt*(b) river-*itrw*(3) group-writing-*r*(a) 'Gerar'-*Krr*

VARIATIONS:

(1)  E23- recumbent lion(2)  F4- forepart of lion(3)  F22- hind quarters of lion or leopard(4)  U13- 'plow', used with E23 in Middle Kingdom hieratic
(hold back)

ASSOCIATIONS:

- embodies vigilance (myth that eyes are never shut) (10*)
- (for more see E22)

OBSERVATIONS:

This sign, typically referred to as the 'recumbent lion', depicts a lion laying down in a characteristic manner with head and body in profile. Notable is the fact that the tail wraps around the rear haunches and curves up- and backwards. A comparison with F22 (above) may show an interesting difference in this aspect of the lion.

E24

panther/leopard



FUNCTION:


(1) ideogram/determinative (panther, leopard)

(a) panther/leopard– *3by*(b) leopard– *b3*

(2) other name

(a) panther of the south (leopard)– *3by šm^c*

VARIATIONS:

(1)  F9– head of leopard (*b3*)

ASSOCIATIONS:

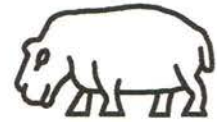
- goddess: Mafdet (mistress of punishment and helper of the deceased), Nut
- magical power (skins used by certain rank of priests– spots like stars) (4, 5)
- conquerer of the dead (death-defying power) and regeneration
- apotropaic (4)
- funerary, protection, hunting, pets
- present to pharaoh (5)
- good and evil (4)
- man who concealed evil deed (3*)

OBSERVATIONS:

This sign, typically referred to as the ‘panther/leopard’, depicts either a panther or leopard with head and body in profile and in motion. The artist often appears to confuse the markings of the two animals on both the animal and its skins. Noteworthy is the demeanor and posture of the animal. With its low tail and lowered head it gives the impression of an animal stalking or about to strike its prey. Also note the lowered ears in comparison to other mammals which seem to substantiate the stalking/striking interpretation.

E25

hippopotamus




FUNCTION:

(1) determinative

(a) hippopotamus- *db*(b) hippopotamus- *dib*(c) hippopotamus- *h3b*

VARIATIONS:

(1)  F3- head of hippopotamus

(2) sometimes drawn on smaller scale to minimize magical influence

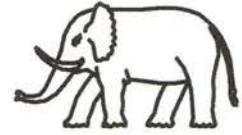
ASSOCIATIONS:

- gods and goddesses: Seth, Thoeris, Opet, Taweret, Horus, Herpest, Isis, Nut, Hathor
- cult centers: Edfu
- good and evil (5)
- apotropaic (10)
- positive: fertility, motherhood (maternity/childbirth) protection, masculinity, vigor, benevolence, power, protection, regeneration, appetite
- negative: disorder, epitome of fear, crop damage, aggression, ferocity
- forces of chaos (9)
- river and marshy areas, the flood of Nile (6)
- Late Period used to write word 'heavy' (*dns*, *wdn*) (3)
- slayed by Horus ('Horus Myth') (12)
- the unjust and ungrateful (2 claws) (4*)
- shamelessness and incestuousness (Plutarch) (4*)

OBSERVATIONS:

This sign, typically referred to as the 'hippopotamus', depicts an animal with head and body in profile. The hippopotamus is depicted in a characteristic manner with its head down grazing. The animal, which was known for its dangerous and aggressive nature, is noticeably not shown with its mouth open (a characteristic of the angry hippopotamus). Knowing that the sign carried with it connotations of power, particularly evil, the portrayal of the animal in a more calm and docile state may have been done in order to appeal to this aspect of the creature.

E26

elephant
(*Loxodonta africana*)

FUNCTION:

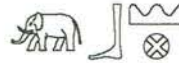
(1) determinative

(a) elephant– 3bw




(2) semi-phonetic/ideogram

(a) Elephantine– 3bw



VARIATIONS:

(1)  F18– tusk of elephant

ASSOCIATIONS:

- Elephantine– ‘city of the Elephants’ (marketplace for ivory) (2)
- powerful instrument of battle (Hellenistic era) (2)
- ivory (8)
- name of 1st province of Upper Egypt (cap. Elephantine) (7)
- domesticated, hunted, and capture
- with pig– king fleeing from a fool (3*)
- strong man sensitive to what is expedient (3*)
- man who prepared his own tomb (elephant tusk) (3*)

OBSERVATIONS:

This sign, typically referred to as the ‘elephant’, depicts a non-aggressive creature with head and body in profile and in motion. The size of the ears indicates that the sign was derived from that of the African elephant which is known for its smaller ears than the Asian elephant. The trunk of the elephant is essentially just swinging in front of the creature and does not necessarily hint at any particular action. The tail of the animal may be depicted as being longer than is characteristic, perhaps in order to achieve a form of balance in relation to the trunk of the elephant in the sign.

E27

giraffe
(*Giraffa camelopardalis*)

FUNCTION:

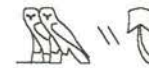
(1) ideogram/determinative

(a) giraffe- *mmy*


(2) determinative

(a) foretell- *sr*

(1) name

(a) giraffe- *mmy*

VARIATIONS:

(1)  E20- 'Seth animal', confused with in Middle Kingdom hieratic

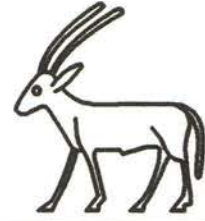
ASSOCIATIONS:

- parades of African tributes (Theban tombs) (2)
- words dealing with oracle and prophecy- 'to foretell', 'to foresee', 'to predict'
- magical powers (skin) (6)
- remarkable observer (5)

OBSERVATIONS:

This sign, typically referred to as the 'giraffe', depicts the animal with head and body in profile. The question of motion is less likely because of the general posture of the animal. Noteworthy is the fact that the small horns and ears are depicted in frontal perspective in contrast to the profile of the animal. Words associated with the animal (see above) reflect the most recognizable characteristic of the giraffe, the long neck, which enables it to see quite a distance.

E28

oryx
(*Oryx gazella*)

FUNCTION:

(1) determinative

(a) oryx- *m3ḥd*

VARIATIONS:

ASSOCIATIONS:

- gods and goddesses: Seth, Satis/et, Anuket, Reshep/Reshef, Horus, Ra, Sokar, Isis
- cult centers: Sehel, Komir
- desert (9)
- emblem of 16th nome in Upper Egypt (6)
- grace, elegance (9)
- dual personality (good/evil): domesticated, sacrificial victim, valued for meat, yet symbol of enemy to be vanquished
- sacred to places where desert economic and cultural value (3)
- impurity (3*)

OBSERVATIONS:

This sign, typically referred to as the 'oryx', depicts the animal with head and body in profile and in motion. The horns are in semi-frontal perspective similar to the ibex (E30) and goat (E31), however marking a noteworthy difference from both cattle and the gazelle (E29). The tail also hangs down as is typical.

E29

gazelle
(*Gazella dorcas*)

FUNCTION:

(1) determinative

(a) gazelle- *ghs*

VARIATIONS:

ASSOCIATIONS:

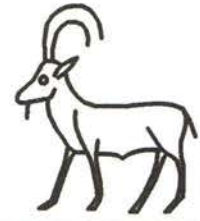
- gods and goddesses: Seth, Hathor, Anuket, Reshef, Satet
- cult center: Komir
- Reshef wears horns of gazelle (4)
- desert (7)
- grace, elegance (7)
- epithets: 'lady of heaven', 'mistress of the gods'
- dual personality (good/evil): domesticated, sacrificial victim, valued for meat, yet symbol of enemy to be vanquished
- sacred to places where desert economic and cultural value (2)
- nome: Upper Egypt- 16 (7)

OBSERVATIONS:

This sign, typically referred to as the 'gazelle', depicts the animal with head and body in profile and in motion. The horns are also depicted in profile in contrast to the perspective similar of the horns of the oryx (E28), the ibex (E30) and the goat (E31). Note the characteristic stance of the tail.

E30

ibex



FUNCTION:

(1) determinative

(a) *ibex-n3w*(b) *ibex-nr3w*(c) *ibex-ni3 (ni3w)*

VARIATIONS:

ASSOCIATIONS:

- desert (5)
- grace, elegance (5)
- dual personality (good/evil): domesticated, sacrificial victim, valued for meat, yet symbol of enemy to be vanquished
- sacred to places where desert economic and cultural value (2)

OBSERVATIONS:


This sign, typically referred to as the 'ibex', depicts the animal with head and body in profile and in motion. The horns are in semi-frontal perspective similar to the oryx (E28) and goat (E31), however marking a noteworthy difference from both cattle and the gazelle (E29). The tail is also hanging as is characteristic.

E31

goat with collar
carrying cylinder seal

FUNCTION:


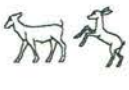

(1) ideogram

(a) goat- *s^ch* 

(2) ideogram or determinative

(a) rank, dignity, and related words- *s^ch*

VARIATIONS:

(1)  F26- skin of a goat(2)  E8/E8a- kid/young goat (original sign from Old Kingdom)(3)  S20- 'seal', sometimes replaces sign (especially in funerary texts)

(4) sometimes found in position of E8a on rear haunches (Dynasty XIX)

(5) without seal around neck- ideographic for 'greed'- *ʒf^c*

ASSOCIATIONS:

- small cattle (7)
- with seal around neck represents nobility (6)
- greed (without seal around the neck) (4)
- fecund man- because goat "covers" female 7 days after birth, and matures faster than other animals (3*)
- man of sharp hearing- because goats breathe through nostrils and ears (3*)

OBSERVATIONS:

This sign, typically referred to as the 'goat', depicts the animal with head and body in profile and in motion. The horns are in semi-frontal perspective similar to the oryx (E28) and ibex (E30), however marking a noteworthy difference from both cattle and the gazelle (E29). Noteworthy is the seal around the neck (cf.: E4) and the distinctive and characteristic beard on the goat.

E32

sacred baboon
(*Cynocephalus hamadryas*/*Papio hamadryas*)



FUNCTION:

(1) determinative

(a) sacred baboon– *iʿn*(b) monkey (generic)– *ky*(c) be furious– *knd*

VARIATIONS:

(1) this variation of the sign (Gardiner variation) is actually less common than the variation of the 'seated baboon' (i.e. like in images associated with Thoth)



ASSOCIATIONS:

- gods: Thoth, Osiris, Ra, Hapi, Khonsu, Shu, Atum, Baba (baboon deity)
- cult centers: Hermopolis, Abydos
- four sons of Horus (13)
- sits at four corners of the Lake of Fire in the Underworld (Book of the Dead) (13)
- strength, lust, sexual potency, ferociousness, aggressiveness, wisdom and science, judgement, writing, excellence, companion, fury
- moon, sunrise and sunset, the solar bark, canopic jars (lungs–north)
- greeting the solar orb (13)
- bases of obelisks (12)
- police/security animals (10)
- Judgement Halls of Osiris (weighing souls) (6)
- inhabited the earth, letters, priest, anger, moonrise, equinoxes (4*)

OBSERVATIONS:

This sign, typically referred to as the 'baboon' (Gardiner variation), depicts the animal with head and body in profile and in motion. The animal is in a typical "strolling" posture. The animal is, like the hippopotamus (E25), not depicted in its more aggressive state thus reflecting only its docile side. The relaxed posture of the tail also reflects a calm state of the baboon in the sign. The more typical version of the hieroglyph, the 'seated baboon', depicts the baboon in a very humanlike posture with hands on its lap. The animal is depicted also in profile and in a very common manner as is seen in nature.

E33

monkey



FUNCTION:

(1) determinative

(a) monkey- *gf*(b) monkey- *gif*

VARIATIONS:

ASSOCIATIONS:

- pets (5)
- amusement and comic appeal (5)
- performers (8)
- man with heir he hates (3*)
- man concealing inferiority (3*)

OBSERVATIONS:

This sign, typically referred to as the 'monkey', depicts the animal with head and body in profile. The demeanor of the monkey perhaps reflects that it is picking up food and eating or even playing. Similar to the sign for the baboon, the monkey sign also reflects its more docile nature as opposed to its fits of "madness" or "aggression". The tail is also in a rather relaxed position

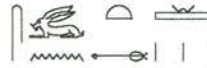
E34

desert hare

(Lepus aegyptiace/Lepus capensis)

FUNCTION:

(1) determinative

(a) hare- *sh^ct*

(2) phonetic

(a) be- *wnn*(b) sale- *swnt*

VARIATIONS:

ASSOCIATIONS:

- gods and goddesses: Ra, Osiris, Wenet, Iunit
- cult centers: Hermopolis, Hermonthis
- desert, rising sun and resurrection (power), reproduction and fertility, fecundity, speed, eternity, moon
- Ra's rising as the sun (2)
- offering (9)
- decoration motif (9)
- specific names (of people) (5)
- sacred animal of Wenet (15th nome of Upper Egypt) (11)
- nome: Upper Egypt- 15 (12)
- esteemed because of divine qualities and its swiftness (Plutarch) (11) *
- listening, acute senses, opening (always stay open) (3*)

OBSERVATIONS:

This sign, typically referred to as the 'hare', depicts the animal lying down with head and body in profile. The ears are in semi-frontal perspective similar to the ass (E7) (cf.: E8a, E13-14, E17, E20/21). Noteworthy is not only the size of the ears but the distinctive and characteristic teeth and whiskers.

10.3 Comments and Observations about the Hieroglyphs for Mammals

Mammals are depicted in Egyptian hieroglyphs in much the same manner that modern people would depict them having only exceptions which reflect the thoughts of the ancient Egyptian themselves. When one wants to catalogue or identify cattle, dogs, etc. the catalogue will most often represent the animal in *profile*. This was the case with the ancient Egyptians. Thus the initial stage of representation can be understood as being typical of humankind. From here, one sees the emergence of the ancient Egyptian and a reflection of his/her “world-view”.

The Egyptian preoccupation, if you will, with balance, nature, and life finds itself in every aspect of their lives right down to the “letter”. Of the differing “aspects” of mammals which reflect the Egyptian mind are: the head (horns, ears, decoration), legs, posture, demeanor, and tail. Each of these aspects were often separated, changed in perspective, and then *added* onto the animal in profile. It is because the processes involved in such are mental processes entailing the deconstruction, thought and/or planning (at least on the cognitive level), and reconstruction that it can safely be said that the final product of such will and does reflect the person from whence it came. And though hieroglyphs were often “codified” very early (i.e. perhaps centuries prior to someone in “X” period of Egyptian history using the sign), these depictions were, even to the illiterate, reflections of the Egyptian mind and attitude towards his/her world. The reason for this is that what existed was a system of characteristically representing the world which was a part of the ancient Egyptian’s life. This “life” was seen around the Egyptian in temples, in trees, and even “mentally” in the stories with which they lived. Therefore, it is the belief of the author that codification by a few (i.e. priestly class, scribes) can be said to have been done in not only a recognizable form for the literate, but also for the illiterate to appreciate the beauty and life which hieroglyphs were and are.

The first aspect to discuss is the *head* of the “Egyptian mammal”.¹ Mammals are most often portrayed, as with other animal hieroglyphs, in a way which reflects the nature of the animal, the perceived nature of the animal, and/or connotations which the animal has. Animals such as cattle have horns which are always depicted in what is called, for our purposes here, “frontal” perspective. This appears to have been done in order to distinguish breeds, sex, and even the demeanor of the animal

(cf. E2, aggressive bull). The use of frontal perspective of horns is also used with the giraffe and rams but animals such as “antelope” and the like (i.e. gazelle, ibex, oryx, goat) are depicted differently. With the exception of the gazelle which has its horns along with its body depicted in profile, other antelope and the like (including the goat) have horns depicted in what is called here “semi-frontal” perspective. The horns for these are separated spatially, usually with one horn (often the one furthest)

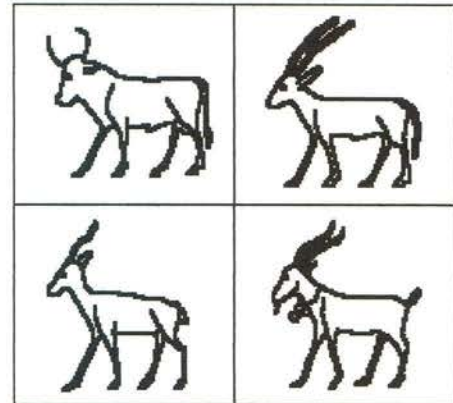


Fig.46: Examples of differing uses of the perspective of horns for various emphasis (aggression, species, etc.).

depicted as being somewhat smaller giving the impression of a perspective that is not quite frontal yet not quite profile, lending itself to an almost angular perspective. The perspective chosen for the representation of horns, though varying, most often reflects an emphasis of a particular attribute which may be most recognizable to those who view the hieroglyph. It is difficult to say whether or not animals which have similar perspectives of their horns were grouped by the ancient Egyptians, at least artistically, but certain similarities suggest that this may have been the case. For example, both wild and domestic cattle are similar in appearance and have horns from frontal perspective. Antelope and goats, which can be said to have certain physical similarities, are also almost without exception depicted from semi-frontal perspective. While it is acknowledged that such hypothesizing is on loose ground, this and questions similar are necessary to ponder in order to understand the relationship between the Egyptian mind and the hieroglyph or animal.

The next characteristic which is important to analyze is the perspective of *ears*. The majority of mammals which are depicted in profile have ears that are also in profile. The exceptions that occur include canines (wolf, jackal, dog, and Seth animal), the ass (E7), cats (E13), and the hare (E34). Each of these animals has very distinctive ears. Interestingly

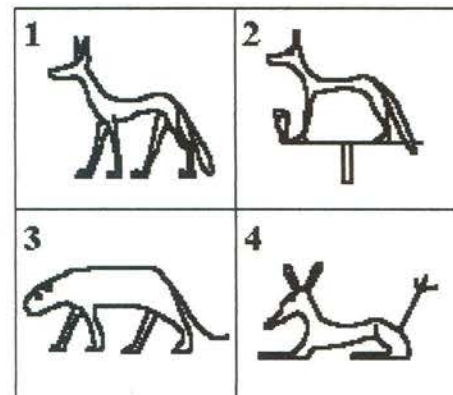
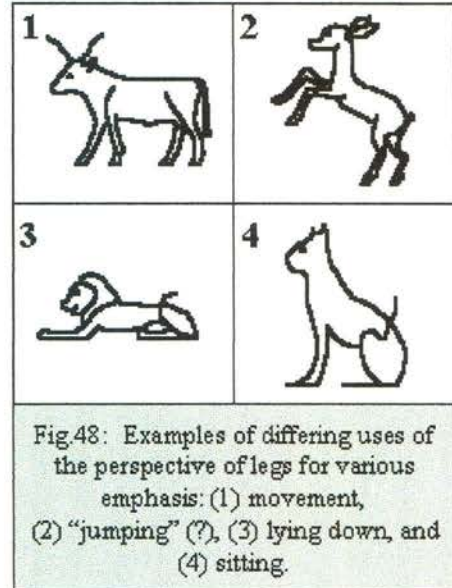


Fig.47: Examples of differing uses of the perspective of ears for various emphasis: (1) semi-frontal, (2) “emblematic”, (3) “stalking”, and (4) frontal.

¹ The wording “Egyptian mammal” is used here not to reflect the idea that the animal was necessarily Egyptian, but to reflect the idea that it was “how” the Egyptian viewed such, thus reflecting an “Egyptianization” of the animal.

enough, each of these animals also distinguishes itself with a particular perkiness of their ears with sound. It is perhaps for these two reasons that these characteristics are emphasized. It should be noted that in cases where the non-living animal is depicted such as in the case of a hieroglyph of an emblem, etc. (cf. E15/16), the ears and the body are shown in pure profile perspective. Other depictions of the ears include depictions of the Seth animal lying down with ears in full frontal perspective and the cat or hare with ears in semi-frontal perspective. The reasons for the Seth animal exception are as questionable as the answer to what (if any) living creature it represents.

The next aspect to examine is the *legs*. The legs of mammals are most often depicted in semi-frontal perspective, showing all four legs "spread" out. The spacing of the legs often suggests that the Egyptian chose to reflect the idea of motion in these animals, such as walking or "jumping". While this idea may be questionable in examples such as the cow suckling calf (E5), there is often a noticeable difference in posture which can explain the exception as front legs spread for balance (see fig. 77 for a comparison of the Mesopotamian



cow suckling calf in which the hind legs are closed together). Even the baboon (Gardiner variation-E32) and monkey (E33) which are both quadrupedal and somewhat bipedal express some form of motion in their four leg depictions. The hypothesis over motion may best be seen by contrasting hieroglyphs in "motion" with those of inaction.

When the Egyptian wished to depict an animal which was still, or even hieroglyphs which were of non-living mammals, they chose a process of diminution. The Egyptian diminished four legs into two legs, giving the impression of a pure perspective of profile. This process was used for animals seated and lying down.² The exceptions which occur include variations of cats (mostly in "art") in which one paw is playful or in action (active). It is a comparison of the perspective representation of the legs of mammals which leads one to believe that the Egyptians were motivated to do so, possibly by the most simplistic reason, to differentiate figuratively and physically motion and stillness.

The *posture* and *demeanor* of the mammal is also important to examine. Posture helps hint at the possible motion or inaction which is meant. It is a subtle means of adding one more characteristic, real or perceived, of the animal into hieroglyphic form. Part and parcel with posture is the animal's demeanor. This may include shaping of the body, turns of the head, etc. The typical hieroglyphic depiction of the horse curiously shows an animal which appears to be startled. The posture and demeanor of the horse can be compared with both the pull of the reins and/or a horse which refuses to do something (such as jump a fence or go down a steep hill). The reason for this is unknown. It is also a great contrast from the artistic depiction (which also finds its way as a variation of the hieroglyph) which shows a mighty, powerful and aggressively "jumping" horse. Another mammal whose posture and demeanor suggest added "characteristics" is the panther/leopard (E24). The posture of the cat is depicted in such a way as to suggest a crouching, stalking animal. The head is bent slightly down as one would see in the wild while even the slow sloping of the tail enhances the dangerousness of this creature. While the animal's legs are "in motion" it can be seen as a subtle hint at the coming strike. The final two hieroglyphs to discuss in terms of their posture and demeanor are the baboon (E32- Gardiner variation) and the monkey (E33). The baboon is depicted in a fairly docile manner, "walking/crawling" along. The posture is such that it reflects a confident baboon. The back is straight, the chest high, and the tail is hanging. This depiction of the baboon may be a reflection of the guard-ape role which it played, full of power, and feared by wrong-doers. The monkey, on the other hand, is shown on four (technically on two and leaning forward using hands) picking at and perhaps picking up food to eat. The tail is swinging above the animal for balance. The overall impression given by the monkey hieroglyph is a mixture between the wild foraging monkey and the playful and mischievous one. It is quite possible that the Egyptian recognized these contrasting states of the animal and chose to represent it subtly in the hieroglyph itself.

