

COGNITIVE LINGUISTICS

لسانيات معرفية

Rune Nyord

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COGNITIVE LINGUISTICS

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Rune Nyord

Kognitive Linguistik
Linguistique cognitive

Cognitive linguistics is an influential branch of linguistics, which has played an increasing role in different areas of Egyptology over the last couple of decades. Concepts from cognitive linguistics have been especially influential in the study of determinatives/classifiers in the hieroglyphic script, but they have also proven useful to elucidate a number of other questions, both narrowly linguistic and more broadly cultural historical.

اللسانيات (اللغويات) المعرفية هي فرع مؤثر من علم اللغويات، والتي لعبت دورا متزايدا في مختلف مجالات علم المصريات على مدى العقدين الماضيين. لقد كان للمفاهيم من علم اللسانيات المعرفية تأثيرا خاصا في دراسة المخصصات / المصنفات في الوثائق الهيروغليفية، ولكنها أثبتت جدواها أيضا في توضيح عدد من المسائل

Cognitive linguistics is a branch of linguistics developed in the 1980s and characterized by the aim of giving an account of language as an integral part of the human cognitive system. Rather than constituting a unified theoretical framework, cognitive linguistics can be seen as a more loosely connected movement united by the aim of drawing on insights from cognitive science and psychology in the description and explanation of linguistic phenomena. Thus, if there is a single core tenet of cognitive linguistics, it could be said to be the hypothesis that linguistic structure reflects conceptual structure.

In practice this commitment means that cognitive linguistics has inherited certain central concerns from cognitive psychology (e.g., questions of classification and category structure) and cognitive science (e.g., the role of embodiment in language and thought), but it has also been able to show the central position in wider human cognition of such

apparently purely linguistic phenomena as metaphor and metonymy. We will focus here on some of the most central concepts in cognitive linguistics, which have influenced Egyptological research significantly (references to more general introductions to the framework can be found in the *Bibliographic Notes* section at the end of this entry).

A fundamental idea in cognitive linguistic approaches is that the human cognitive system (of which language forms an integral part) is fundamentally *embodied*. In contrast to traditional Western philosophical ideas about reason consisting of the manipulation of purely abstract symbols, cognitive linguistics stresses the way human conceptual categories have their basis in human embodied experience. This view of cognition has consequences on a number of different levels, the most important for the present purposes being the *prototype structure* of natural human categories and the notion of pre-conceptual structures based on embodied experience known as *image schemata*

(cf. in general Lakoff and Johnson 1999 and Gibbs 2005).

A fundamental early insight is Rosch's (1978) demonstration that categories in human natural language tend to be delimited, not by necessary and sufficient criteria, but rather by being organized around experientially salient prototypes regarded as central members of the category in question, while less "good" examples of the category are characterized by varying degrees of deviation from the prototype. Thus, in a frequent example, a *blackbird* or a *robin* is a "better," more "typical" example of the category *bird* than, say, a *penguin* or an *ostrich* (both of which lack, for example, the prototypical attribute of flight, but also deviate on other points such as the prototypical shape shared by more central members). Prototypes further tend to be located on what is known as the "basic" level of categorization between the "superordinate" and the "subordinate," e.g., *dog* as opposed to either *mammal* or *dachshund*.

The focus on the human conceptual system as rooted in embodied experience has led to the notion of pre-conceptual primitives based on basic experiences of the human body, which underlie even the most abstract reasoning. Known as *image schemata*, these include such central experiential *gestalts* as CONTAINER, PART-WHOLE, PATH, etc. (Johnson 1987; Hampe 2005).