The final aspect of mammals to discuss is the *tail* or *rear-end*. Tails on mammals vary greatly. In some cases the tails of the animal are exaggerated in the hieroglyph, perhaps to emphasize this distinctive part or its characteristics. For example, the "jackal" and other canine often have extremely long tails. This emphasis may be related to the use of the skins, particularly the tails of these kinds of animals. The tails of mammals may also be used to distinguish a particular

² Emblems, which are also diminished should be examined within the context of their "perspectivity",

animal (i.e. one from another). The greyhound (E14) is shown with a distinctive tail curved upwards while the pig (E12) is also depicted with a curved tail. Other animals such as the goat/kid (E8, E8a, E31) are depicted with distinctive upturned tails. Even the baboon and monkey whose depiction by poorer artists could leave a question could still be distinguished by the differences in the tails.

The other aspect of the tails of mammals to discuss is their perspective. While most often tails are depicted in profile, exceptions do exist.

These exceptions reflect both a tendency and desire to reflect a particular characteristic of the animal which would not be visible in profile. An example of this is the recumbent dog (or jackal) which when lying down, one would be unable to see the characteristic tail of the canine. The tail would naturally also be lying on the ground (with the exception of the emblem which would have the tail naturally hanging "off the side"— E16). In order to compensate for this shortcoming, the Egyptian chose to depict the above perspective of the tail in this position (or arguably the tail in profile while standing).³ Another example of this is the pig (E12). Most often, the pig's distinctive curly tail would not be seen or "clear" in profile. However, by depicting the tail of the pig from frontal perspective (from behind the animal of course), and adding it to the profiled hieroglyph the characteristic tail becomes more visible.

With the hieroglyphs for mammals one can see a conscious effort to alter and/or modify natural perspective into hieroglyphic form. Through the use of emphasizing certain aspects via the piecing together of various perspectives of the animals, one can see not only the characteristic or distinctive aspects of the animals, but also what the Egyptian considered important. This importance reflects a combination of attitudes (towards the environment, etc.), vision, understanding, and connotation (including religious importance and mysteriousness). By attempting to see the puzzle before it is pieced together one can see inside the mind of the ancient Egyptian and take a step towards a better understanding of the people who chose this particular method of written communication.

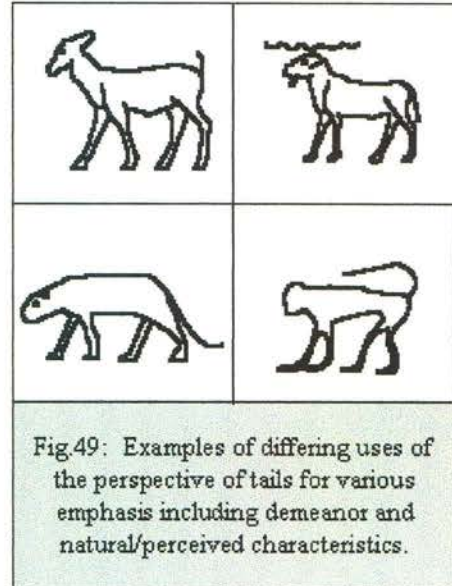


Fig.49: Examples of differing uses of the perspective of tails for various emphasis including demeanor and natural/perceived characteristics.

that of the depiction of non-living objects.

³ Whichever perspective was adapted is unimportant since the fact that a conscious decision to alter or modify natural perspective into the hieroglyph was still made.

11. Birds: Group G

11.1 Introduction

11.2 Analysis

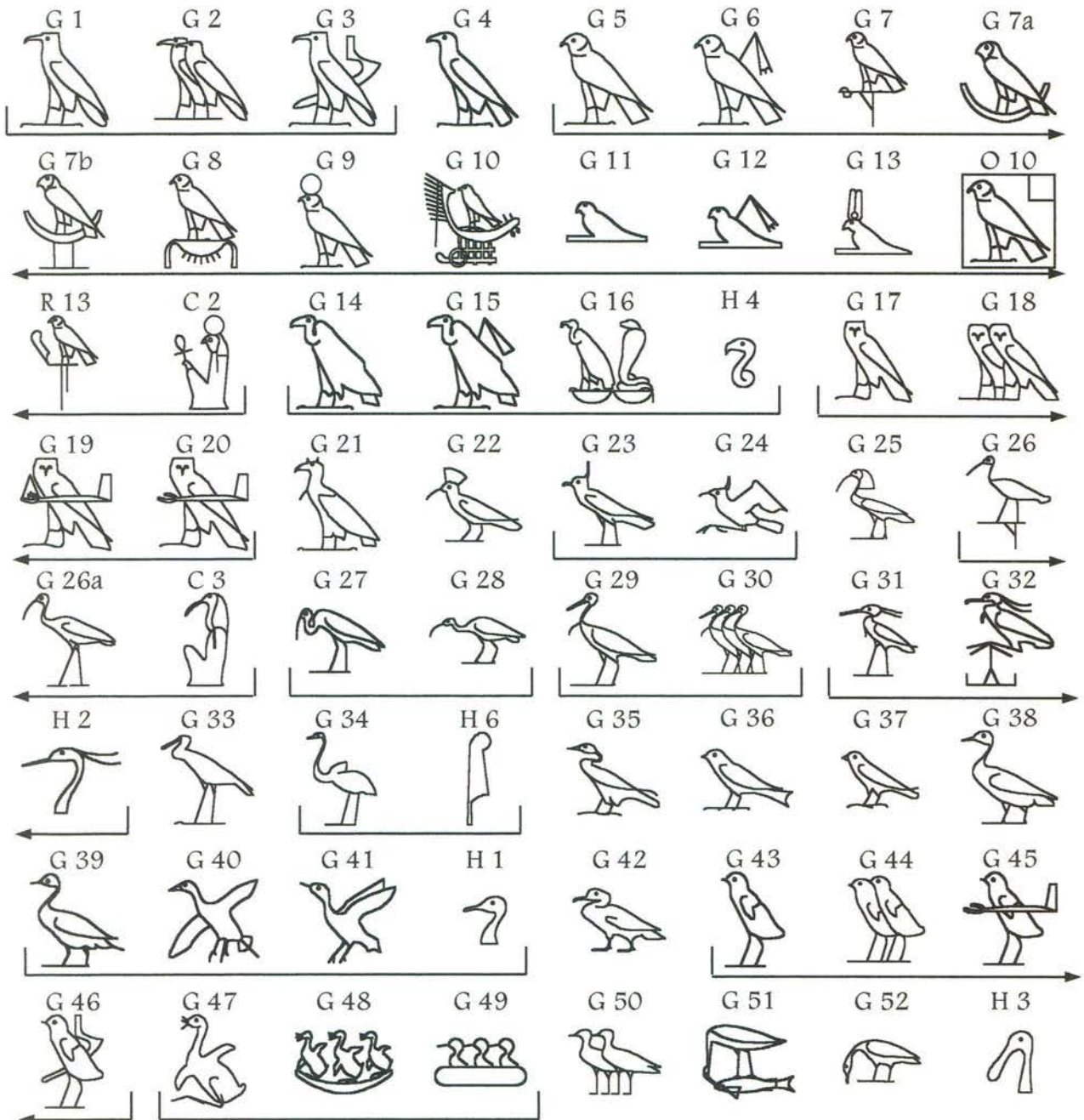
11.3 Comments and Observations about the Hieroglyphs for Birds

11.1 Introduction

In this section the hieroglyphs for birds are examined. For reasons stated in the introduction, the structuring for the signs for variations (including emblematic signs, etc.) are done on pages following the “original” sign. Below is a list of signs that are discussed in this section (including ‘groupings’). At the end of the section there will be a general set of observations, conclusions, and perhaps questions related to a particular Gardiner group of signs.

11.2 Analysis

Group G (variations from Groups C, H, O, and R in order of appearance except when sign is discussed in more detail):



G1

Egyptian vulture

(Neophron percnopterus)

**FUNCTION:**

(1) ideogram (vulture)



(2) determinative

(a) kite- *dryt*

(3) phonetic- 3

VARIATIONS:(1) often indistinguishable from  G4- 'the long-legged buzzard'

(2) G2 and G3 (see following page)

ASSOCIATIONS:

- goddesses: Isis, Nephthys
- "the two kings" (4)
- birds of prey (3)
- funerary (3)
- pharaoh sometimes takes form of as he rises to the sky (8)
- areas of human settlement (7)
- "pharaoh's hens" (7)

OBSERVATIONS:

This sign, typically referred to as the 'Egyptian vulture', depicts the bird in profile. The distinctive feathers on head and bare spots are visible and can be seen in detail. Like most birds the claws, beak, feathers, and wings are also drawn to characteristic form. Noteworthy is the fact that the legs are in semi-frontal perspective. This sign is very rare in art (one example from a tomb at Thebes).

G2-3

Variations of Egyptian Vulture



G2- Two Egyptian vultures (G1) as monogram

(1) phonetic- ʒʒ

(a) 'see²- mʒʒ



G3- Combination of Egyptian vulture (G1) and sickle (U1)

(1) phonetic- mʒ

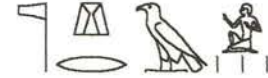
(a) 'renew²- smʒwy





G4

the long-legged buzzard
(*Buteo ferox/Buteo rufinus*)

FUNCTION:

(1) phonetic– *tyw*(a) ‘necropolis workmen’– *hrtyw-ntr*(b) ‘welcome ye!’– *i·tywn(y)*

VARIATIONS:

(1) often indistinguishable from  G1– ‘Egyptian vulture’(2) replaces  G7– ‘falcon of Horus on standard’ sometimes during Old Kingdom and Late Period (see below)

ASSOCIATIONS:

- divine determinative in Old Kingdom and in names of persons during the Late Period (3)

OBSERVATIONS:

This sign, typically referred to as the ‘long legged buzzard’, depicts the bird in profile. It is often confused with the Egyptian vulture (G1) or is indistinguishable due to roundness of the head or lack thereof. Similarly to most bird hieroglyphs, the sign is shown in an erect posture. The claws, beak, feathers, and wings are also drawn in a distinctive manner reflecting the natural characteristics of the bird. Noteworthy is the fact that the legs are in semi-frontal perspective.

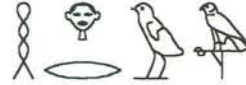
G5

falcon/hawk

(exact species ?, *Falco sp.* possibly *Falco peregrinus*)

**FUNCTION:**

(1) ideogram

(a) 'the falcon-god Horus'– *Hrw* (Horus)**VARIATIONS:**

(1) G6 – G13 (see following pages)

ASSOCIATIONS:

- gods and goddesses: Horus, Horus Khenty-Kety Ptah, Osiris, Ra-Harkhty, Ra, Mont, Horemakhet, Hathor, Sokar, Montu, Mandulis, Sopdu, Hor-Behedeti, Khons, Isis, Nephthys, Ptah, Serket (Selket), Pataikos (Late Period, minor amuletic deity)
- cult centers (including cemeteries): Memphis (Saqqara), Per-Soped, Edfu, Hierakonpolis
- *ba* of Horus (14)
- west, necropolises, pharaoh ('the great falcon'), royalty and the monarchy, protection, heavenly and 'dynastic' gods, Lower Egypt
- celestial: transfiguration of the sun, moon, sky, the east (sunrise)
- epithets: 'Horus of the horizon', 'the distant one', 'he who is far'
- the *shen* = eternity (14)
- *serekh* frame (early cartouches)– mounted with falcon on top (14)
- canopic jar– Qebhsenuf: west, held the intestines (14)
- 'golden Horus name' of pharaoh: one of five names/titles of the pharaoh, perceived to be an association with some form of the concept to be 'superiority over foes'
- royal ancestors (of Pe) (16)
- nomes: Upper Egypt– 2, 5, 18; Lower Egypt– 3, 20 (14)
- symbol for god, superiority, victory, Ares, Aphrodite (4*)
- symbolic of god, soul (Plutarch) (4*)

OBSERVATIONS:

This sign, typically referred to as the 'falcon', depicts the bird in profile. The rounded head and unique beak help to distinguish this bird. The feathers and claws are also drawn in a distinctive and characteristic manner. Notable is the fact that the legs are in semi-frontal perspective. Variations of signs with the falcon depict the bird the same as in G5 with the exception of hieroglyphs what may be either "images" of non-living variations (i.e., emblems, etc.) or mummified (?) versions (G11-13) which take silhouette forms with legs stretched out forward in front of the body.

G6-10


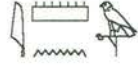




Variations of
Falcons (page 1)

G6- Falcon with flagellum (S45)

- (1) determinative
(a) 'falcon'– *bik*





G7- Falcon of Horus on standard (R12)

- (1) determinative (O.K./archaic– used for gods and pharaoh)
- (a) 'Horus'– *Hr(w)* 
- (b) 'Amun'– *Imn* 
- (c) 'king/pharaoh'– *nsw* 
- (d) 'divine'– *ntr* 
- (2) ideogram in 1st person singular (when referring to pharaoh)
- (a) 'I/me'– *wi* 
- (b) 'he who is privy to the secret of the god's words'– *hr sšt n ntr* 



G7A/G7B- Falcon in boat and variant form

- (1) ideogram
- (a) god of 12th nome of Upper Egypt 'Anty'– 'nty' 
- (a) god 'Nemti'– *nmti* 



G8- Falcon of Horus on sign for gold (S12)

- (1) ideogram/title (?)
- (a) in title of pharaoh 'golden Horus name',
'Golden Falcon title'– *Hr/bik n nbw*



G9- Falcon of Horus with sun on head (N5)

- (1) ideogram/title (?)
- (a) the composite god 'Ra-Harakhti'– *R^c-Hr-3hty* (*R^c-Hrw-3hty*)

G10-13, O10, R13, C2

Variations of Falcons (page 2)



G10- Falcon on a special sacred bark

(1) determinative

(a) the god 'Sokar'– *Skr* (*Zkr*)



(b) 'the *hnw* bark (of Sokar)'– *hnw*



G11– Archaic image of falcon (mummified?)

(1) determinative

(a) 'divine image'– *šm* (also in *šm*, *šm*)



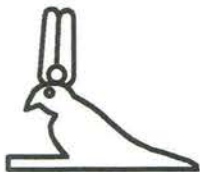
(b) 'breast'– *šnbt*



G12– Archaic image of falcon with flagellum (mummified?)

(1) determinative (like G11)

(a) 'divine image', 'idol'– *šm*



G13– Archaic image of falcon with double plumes (S9)
(mummified?)

(1) determinative

(a) the god 'Horus of Nekhen'– *Hr Nšn(y)*



(2) ideogram

(a) the god 'Sopd'– *Spdw*



O10– Combination of enclosure seen in plan (O6) and falcon (G5)

(1) variant (phonetic?)/ideogram

(a) the goddess 'Hathor'– *Ht-hr* (*Hwt-hrw*)



R13- Falcon (G5) on standard with feather (R12)

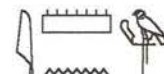
(1) ideogram

(a) emblem of the West and related words

'falcon'– *imnt*



(b) 'right/right-hand'– *imn*



C2– God with head of falcon (G9) holding ankh (S34)

G14

vulture
(Griffin/Lapet-faced)
(*Gyps fulvus/Aegyptiustracheliotus*)



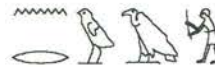
FUNCTION:

(1) ideogram (see following page)

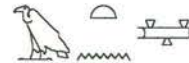
(2) determinative

(a) 'vulture' – *nrt*

(3) phonetic determinative

(a) 'terror' – *nrw*(b) 'mother' – *mwt*

(4) phonetic

(a) 'river-bank' – *hmt*(b) 'road' – *mtn*

VARIATIONS:

(1) G15-16, H4 (see following page)

ASSOCIATIONS:

- goddesses: Nekhbet, Mut, Isis, Nut, Neith
- cult centers: Thebes, el-Kab, Hierakonpolis
- concept of mother, femininity (divine) (5)
- ascension to heaven
- eternity (with *shen* sign), protection
- nurse to pharaoh (12)
- insignia of pharaoh (12)
- south: southern goddess, Nekhbet
- 'vulture of gold' – amulet around neck of mummy (14)
- personification of white crown (Upper Egypt) (2)
- *nbty* – 'He of the Two ladies' (title of pharaoh) with Wadjet (2)
- word 'few' because close to death (10*)
- celestial (compare with snake-terrestrial) (10*)
- sight, boundaries, foreknowledge, the year, heavens, pity, Athena, Hera, two drachmas (3*)
- no male species (3*)
- with the scarab, Hephaistus (3*)

OBSERVATIONS:

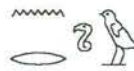
This sign, typically referred to as the 'vulture', depicts the bird in a somewhat typical pose in profile. The posture is characteristic and emphasizes the hunch-back and curved neck of the bird. Other details like the beak, feathers, wings, and claws are also depicted characteristically. Notable is the fact that the legs are in semi-frontal perspective.

G15-16, H4**Variations of the
Vulture****G15- Vulture with flagellum**

(1) ideogram/determinative

(a) the goddess, 'Mut'– *Mwt***G15– Vulture-goddess Nekhbet with cobra-goddess Edjo (Wadjet)
on baskets (V30)**

(1) ideogram/determinative

(a) title of the king, 'Two-Ladies'– *nbtj***H4– Head of vulture with flagellum**(1) phonetic determinative– *nr*(a) 'see'– *nrw*

(1) phonetic determinative/ideogram

(b) 'see'– *rmꜥ*

G17

owl (barn owl)

(*Tyto alba*; also *Bubo bubo*, *Asio otus*)



FUNCTION:

(1) phonetic (alphabet)– *m*

(a) 'in, as, by, with, from'– *im (m)*



VARIATIONS:

(1) G18-20 (see following page)

ASSOCIATIONS:

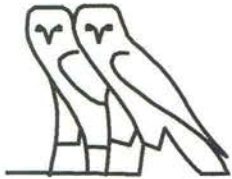
- 'what is inner, what is on the inside' (8*)
- foreknowledge of an abundant vintage (3*)

OBSERVATIONS:

This sign, typically referred to as the 'owl', depicts the bird's body in profile while the head is turned full-face to the onlooker. The 'squarish' head is characteristic along with the limberness of the neck and the gaze of the eyes. The wings and beak are typical with the claws being an exception to bird depictions by lacking the rear-toe. Noteworthy is the fact that the legs are in semi-frontal perspective. A curious note is the fact that mummies of owls had their heads cut off, supposedly because of bad luck.

G18-20

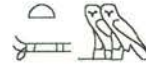
Variations of the Owl



G18– Two owls as monogram

(1) phonetic– *mm*

(a) ‘not having been’– *tmm*



G19– Combination of owl (G17) and arm holding loaf (D37/38) variation, G20– owl and arm (D36) (use as last)

(1) phonetic– *m* (originally– *mi*)

(a) ‘be neglectful’– *mhy*




G21

Sennâr/Helmeted guinea-fowl (*Numida meleagris*)

**FUNCTION:**

(1) ideogram

(a) 'the *nḥ*-bird' – *ḥnḥ*(2) phonetic – *nḥ*(a) 'pray' – *nḥi*(b) 'eternity' – *nḥḥ***VARIATIONS:**(1) some sculptors assimilate with  G1 or  G43(2) sometimes wattle is replaced by  'wick of twisted flax' (V28)**ASSOCIATIONS:****OBSERVATIONS:**

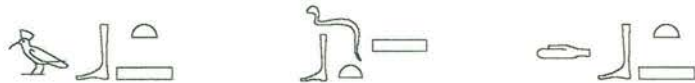
This sign, typically referred to as the 'sennâr/helmeted guinea-fowl', depicts the bird in profile. The bird is depicted with characteristic crest and wattle. The wattle is often placed too low such as the hieroglyph above. The crest is depicted in semi-frontal perspective and thus appears as two 'horn-like' structures on the bird's head. The claws, beak, wings, and feathers are also shown in characteristic fashion. The legs are, like most other bird hieroglyphs, in semi-frontal perspective.

G22

hoepoe
(*Upupa epops*)

**FUNCTION:**

- (1) phonetic– *db*, *db*
(a) ‘brick’– *dbt* (*dbt*)

**VARIATIONS:****ASSOCIATIONS:**

- carried by infant god Harpocrate (late iconography) (2)
- carried by children and women (5)
- pest to orchards (7)
- subtle erotic associations (6)
- regeneration (6)
- some religious associations (5)
- gratitude (2, 3*)

OBSERVATIONS:




This sign, typically referred to as the ‘hoepoe’, depicts the bird in profile. The bird has its characteristic crest, which varies in detail. The beak of the bird is sometimes slightly exaggerated. The feathers, wings, and claws are also depicted characteristically. The legs are in semi-frontal perspective.

G23/24

lapwing

(*Vanellus cristatus*/
Vanellus vanellus)



FUNCTION:	<p>(1) phonetic/phonetic determinative/determinative/ideogram – <i>rh(y)t</i>, <i>rhwt</i> (a) ‘common folk’– <i>rhyt</i></p>  
VARIATIONS:	<p>(1)  G24 sometimes used with connotations with captives, etc. having its wings ‘tied’ behind its back to prevent it from flying</p>
ASSOCIATIONS:	<ul style="list-style-type: none"> • children and women (4) • common people/subjects, or enemies (6) • Lower Egyptian nomes (6) • foreigners (negative connotations) (2) • subtle erotic associations (5) • regeneration (5) • indicating praise of pharaoh (with ‘all’ sign and ‘adore’, <i>neb</i> and <i>dwa</i>): ‘all the people in adoration before the king’ (4) • people and the land (8) • <i>rhyt</i>, part of ‘nucleus of humanity’: <i>rhyt</i>, <i>p^ct</i>, <i>hnmmt</i> (2)
OBSERVATIONS:	<p>This sign, typically referred to as the ‘lapwing’, depicts the bird in profile. The beak, crest, feathers, wings, and claws are also depicted in characteristic manner. Variation of the sign as G24 used to indicate connotations of being subjects, under the rule of pharaoh, etc. Note also the fact that the legs are in semi-frontal perspective.</p>

G25

crested/hermit ibis
(*Ibis comata*/*Geronticus eremita*)



FUNCTION:

(1) ideogram/semi-ideogram

(a) 'spirit', 'spirit-like', 'luminous energy', 'to be radiant'– 3h



(2) semi-phonetic– 3h

(a) 'be glorious', 'beneficial'– 3h



VARIATIONS:

(1) see G26/26a, G28 for other types of ibises

ASSOCIATIONS:

- light, transfiguration and resurrection, spirit, heaven (3)
- *akh*, one of 5 elements of personality (*ba*, *ka*, name, shadow) (8)
- enduring and unchanging (eternity) (8)
- root *akh*: 'the divine eye', 'fertile earth', 'royal place', 'secret place of the temple' (6*)
- (see variations G26/26a, G28 for other ibis associations)

OBSERVATIONS:

This sign, typically referred to as the 'crested ibis', depicts the bird in profile. The characteristic plumage (crests, feathers, etc.) are also depicted along with the wings and bill. The feet sometimes are depicted more spur-like than other times. Note the legs which are in semi-frontal perspective.

G26/26A**sacred ibis**
(Ibis religiosa)**FUNCTION:**


(1) determinative

(a) 'ibis'– *hb*

(1) determinative/ideogram

(a) the ibis-god, 'Thoth'– *Dḥwty***VARIATIONS:**(1)  G26a, use as last

(2) non-Gardiner variation

(3)  C2– god with head of ibis (G26)

(3) see G25 and G28 for other types of ibises

ASSOCIATIONS:

- god: Thoth
- cult-centers (including cemeteries): Tuna el-Gebel, Memphis (Saqqara), Hermopolis
- science, writing, wisdom, art of magic, phases of the moon
- the Nile and its characteristic changes (5)
- Imhotep: the vizier and architect of the first pyramid (13)
- 'royal ancestors' at Hermopolis (15)
- nome: Lower Egypt– 15 (13)
- (see variation G25, G28 for other ibis associations)

OBSERVATIONS:

This sign, typically referred to as the 'sacred ibis', depicts the bird typically on the standard (more of an emblem) or with a variation without. The bird is in profile and its characteristic long legs (in semi-frontal perspective), bill, and neck are shown while details of the bird's feathers and wings often vary according to whether the sign more emblematic in which case it is less detailed.

G27

(greater) flamingo
(Phoenicopterus roseus)

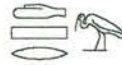


FUNCTION:

(1) determinative

(a) 'flamingo' – *dšr*

(1) phonetic

(a) 'red', etc. – *dšr*

VARIATIONS:

ASSOCIATIONS:

OBSERVATIONS:

This sign, typically referred to as the 'flamingo', depicts the bird in profile with its characteristic long legs and bill. The bill is sometimes exaggerated in terms of its length and amount of curve. The hunch on the back and neck are also shown as they might typically be seen. Other aspects such as the feathers, claws, and wings are also depicted characteristically. Note the fact that the legs are in semi-frontal perspective.

G28

black/glossy ibis (*Plegadis falcinellus*)

**FUNCTION:**(1) phonetic– *gm*(a) ‘find’, ‘look at’– *gmi*

(1) name

(a) ‘black ibis’– *gmt***VARIATIONS:**

(1) during the New Kingdom (18th Dynasty), variation with head bent down often replaces G28

(2) see G25 and G26/26a for other types of ibises

ASSOCIATIONS:

• (see variations G25, G26/26a for other ibis associations)

OBSERVATIONS:

This sign, typically referred to as the ‘black/glossy ibis’, depicts the bird in profile in characteristic ‘hunting/fishing’ posture. The length and curve of the bill is sometimes exaggerated. The neck, feathers, wings, and claws are depicted characteristically. Notable is the fact that the legs are in semi-frontal perspective.

G29

jabiru/saddlebill stork
*(Ephippiorhynchus senegalensis/
 Mycteria sene)*

**FUNCTION:**

(1) ideogram

(a) 'soul'– *b3*(2) phonetic– *b3*(a) 'servant'– *b3k*(b) 'look at'– *hb3*(3) group-writing– *b***VARIATIONS:**

(1) G30 (see following page)

ASSOCIATIONS:

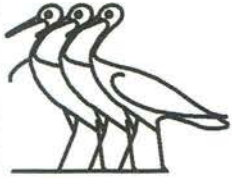
- *ba* ('soul')– of pharaoh, men, gods (2)
- *ba*, one of 5 elements of personality (*akh, ka, name, shadow*) (3)
- soul-bird (7)
- manifestation of supernatural power (2)
- vital forces– for after death (2)

OBSERVATIONS:

This sign, typically referred to as the 'jabiru/saddlebill stork', depicts the bird in profile. The bill, wings, feathers, and claws are all depicted somewhat typically with some variation. The legs are depicted in semi-frontal perspective. The wattle of the bird is often placed too low in comparison its natural place on the bird.

G30

Variations of the Jabiru/Stork



Three jabiru (G29) as monogram

(1) phonetic- *b3w*

(a) 'spirits', 'might', 'power, whole of the divine manifestations'

- *b3w*



G31

heron/phoenix

(*Ardea cinerea*/*Ardea pupurea*)



FUNCTION:

(1) determinative

(a) 'phoenix/heron'– *bnw*

VARIATIONS:

(1) G32 (see following page)

(1) similar bird as determinative in 'heron'– *šnty*

ASSOCIATIONS:

- gods: Ra, Osiris, Atum
- cult centers (including cemeteries): Heliopolis, various shrines in the Delta
- *ba* of Osiris and Ra (9)
- *bennu*-bird: which stays in the sacred perseu tree at Heliopolis (5)
- atef crown, rebirth, resurrection (9)
- primeval mound and flood, marsh areas
- water and sun (2)
- heliacal rising of the Sirius star (Egyptian new year) (2)
- resurrected Osiris (10)
- soul delaying here a long time or a flood (3*)
- return of the long-absent traveler (3*)
- long-enduring restoration (3*)

OBSERVATIONS:

This sign, typically referred to as the 'heron/phoenix', depicts the bird with head and body in profile and legs in semi-frontal perspective. The characteristic wattle and tuft of feathers on the back of its head. The bill is sometimes exaggerated in size and the wattle is sometimes misplaced.

G32, H 2

Variations of the Heron/Phoenix



Heron on a perch (G31)

(1) ideogram/determinative

(a) 'flood', 'be inundated'— *b^chi*



H2— Head of crested bird (probably G31— heron)

(1) phonetic determinative

(a) 'temple (of head)', 'nest'— *m³c*



(b) 'real'— *m³c*



(2) phonetic/phonetic determinative

(c) 'ear (of corn)'— *wšm*



(d) 'vessel (for beer)'— *wšmw*



(3) phonetic— *p^k*

(e) 'fine linen'— *p³k*



G33**buff-backed egret (?)**
(Egretta sp.)**FUNCTION:**

(1) determinative

(a) 'sd3-bird'– sd3



(1) phonetic determinative– sd3

(a) 'tremble'– sd3



(a) 'tremble'– sd3d3

**VARIATIONS:**(1)  G51, 'egret pecking at fish'**ASSOCIATIONS:****OBSERVATIONS:**

This sign, typically referred to as the 'buff-backed egret', depicts the bird in profile with its characteristic long legs. The bird's bill, and protruding neck are depicted as one might see the bird in the wild. The feathers, wings, and claws are also depicted characteristically. Noteworthy is the fact that the legs are depicted in semi-frontal perspective.

G34

ostrich
(*Struthio camelus*)

FUNCTION:

- (1) determinative
(a) 'ostrich' – *niw*



VARIATIONS:

- (1)  H6, 'ostrich feather'

ASSOCIATIONS:

- gods and goddesses: Shu, Hathor, and Maat (feather), Amon, Min, Horus, Geb
- cult centers (including cemeteries): Hierakonpolis
- feather: maat, truth, order, harmony, justice, air, creation, wind, breath, virility
- feather: four corners of earth/four cardinal points (*meret* chest/*nemset* vessels) (7, 8)
- atef crown of Osiris (7)
- sacred eggs (kept in temples) (2)
- air which covers Geb (8)
- feather: worn by the man who erects the ceremonial maat or pole during the feast of Min (8)
- nomes (plume(s) as parts of groups/signs): Upper Egypt– 3, 6, 8, 9, 10, 17; Lower Egypt– 3, 7, 9, 20 (7)

OBSERVATIONS:

This sign, typically referred to as the 'ostrich', depicts the bird in characteristic fashion with some exaggeration. The neck is often emphasized by its size and curve. The legs, which are in semi-frontal perspective, also tend to be simplified, in part because of the lost detail of the small sign. The wings are slightly unnaturally depicted perhaps to emphasize its inability to fly (?).

G35

cormorant

(*Phalacrocorax sp./Anhinga ?*)

**FUNCTION:**

(1) phonetic- ʕk

(a) 'enter'- ʕk



(b) 'revenue', 'provisions'- ʕkw

**VARIATIONS:****ASSOCIATIONS:**

- water (2)
- 'to enter', 'to penetrate'
- Fayum (2)

OBSERVATIONS:

This sign, typically referred to as the 'cormorant', depicts the bird in profile with its characteristic, yet exaggerated, breast and neck. The bill, feathers, wings, and claws are also depicted fairly typically. The legs are depicted in semi-frontal perspective.

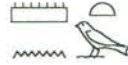
G36

swallow/martin
(*Hirundidae sp.*)


FUNCTION:

(1) phonetic– *wr*(a) ‘great’– *wr*(b) ‘anoint’– *wrh*

(2) determinative

(a) ‘swallow’– *mnt*

VARIATIONS:

(1) often confused with  G37, ‘sparrow’

ASSOCIATIONS:

- gods: Ra and Ra-Harakhty
- minor deity in region of Theban necropolis (7)
- sun greeting bird (6)
- soul and solar renewal (10)
- solar bark (10)
- solar disk (10)
- pharaoh: sometimes turns into one when ascending to sky (8)
- transfigured soul of the dead and the deceased (10)
- Isis took its form when she lamented over the death of Osiris (Plutarch) (3, 9)

OBSERVATIONS:

This sign, typically referred to as the ‘swallow/martin’, depicts the bird in profile. The representation of this hieroglyph is often confused with the ‘sparrow’ (G37). Even the distinguishing wide/forked tail is not always accurately portrayed. The other features of the bird can be characteristically depicted by the artist but confusing may still exist. Note the fact that the legs are in semi-frontal perspective.

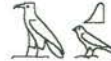
G37

sparrow

(*Passer domesticus aegyptiacus*)

**FUNCTION:**

(1) determinative (bad things)

(a) 'small'– *nds*(a) 'narrow'– *hns*(a) 'bad', 'defective'– *bin*(a) 'empty'– *šw*(a) 'ill', 'deceased'– *mr*(a) 'perish'– *zk***VARIATIONS:**(1) often confused with  G36, 'swallow/martin'**ASSOCIATIONS:**

- evil, bad and most anything with negative connotations
- smallness, sickness
- sign of bad tidings (3)

OBSERVATIONS:

This sign, typically referred to as the 'sparrow', depicts the bird in profile. The representation of this hieroglyph is often confused with the 'swallow/martin' (G36). Even the distinguishing narrow/rounded tail is not always accurately portrayed. Like G36, the other features of the bird can be characteristically depicted by the artist but confusing may still exist. The legs are depicted in semi-frontal perspective.

G38

white-fronted goose
(*Anser sp.*)

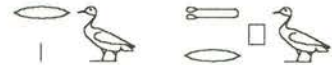
FUNCTION:

(1) determinative

(a) 'gb-goose'- gb



(b) names of kinds of geese- 'r', 'trp'



(2) phonetic- gb, gbb, gbw

(a) the earth god 'Geb'- gb



(3) phonetic determinative (using indeterminate birds ?)

(a) 'talk'- wꜥ



(b) 'be idle'- wꜥf (wꜥf)



(c) 'delay'- wdf



(4) generalized determinative of birds and locusts

(a) 'hawk'(?)- tnhꜥ



(b) 'ostrich'- niw



(c) 'locusts'- snḥmw (znḥmw)



VARIATIONS:

(1)  G52, 'goose picking up grain'

(2) also interchanged with G39- 'pintail duck'

ASSOCIATIONS:

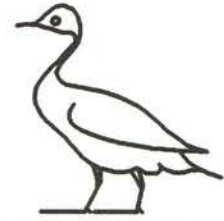
- gods: Geb, Amon, Hapi
- Khenken-wer- 'the great cackler'
- popular names (10)
- the Nile, the earth
- father of primordial egg from which sun was born (3)
- sacred lake of Amon (at Karnak) (8)
- gosling: erotic connotations (8)
- destruction (9)

OBSERVATIONS:

This sign, typically referred to as the 'white-fronted goose', depicts the bird in profile. The characteristic bill, neck, feathers, wings, and feet are also shown. This sign is often confused with the 'pintail duck' (G39) because of the tail feathers not being depicted in a distinctive manner. Note that the legs are in semi-frontal perspective.

G39

pintail duck
(*Dafila acuta*, *Anas sp.*,
Tadorna sp.)



FUNCTION:

(1) determinative

(a) 'pintail duck'– *st* (*zt*)

(2) phonetic determinative

(a) 'son'– *s3* (*z3*)(b) 'beam', 'plank'– *s3w* (*z3w*)(c) '*hs3t*-cow'– *hs3t* (*hz3t*)

VARIATIONS:

(1) G40-41, H1 (see following page)

(2) G38– 'white-fronted goose'

ASSOCIATIONS:

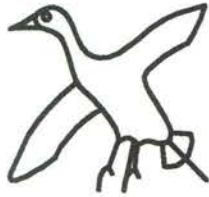
- gods: Amon-Ra, Geb, Harpocrate
- 'son'
- naked women, fertility, sexuality, fecundity, eroticism (3, 7, 8)
- regeneration (3)
- waterfowl, birds in general (8)
- suppresses evil (8)

OBSERVATIONS:

This sign, typically referred to as the 'pintail duck', depicts the bird in profile. The characteristic bill, neck, feathers, wings, and feet are also shown. This sign is often confused with the 'white-fronted goose' (G38) because of the tail feathers not being depicted in a distinctive manner. The sign also can replace G38 when the actual nature of the bird is uncertain. The variations of this sign include the flying and landing bird with outstretched wings. Occasionally the lower wing of the flying duck (G40) is not depicted. The legs of G39-41 are all depicted in semi-frontal perspective.

G40-41, H1

Variations of Pintail duck



G40– Flying duck

(1) ideogram

(a) ‘fly’– *p3*



(2) phonetic– *p3*

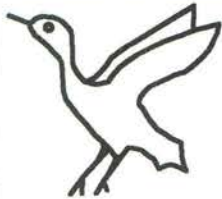
(a) ‘the/this...’ (proceeds noun)– *p3*



(b) ‘centipede’– *sp3*



(3) group-writing– *p*



G41– Landing duck

(1) determinative

(a) ‘alight’, ‘halt’, ‘land’– *hni*



(b) ‘throw’– *km3*



(c) ‘create’– *km3*



(d) ‘nomad hunter’– *mtn* (*mtn*)



(2) phonetic determinative– *hn*, *kmi*, *shw*, *tn* (*tn*)

(a) ‘speech’, ‘sentence’– *hn*



(b) ‘gum’– *kmi* (*kmyt*)



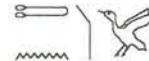
(c) ‘collect’– *shw*



(d) ‘road’– *mtn*



(e) ‘distinguish’– *tni* (*tni*)

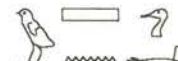


H1– Head of pintail duck



(1) determinative

(a) ‘wring neck of (birds)’, ‘offer’– *wšn*



(1) abbreviation (offering formulas)

(a) ‘fowl’– *3pdw* (*3pd*)



G42

fattened duck/
widgeon (?)
(*Anas penelope*)



FUNCTION:

(1) ideogram/determinative

(a) 'fatten', 'to gain weight'— *wš3t* (*wš3*)(a) 'provisions', 'food'— *df(3)* (*df3w*)

VARIATIONS:

ASSOCIATIONS: • (see also G39— 'pintail duck')

OBSERVATIONS: This sign, typically referred to as the 'fatted duck/widgeon', depicts the bird in profile. The characteristic posture of the neck and head is depicted. The feathers, feet, and wings are also depicted in typical fashion. Note the fact that the legs are depicted in semi-frontal perspective.

G43

quail chick

(Coturnix coturnix)

**FUNCTION:**

(1) ideogram

(a) 'quail chick'– w



(2) phonetic (alphabet)– w

VARIATIONS:

(1) ☞ Z7, 'hieratic adaptation of hieroglyphic form' r – occasionally replaces sign

(2) G44-46 (see following page)

ASSOCIATIONS: • eaten raw (4*)**OBSERVATIONS:**

This sign, typically referred to as the 'quail chick', depicts the young offspring of quail. The bird is in profile and its characteristic small featherless wings and clumsy feet are also depicted. The legs are depicted in semi-frontal perspective.

G44-46

Variations of Quail chick



G44– Two quail chicks as monogram

(1) phonetic– *ww*

(a) ‘end’– *phww*



G45– Combination of quail chick (G43) and arm (D36)

(1) phonetic– *w^c*

(a) ‘soldier’– *w^cw*



G46– Combination of quail chick (G43) and sickle (U1)

(1) phonetic– *m3w*

(a) ‘anew’– *m3wt*



G47

duckling



FUNCTION:

(1) ideogram

(a) 'nestly', 'duckling' – *tʒ*(1) phonetic – *tʒ*(a) 'male' – *tʒy*(a) 'baldachin' – *tntʒt*(1) group-writing – *t*

VARIATIONS:

(1) G48-49 (see following page)

(2) Old Kingdom variations less vertical

ASSOCIATIONS:

- subtle erotic connotations (3, 9)
- royal children (10)
- (see also G39– 'pintail duck')

OBSERVATIONS:

This sign, typically referred to as the 'duckling', depicts the bird in semi-frontal perspective. Both wings out to the side balancing the bird and the open mouth with tongue are typical of this chick when begging for food. The body and feet are depicted as being clumsy, similar to the characteristic nature of the young bird.

G48-49

Variations of Duckling

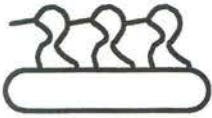


G48– Three ducklings in a nest

(occasionally takes place of single duckling-G47 in nest)

(1) ideogram/determinative

(a) ‘nest’– sš (zš)



G49– Three ducklings in nest (or wading)

(1) ideogram/determinative

(a) ‘bird-pool’, ‘nest’– sš (zš)



G50

two plovers as monogram
 (ringed/little ringed plovers)
 (*Charadrius hiaticula*/*Charadrius dubius*)

**FUNCTION:**(1) phonetic– *rht*(a) ‘fuller’, ‘washerman’– *rhty***VARIATIONS:**

(1) occasionally depicted as one bird

ASSOCIATIONS:**OBSERVATIONS:**

This sign, typically referred to as the ‘two plovers’, depicts the bird in profile. The legs are, like most birds, depicted in semi-frontal perspective. The two birds together can either be said to be in profile, one in front of the other, or semi-frontal perspective giving the impression that one is in front of the other. The feathers, feet, and wings are depicted characteristically. Notice that both sets of legs are in semi-frontal perspective (occasionally some legs are unaccounted for).

G51 egret (?) pecking at fish



FUNCTION:

(1) determinative

(a) 'catch fish' – *ḥ^cm/hym*



VARIATIONS:

(1)  G33, 'egret'

(2) from late Old Kingdom onwards, the bird is depicted standing on top of the fish as above

ASSOCIATIONS: • (compare G33 'buff-backed egret')

OBSERVATIONS:

This sign, typically referred to as the 'egret pecking at fish', depicts the bird in profile. The bird is depicted as being on top of the fish it is catching, presumably emphasizing this aspect of the fish and words related. Old Kingdom variations do not usually depict the bird standing on top of the fish. The legs are depicted in semi-frontal perspective.

G52


goose (?) picking up
grain, etc.

FUNCTION:

- (1) determinative
(a) 'feed'– *snm*



VARIATIONS:

- (1)  G38, 'white-fronted goose'

ASSOCIATIONS: • (see G38 'white-fronted goose')

OBSERVATIONS: This sign, typically referred to as the 'goose picking up grain', depicts the bird in profile with head bent down to the ground. The bird's feathers, feet, and wings are also all depicted in a typical manner. Note that the legs are depicted in semi-frontal perspective.

H3

Variations of Other birds



H3– Head of spoonbill

(1) phonetic determinative– *p3k*

(a) ‘*p3k*-cake’– *p3k*



11.3 Comments and Observations about the Hieroglyphs for Birds

The hieroglyphs for birds are depicted in a fairly easily identifiable manner. Each sign is depicted in a way very similar to how depictions of birds are done today, in profile. A detailed discussion into each bird or even groups of birds will not be made since specific observations are made in the previous section under each sign. Here only a general set of observations about most bird hieroglyphs will be made in order to elucidate and hopefully validate the "hidden" messages hieroglyphs give about their creators.

The bird hieroglyphs are all depicted with the body in profile. Even the heads of the birds are also in profile, with the exception of the owl (G17). The owl, however, is depicted, like the other birds, in a manner which reflects its natural characteristics. Most birds distinguish themselves by the shape of their heads, their plumage, and the shape of their beaks. It is no wonder that most hieroglyphs for birds keep to this somewhat simplistic formula. Since the owl has a short beak and flat face this

“formula” seems impractical. But even so, by depicting the owl with its head turned, facing the viewer, it reflects both the natural characteristic of its very flexible neck and its eerie stare via its two front-faced eyes. In this case the head of the owl is most probably not depicted as frontal perspective pasted into the profile of the body. Since most birds are like fish, with eyes which are more peripheral than frontal, this slight variation in the hieroglyph for the owl makes for an interesting yet understandable difference of perspective.