The role played by image schemata in abstract thought is mediated by another central concept, that of *conceptual metaphor* (Kövecses 2002; Lakoff and Johnson 2003). In cognitive linguistics, metaphor is understood as the transfer of conceptual structure from one domain, which is closer to direct embodied experience (i.e., more "concrete"), to one which is further away (i.e., more "abstract"). Metaphor is thus not just a question of choosing a particular way to express an idea, but rather it is a conceptual mechanism, which provides structure to abstract domains such as LOVE or ANGER. As linguistic structure reflects conceptual structure, linguistic metaphorical expressions can become a window into the conceptual structure of a linguistic community—which is particularly useful when

dealing with a dead culture, which has left abundant written documentation of the language. On this basis, such examples as "It has been a long, bumpy road" said in the context of a love relationship is indicative of the wider conceptual metaphor LOVE IS A JOURNEY, which enables speakers of English to talk and think about LOVE in terms of JOURNEYS—thereby offering a number of new inferential possibilities. To someone studying the culture in question, in turn, this phenomenon would offer some central insights into one side of the ideals and expectations English speakers have about the domain of LOVE.


As a fundamental conceptual mechanism, metaphor plays a role on many levels of human cognition, including making it possible for image schemata to provide structure to abstract categories. For example, "He was *forced* to abandon the hypothesis" treats data or arguments as a concrete force compelling an object to move, while "There are many important ideas *in* the new theory" conceptualizes the relationship between theory and ideas as one of CONTAINMENT. Metaphor also often plays a role in category structure, so that extensions from a prototype are not necessarily made just by the absence of particular attributes of the prototype, but can also be made by conceptual mechanisms such as metaphor, leading to a so-called *radial structure* where less central members of a category are derived from more central ones, sometimes involving several different steps and conceptual principles of derivation (Lakoff 1987).

Cognitive Linguistics in Egyptology

Since the first introduction of cognitive linguistic ideas in Egyptology in the early 1990s (Goldwasser 1992; Collier 1994), the explicit use of this framework has remained a consistent, if somewhat marginal, presence in the field. The earliest and still by far the most widespread use of cognitive linguistics is found in the study of the hieroglyphic script, especially the function of what is known in traditional Egyptology as "determinatives," which was relabeled by Goldwasser as










“classifiers” in an attempt to better capture their function from a cognitive point of view. Concepts and methods derived from cognitive linguistics have found more sporadic usage in other areas of Egyptology, both linguistic core areas such as grammar and lexical semantics and in broader cultural studies where textual (and occasionally even pictorial) evidence is analyzed in order to reveal underlying conceptual frameworks with relevance for such areas as emotions, law, and religion.

Script: “Classifiers” (Determinatives)

The first area in which the principles of classification discovered in cognitive linguistics became used in Egyptology is in the exploration of the hieroglyphic script, in particular the use of “determinatives.” Orly Goldwasser (1995, 1999, 2002, 2005, 2006) has argued and demonstrated in a series of works that the fact that determinatives relate semantically to the words they determine effectively creates a category for each determinative, and that such categories show the same basic structure as other human categories. For this reason, Goldwasser introduced the new designation “classifiers” for this group of signs based on their functional similarity to classifying morphemes in other languages, arguing that identifying the central (prototypical) members and exploring the inclusion of less central members could provide an understanding of Egyptian conceptual categories that are not necessarily found in the spoken language. An example of this (Table 1) is the sign marking the category [HABITAT], and thereby showing that the Egyptian conceptual system incorporated such a general idea (encompassing both human and divine dwellings, but also those of animals, so that “building” would be too narrow a designation), although there does not appear to have been a corresponding word in Egyptian. By focusing on the interplay between different hierarchical levels (superordinate, basic level, subordinate), the structure of the categories marked by classifiers can be explored. Studies in this tradition have focused either on the categories marked by individual signs, such as the “bad bird” (G37 ; David 2000), divine

determinatives (Shalomi-Hen 2000, 2006), cloth (Herslund 2010), or on a particular domain, such as the use of classifiers in foreign phrases (Allon 2010).

Table 1. Members of the taxonomic category [habitat] (after Goldwasser 2005: 97).

The  [HABITAT] classifier	
	house (logogram)
	fortress
	office
	tomb
	stable
	cave, den
	nest
	tent

The focus on classification in this sense means that Goldwasser’s and her students’ approach works particularly well for nouns, whereas it has been somewhat less successful in analyzing the classification of verbs. A more recent attempt to account for verbal classification developed by Frank Kammerzell moves away from some of the fundamental assumptions in Goldwasser’s framework, regarding classifiers as being a means to codify salient participants in the event expressed by the verb (Lincke 2011; Lincke and Kammerzell 2012). Having only been published fairly

recently, the full potential of this development and its precise relationship to Goldwasser's framework remains to be explored, but at the moment it seems accurate to speak of a "Jerusalem School" and a "Berlin School" of classifier studies (as in Goldwasser and Grinevald 2012: 19).