Another variation about bird hieroglyphs worth mentioning is the *feet*, or *claws*. Most birds are depicted with their typical legs and feet, sometimes exaggerated for emphasis (i.e. height/length), including the “rear” toes of the feet. The legs are most often in semi-frontal perspective with the exception of the 'bound lapwing' (G24), the 'heron on perch' (G32), the

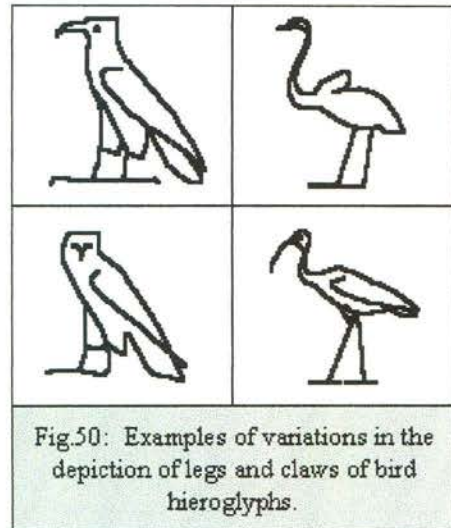


Fig.50: Examples of variations in the depiction of legs and claws of bird hieroglyphs.

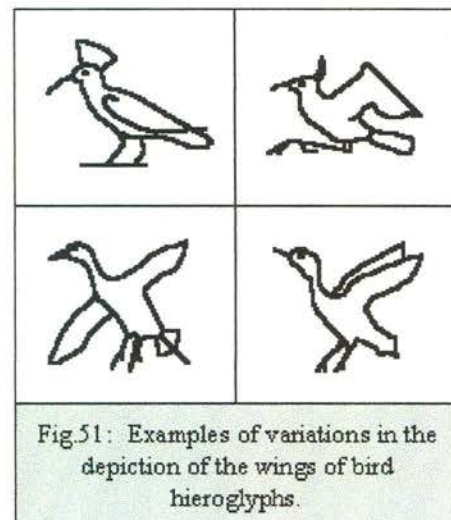


Fig.51: Examples of variations in the depiction of the wings of bird hieroglyphs.

'duckling' (G47, G48), and a few non-Gardiner signs.¹ The two birds that are exceptions to the "formula" are the owl (G17) and the ostrich (G34). The lack of the rear toe of the ostrich (some variations) may be the result of the ability to represent such a small aspect on a sign which is already vastly diminished in size. The owl on the other hand, leaves many questions unanswered.²

Some other differences in individual hieroglyphs include *wings* which may indicate flight, landing, or taking off (Cf.: G40, G41). Characteristics such as curvature of the neck, symbolic placement of the wings (i.e. lapwing with wings tied behind its back as symbol of conquered people, etc.), crests, and tufts are often individualized with exaggerations and even mistakes in placement being made. Posture of birds, often water/fishing birds, often suggest a particular action related to the animals behavior such as fishing or feeding, wading, etc. (Cf.: G51, G52).

The signs for birds are numerous and vary greatly. However, most bird signs seem to follow some "formula" for their depiction which might be understood as being very simplistic. This so-called simplicity is perhaps misunderstood. It is merely coincidence that in order for the ancient Egyptian to depict most birds characteristically a similar formula could be followed. While aesthetic reasons most certainly played a part in the reasoning for using the profile perspective for birds (i.e. in order to depict not only characteristic plumage but also the colorful and natural beauty), this does not minimize its importance or should it be overestimated. The bird hieroglyphs, similarly to other living creature hieroglyphs, depict the creatures in as natural a state as one would expect to see them, emphasizing characteristics often via the use of aspects (although seemingly much less so than other animals). By doing so the Egyptian presented the world as he/she saw it, thus opening up his/her mind to those long after their time.

¹ The reason for the differing perspective of the legs, more akin to the posture of 'claws' in striking position, is very confusing. Interpretations including nesting, dead birds, on standard, etc. all prove highly inconsistent. One other possibility includes that the birds are forms of "emblems" and the legs and feet are depicted in the particular manner reflecting the "balancing" bottom of the object itself (?). However, even this seems highly unlikely given the exceptions that do not seem to make any sense.

² For more information on these two signs refer to G17 and G34.

12. Amphibians and Reptiles: Group I

12.1 Introduction

12.2 Analysis

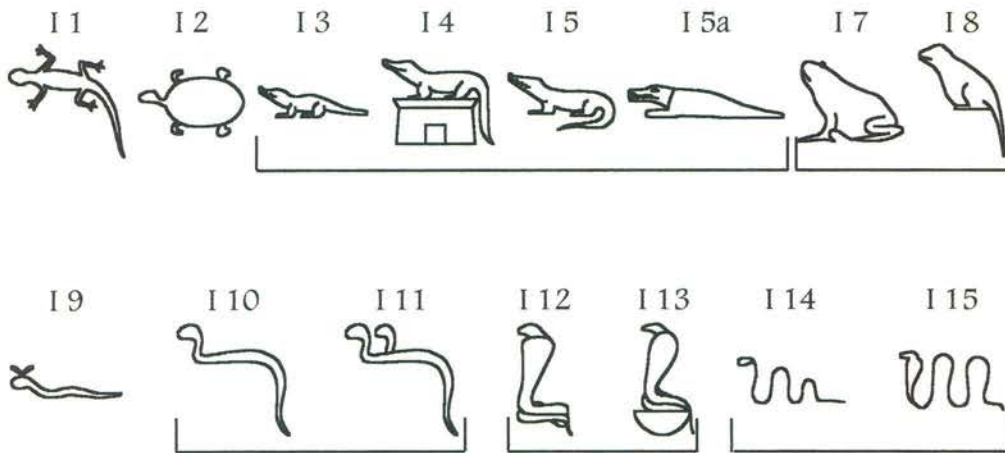
12.3 Comments and Observations about the Hieroglyphs for Amphibians and Reptiles

12.1 Introduction

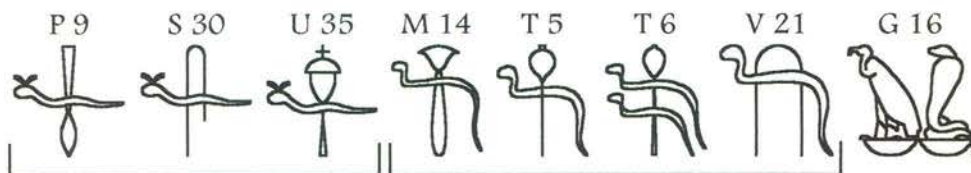
In this section the hieroglyphs for amphibians and reptiles will be examined. The structure is similar to that of the birds in regards to “variations” of signs with the exception of combination signs and “same signs” which are only listed as variations. Below is a list of signs that are discussed in this section (including ‘groupings’).

12.2 Analysis

Group I:



Additional Signs From Other Groups (Variations in order of appearance):

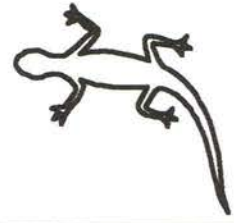





Non-Gardiner sign (also Group I) (van den Berg 1995ff):

Horned Viper
(in repose)

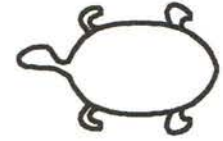


I 1

lizard
(*Lacertidae*)

FUNCTION:	<p>(1) determinative</p> <p>(a) lizard– <i>hnt3sw</i> </p> <p>(b) lizard– <i>ʕ3(3)</i> </p> <p>(2) phonetic– <i>ʕ3</i></p> <p>(a) many (and related words)– <i>ʕ3</i></p> <p></p>
VARIATIONS:	<p>(1) sometimes in portrayals which differentiate between types of lizards/salamanders (New Kingdom example of gecko)</p>
ASSOCIATIONS:	<ul style="list-style-type: none"> • personification of Osiris (4) • in the sun, the figure Atum • considered hybrid between crocodiles and serpents (2) • depiction for lizard-like creatures • numerous amount, innumerable quantity (2) • man burned by fire (salamander) (3*)
OBSERVATIONS:	<p>This sign, typically referred to as the ‘lizard’, could represent a variety of types of lizards or salamanders. Noteworthy is the above perspective of the species, characteristic of the view most ancient Egyptians would have had of such an animal, especially the gecko which crawls on walls on ceilings. An interesting example of a piece which may or may not reflect the idea of the species being a hybrid between crocodiles and serpents is the Egyptian Museum-Cairo Amratan period pottery which has in artistic rendering (i.e. not a hieroglyph) what has been interpreted as a crocodile (for more on this including an image see the following section <i>Comments and Observations about the Hieroglyphs for Amphibians and Reptiles and Living Creature Hieroglyphs: What They Can Tell Us</i>). The shape and the perspective brings up questions on this interpretation such as why was the perspective of the crocodile changed (when made a hieroglyph) (?), is it in fact a crocodile or another type of scaly lizard (?), and so on. The answer may lie simply enough in the Egyptian idea of what a lizard was, a hybrid. What this means is that whether the interpretation of the crocodile as a “lizard” (and vice versa) was before the codification of the hieroglyph is irrelevant since the idea behind the perspective, i.e. the reasoning, survives as the understanding of a relationship between the species.</p>

I 2

freshwater turtle
(*Trionyx*)

FUNCTION:

(1) ideogram or determinative

(a) turtle– *štyw* (*štyw*- late variation)

VARIATIONS:

ASSOCIATIONS:

- manifestation of harmful deities (3)
- enemy of god Ra (3)
- slayed by Horus in some myths
- regeneration and resurrection
- evil (8)
- magical powers (keep evil at bay) (7)
- type of fish (5)
- supernatural
- relationship with heaven and the earth (5)

OBSERVATIONS:

This sign, typically referred to as the ‘freshwater turtle’, depicts a turtle from above perspective. While it is possible that this was the typical view (perspective) seen by the ancient Egyptians it is no doubt still interesting in context with the muddy water of the Nile. The animal was associated with fish and this may hint at some of the evil aspects that are a part of it, especially with its bite. Though these turtles may have been seen from a side perspective (profile), it does seem that the perspective chosen by the Egyptian does reflect not only the typical point of view, but also perhaps its most recognizable form. The perspective may have also been influenced by the general round shape that the Egyptian was fond of (such as seen in the sun, moon, etc.)(?).

I 3

crocodile



FUNCTION:

(1) ideogram or determinative

(a) crocodile– *msh* (*mzh*)(b) crocodile– *hnty*

(2) determinative

(a) lust after– *skn* (*zkn*)(b) be greedy– *hnt*(c) voracious(?)spirit– *hm*(d) be aggressive, angry (aggression)– *3d*(2) phonetic– *it*(a) sovereign– *ity*

VARIATIONS:

(1) see following page

ASSOCIATIONS:

- gods and goddesses: Sobek, Horus, Khenty-Khet, Neith, Geb, Sobek-Hetep, Ra, Suchos-Sobek, Sobek-Ra, Seth
- cult centers and cemeteries: Crocodilopolis, Kom Ombo, Fayum, Heliopolis, Dendera, Athribis, Gebelein, Sais, el-Maabda
- “Horus myth”: slayed by Horus (11)
- in composite of Ammit: Hippopotamus legs and crocodile jaws (11)
- atef crown (10)
- water and fertility (god of), strength, ferociousness, appetite, fierceness, abyss, heaven and earth, sun and stars, immortality, danger and hostility, fascination and awe, rebirth, abomination
- defender of pharaoh
- Hall of Judgement (“devourer of hearts”)
- negative and positive forces (death and destruction/life and regeneration)
- pharaoh’s bellicose and conquering aspects (9)
- nome: Upper Egypt– 6 (11)
- ‘60’– lays 60 eggs and hatches them in same number of days (Plutarch) (12*)
- fecund man (many offspring), madman, sunrise/set, war, shadow, eating (open-mouth) (3*)

OBSERVATIONS:

see following page

I 4-5a

Variations of
Crocodiles

I 4– Crocodile on shrine (O21)

(1) ideogram or determinative

(a) the crocodile god ‘Sobek’ – *Sbk* (*Sbkw*)

I 5– Crocodile with tail curved inward

(1) ideogram or determinative

(a) ‘collect’, ‘gather together’– *s3k*

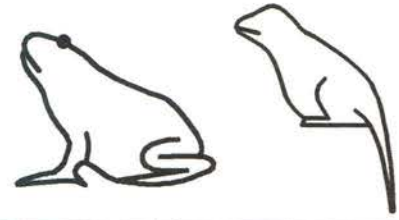
I 5a– Image of crocodile (mummified?)

(1) ideogram or determinative

(a) the crocodile god ‘Sobek’ – *Sbk*

OBSERVATIONS: These signs all depict the ‘crocodile’ in a profile perspective. The “crocodile” signs most often used (and a part of Gardiner’s list, c. Middle Kingdom) are all depicted in a fairly docile manner, perhaps a subtle attempt at appealing to their good nature (examples exist with aggressive, open mouth crocodiles). Interesting to note is how the profile aspect of the crocodile also limits the 4 to 2 legs impression of many animals that are lying down (cf.: E9, E13, E15, E20, E23, E34). Also, noteworthy is the Amratian period pottery in which the crocodile is depicted from above similarly to the lizard (see I 1 for more on this).

I 7/ I 8

frog and tadpole
(*Rana sp.*)

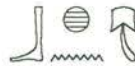
FUNCTION:

I 7– Frog

(1) ideogram (sportive)

(a) ‘repeating life’, as epithet after personal name–
from Dynasty XVIII/XIX– *wḥm ḥnh*

(2) determinative

(a) the frog goddess, Heket– *Hkt*b) ‘frog’– *ḥhn*

I 8– Tadpole

(1) ideogram or determinative

(a) tadpole– *hfn*(2) phonetic– *hfn*(a) one hundred thousand– *hfn/hfnw (pl.)*

VARIATIONS:

ASSOCIATIONS:


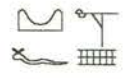





- gods and goddesses: Heket, Heh, Kek, Nun, Amun, Hapi, Horus
- cult centers: Herwer, Hermopolis
- chthonic, primeval deities (9)
- creation, fertility/conception, birth, rebirth, regeneration, resurrection, sexuality, fecundity, protection (childbirth), water, good luck, eternity (tadpole on *shen* sign)
- apotropaic powers (7)
- abundance, unlimited, numerous (100,000)– tadpole
- life-giving: decoration wishing pharaoh 100,000 years of reign
- shameless of keen sight (no blood except in eyes) (3*)
- man with no movement (frog with hind legs) (3*)

OBSERVATIONS:

These two signs, the ‘frog’ and ‘tadpole’, are both depicted in profile. The frog is shown as is characteristic with the exception of the head, which is looking upward. Whether this is a subtle play at showing a frog during its mating call (without air) or a depiction of a frog in seated position with head just out of the ‘imaginary’ water is difficult to say. The tadpole is depicted in the stage of development when it moves between water and land, perhaps symbolic of the ‘rebirth’. Noteworthy is the fact that both frog and tadpole are depicted with 4 ‘legs’ into 2, a characteristic common to Egyptian hieroglyphs depicting seated or lying animals. (N.B. often used also to depict the ‘toad’.)

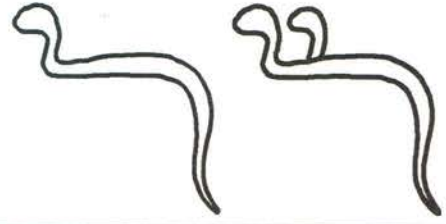
I 9

horned viper
(*Cerastes cornutus*)

FUNCTION:	<p>(1) ideogram</p> <p>(a) viper-<i>fy</i> </p> <p>(b) 'Mountain of the Horned Viper'- <i>Dw-ft</i> </p> <p>(2) determinative</p> <p>(a) father- <i>it (iti)</i> </p> <p>(3) phonetic (alphabet)-<i>f</i></p> <p>(a) he, him, his, it, its (suffix pronoun)-<i>f</i> </p>
VARIATIONS:	<p>(1)  P9- (combination of I 9 and 'oar' P8)</p> <p>(2)  S30- (combination of I 9 and 'folded cloth' S29)</p> <p>(3)  U35- (combination of I 9 and 'spindle' U34)</p>
ASSOCIATIONS:	<ul style="list-style-type: none"> • god: Horus • father: used to write word but not 'read' • manifestation of god (3) • poisonous (death) (3) • nomes: Upper Egypt- 12, 13, 14 (1, 12) • wife who hates husband (snake bites mates head off) (4*) • children who hate their mother (devours belly of mother and is born) (4*) • (see I 14/I 15 for general associations about snakes)
OBSERVATIONS:	<p>This sign, typically referred to as the 'horned viper', depicts a viper from what usually might be interpreted as profile perspective. The body of the snake, however, is curved and most likely is not done so to reflect the body moving over an uneven surface but is actually the snake's body from above perspective (cf.: I14/I 15). In this way the image or sign could depict the characteristic movement of the snake without movement actually being shown. Noteworthy are the two horns on the head shown in frontal perspective to emphasize this aspect of the viper while distinguishing it from other snakes as well.</p>

I 10/
I 11

cobra in repose/
two cobras
(*Naja haje haje*)



FUNCTION:

I 10

(1) phonetic (alphabet)– *d* (sometimes replaces ‘hand’ – *d*)

(a) cobra– *dt*

I 11

(2) phonetic– *dd*

(a) ‘what had been commanded’– *wddt*

(3) more common name

(a) cobra– *iʿrt*

VARIATIONS:

(1) M14– (combination of I 10 and ‘stem of papyrus’ M13),
phon. *w(3)d*

(3) T5/6– (combination of I 10 and ‘mace with pear-shaped head’ T3), phon. *hd/hdd*

(4) V21– (combination of I 10 and ‘hobble for cattle’ V20),
phon. *md*

ASSOCIATIONS:

- not divine image like erect variation (see I 12/I 13)
- nome: Upper Egypt– 10 (5)
- (see I 12/I 13 for associations of cobras– specifically erect ones)
- (see I 14/I 15 for general associations about snakes)

OBSERVATIONS:

These signs, typically referred to as the ‘cobra in repose’ and ‘two cobras in repose’, depicts a cobra(s) from what usually might be interpreted as profile perspective. The snake, however, is actually depicted from above perspective lying still on the ground (cf.: horned viper I 9 which is moving). Noteworthy is the way in which two cobras are merged for I 11, giving the impression of a two-headed snake (cf.: two owls G18). This perspective may have been a combination of simplification for ease of writing/drawing along with a simplification of how two head’s of snakes might appear when they are bundled together (see *Comments and Observations about the Hieroglyphs for Amphibians and Reptiles* for other interpretations).

I 12/
I 13

cobra– erect
(on basket– V30)
(*Naja haje haje*)



FUNCTION:

I 12

(1) determinative

(a) uraeus– *iʿrt*



(b) goddess, Edjo/Wadjet– *W3d(y)t*



(b) goddess, Nesret– *Nsrt/Nzrt*



I 13



(1) determinative

(a) ‘goddess’– *ntrt* (5, 6)



VARIATIONS:

(1) I 12 and I 13– sometimes replace each other for determinative in *W3dyt*– Edjo

(2)  I 13, as element in royal title ‘Two-Ladies’ –  G16

ASSOCIATIONS:

- gods and goddesses: Ra, Urethekau, Wadjet, Edjo, Nekhbet, Meretseger/Merseger, Apophis, Renenutet
- cult centers: Buto
- divine image unlike repose variation (see I 10/I 11)
- pharaoh: symbol of unification (sign G16), emblem of royalty and power (forehead)
- protector of the dead, red crown, color green, north, protection and justice (5)
- Lower Egypt (1)
- (see I 14/I 15 for general associations about snakes)

OBSERVATIONS:

These two signs, the ‘cobra erect’ and ‘cobra erect on basket’, are both depicted coiled up with body and head in profile. The depiction, which is the variation of the cobra used for gods/goddesses and pharaoh, shows the aggressive snake. The throat is distended and in semi-frontal perspective and the snake is ready to strike. It should be noted that this is one of the few examples of a dangerous animal sign (even with pharaonic/deity associations) which maintains such an aggressive pose (cf. lion E22, hippopotamus, E25, and baboon E32). (N.B. The head is in profile while the distended throat is in “frontal/semi-frontal” perspective giving the impression of an “inflated breast”.) (8)

I 14/
I 15

snake



FUNCTION:

(1) determinative

(a) serpent— *hf3w*



(b) snake, worm(?)— *ddft*



ASSOCIATIONS:

- gods and goddesses: Ra, Urethekau, Wadjet, Edjo, Nekhbet, Meretseger/Merseger, Amon, Apophis, Renenutet, Horus, Nun
- four goddesses of Hermopolitan ogdoad
- positive: subterranean world, fertility, creation, rebirth, resurrection, 'father', protector of red crown, primeval waters, speed, energy, sun, land, grain
- negative: destruction, fear, evil, mystery and danger
- Mehen (game): guard of the solar bark (5)
- wife who hates husband (viper) (3*)
- children who hate their mother (viper) (3*)
- mouth, where strength is (3*)
- powerful king and cosmos (3*)
- king ruling part (serpent cut in half) (3*)
- Almighty god (complete serpent) (3*)
- king as guardian (serpent in state of watchfulness) (3*)
- cosmic ruler (3*)

OBSERVATIONS:

These signs, variations of 'snakes' ('generic' I 14 and 'cobra' I 15), both depict snakes from the above perspective. The body of the snakes are curved denoting not only 'rapid' movement but possibly also movement on a surface which is difficult for snakes such as sand or water. Noteworthy is the fact that I 15 shows the moving cobra with semi-flared head in semi-frontal perspective. The head is depicted in such a way as to not denote aggression/striking position, but merely a way of depicting the most typical characteristic of the particular snake.

12.3 Comments and Observations about the Hieroglyphs for Amphibians and Reptiles

The group for amphibians and reptiles demonstrates some quite interesting use of perspective. The perspective views represented by the hieroglyphs for amphibians and reptiles are often individualized much more so than other groups.

The sign for the lizard is depicted interestingly enough from above. This is a perspective which was also taken for crocodiles (in "art") in the Amratian period. The perspective taken for lizards (and salamanders) reflects the typical perspective from which one would view the creature. This is especially clear when considering the gecko lizard which climbs on walls and ceilings. The use of the same perspective in crocodiles during early periods may be explained by the fact that lizards were considered hybrids between fish and snakes (see I 1).¹ The reason for the change in the perspective of the hieroglyph for the crocodile is unknown, but may also be influenced by the fact that animals which are lying down (see mammals, Group E) are depicted in diminution (4 legs to 2).² This practice may have been adopted during the "codification" of hieroglyphs. And since the sign gives the appearance of lying down it is possible that this codified practice found its way into this hieroglyph, changing the older perspective representation.