Whichever approach is taken, studying determinatives/classifiers from the point of view of their semantic contents can often yield results, which are of interest beyond the exploration of the structure of the writing system itself. Thus, Arlette David (2006, 2007, 2010, 2011) has written a series of important works on ancient Egyptian legal and social conceptions, which draw frequently on the "classifier" framework to supplement more traditional structuralist linguistic analyses.

Lexical Semantics

With the focus on category structure (radiality, prototype structure, etc.), lexical semantics is one of the core areas of interest in cognitive linguistics, and there are several Egyptological studies testifying to this (cf. Smoczyński 1999; and Lincke and Kammerzell 2012 for the interplay between lexical semantics and classifiers).

In a recent contribution dedicated to illustrating the usefulness of cognitive linguistics in the exploration of ancient Egyptian lexical semantics, the present author (Nyord 2012) has argued that the meanings of the highly polysemous verb *ḥt* "release," "leave," "destroy," etc. can be understood as a radial structure organized around the embodied prototype of "letting go of an object held in the hand," from which the other meanings can be derived.

Also drawing on the concept of radial structure, it has been suggested (Nyord 2010, 2015) that the relations marked by prepositions can also be understood as radial structures organized around a prototype. In the case of prepositions such prototypes become very general, in fact approximating pure image schematic structures in the case of frequent prepositions such as *m* "in," etc. (CONTAINER schema) and *r* "towards," etc. (PATH schema;

Nyord 2010). Compound prepositions in ancient Egyptian are often derived from parts of the human body, and it has been shown (Nyord 2015) that the semantics of such compounds in Coptic can be analyzed in terms of a chain of metonymical and metaphorical extensions from the central body part concept.

Apart from such analyses of the radial structure of linguistic categories, cognitive linguistic principles have also been used to elucidate lexical semantics in other ways. Thus the present author (Nyord 2009: 55-113) revisits the classical Egyptological debate about the meanings and interrelationship of the apparently two synonyms for "heart" in ancient Egyptian, *jb* and *ḥꜣty*. Without going into the possibly radial structure of the concepts, the image-schematic properties of each term are examined instead (e.g., the ability to be conceptualized as a CONTAINER, the role in metaphors, etc.). This study shows clear and consistent differences in the use of the two terms in the examined texts, indicating that the idea of their straightforward synonymy may stem more from the modern expectation of finding anatomical correlates to the terms than from their actual usage in Earlier Egyptian. Apart from this specific conclusion, this study also indicates that there are other, more indirect, ways in which the conceptual framework can be drawn upon in the exploration of lexical semantics than just the examination of radial structures.

Grammar

Despite the promise of such frameworks as Langacker's "cognitive grammar" (Langacker 1987, 2008) and the broader principle of cognitively realistic descriptions, cognitive linguistics has relatively rarely played an explicit role in the study of overall grammatical patterns in ancient Egyptian, such as those of the verbal system. In an early article by Mark Collier (1994), it is argued that the then-prevailing Standard Theory understanding of the Egyptian verbal system where verbal forms are classified primarily according to syntactic categories should be replaced with an approach based on cognitive principles, most notably figure/ground relations. Following Collier's

analysis, Uljas (2009) draws on the cognitive linguistic principle of radiality to argue that grammatical categories, such as those marked by different verbal forms, are organized around central, experientially salient prototypes from which less central members are derived. In other recent studies of Egyptian grammar (e.g., Winand 2006: 9; Uljas 2007: 27) cognitive linguistics or one of its subfields is cited as an important source of inspiration for the analyses presented, especially regarding the aim of cognitively realistic descriptions. More generally, it is likely that the latter principle, along with the general cognitive linguistic focus on semantics, has further played a more implicit and possibly indirect role in much of the criticism of the Standard Theory of Egyptian grammar published in the last couple of decades.