Fig.52: Amratian Period pottery with "crocodiles" and "fish". (Ragghianti 1970: 19)

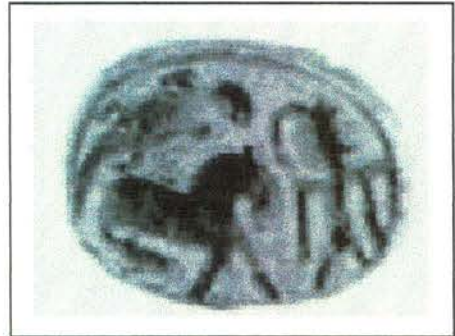


Fig.53: Misinterpretations which did not take into account the change in the iconography and perspective include Petrie's (mis)interpretation of the 'lizard' as a 'crocodile' (in BM 44). (Cornelius 1994: 192 and Pl.48)

The body and the head of the freshwater turtle (I 2) are depicted from above perspective. This perspective may reflect the perspective from which the turtle was most often seen, from a boat. It is also a perspective which may have made it more easily identifiable to the ancient Egyptian. The legs of the turtle are depicted towards the back end of the creature indicating the backstroke of the swimming

¹ The predynastic crocodile above perspective changed during the historic period coinciding with the hieroglyph. (Schäfer 1974: 150)

turtle. The above perspective of the turtle, in light of the motion of the legs, may also provide an answer for the reason the particular perspective of the creature was taken.

The crocodiles are depicted in profile with diminished legs. The tail of the crocodile is most often also depicted in profile perspective. The exception to this is the "crocodile with curved tail" (I 5), and "crocodile on a shrine" (I 4). The "crocodile with curved tail" is depicted in above perspective but is altered somewhat by having the tail viewable "below" the hieroglyph itself. The curve of the tail is also exaggerated for emphasis. The "crocodile on a shrine" has a "hanging" tail typical of similar emblematic representations on shrines (cf.: E 16). This emphasis can be seen in the use of the sign in words such as "to collect". The neck of the crocodile is unnaturally depicted in some cases where the crocodile's head is turned almost completely around.

The reason for this is not fully understood.

The posture and demeanor of the crocodile is typically docile. The mouth is most often closed and the head is tilted slightly upward. The tilt of the head may have a similar "characteristic" perspective as the frog, perhaps representing the characteristic head out of water so familiar to the creature. There are crocodiles with mouths open which are typically representative of aggression that are not a part of the Gardiner Group but worthy of mention here.

As mentioned above, the frog (I 7) is depicted in profile with head tilted upward. The seated posture of the frog (and tadpole— I 8) also lend themselves to the characteristic diminution of the "legs". The posture and demeanor of both is fairly typical of the creature. The depiction of the tadpole's tail, however, slopes nearly straight downward. This depiction may reflect more the tadpole's association with the *shen* sign (V9), 'encircling protection', on which it is often

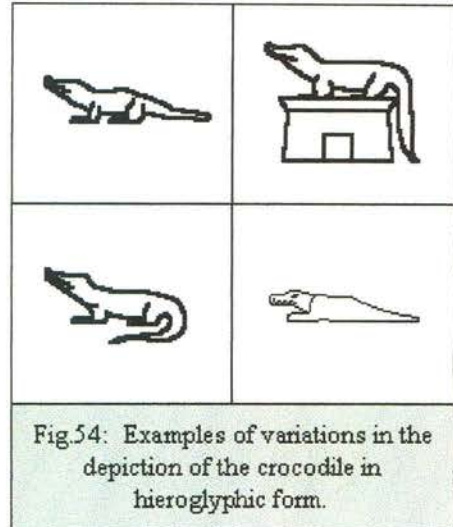


Fig.54: Examples of variations in the depiction of the crocodile in hieroglyphic form.

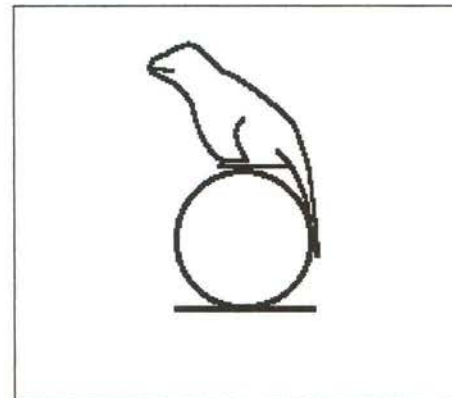


Fig.55: Example of the 'tadpole' (I 8) on top of the *shen* sign (V9).

² Schäfer interprets the diminution of the legs as a result the legs of animals with short legs, those lying, or those sitting. (1974: 105)

depicted as sitting upon.

The depiction of the “posture” of snakes often is a reflection of the creature's state. The cobra in repose (I 10) depicts a cobra with head in profile and the body in above perspective. The depiction of the body is often thought to have been a cobra lying on an object with tail hanging down. However, when understood in light of the use of aspect emphasis, for both natural and perceived characteristics, it seems more probable that the body is depicted from above. Also, a comparison with the characteristic of snakes in motion (I 9, I 14, and I 15– see below) demonstrates the practicality and feasibility of this interpretation. Other snakes which are also “still” or “motionless” are the erect cobras (I 12, I 13). These two cobras, only variations of the same, show a cobra in its defensive/aggressive state with throat distended. The head of the snake is depicted in semi-frontal perspective. The curled representation of the body is characteristic of both the cobra in its natural “defensive” posture and quite possibly, as may be inferred from its association with the basket, a reflection of the typical “charmed” snake.³

The posture of snakes in motion can be seen by a few snake hieroglyphs. The horned viper (I 9) can be seen as a snake with its head depicted in profile and its horns depicted in frontal perspective. The frontal perspective of the “horns” helps to distinguish the snake and emphasize this unique characteristic. The body, however, is depicted from above perspective. While some may interpret the curves of the snake as an indication of the terrain over which the snake is “moving”, this interpretation may be misunderstood.⁴ When examined under the light of the emphasis of aspects, it seems quite possible and even likely, that the snake's body is depicted from above perspective in order to give the allusion of movement. A comparison of this sign may be made with a non-Gardiner group sign in which the horned viper is depicted in a similar manner as the cobra in repose. This same effect can be seen with the hieroglyph's used to indicate the word “snakes” (including the cobra variation– I 14, I 15). Both of these have distinct and exaggerated wavy bodies. The bodies, however, similar to the horned viper, are not depicted in profile. They are not representations of snakes

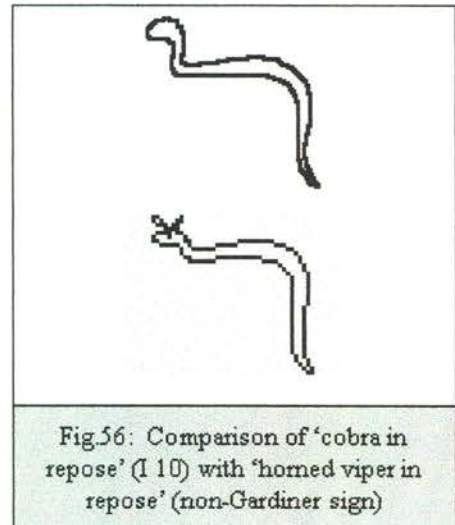


Fig.56: Comparison of ‘cobra in repose’ (I 10) with ‘horned viper in repose’ (non-Gardiner sign)

³ This is not discounting the possibility of a link between the basket and the “lord” or *neb* connotations.

⁴ Past interpretations included that of a “jumping” snake. Schäfer describes the snake as “lying in a broad coil on the ground with just its head raised.” (1974: 145)

which are moving over very hilly or rough terrain, but are representations of snakes in motion. The exaggerated waviness of the body of the snakes may reflect the natural movement and difficulty with which the snake moves over sand or even in water. Like many other snakes, the head of I 14 is depicted in profile. The variation of this sign, I 15, depicts a cobra with a distended throat in semi-frontal perspective. The variation in the perspective of the heads of the snakes was most probably used to distinguish the cobra from the generic snake.

The amphibians and reptiles of ancient Egyptians, like the other living animal hieroglyphs, are the result of a conscious effort to represent the animals in characteristic ways. The legs, posture and demeanor of the creatures tells one much more about the people than about the creature itself. The choices made in depicting the various animals were done so in order to reflect nature and perceptions about nature. In this way, each hieroglyph can be said to be a fingerprint from the mind of the ancient Egyptian.

13. Fish: Group K

13.1 Introduction

13.2 Analysis

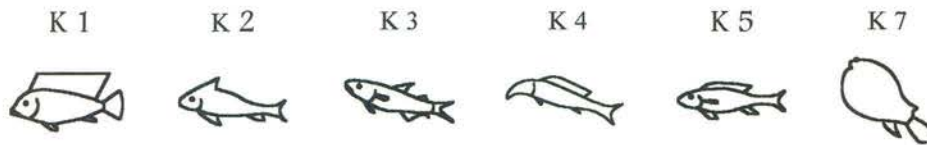
13.3 Comments and Observations about the Hieroglyphs for Fish

13.1 Introduction

In this section the hieroglyphs for fish will be examined. The structure is the same as in the previous sections with the exception that the category on “variations” is not listed since the only variations are non-Gardiner signs. Below is a list of signs that are discussed in this section.

13.2 Analysis

Group K:



Non-Gardiner sign (also Group K) (Castel 1999: 305):

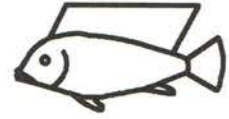
Catfish



K1

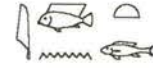
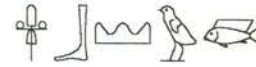
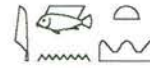
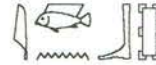
bulti fish

(*Tilapia nilotica* and sp.)



FUNCTION:

(1) determinative

(a) bulti fish– *int*(a) 'Abydos' fish– *3bdw*(2) phonetic– *in*(a) valley– *int*(a) wall– *inb*

ASSOCIATIONS:

- gods and goddesses: Osiris (manifestation), Hathor, Neith, Kha-bekhent
- cult centers: Abydos, Deir el-Medina, Dendera
- impurity: during the New Kingdom fish was widely consumed but taboos or restrictions were later (substantiated during the Late Period) placed on its consumption
- fertility, rebirth, solar orb (reddish fins) (10)
- sacred and scorned– essential food but not acceptable to temples and the like
- with the Nile Perch (symbol of Upper Egypt) = unification (4, 9)

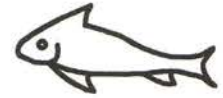
OBSERVATIONS:

This sign, typically referred to as the 'Nile perch', is depicted in profile. The distinctive characteristic of the dorsal fin on top is emphasized along with the shape of the tail (caudal fin) and pectoral fins. The gill of the fish is also made noticeable perhaps for distinction. Where realistic colors are represented the fish's distinctive reddish fins are shown.

K2

carp/barbel

(*Barbus bynni* and sp.)

**FUNCTION:**(1) phonetic determinative– *bw*(a) abomination– *bwt*

(1) name (group of fish)

(a) carp– *mhy***ASSOCIATIONS:**

- gods and goddesses: Khnum, Banebdyedet, Mehit, Tebas, Osiris (resurrection)
- fecundity, primeval ocean, the Nile (3)
- emblem of 16th nome of Lower Egypt (5)

OBSERVATIONS:

This sign, typically referred to as the 'bynni' or 'barbel/carp', depicts the fish in profile. The fish is in a characteristically normal 'posture' though variations from the Old Kingdom show a tail curved downward with the typical horizontal variation coming about during the Middle Kingdom. Noteworthy are the distinctive dorsal and pectoral fins along with the caudal and anal fins. The gill of the fish is also made noticeable perhaps for distinction.

K3

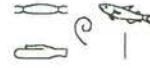
mullet

(*Mugil cephalus* and sp.)



FUNCTION:

(1) determinative

(a) buri-fish/mullet- 𓆎dw (2) phonetic- 𓆎d (?)(a) administrator of a province (district administrator),
lit. excavator of canals(?) - 𓆎d-mr (𓆎d-mr)

(3) name

(a) buri-fish- $b\bar{z}ry$ 

ASSOCIATIONS:

- god: Ra (red)
- cult centers: Heliopolis, Phagriopolis, Elephantine
- positive role (7)

OBSERVATIONS:

This sign, typically referred to as the 'mullet', depicts the fish in profile. The fish's characteristic dorsal, pectoral, caudal, and anal fins are all present along with the gills. Noteworthy is the fact that the natural sloping up of the body is emphasized to the extent to give the impression of a floundering or jumping fish.

K4

oxyrhynchus fish
(Elephant fish)

(*Mormyrus kannume* and sp.)

FUNCTION:

(1) ideogram

(a) oxyrhynchus fish– *h3t*



(2) phonetic– *h3*

(a) corpse– *h3t*



(b) widow– *h3rt*



ASSOCIATIONS:

- gods and goddesses: Osiris, Hathor (at Esna)
- not eaten as devotion to Osiris– fish swallowed his phallus after being dismembered thus endangering his resurrection (10)
- from wounds of Osiris (11)
- sacred to town of same name in Fayum– ‘Oxyrhynchus’ (el-Bahnasa)
- foul-smell, fishy-smell

OBSERVATIONS:

This sign, typically referred to as the ‘oxyrhynchus’ or ‘elephant fish’, is depicted in profile. The fish’s characteristic dorsal, pectoral, caudal, and anal fins are all shown. Associations with Elephantine and the elephant also may be a reflection of the characteristically long ‘snout’ of the fish. This may perhaps be in part a reason for the association of the fish with the phallus of Osiris. The shape of the fish is emphasized and to an extent exaggerated to contrast the rounded ‘belly’, thin tail, and curved snout.

K5

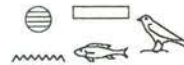
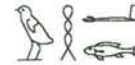
pike

(Petrocephalus bane/Synodontis sp. ?)

FUNCTION:

(1) phonetic determinative– *bs/bz*(a) introduce, enter (variation– Old Kingdom)– *bs/bzi (ibz)*

(2) determinative

(a) fish– *rmw*(b) fishy smell/stink– *hnš*(b) synodontis schall– *wh^c*(b) synodontis betensoda– *sbyt (zbyt)*(b) catfish– *n^r*

ASSOCIATIONS:

- gods and goddesses: Ra, Bastet
- fertility, solar bark (4)
- used as determinative in catfish (see above) (4)

OBSERVATIONS:

This sign, typically referred to as representing 'pike' and Syndontis species, is problematic. The fish is depicted in profile. Unfortunately, there is some confusion as to the association of the fish with a particular species. The use of the sign as a determinative in the word 'catfish' may be the result of the disuse of an early dynastic variation of the catfish (?) (for more information on this see *Comments and Observations about the Hieroglyphs for Fish*).

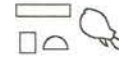
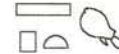
K7

blowfish/puffer

(Tetrodon fahaka)

**FUNCTION:**

(1) determinative

(a) be discontented, angry– *špt*(b) 'Tetrodon fahaka', the fish– *špt***ASSOCIATIONS:**

- taboo against killing and eating (Kom Ombo) (2)
- special veneration connected with flooding (Elephantine) (2)

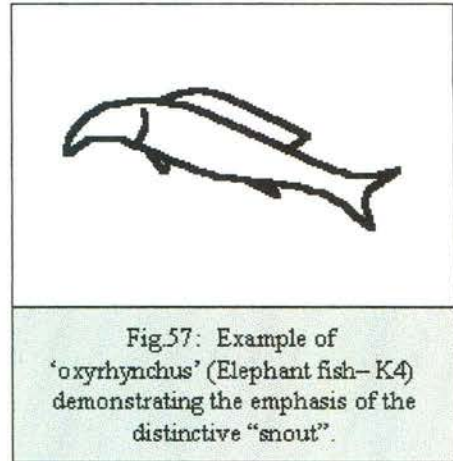
OBSERVATIONS:

This sign, typically referred to as representing 'blowfish/puffer', depicts the fish in profile. The fish is shown not in its normal state, but in its defensive state, blown up. It is interesting to note the connotations with anger and discontentment that the Egyptians attached to the idea to 'blow up' and the fish itself especially given the fact that 'to blow up' also carries the same connotations in modern English. The connotation of anger may also be linked to the poisonous nature of the fish. The characteristic small dorsal fins are often shown along with the anal and caudal fins.

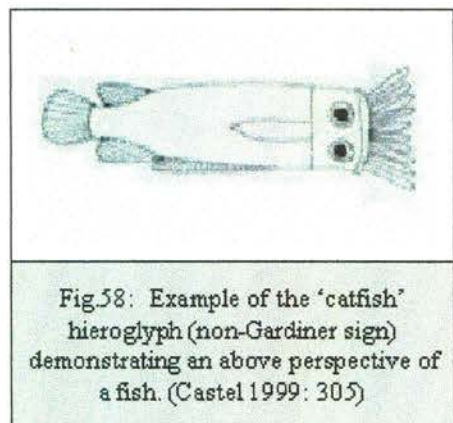
13.3 Comments and Observations about the Hieroglyphs for Fish

The depiction of fish is somewhat more straightforward than the depiction of other creatures. The possibilities are limited by the nature of fish, their shape. Fish, however, like mammals and many other animals, are depicted today in much the same manner as the ancient Egyptians. The choice to depict a fish in profile, which was most often the case, is very understandable as frontal perspective would not only be difficult to “decipher” or interpret, but also would make it more difficult to depict the natural and perceived characteristics of the fish.

Each fish sign from the Gardiner sign list is depicted in *profile*. The gills, dorsal, anal and caudal fins are all depicted characteristically, helping to distinguish the particular fish. Other characteristics of fish are also depicted such as the “posture” of the fish (K3 or K4) which may imply that the fish is jumping. The oxyrhynchus’ “snout” (K4) depicts the characteristic shape which is also reflected by the Egyptian association with the fish, the elephant and Elephantine. The blowfish (K7) also is depicted in a characteristic manner being “blown up”. It is also worthy of mentioning that the blowfish through its use as a determinative in the word “to be discontent” or “to be angry” (*špt*) reflects a very similar idea and connotations with the modern idea of “to blow up”.



There is one example examined that was not on the Gardiner grouping that is worth mentioning also, the catfish. The catfish distinguishes itself by being the only true “fish” to be depicted from above perspective. It is depicted with its characteristic fins and whiskers and with eyes on “top”. This depiction reflects a similar perspective that would be taken by most people even today. The depiction



from above also may be the result of the characteristic of both its bottom-dwelling nature and the fact that the fish is as flat as most fish are thin. Similar above depictions are also taken with some other non-Gardiner group water creatures such as “crawfish(?)” or other similar mollusks and the like which are depicted in a manner to reflect their characteristics.

The fish was depicted by the ancient Egyptian in a fairly typical manner as one would do today. The only differences, like with other creatures, are with the Egyptian's use of adding characteristics typical to the fish within the sign. In most cases, unfortunately, the depictions are so close to the natural characteristics of the fish that little adaptation has been made and thus reflect very little about the ancient Egyptians themselves.

14. Invertebrates and Lesser Animals: Group L

14.1 Introduction

14.2 Analysis

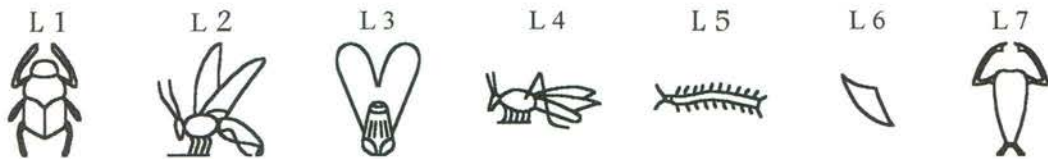
14.3 Comments and Observations about the Hieroglyphs for Invertebrates and Lesser Animals

14.1 Introduction

In this section the hieroglyphs for invertebrates and lesser animals will be examined. The section is examined in a similar manner to the previous sections with the exception that only variations of signs deemed relevant are mentioned. Below is a list of signs that are discussed in this section.

14.2 Analysis

Group L:



Non-Gardiner sign (also Group L: Invertebrates and Lesser Animals) (Betrò 1996: 86:

Scorpion



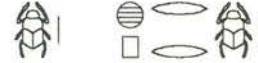
L1

dung-beetle/scarab

(Scarabaeus sacer/Ateuchus sacer/Kheper aegyptiorum/Orycternasicornis)

**FUNCTION:**

(1) ideogram or determinative

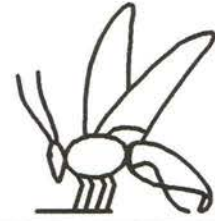
(a) dung-beetle/scarab- *hpr*(2) phonetic- *hpr*(a) become, make happen, etc.- *hpr***VARIATIONS:****ASSOCIATIONS:**





- gods and goddesses: Khepri, Neith, Ra, Osiris
- cult centers: Heliopolis, Esna
- rejuvenation, afterlife, renewal, rebirth, self-generation, life and existence, warmth, good luck
- sun and solar imagery
- seals, amulets
- restoration of the heart (5)
- scarabs of the heart: amulets on mummies for protection
- concepts 'to become', 'to be born'
- preparing the arrival of the new sun (9*)
- life coming out of the darkness, alluding to life's work (9*)
- only begotten (of self), birth, father, world, Hephaistos (3*)
- military seals: all scarabs are male- discharge seed in dung (Plutarch) (3*)

OBSERVATIONS:

This sign, typically referred to as the 'scarab', is depicted from above perspective. The depiction of the hieroglyph can be likened to the amulet and may be in part the reasoning for this particular perspective. The perspective may also be influenced by the typical perspective in which the Egyptian would have seen it, from above. Any other reasons for such a perspective may include simply aesthetic appeal.

L2

bee
(*Apis mellifeca*)

FUNCTION:	<p>(1) ideogram (a) bee– bit </p> <p>(2) ideogram/phonetic (c) king of Lower and Upper Egypt– <i>n-sw-bit</i> </p> <p>(3) phonetic– <i>bit</i> (a) honey– bit </p> <p>(b) king of Lower Egypt– <i>bit(y)</i> </p>
VARIATIONS:	(1) sometimes head omitted
ASSOCIATIONS:	<ul style="list-style-type: none"> • gods and goddesses: Ra, Neith, Osiris, Min • cult centers: Sais (Temple of the Bee) • royalty: king of Lower Egypt (red crown), king of Upper and Lower Egypt (pharaoh)– ‘he of the Sedge and Bee’ • Lower Egypt, stinging • tears of Ra became bees (9) • honey– medicine (healer– pharaoh) (10*) • people obedient to the king (3*) • bees and flowers, ‘to exist’– thanks to pharaoh life is possible (10*) • ‘the good action’, ‘the fine character’ (10*) • hierarchy– lives in and is natural, and obeys (10*)
OBSERVATIONS:	<p>This sign, typically referred to as the ‘bee’, depicts the bee in profile. The features are exaggerated and this is part of the reason for speculation that the sign more accurately portrays a wasp. (N. B. the association of the pharaoh to the bee, to Ra, and to honey tend to contradict this possibility.) While it is quite possible that the depiction of the bee was influenced by such, it is unfortunately not substantiated. Noteworthy is how the legs are shown in a straight line (cf.: locust/grasshopper L4). Also, the hind legs under the abdomen are often omitted. The fact that the wings are depicted above also does not necessarily hint towards the mistaken use of the wasp. The depiction of the wings is a result of: (1) emphasizing this aspect of the bee (constantly flying, busy, etc.), and (2) balance (as the wings are shown “curved” forward). The wings, if seen from above, would be curved in the same direction. To compensate for this loss when the perspective was adjusted, the artist reversed one of the wings thus producing a balanced image.</p>

L3

fly



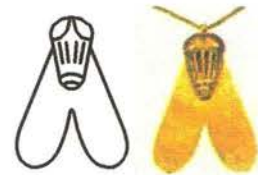
FUNCTION:

(1) determinative
(a) fly- *ff*



VARIATIONS:

(1) sometimes the fly is shown looking 'up', corresponding more to the military decoration, which shows the fly hanging in this position on the necklace or chain.



ASSOCIATIONS:

- apotropaic properties: on magic wands
- bravery because not easy to fend off
- military decoration: fly of valor, gold flies on a necklace awarded to those whose fighting on the battle field reflected the nature of the fly
- difficult to wound, capture, and kill (6)
- quickness, persistence (6)
- nuisance
- impudence- driven off, it comes back (3*)

OBSERVATIONS:

This sign, typically referred to as the 'fly', is depicted from above. The perspective reflects the typical perspective in which one might see a fly (on a wall, etc.). The only variations in depiction are as mentioned above and are probably the result of the influence of the design of the military award.

L4

locust/grasshopper
(*Acrydium peregrinum*)

FUNCTION:

(1) determinative

(a) locust- *snḥm* (*znḥm*)

VARIATIONS:

ASSOCIATIONS:


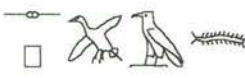
- appetite (5)
- damage and destruction (of crops) (5)
- resurrection (3)
- metamorphosis (3)
- pharaoh: jumps from earth to sky turns into one (6)

OBSERVATIONS:

This sign, typically referred to as the 'locust', represents what is sometimes referred to as a grasshopper. In reality the sign represents the desert locust which migrates through Egypt. The sign itself is in profile (cf.: the bee, E2). The insect is depicted with legs in a row with the exception of its giant leaping rear legs. The 'wings' are also noticeable but are not necessarily emphasized. It seems likely that Egyptian wished to emphasize the jumping legs of the locust over the 'wings' which it also uses .

L5 centipede/millipede (?)

(Scolopendra adhaerens?)

FUNCTION:	<p>(1) ideogram (a) centipede– <i>sp3</i> (<i>zp3</i>) </p> <p>(2) determinative (a) centipede– <i>sp3</i> (<i>zp3</i>) </p>
VARIATIONS:	
ASSOCIATIONS:	<ul style="list-style-type: none"> • gods: Osiris, Sepa, Horus • cult centers: Heliopolis • poisonous nature (bite) (3) • chthonic nature: necropolis and related aspects (5) • magical cures and protection (especially against harmful animals and enemies of the gods) (3) • number of legs 42: 20 men and chief porter carrying throne of pharaoh, and 42 provinces of Egypt (2)
OBSERVATIONS:	<p>This sign, typically referred to as the ‘centipede’, may have represented either a centipede or a millipede. Though the legs and antennae seem more typical of centipedes, the legs and antennae of millipedes may also have been artificially ‘outstretched’ (via perspective) for purposes of emphasis also. The creature is depicted from above perspective, either in full (including the legs) or partially (the body with a differing perspective for the legs). The fact that it is the characteristic of the millipede to have a bite (poisonous also) seems also to confuse the matter leaning interpretation towards the millipede as opposed to the centipede.</p>

L6

bivalve shell



FUNCTION:

(1) phonetic– *h3*(a) Middle Kingdom– table of offerings– *h3t (h3wt)*

VARIATIONS:

ASSOCIATIONS:

OBSERVATIONS:

This sign, typically referred to as the 'bivalve shell', is only mentioned here as it is representation of a living creature's shell. The creature itself is mysteriously not depicted.

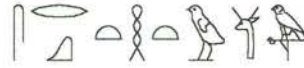
L7

scorpion

(*Leiurus quinquestriatus/Scorpio africanus*)

**FUNCTION:**

1) ideogram

(a) Serket/Selket 'she who relieves the wind pipe'– *Srkt-htw***VARIATIONS:**

(1) early representations (especially– predynastic/early dynastic) often depicted differently (see early: below left, and Libyan Palette– on 'cartouche' with plow, see also "*Comments and Observations*" for more on this sign)

(2) other non-Gardiner variations are mostly combinations of one of the two scorpion signs with other signs

**ASSOCIATIONS:**

- gods and goddesses: Osiris, Horus, Neith, Nephthys, Selket/Serket, Isis
- feminine identity, guardian, water (occasionally)
- respiratory problems (sting)– 'she who cause (the throat) to breathe' (7)
- funerary texts and chambers
- apotropaic powers (7)
- "mother of the dead" (4)
- divine veneration (8)
- magical protection for Isis during search for Osiris (11)
- watched over body of Osiris (8)
- goddess of mother of Hours (4)

OBSERVATIONS:

This sign, typically referred to as the 'scorpion', depicts a scorpion whose attributes/characteristics are altered for safety/superstitious reasons. Old interpretations include that the sign was the depiction of the headless larva. (2) Problems, however, with this interpretation such as having to rethink the significance of the goddess caused the hypothesis to lose validity. The altered version of the sign is from above perspective and is lacking both the legs and the stinger. This is radically different from the early variations which depict the scorpion from above, with all legs and 'claws', while choosing to emphasize the aspect of the stinger by depicting it in profile perspective. In contrast these early examples are, it must be stated, often associated with concepts of 'power' such as the name of the pharaoh on the Libyan Palette known affectionately as "King Scorpion".

14.3 Comments and Observations about the Hieroglyphs for Invertebrates and Lesser Animals

The depiction of invertebrates and lesser animals, mostly composed of so-called “insects”, also reflects a lot about the ancient Egyptians. There are many subtle differences in the depiction of these small creatures which may have explanation. The conventional perspectives taken for groups of animals are often not applicable to this group as each sign seems to be depicted in a unique fashion.

The scarab (L1) is depicted from above with legs out to the side. The legs are drawn in such a way as to reflect a subtle balancing of the hieroglyph with the front “legs” up, the middle legs down, and the rear legs down thus balancing the creature. The sign’s above perspective may be a reflection of the typical perspective from which it was seen or even of the amulet (?).

The bee (L2) and the locust (L4) are both similarly depicted in profile. The bee is shown with its legs in a “straight” line as if one is directly behind the other and not left-side and right-side alignment. The hind legs are sometimes omitted but this may only represent errors on the part of the artisans. The antennae are depicted in semi-frontal perspective while the wings are depicted from above perspective with slight adaptation. The legs of the locust are similarly depicted with the hind legs (which are used for jumping) shown in a characteristic profile perspective. The antennae are also in semi-frontal perspective. The “wings” are also depicted in a semi-frontal perspective showing both, one “above” the other. Also worth mentioning is the fact that the bee is often given a bird’s beak for its stinging or biting nature. (Schäfer 1974: 262)

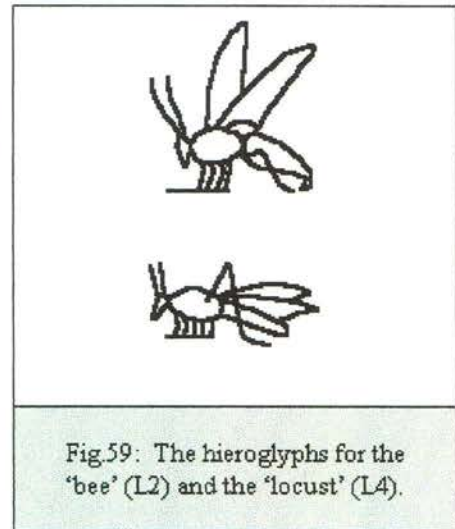


Fig.59: The hieroglyphs for the ‘bee’ (L2) and the ‘locust’ (L4).

The fly (L3) is depicted from above which is a typical perspective from which it would be seen. Some variations show more detail including the legs and lower abdomen. The variations that exist include the fly’s head facing up as opposed to the usual “down” facing of the hieroglyph. This variation may be the result of the influence of the military award in which the sign hangs down from its head which is attached to the chain.

The centipede (L5) is also depicted from the typical perspective from which it would be seen, above. The antennae are shown as they might be seen from above

and the legs are also but perhaps may be exaggerated in regards to how much they are visible from above. The question of the legs being depicted in adapted profile or pure above perspective (with possible exaggeration) is also debatable as to whether one interprets the sign as being a millipede or centipede.

The final hieroglyph to mention is the scorpion (L7). Early depictions of the scorpion are fairly typical for the ancient Near East. The body, head, and legs are depicted from above perspective while the stinger is depicted in profile. By doing so the Egyptian emphasized this aspect of the creature, keeping and reflecting its natural characteristics. This depiction is most often associated with "King Scorpion" from the Libyan Palette. The "King Scorpion" example and earlier variations, which are often closely attached to some idea of power, convey this connotation via the depiction of such a dangerous characteristic, the stinger. It is perhaps due to a combination of superstitious beliefs, changes in funerary beliefs, and magic beliefs that the later variation seen as Gardiner sign L7 is altered. Though the sign is often used as the determinative for the god "she who relieves the wind pipe", it is still the adapted version. Early interpretations of the later variation are that of it being the headless larva. This interpretation has long since been abandoned as the problem over the connotations of the sign would have to be totally altered (see L7). (Betrò 1996: 86) In this later variation the scorpion is depicted from above very simplistically. The front claws are also depicted from above so as to make the sign identifiable since the sign lacks "legs" and its stinger. While there are instances, most often outside of funerary use, where the scorpion is depicted in its earlier form, the variation itself still tells one a lot about the people and their beliefs by seemingly simple adaptations of the sign itself.

Invertebrates and lesser animals are difficult to group under one set of similar treatments via perspective. Although there are some similarities with similar looking creatures, most often one is left with the Egyptian idea of depicting a creature as naturally as possible while emphasizing its characteristics. In this way,

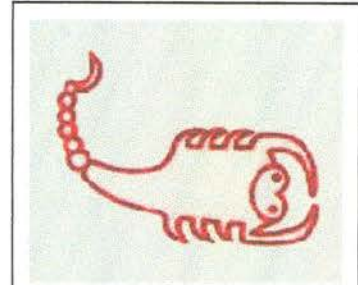


Fig.60: A somewhat typical "viewpoint" of a scorpion, not altered for superstitious reasons, by the ancient Egyptian mind. (Betrò 1996: 86)



Fig.61: Example of "cartouche" with King Scorpion on a hoe sign (U6) from the Libyan Palette. (Tiradritti 1998: 38)

the Egyptian once again uses the subconscious and conscious element in his/her representation of life as hieroglyph.

15. Endnote References for Catalogue

15.1 Structure

Below is a list of all of the books referenced for the animal group signs in this section (charts only, not text sections). Only the authors and titles are given on this page for simplification purposes, with full information of the sources in the *Bibliography*. Each sign is listed with the Gardiner sign number and "name" separately. Below each sign is the list of sources referenced in alphabetical order. Page numbers specifically referenced in a book are italicized. N.B. Where multiple works by an author, the works are referred to in the following manner: "Castel (a)".

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15.2 MAMMALS

<p style="text-align: center;">E1: BULL</p> <ol style="list-style-type: none"> 1. Allen: 428 2. Betrò: <i>92</i>, 94 3. Boas: <i>78-79</i> (Bk I, 46, 47) 4. Brewer, et al.: 77-90 5. Bunson: 1, 27, 48-49, 101-102 6. Carrington: 89 7. Castel (a): 380-383 8. Fischer: 20 9. Gardiner: 172, <i>458</i>, 461 10. Houlihan (b): 5-7, 10-21 11. Jacq: 82 12. Janssen and Janssen: 27-31 13. Lurker: 17, 29, 35, <i>36</i>, 81 14. Nicholson and Shaw: 33, 36, 57, 248 15. Wilkinson (a): 56-<i>57</i> 16. Wilkinson (b): 18, 109 	<p style="text-align: center;">E5: COW SUCKLING CALF</p> <ol style="list-style-type: none"> 1. Alleaume: <i>35</i> 2. Allen: 428 3. Betrò: 126 4. Gardiner: 458 5. Jacq: <i>82</i>* 6. Lurker: <i>41-42</i> 7. Nicholson and Shaw: 73, 248 8. Wilkinson (a): <i>57</i>, <i>59</i>
<p style="text-align: center;">E2: AGGRESSIVE BULL</p> <ol style="list-style-type: none"> 1. Allen: 428, 461 2. Betrò: 92 3. Faulkner: 141, 226 4. Gardiner: 51, 458 5. Nicholson and Shaw: <i>6</i> 6. (see also E1) 	<p style="text-align: center;">E6: HORSE</p> <ol style="list-style-type: none"> 1. Allen: 428 2. Betrò: <i>93</i> 3. Boas: <i>93</i> (Bk II, 44)* 4. Brewer, et al.: <i>101</i> 5. Carrington: <i>81</i> 6. Gardiner: 459 7. Houlihan (b): 33-37 8. Janssen and Janssen: 38-43 9. Nicholson and Shaw: <i>132-133</i>
<p style="text-align: center;">E3: CALF</p> <ol style="list-style-type: none"> 1. Allen: 428 2. Betrò: 126 3. Gardiner: 458 4. Nicholson and Shaw: <i>6</i> 5. Wilkinson (a): <i>57</i> 6. (see also E1) 	<p style="text-align: center;">E7: ASS</p> <ol style="list-style-type: none"> 1. Allen: 428 2. Betrò: 94 3. Boas: <i>72</i> (Bk I, 23), <i>93</i> (Bk II, 43)* 4. Brewer, et al.: 99 5. Bunson: <i>101</i> 6. Carrington: 70, 71, 85 7. Castel (a): <i>83</i> 8. Gardiner: 459, 460 9. Houlihan (b): 29-33 10. Janssen and Janssen: 30-38 11. Lurker: <i>30-31</i> 12. Nicholson and Shaw: 33
<p style="text-align: center;">E4: HEZAT/HESAT COW</p> <ol style="list-style-type: none"> 1. Allen: 428 2. Brewer, et al.: 77-90 3. Faulkner: 177 3. Gardiner: <i>458</i>, <i>505</i>, <i>506</i> 4. Lurker: <i>41</i> 5. Wilkinson (a): 58-<i>59</i> 6. Wilkinson (b): 137 7. (see also E1) 	<p style="text-align: center;">E8/8a: KID/YOUNG GOAT</p> <ol style="list-style-type: none"> 1. Allen: 428 2. Betrò: 95 3. Carrington: 70-71 4. Gardiner: <i>459</i> 5. Janssen and Janssen: 31-35 6. Lurker: <i>55</i> 7. Nicholson and Shaw: 31

<p style="text-align: center;">E9: BUBALIS/HARTEBEEST</p> <ol style="list-style-type: none"> 1. Allen: 428 2. Fischer: 21 3. Gardiner: 459, 462 4. Houlihan (b): 41, 57-58 5. Nicholson and Shaw: 6 	<p style="text-align: center;">E13: CAT</p> <ol style="list-style-type: none"> 1. Alleaume: 35 2. Allen: 428 3. Betrò: 97 4. Brewer, et al.: 105-109 5. Bunson: 51-52 6. Carrington: 78-79 7. Castel (a): 183-185 8. Gardiner: 459 9. Houlihan (b): 80-90, 83, 87 10. Jacq: 83 11. Janssen and Janssen: 14-19 12. Lurker: 32, 39 13. Nicholson and Shaw: 62, 93, 248 14. Wilkinson (a): 62-63 15. Wilkinson (b): 11-12*
<p style="text-align: center;">E10/11: RAM</p> <ol style="list-style-type: none"> 1. Allen: 428 2. Betrò: 96 3. Brewer, et al.: 93 4. Bunson: 101 5. Carrington: 70-71, 85 6. Castel (a): 88-89 7. Fischer: 23 8. Gardiner: 459, 462, 508 9. Houlihan (b): 22 10. Jacq: 83 11. Janssen and Janssen: 31-35 12. Lurker: 99-100 13. Nicholson and Shaw: 240, 248 14. Wilkinson (a): 60-61 15. Wilkinson (b): 135, 157 	<p style="text-align: center;">E14: DOG</p> <ol style="list-style-type: none"> 1. Allen: 429 2. Betrò: 126 3. Boas: 77 (Bk I, 39, 40) 4. Brewer, et al.: 110-118 5. Bunson: 67 6. Carrington: 72, 78 7. Castel (a): 307-308 8. Gardiner: 459, 517 9. Jacq: 83 10. Janssen and Janssen: 9-13 11. Nicholson and Shaw: 87
<p style="text-align: center;">E12: PIG</p> <ol style="list-style-type: none"> 1. Allen: 428 2. Betrò: 95 3. Boas: 92 (Bk II, 37), 104 (Bk II, 86)* 4. Brewer, et al.: 93-97 5. Bunson: 101 6. Carrington: 70-71 7. Castel (a): 98-100 8. Gardiner: 459 9. Houlihan (b): 25-29 10. Janssen and Janssen 33-35 11. Lurker: 95-96 12. Nicholson and Shaw: 33-34 	<p style="text-align: center;">E15/16: RECUMBENT JACKAL (ON SHRINE)</p> <ol style="list-style-type: none"> 1. Alleaume: 35 2. Allen: 429 3. Betrò: 77, 78 4. Bunson: 101, 128 5. Fischer: 21 6. Gardiner: 459, 462, 517 7. Jacq: 83 8. Lurker: 28, 37-38, 73 9. Nicholson and Shaw: 6, 34-35, 304-305 10. Wilkinson (a): 64-65 11. (see also E14, E17)

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<p style="text-align: center;">E17: JACKAL</p> <ol style="list-style-type: none"> 1. Allen: 429 2. Betrò: 78 3. Carrington: 84 4. Castel (a): 144-145 5. Faulkner: 63 6. Fischer: 21 7. Gardiner: 460, 517 8. Jacq: 83 9. Lurker: 73 10. Wilkinson (a): <i>64-65</i> 11. Wilkinson (b): 138 12. (see also E14, E15/16) 	<p style="text-align: center;">E22/23: LION (RECUMBENT)</p> <ol style="list-style-type: none"> 1. Alleaume: 35 2. Allen: 429 3. Betrò: <i>98</i> 4. Boas: <i>70</i> (Bk I, 18-19), <i>71</i> (Bk I, 20-21), <i>92</i> (Bk II, 38), <i>102</i> (Bk II, 75), <i>103</i> (Bk II, 82)* 5. Bunson: 101, 146-147 6. Carrington: 88 7. Castel (a): 218-222 8. Gardiner: 460, 462, 517 9. Houlihan (b): 89, 91-95 10. Jacq: <i>83</i> 11. Janssen and Janssen: 18-19 11. Lurker: <i>25, 77</i> 12. Nicholson and Shaw: 162-163 13. Wilkinson (a): <i>68-69</i> 14. Wilkinson (b): <i>158</i>
<p style="text-align: center;">E18/19: JACKAL ON STANDARD</p> <ol style="list-style-type: none"> 1. Allen: 429 2. Betrò: <i>78</i> 3. Gardiner: 460, 510 4. (see also E14, E15/16, E17) 	<p style="text-align: center;">E24: PANTHER/LEOPARD</p> <ol style="list-style-type: none"> 1. Allen: 429 2. Betrò: 126 3. Boas: <i>105</i> (Bk II, 90)* 4. Castel (a): <i>222-228, 291-293</i> 5. Castel (b): <i>all pages</i> 6. Gardiner: 460, 462 7. Houlihan (b): 69 8. Janssen and Janssen: 54-55 9. Lurker: 76
<p style="text-align: center;">E20/21: SETH ANIMAL (RECUMBENT)</p> <ol style="list-style-type: none"> 1. Allen: 429 2. Bunson: 243 3. Cornelius: 15, Pl. 38 (BR 10) 4. Fischer: 21 5. Gardiner: 459, 460, 461 6. Lurker: <i>110</i> 7. Nicholson and Shaw: 264-265 8. Wilkinson (a): <i>66-67</i> 	<p style="text-align: center;">E25: HIPPOPOTAMUS</p> <ol style="list-style-type: none"> 1. Alleaume: 34 2. Allen: 429 3. Betrò: <i>99</i> 4. Boas: <i>82</i> (Bk I, 56), <i>83</i>* 5. Bunson: <i>114-115</i> 6. Castel (a): <i>196-198</i> 7. Fischer: 22-23 8. Gardiner: 461 9. Houlihan (b): 119-121 10. Lurker: <i>64</i> 11. Nicholson and Shaw: 129-130 12. Wilkinson (a): <i>70-71</i> 13. Wilkinson (b): 44

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<p style="text-align: center;">E26: ELEPHANT</p> <ol style="list-style-type: none"> 1. Allen: 429 2. Betrò: <i>99</i> 3. Boas: <i>104</i> (Bk II, 84, 86), <i>105</i> (Bk II, 88)* 4. Bunson: 101 5. Carrington: 75-76 6. Gardiner: 461, 463 7. Jacq: <i>83-84</i> 8. Janssen and Janssen: <i>55-56</i> 	<p style="text-align: center;">E30: IBEX</p> <ol style="list-style-type: none"> 1. Allen: 429 2. Betrò: <i>100</i>, 126 3. Carrington: 70-79 4. Gardiner: 461 5. Nicholson and Shaw: <i>34-35</i> 6. (see also E28, E29)
<p style="text-align: center;">E27: GIRAFFE</p> <ol style="list-style-type: none"> 1. Allen: 425, 429 2. Betrò: 101 3. Faulkner: 106 4. Gardiner: 460, 461 5. Jacq: <i>83</i> 6. Janssen and Janssen: <i>55</i> 	<p style="text-align: center;">E31: GOAT (COLLAR WITH CYLINDER SEAL)</p> <ol style="list-style-type: none"> 1. Allen: 429 2. Betrò: 126 3. Boas: <i>79</i> (Bk I, 48), <i>100</i> (Bk II, 68) 4. Fischer: <i>22</i>, 24, 54 5. Gardiner: 461, 464, 506 6. Jacq: <i>83</i> 7. Nicholson and Shaw: <i>33</i> 8. (see also E8/E8a)
<p style="text-align: center;">E28: ORYX</p> <ol style="list-style-type: none"> 1. Allen: 429 2. Boas: <i>79-80</i> (Bk II, 49)* 3. Betrò: <i>100</i> 4. Bunson: 101 5. Carrington: 70-79 6. Castel (a): <i>46-49</i> 7. Gardiner: 461 8. Houlihan (b): 57 9. Nicholson and Shaw: <i>34-35</i> 10. (see also E29, E30) 	<p style="text-align: center;">E32: BABOON (SACRED)</p> <ol style="list-style-type: none"> 1. Alleaume: 34 2. Allen: 429 3. Betrò: 102 4. Boas: <i>66-69</i> (Bk I, 14, 15, 16)* 5. Brewer, et al.: 98, 119 6. Bunson: <i>41</i>, 101 7. Castel (a): 246-249 8. Gardiner: 461 9. Houlihan (b): 96-108 10. Janssen and Janssen: 20-26, <i>25</i> 11. Lurker: 37 12. Nicholson and Shaw: <i>76</i> 13. Wilkinson (a): <i>72-73</i> 14. Wilkinson (b): 84
<p style="text-align: center;">E29: GAZELLE</p> <ol style="list-style-type: none"> 1. Allen: 429 2. Betrò: <i>100</i> 3. Carrington: 70-79 4. Cornelius: 59-63, Pl. 20-22 (RR 28-30) 5. Gardiner: 461 6. Lurker: 53-54 7. Nicholson and Shaw: <i>6</i>, <i>34-35</i> 8. Wilkinson (b): 21 9. (see also E29, E30) 	<p style="text-align: center;">E33: MONKEY</p> <ol style="list-style-type: none"> 1. Allen: 429 2. Betrò: 126 3. Boas: <i>99</i> (Bk II, 66, 67)* 4. Brewer, et al.: 98, 119 5. Carrington: <i>79-80</i>, 86 6. Castel (a): 246-249 7. Gardiner: 461 8. Houlihan (b): <i>95</i> 9. Janssen and Janssen: 20-26

E34: HARE

1. Allen: 429
2. Betrò: *101*
3. Boas: *73* (Bk I, 26)*
4. Bunson: 101
5. Carrington: 84
6. Castel (a): 228-229
7. Faulkner: 244
8. Gardiner: 461
9. Houlihan (b): *70*
10. Jacq: *47-48**
11. Lurker: *57-58*
12. Nicholson and Shaw: *6*

15.3 BIRDS

<p style="text-align: center;">G1-3: EGYPTIAN VULTURE</p> <ol style="list-style-type: none"> 1. Allen: 431 2. Betrò: 103, 129 3. Castel (a): <i>245-246</i> 4. Faulkner: <i>323</i> 5. Fischer: 9 6. Gardiner: 27, 467 7. Houlihan (a): <i>39-40</i> 8. Jacq: <i>29</i> 	<p style="text-align: center;">G14-16, H4: VULTURE (INCLUDING VARIATIONS)</p> <ol style="list-style-type: none"> 1. Allen: 431 2. Betrò: <i>87</i>, 103 3. Boas: <i>63-65</i> (Bk I, 11), <i>66</i> (Bk I, 12)* 4. Bunson: 101 5. Castel (a): <i>81-83</i> 6. Fischer: 26 7. Gardiner: 469, 474 8. Houlihan (a): 40-42 9. Houlihan (b): 2, 160, 171, 174 10. Jacq: <i>79, 106</i> 11. Lurker: 85-86, 125 12. Nicholson and Shaw: <i>74, 122, 193, 201</i> 13. Wilkinson (a): 84-85 14. Wilkinson (b): 66, 71, <i>83</i>
<p style="text-align: center;">G4: LONG-LEGGED BUZZARD</p> <ol style="list-style-type: none"> 1. Allen: 431 2. Betrò: 103, 129 3. Fischer: <i>26</i> 4. Gardiner: 467 5. Houlihan (a): 44 6. Houlihan (b): 160 	<p style="text-align: center;">G17-20: OWL (INCLUDING VARIATIONS)</p> <ol style="list-style-type: none"> 1. Allen: 431 2. Betrò: 104 3. Boas: <i>106</i> (Bk II, 93, 94)* 4. Carrington: 77 5. Fischer: 10 6. Gardiner: 27, 469 7. Houlihan (a): 108-111 8. Jacq: <i>79*</i>
<p style="text-align: center;">G5-13, O10, R13: FALCON/HAWK (INCLUDING VARIATIONS)</p> <ol style="list-style-type: none"> 1. Alleaume: 34 2. Allen: 425, 431, 461 3. Betrò: 72 4. Boas: <i>59-61</i> (Bk I, 6-8) 5. Bunson: 46, 101, 116-118 6. Carrington: 89 7. Castel (a): <i>191-192</i> 8. Fischer: 55 9. Gardiner: 73, 448, 467-469, 494, 502 10. Houlihan (a): 46-48 11. Houlihan (b): 2, 160-165 12. Jacq: <i>79</i> 13. Lurker: 49, 64 14. Nicholson and Shaw: <i>6, 45, 59-60, 89, 96, 133-134, 151, 189, 219, 252, 267, 273-274, 276</i> 15. Wilkinson (a): 82-83 16. Wilkinson (b): 23, 40, 63, 67, 134, 138 	<p style="text-align: center;">G21: HELMETED/SENNÂR GUINEA-FOWL</p> <ol style="list-style-type: none"> 1. Allen: 431 2. Betrò: 105 3. Fischer: 26 4. Gardiner: 469 5. Houlihan (a): 82-83 6. Houlihan (b): 155
	<p style="text-align: center;">G22: HOEPOE</p> <ol style="list-style-type: none"> 1. Allen: 431 2. Betrò: <i>106</i> 3. Boas: 81-82 (Bk I, 55), <i>82*</i> 4. Gardiner: 469 5. Houlihan (a): <i>118-120</i> 6. Houlihan (b): <i>112</i> 7. Janssen and Janssen: 46

<p style="text-align: center;">G23/24: LAPWING</p> <ol style="list-style-type: none"> 1. Allen: 431 2. Betrò: <i>105</i> 3. Gardiner: 470 4. Houlihan (a): <i>93-96</i> 5. Houlihan (b): <i>112</i> 6. Nicholson and Shaw: <i>244</i> 7. Wilkinson (a): 86-87 8. Wilkinson (b): <i>68, 77</i> 	<p style="text-align: center;">G28: BLACK/GLOSSY IBIS</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Castel (a): 203 3. Fischer: 27-28, 55 4. Gardiner: 470 5. Houlihan (a): 26-27 6. Nicholson and Shaw: 139
<p style="text-align: center;">G25: CRESTED/HERMIT IBIS</p> <ol style="list-style-type: none"> 1. Allen: 431 2. Betrò: 129 3. Castel (a): <i>32-33</i> 4. Gardiner: 470 5. Houlihan (a): 31-32 6. Jacq: <i>195*</i> 7. Lurker: 69 8. Nicholson and Shaw: <i>20, 139</i> 	<p style="text-align: center;">G29-30: JABIRU (ONE AND THREE)</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Betrò: <i>107</i> 3. Castel (a): <i>69-72</i> 4. Fischer: 28 5. Gardiner: 470 6. Houlihan (a): 23-25 7. Jacq: <i>81</i> 8. Nicholson and Shaw: 47, 151
<p style="text-align: center;">G26-26A: SACRED IBIS</p> <ol style="list-style-type: none"> 1. Allen: 425, 432 2. Betrò: 76 3. Bunson: 46, 101, 122 4. Carrington: 88 5. Castel (a): <i>203-204</i> 6. Fischer: 55 7. Gardiner: 448, 470 8. Houlihan (a): 28-30 9. Houlihan (b): 158-160 10. Jacq: 81 11. Janssen and Janssen: 46 12. Lurker: 68-69, 129 13. Nicholson and Shaw: <i>6, 139</i> 14. Wilkinson (a): 88-89 15. Wilkinson (b): <i>138</i> 	<p style="text-align: center;">G31: HERON/PHOENIX (INCLUDING VARIATIONS)</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Betrò: <i>108</i> 3. Boas: <i>75</i> (Bk I, 34, 35), <i>96-97</i> (Bk II, 57)* 4. Bunson: 45, 101, 207 5. Castel (a): 79-81 6. Gardiner: 470, 474 7. Houlihan (a): 13-16 8. Lurker: 31, 129 9. Nicholson and Shaw: <i>52-53</i> 10. Wilkinson (a): <i>90-91</i> 11. Wilkinson (b): 12, 107, 138
<p style="text-align: center;">G27: FLAMINGO</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Betrò: 129 3. Fischer: 27 4. Gardiner: 470 5. Houlihan (a): 35-36 	<p style="text-align: center;">G33: BUFF-BACKED EGRET</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Betrò: 129 3. Gardiner: 470, 473 4. Houlihan (a): 16

<p style="text-align: center;">G34: OSTRICH</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Bunson: <i>102</i> 3. Castel (a): 331-333 4. Gardiner: 470 5. Houlihan (a): 1-5 6. Houlihan (b): 167 7. Nicholson and Shaw: <i>6, 122, 166, 184</i> 8. Wilkinson (a): <i>102-103</i> 	<p style="text-align: center;">G38: WHITE-FRONTED GOOSE</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Betrò: 130 3. Brewer et al.: <i>121-123</i> 4. Bunson: 101 5. Castel (a): 43-45 6. Gardiner: 471, 473 7. Houlihan (a): 54-65 8. Houlihan (b): <i>112, 143</i> 9. Jacq: 81-<i>82</i> 10. Janssen and Janssen: <i>44-45</i> 11. Wilkinson (b): 157
<p style="text-align: center;">G35: CORMORANT</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Betrò: <i>110</i> 3. Fischer: 28 4. Gardiner: 471 5. Houlihan (a): 7-8 	<p style="text-align: center;">G39-41, H1: PINTAIL DUCK</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Betrò: 109, 130 3. Castel (a): <i>43-45</i> 4. Gardiner: 471, 472, 473 5. Houlihan (a): 71-73 6. Jacq: 81 7. Nicholson and Shaw: <i>93</i> 8. Wilkinson (a): <i>94-95</i>
<p style="text-align: center;">G36: SWALLOW/MARTIN</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Betrò: 130 3. Bunson: <i>46</i> 4. Fischer: 28-29 5. Gardiner: 471 6. Houlihan (a): <i>122-125</i> 7. Houlihan (b): <i>87</i> 8. Jacq: <i>81</i> 9. Wilkinson (a): <i>92-93</i> 10. Wilkinson (b): <i>12, 22-23</i> 	<p style="text-align: center;">G42: FATTED DUCK/WIDGEON</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Betrò: 130 3. Castel (a): 43-45 4. Gardiner: 472 5. Houlihan (a): 69-70
<p style="text-align: center;">G37: SPARROW</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Betrò: 130 3. Bunson: <i>46</i> 4. Gardiner: 471 5. Houlihan (a): 136-137 6. Jacq: 81 7. Janssen and Janssen: 46 8. Wilkinson (a): 93 	<p style="text-align: center;">G43-46: QUAIL CHICK (INCLUDING VARIATIONS)</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Betrò: 130 3. Gardiner: 27, 472, 537 4. Houlihan (a): <i>74-78</i>

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<p style="text-align: center;">G47-49: DUCKLING(S) (INCLUDING VARIATIONS)</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Betrò: 130-131 3. Castel (a): <i>43-45</i> 4. Fischer: 29 5. Gardiner: 473 6. Houlihan (b): 143 7. Jacq: 82 8. Janssen and Janssen 9. Nicholson and Shaw: <i>93</i> 10. Wilkinson (a): 96-97 	<p style="text-align: center;">G51: EGRET PECKING AT FISH</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Betrò: 131 3. Fischer: 30 4. Gardiner: 470, 473 5. (see also G33)
<p style="text-align: center;">G50: TWO PLOVERS</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Betrò: 131 3. Gardiner: 473 4. Houlihan (a): 92-93 	<p style="text-align: center;">G52: GOOSE PICKING UP GRAIN</p> <ol style="list-style-type: none"> 1. Allen: 432 2. Betrò: 131 3. Gardiner: 471, 473 4. (see also G38) <hr/> <p style="text-align: center;">H3: HEAD OF SPOONBILL</p> <p>Allen: 433 Betrò: 131 Gardiner: 474 Houlihan (a): 33-34</p>

15.4 AMPHIBIANS AND REPTILES

<p style="text-align: center;">I 1: LIZARD</p> <ol style="list-style-type: none"> 1. Allen: 433 2. Betrò: <i>111</i> 3. Boas: <i>98</i> (Bk II, 62)* 4. Castel (a): <i>363</i> 5. Fischer: 30 6. Gardiner: 475 	<p style="text-align: center;">I 9: HORNED VIPER</p> <ol style="list-style-type: none"> 1. Alleaume: 34 2. Allen: 433 3. Betrò: <i>113</i> 4. Boas: <i>97-98</i> (Bk II, 59-60)* 5. Bunson: 102 6. Castel (a): 353 7. Faulkner: 97 8. Gardiner: 39, 476, 499, 507, 520 9. Houlihan (b): 168-185 10. Jacq: 105-106 11. Lurker: 108 12. Nicholson and Shaw: <i>6</i>, 262-263
<p style="text-align: center;">I 2: FRESHWATER TURTLE</p> <ol style="list-style-type: none"> 1. Allen: 433 2. Betrò: 131 3. Bunson: <i>102</i> 4. Carrington: 76 5. Castel (a): 383-385, <i>384</i> 6. Gardiner: 475 7. Houlihan (b): <i>125</i> 8. Jacq: <i>84</i> 	<p style="text-align: center;">I 10/11: COBRA(S) IN REPOSE</p> <ol style="list-style-type: none"> 1. Allen: 433 2. Betrò: 113 3. Gardiner: 26-27, 455, 476, 480, 510, 524 4. Houlihan (b): 168-185 5. Nicholson and Shaw: <i>6</i>, 262-263
<p style="text-align: center;">I 3-15a: CROCODILE(S)</p> <ol style="list-style-type: none"> 1. Allen: 433 2. Betrò: 86, 112 3. Boas: <i>85</i> (Bk I, 67-70), <i>92</i> (Bk II, 35), <i>103</i> (Bk II, 80)* 4. Bunson: 58, 102 5. Carrington: 70, 72-73 6. Castel (a): 112-115 7. Gardiner: 475 8. Houlihan (b): 113-119 9. Jacq: <i>84</i> 10. Lurker: 43, <i>117</i>, 118 11. Nicholson and Shaw: <i>6</i>, 248 12. Wilkinson (a): <i>71</i>, 104-105 13. Wilkinson (b): 8, 44, <i>137</i>* 	<p style="text-align: center;">I 12/13: COBRA ERECT (ON BASKET)</p> <ol style="list-style-type: none"> 1. Alleaume: 34 2. Allen: 433 3. Betrò: 87 4. Bunson: 102 5. Castel (a): <i>110-112</i> 6. Faulkner: 142 7. Gardiner: 469, 476, 525 8. Schäfer: <i>98, 144</i> 9. Wilkinson (a): 108-109
<p style="text-align: center;">I 7/8: FROG AND TADPOLE</p> <ol style="list-style-type: none"> 1. Allen: 433 2. Betrò: 111, 132 3. Boas: <i>108</i> (Bk II, 101, 102)* 4. Bunson: 94, 102 5. Castel (a): 337-338 6. Gardiner: 475 7. Houlihan (b): <i>122</i> 8. Jacq: 84 9. Lurker: <i>52</i> 10. Nicholson and Shaw: 103-104 11. Wilkinson (a): 106-107 	<p style="text-align: center;">I 14/15: SNAKE</p> <ol style="list-style-type: none"> 1. Allen: 433 2. Betrò: 132 3. Boas: <i>78</i> (Bk I, 45), <i>83-85</i> (Bk I, 59,, 60, 63, 64), <i>97-98</i> (Bk II, 59-60)* 4. Bunson: 102 5. Castel (a): 353-358, <i>356</i> 6. Gardiner: 476 7. Houlihan (b): 168-185 8. Lurker: 108 9. Nicholson and Shaw: 262-263

15.5 FISH

<p style="text-align: center;">K1: BULTI</p> <ol style="list-style-type: none"> 1. Allen: 433 2. Betrò: 114 3. Brewer and Friedman: 15-19 4. Castel (a): 299-300, 303-304, 296-306 (fish) 5. Faulkner: 3 6. Gardiner: 476 7. Houlihan (b): 127-133 (fish) 8. Nicholson and Shaw: 100-101 (fish) 9. Wilkinson (a): 110-111 10. Wilkinson (b): 18 	<p style="text-align: center;">K4: OXYRYNCHUS/ELEPHANT FISH</p> <ol style="list-style-type: none"> 1. Allen: 434 2. Betrò: 132 3. Brewer and Friedman: 51-52 4. Bunson: 199 5. Castel (a): 302-303, 296-306 (fish) 6. Faulkner: 200 7. Fischer: 31 8. Gardiner: 477 9. Houlihan (b): 133, 127-133 (fish) 10. Jacq: 84-85 11. Nicholson and Shaw: 100, 100-101 (fish)
<p style="text-align: center;">K2: CARP/BARBEL</p> <ol style="list-style-type: none"> 1. Allen: 433 2. Brewer and Friedman: 59, 89 3. Castel (a): 298-299, 296-306 (fish) 4. Faulkner: 82 5. Fischer: 31 6. Gardiner: 476 7. Houlihan (b): 127-133 (fish) 8. Jacq: 85 9. Nicholson and Shaw: 100-101 (fish) 	<p style="text-align: center;">K5: PIKE</p> <ol style="list-style-type: none"> 1. Allen: 433 2. Betrò: 132 3. Brewer and Friedman: 48-49, 66, 126 4. Castel (a): 304-306, 296-306 (fish) 5. Gardiner: 434 6. Houlihan (b): 133, 127-133 (fish) 7. Nicholson and Shaw: 100-101 (fish)
<p style="text-align: center;">K3: MULLET</p> <ol style="list-style-type: none"> 1. Allen: 433 2. Brewer and Friedman: 62-63 3. Castel (a): 301-302, 296-306 (fish) 4. Fischer: 31 5. Gardiner: 477 6. Houlihan (b): 127-133 (fish) 7. Jacq: 85 8. Nicholson and Shaw: 100-101 (fish) 	<p style="text-align: center;">K7: BLOWFISH/PUFFER</p> <ol style="list-style-type: none"> 1. Allen: 434 2. Betrò: 115 3. Brewer and Friedman: 80-81 4. Castel (a): 296-306 (fish) 5. Faulkner: 265 6. Fischer: 32 7. Gardiner: 477 8. Houlihan (b): 127-133 (fish) 9. Nicholson and Shaw: 100-101 (fish)

15.6 INVERTEBRATES AND LESSER ANIMALS

<p style="text-align: center;">L1: DUNG-BEETLE/SCARAB</p> <ol style="list-style-type: none"> 1. Allen:434 2. Betrò: 116 3. Boas: 62-63 (Bk I, 10), <i>63</i>, 66 (Bk I, 12)* 4. Bunson: 234-236 5. Carrington: <i>81-82</i> 6. Castel (a): 160-164 7. Gardiner: 477 8. Houlihan (b): 187-189 9. Jacq: 85, <i>108-109*</i> 10. Lurker: 61, 104-105 11. Nicholson and Shaw: 253 12. Wilkinson (a): 112-113 13. Wilkinson (b): 69 	<p style="text-align: center;">L4: LOCUST/GRASSHOPPER</p> <ol style="list-style-type: none"> 1. Allen:434 2. Betrò: 132 3. Castel (a): <i>286-288</i> 4. Gardiner: 477 5. Houlihan (b): 191- <i>192</i> 6. Jacq: <i>85</i>
<p style="text-align: center;">L2: BEE</p> <ol style="list-style-type: none"> 1. Allen:434 2. Betrò: 117 3. Boas: <i>84</i> (Bk I, 62) 4. Bunson: 102 5. Carrington: 82-83 6. Castel (a): 21-23 7. Fischer: 32 8. Gardiner: 477 9. Houlihan (b): <i>189-191</i> 10. Jacq: <i>51*</i>, 85 11. Lurker: 32 12. Nicholson and Shaw: 51 13. Wilkinson (a): 114-115 	<p style="text-align: center;">L5: CENTIPEDE/MILLIPEDE</p> <ol style="list-style-type: none"> 1. Allen:434 2. Betrò: <i>118</i> 3. Castel (a): <i>104-105</i> 4. Gardiner: 478 5. Lurker: <i>39</i>
<p style="text-align: center;">L3: FLY</p> <ol style="list-style-type: none"> 1. Allen:434 2. Betrò: 132 3. Boas: <i>80</i> (Bk I, 51)* 4. Castel (a):249-250 5. Gardiner: 477 6. Houlihan (b):<i>193-194</i> 7. Lurker: 52 8. Murname: 30 (image) 9. Nicholson and Shaw: 101 	<p style="text-align: center;">L6: BIVALVE SHELL</p> <ol style="list-style-type: none"> 1. Allen:434 2. Betrò: 132 3. Gardiner: 478 <p style="text-align: center;">L7: SCORPION</p> <ol style="list-style-type: none"> 1. Allen:434 2. Betrò: <i>86</i> (also image) 3. Bunson: 236 4. Castel (a): <i>164-165</i> 5. Fischer: 32, 55-56 6. Gardiner: 478 7. Houlihan (b): <i>185-187</i> 8. Lurker: <i>104</i> 9. Nicholson and Shaw: 253-254 10. Tiradritti: 38 (image 2) 10. Wilkinson (b): <i>136</i>

Part III: Synthesis and Relevance

16. Living Creature Hieroglyphs: What They Can Tell Us

The notion has been put forward that hieroglyphs are perhaps more than just signs used for writing. Hieroglyphs are considered for most to be a colorful means of communication which shows itself as a written script. This script and its artistic nature impart more than just the *historical* records of a people. It is not just a script full of religion, amusement, and wonder, but a script full of life. The life of the script finds itself in the symbolism which persists throughout it. And though the "symbol" is very important, it is not necessarily one's best mechanism for uncovering the ancient mind that it reflects. The most subtle traces of a person can be found often in the place most looked at, but not looked at from the right point of view. This is why it is necessary to reexamine hieroglyphs as "whole of parts" instead of "parts of a whole". To see a hieroglyph in its pieces is to see it as a puzzle which its parts have been created in such a manner as to inadvertently suggest something about the puzzle maker, the Egyptian.

The linguistic aspect of hieroglyphs is important to understand. The reason one bilateral (or hieroglyph) is used as opposed to another in some cases may hint at subtle puns, even symbolism. And by understanding hieroglyphs in their role(s) as symbols further enlightenment may be obtained. These two ways of "interpreting" hieroglyphs and their uses, however, most often only *speak* when they are intended to do so. Even though this is a valuable tool for understanding the ancient Egyptians, there is still one that has not really been explored, that is the overt and subtle emphases made through the use of perspective representation.

It has been suggested that hieroglyphs, especially those such as living creatures, may impart a unique and *hidden* fingerprint of the mind of the ancient Egyptians. This is in part due to the fact that "realism is relative, determined by the system of representation standard for a given culture or person at a given time." (Goodman 1976: 37) This notion suggests that the Egyptians depicted objects, etc. in a manner which was recognizable (at least to the ancient Egyptian on some level), thus also leaving traces of their perception and their minds upon the very hieroglyphs they "drew".

16.1 From Art to Hieroglyph

From the earliest times depictions of living creatures, many precursors to hieroglyphs, are done so in such a way to emphasize some recognizable aspect. This recognizable aspect may be one that imparts merely physical characteristics, perceived nature of characteristics, or symbolism. For instance, in figure 62 (Amratian Period) there are (from this angle) fish and what has commonly been interpreted as crocodiles.¹ Looking at the fish one can see that the fish is depicted in profile with various characteristics such as the fins noted by the artist. This perspective of depicting a fish is very typical of the ancient Egyptian, even understandable due to the difficulty of "accurately" depicting a fish from any other perspective. The crocodile, however, brings up many questions. Firstly, it is depicted from above, a perspective most often reserved for "lizards" and the like (see Fig.63). This causes one to rethink the interpretation as a crocodile, despite the scales, etc.² Whether one considers

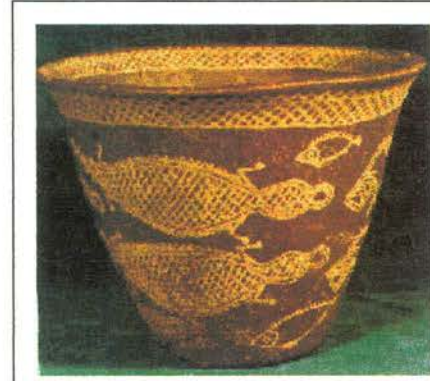


Fig.62: Amratian Period pottery with "crocodiles" and "fish". (Ragghianti 1970: 19)

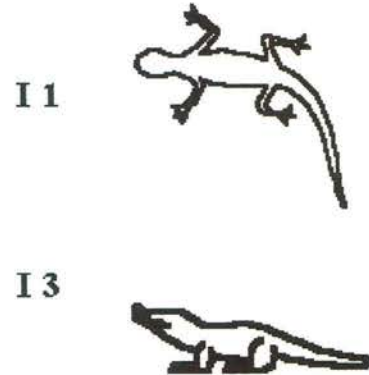


Fig.63: Comparison of the hieroglyphs for the 'lizard' (I 1) and the 'crocodile' (I 3).

this a crocodile, or a lizard, is not so relevant. What is, however, is the fact that the perspective changed (in the case of "crocodile") or the posture and/or demeanor changed (in the case of "lizard"). This is true despite their being a difference in purpose, i.e. art versus hieroglyph, because during the historic period (even early) art perspective is most often similar to hieroglyphic, although with some subtleties.

The perspective of the hieroglyph for the crocodile is in profile as opposed to the artistic rendering in the Amratian Period pot.³ While some may suggest that

¹ The interpretation of this as a crocodile is due in part because of its scaly nature and its seemingly being underwater (see "water" around rim). Problems with the above perspective, short tail, and rounded nature of the head lead to many unexplained questions.

² A "blind" testing of the interpretation of the creatures on the pot was given to various people (including a zoologist) in which, even not knowing its origins, the most common interpretations were that of "fish" and "crocodiles". This was despite any doubts that the "interpreters" may have had.

³ It should be noted that it is possible that there was in fact no change between the perspective of the crocodile, and that this is based upon modern misinterpretation. Interpretations, however, regarding the creature and its perspective still leave many questions unresolved.

there is no relationship between early art and later glyph this is unfounded as will be demonstrated. One subtle link that suggests why the form changed is in relation to the Egyptian view of the lizard. The Egyptian regarded the lizard as a hybrid of sorts between the crocodile and the snake. In light of this fact, one may interpret that early depictions are prior to the Egyptian differentiating between crocodile and the common lizard, at least in artistic forms. This may further suggest that when "codifying" the hieroglyphs it seemed more reasonable that if a differentiation were to be made, that depicted characteristically (both natural and perceived) one of the two, the crocodile perspective should change. The perspective thus would reflect more accurately both the shape and the typical perspective from which the animals were seen. ⁴

The next example provides a more specific demonstration of the idea of the Egyptian emphasis of characteristics via perspective. In figure 64 there is a mixture of "objects" depicted: environment, people, some form of antelope. The antelope is most often interpreted as a gazelle because of the wavy nature of its horns. The horns are depicted in semi-frontal perspective with the animal in the motion of "springing" (?). The animal is most likely the gazelle, with its characteristic horns and long tail. Of interest here is also a difference or change in perspective. The later change from art to glyph not only lost the "springing" motion of the legs, but also the tail became hanging and the horns profile perspective. It should be noted that many other "antelope" retained the distinguishing semi-frontal perspective of the horns. ⁵ Although some may think that interpretation as a goat may be likely, this is most likely not possible since none of the "antelope" show any hint of a beard.

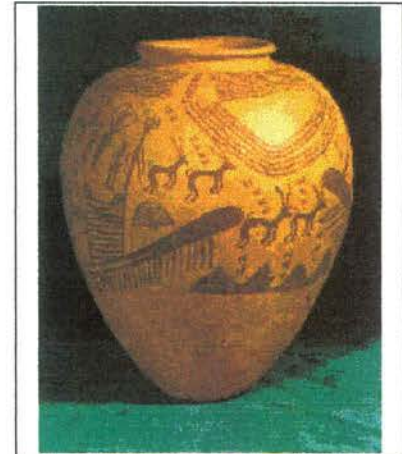


Fig.64: Early example of "future" hieroglyphs, specifically the gazelle, on predynastic pottery. (Ragghianti 1970: 22)

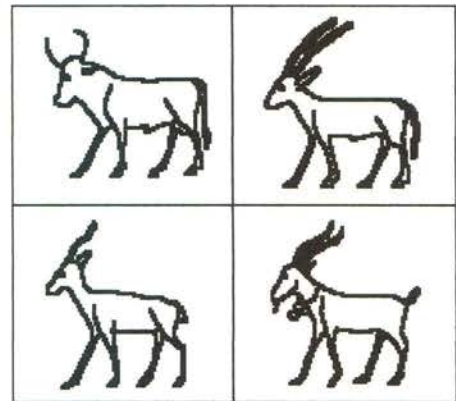


Fig.65: Examples of differing uses of the perspective of horns for various emphasis (clockwise: aggressive bull, oryx, goat, gazelle).

⁴ While it is noted that this scenario for the "reasoning" is very hypothetical in nature, it is done so in order to demonstrate that it may not only be necessary (in this and other cases), but also may provide more insight into the people, their art, and their hieroglyphs.

⁵ The change in the depiction of the tail may reflect the natural characteristic "stance" of the tail when "springing" in "art" versus less movement in the glyph.

The changes that exist are in part due to change in form, art to hieroglyph. However, this is applicable more to the "motion" of the animal and not its depiction. What one sees is that although there were changes upon "codification", the Egyptian still made a point to try and represent the creature, etc. in a characteristic manner, both in the scene itself and in general. It is for this reason that it has been suggested that by examining the possible "why" in the perspective and emphasis of aspects of animals it may be possible to gain insight into the people themselves.

The last early artistic form to compare with the hieroglyph is the scorpion on the Libyan Palette. This depiction is fairly typical of some early examples but is quickly altered for superstitious/magical reasons. The depiction on the palette shows a scorpion with body and head from above perspective, stinger/tail in profile, and legs possible in profile also. ⁶ This contrasts with the hieroglyphic form which shows a headless and tailless creature in a barely recognizable form. The hieroglyph, adopted foremost for superstitious/magical reasons, is most often found in relation to tombs, funerary texts, and the like. While interpretations of the hieroglyph included being that of the young headless larva (see L7), this proved fallible due to the religious associations of the scorpion with Serket (Selket). For the "larva" interpretation to be feasible required an unacceptable reinterpretation of the scorpion and its religious associations and significance. (Betrò 1996: 86) The interpretation problems with the hieroglyph, although short lived, and the reasoning which was used to discredit the hypothesis of "larva" demonstrates another way



Fig.66: Depiction of a scorpion on King Scorpion "cartouche" representing a different early dynastic perspective. (Tiradritti 1998: 38)

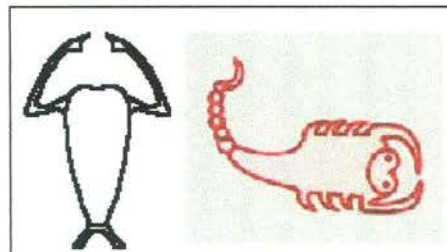
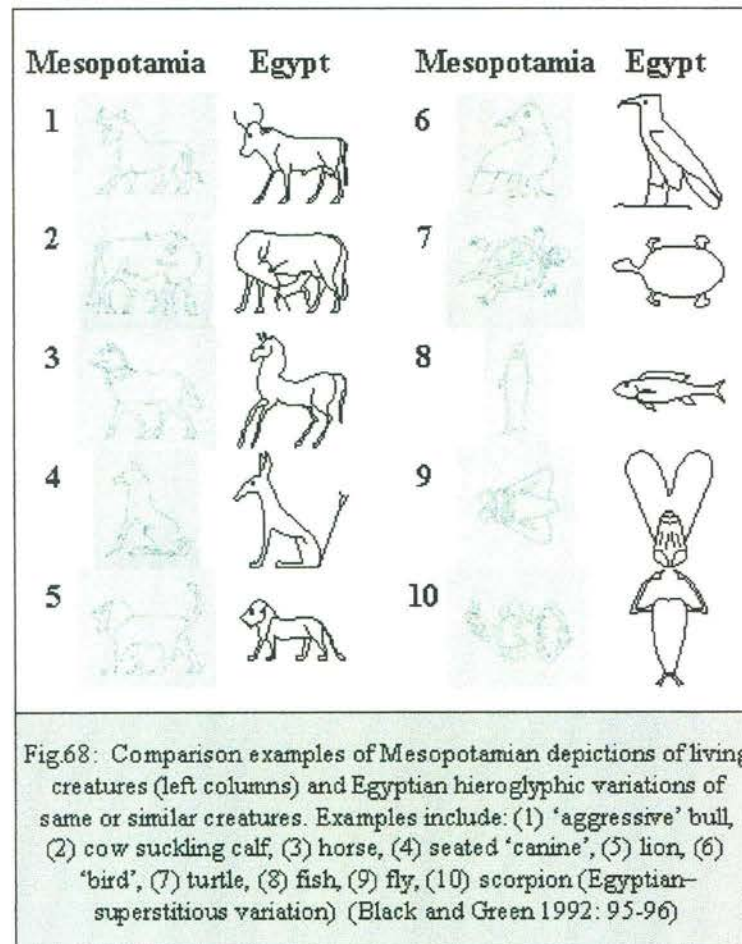


Fig.67: Comparison of "superstitious/magical" hieroglyphic (L7) perspective with "typical" perspective. (Betrò 1996: 86)

⁶ The reason that the legs may or may not be in profile perspective is due to the fact that this variation is on top of a standard, therefore possibly having only the "right" side legs (if seen from above) depicted. This is stated since other variations with "similar" perspectives depict in the same manner with only the difference of legs on both sides (in above perspective) of the body. The possibility of being depicted in profile is also likely and precludes and questioning.

in which the depiction of aspects emphasized via perspective can tell more about the sign, and even about the people's associations with the sign.⁷

Each of these examples were intended to demonstrate the perhaps hidden complexity of a sign. This does not necessarily mean the complexity of its "lines" or even symbolism, but that of the *hidden* impression imparted (not intentionally) on the sign by its creation and left to impart more upon those who look. Having understood the possibility of impressions reflecting the creator, or in this case the people, one can then attempt to identify what may be considered the subtle point of view and perception the Egyptians had of that which was around them.



16.2 Hieroglyphs: Living Creature Examples

Hieroglyphs acted as symbols, a written script, and even as art. The hieroglyphs themselves, however, may be considered to impart to one a subtle trace of the ancient Egyptian mind. Through perspective representation, the sum of vision,

⁷ The associations with a hieroglyph may or may not include symbolism, political significance, or religious significance, but what this demonstrates is by *reading* the sign may impart a broader message than necessarily intended.

experience, and portrayal/creation, the Egyptian as with anyone imparts his/her own point of view to the onlooker. And while it can be argued that hieroglyphs may only reflect the original "codifier", it is the author's belief that due in part to the conservative nature of the Egyptian religious, political, and even social state (i.e. the sum of "culture"), hieroglyphs may necessarily reflect on all of the people through their use in a recognizable form (see Fig. 71).⁸

The hieroglyphs for mammals reflect some very common notions and ideas, in regards to perception/perspective, held by the ancient Egyptians.⁹ Mammals are typically depicted with body and head in profile. This use of profile is similar to the perspective used in

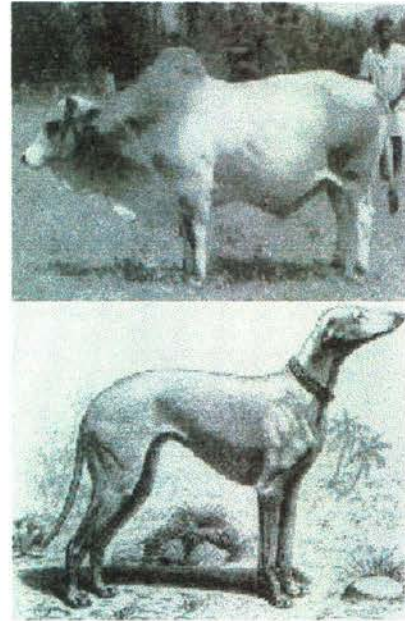


Fig.69: Examples of the use of a "similar" perspective today in the depiction of a bull and a dog. (Epstein 1971: 62, 379)

modern catalogues of animals (see Fig.69). The difference, however, rests with the overall combined (aspects) perspective of the animal. The Egyptian then emphasized various aspects of the mammal by "mixing" perspectives. For example, a bull might be depicted with body and head in profile and its horns in frontal perspective (see E1). Mammals are also typically shown with four legs when standing, perhaps implying movement, and "two" legs when sitting, lying, or acting/representing an emblem. This demonstrates a conscious decision to vary hieroglyphs to impart a certain connotation (at the very least from the artistic perspective).

The representation of birds appears to follow a certain set of rules. Birds are typically depicted in profile with legs in semi-frontal perspective. The exceptions to this rule include the duckling (G47), the heron/phoenix on a perch (G32), and a few examples of presumably young geese/ducks.¹⁰ In these cases the legs are outstretched forward as if the claws of "birds of prey about to strike" (see Fig.70).¹¹

⁸ While it can also be argued that Egypt's conservatism prevented any variation in "impression" and "perspective" it is doubted that even without such that there would have been any degree of variance.

⁹ It should be remembered that when speaking of a group such as "mammals" that this is a modern categorization and does not necessarily reflect those of the ancient Egyptians. Therefore, generalizations about "groups" may or may not reflect the same or similar groupings of the ancient Egyptians.

¹⁰ The possible young geese/ducks with "one" leg are non-Gardiner signs. Schäfer interprets, referring specifically to the legs/feet, signs like these as being merely "purely lateral" or profile perspective. (1974: 106)

¹¹ Curiously, though, none of the birds are birds of prey.

Differing from mammals, there are very few signs with diminution of the legs/feet. This reflects not only the notion of "balance" that the Egyptian held so dear, but perhaps also the notion of the animals physical necessity to spend most of its time on both legs as opposed to the one when sleeping.

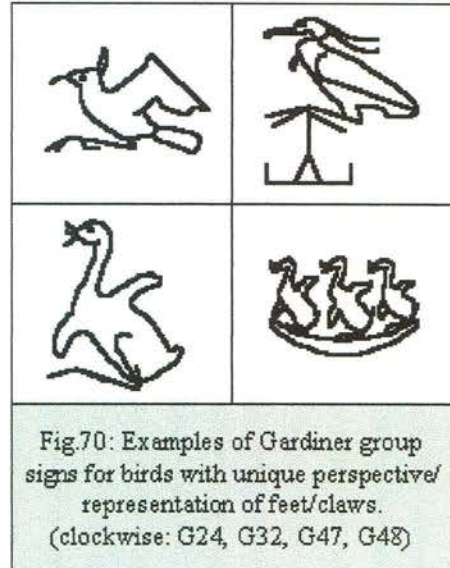
Fish hieroglyphs are also depicted typically, in profile. The perspective of depicting fish, like many other perspectives of living creature hieroglyphs, is similar to the perspective taken today to depict the same living creatures. The exceptions to the profile perspective are with creatures such as mollusks, and the catfish.

Hieroglyphs which depict amphibians, reptiles, invertebrates, and lesser animals are more difficult to "group". These signs can be said to typically reflect perspectives (of aspects) which represent the animal's characteristics (both real and perceived).

17. Towards a New and Better Understanding

Understanding the ancient Egyptian entails more than just understanding the script (language), religion, social institutions, etc. Goldwasser suggests another level of focusing on hieroglyphic inscriptions, "visual focusing". (1995: 109) The people and their culture are more than just the artifacts that they left behind. There are *ideas*, which are reflections of both the human mind and spirit, which pervade all of the material left behind. Each creation was the result of conscious decisions and conscious and/or unconscious perceptions which manage to come through, both blatantly and subtly, to the object from the hands and mind(s) that made them. When such an idea is acknowledged, it is then possible to attempt to analyze "material culture" by not looking at the physical but by delving into the "mental".

Although the importance of understanding a hieroglyph can be overstated and exaggerated, it is nonetheless something important to do. The Egyptian use of a picture or an image for writing was not for merely aesthetic reasons. "A hieroglyph is in origin a pictorial sign that indicates a reality in the world of the Egyptians..." (te Velde 1985-1986: 64) It was also for conveying the "what". Here the "what" is the essence of the hieroglyph itself. The lines represent more than "letters", and this

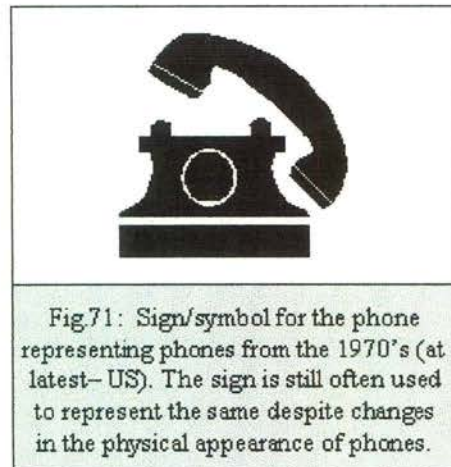


is perhaps why the system never "fully" gave way to shorthand versions such as hieratic or to the development of an alphabet. Hieroglyphs impart the mental imagery of the world of the ancient Egyptian, with his and her perceptions seething throughout.

But why is it necessary to bother with such a detailed analysis? It is the author's belief that "culture" is the combination of aspects crossing, interlocked, and interconnected in a web of life. And in order to understand this web of life, life and the mind that encompasses it must not be forsaken. It is acknowledged that the Egyptians were a people concerned with life itself. The main focus of their lives was the environment in which they lived. This environment, including its animals and society with its "objects", represented life. For this reason the Egyptian chose to depict life (even an innate object was life in that it represented an aspect of someone's life- i.e. the shepherd's crook reflects the life of a shepherd). Therefore, when one speaks of the Egyptians, their world, or their worldview, one must be willing to look at their world from an Egyptian perspective. And what better way is there to do this than through their art and the hieroglyph.

18. Conclusion

The Egyptians used perception just as anyone might today. Even as the objects represented by signs change, it is not necessary to change the sign itself. For example, phones have changed drastically since their invention and earliest widespread use, however, the "symbol" for phone has not changed (see Fig.71).¹² The Egyptians chose to depict animals in a characteristic manner (real and perceived). However, the Egyptians did so in a



manner which can be said to be somewhat unique to the people themselves. Reflecting notions of balance, life, and characteristics which "identify" an animal (and other "objects"), the Egyptian took various aspects that were considered of importance (or perhaps stood out in memory as important, cf. Fig. 2), and pieced them together to represent the entire being. And in so doing, the Egyptian inadvertently left "fingerprints" upon every artistic and hieroglyphic work. It is for reasons such as these that understanding what the Egyptian saw, albeit through

¹² It is also feasible that this could happen in ancient Egypt with hieroglyphs.

perception, inherently reflects upon the culture thus suggesting that it is as important to understand the artistic form or depiction of the hieroglyph as the word which it creates.¹³

Hieroglyphs and the artistic remains left by the ancient Egyptians should be understood more as cultural remains than as mere historical remains (artifacts, etc.). As cultural remains, the context of "objects" can be seen more clearly as a reflection of the web which makes up *culture* (i.e. politics, art, religion, etc.). The "objects", here referring to the hieroglyphs, can be seen as a part of the human puzzle of reconstructing both the past and *past experience*. For the purposes here, hieroglyphs should be understood as mechanisms for understanding, experiencing, and (re)visualizing via mental "reconstructions" the worldview of the Egyptians on the most primary level, that of perception. Perhaps by understanding or viewing the "physically perceived" world of the ancient Egyptians one can "share the ancient Egyptians' view of the world." (Jacq 1998: 6)

¹³ While it is perhaps important as well as interesting to understand the "why" behind the depiction of aspects in hieroglyphs, it is suggested here that of primary importance is to understand the components (or aspects emphasized via perspective) as well.

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