Broader Conceptual Patterns

Because of the broad commitment of cognitive linguistics to providing cognitively realistic descriptions, and due to the underlying notion that linguistic structure reflects conceptual structure, the cognitive linguistic framework lends itself well to analysis of broader conceptual patterns than the purely linguistic. This possibility has played a significant role in Egyptological research, although it cannot be said to have entered the mainstream of the field the way it has in other subject areas. Instead, the cognitive linguistic framework has been used in studies of particular areas reflecting the interests of the individual researchers making use of the theory and methods.

This background has led to text- and/or script-based studies of religious conceptions (e.g., Goldwasser 1997), legal theory and practice (e.g., David 2007), political ideology (David 2011), conceptions of the body (Nyord 2009), emotions (Köhler 2011a, 2011b, 2012), and notions of communication (Nyord 2012). Because of the predicted commensurability of linguistic patterns with broader conceptual patterns, the cognitive linguistic framework can even be used in analyses of non-linguistic material, an approach which has been influential in material culture studies more widely (e.g., Tilley 1999), but has not so far

been very influential in Egyptology. An exception to this trend is found in a small group of studies on the cognitive principles behind ancient Egyptian art.

In a seminal analysis relating insights from cognitive linguistics to the principles of ancient Egyptian art, Frandsen (1997) has argued that the concept of an object underlying both pictorial and linguistic instantiations can be characterized in terms of a combination of inalienable properties (“the features or properties which cannot be acquired or disposed of, and without which the object would cease to be what it is,” Frandsen 1997: 78) and interactional properties (“characteristic features deriving from the classifier’s interaction with the category,” Frandsen 1997: 80). On this basis, Frandsen goes on to show that comparable classificatory and metaphorical phenomena can be found both in hieroglyphic writing, in the grammar of the language and in pictorial representations, focusing especially on the way depictions and accompanying texts can interact by highlighting complementary metaphorical conceptualizations. Building on this approach, in a more recent contribution (Nyord 2013), the present author has presented a new interpretation of the “aspectivity” of Egyptian art in terms of philosophy of perception, showing that within this new understanding some of the conspicuous details in Egyptian two-dimensional depictions (such as the larger size of important persons) can be understood as pictorial expressions of conceptual metaphors paralleled linguistically in texts.

Reception of Cognitive Linguistic Approaches in Egyptology

As seen above, cognitive linguistic approaches have slowly crept from the relatively limited areas in which they were first used from the 1990s onwards to become a contributor to most of the main themes of the exploration of the Egyptian language (and sometimes significantly beyond). In many cases, cognitive linguistic analyses are able to provide a perspective complementing different approaches to the same question. A good example are the many recent studies of the

preposition *r* “towards,” etc., where the cognitive linguistic approach (Nyord 2010) usefully supplements more traditional notions of a “basic meaning” (Stauder-Porchet 2009; Gracia Zamacona 2010) and typologically oriented mappings of the semantic space covered by the preposition (Grossman and Polis 2012; Werning 2012) by focusing on the internal conceptual structure of the category. Other studies of prepositions show that perspectives from cognitive linguistics can fruitfully be combined with other linguistic approaches, such as Di Biase-Dyson (2012).

Outside of the discussions among specialized linguists, the use of cognitive linguistics in Egyptology is sometimes met with the kind of general suspicion often accorded to “imported” theories. Unlike the fairly pluralistic way of thinking characterizing linguistic approaches, the question outside this area often becomes: to the extent that the analyses presented on the basis of cognitive linguistic concepts seem convincing, couldn’t we just have arrived at those results without the theory (e.g., Stadler 2011)? This sentiment is difficult to debate in practice and hence rarely leads to a substantial critique, based as it is on an old tradition of ancient Egypt as a *sui generis* culture that can best (or even only) be studied on its own terms in isolation from specialist knowledge from other fields about the phenomena studied (cf. the recent discussion in Moreno García 2015). This way of thinking is strongly ingrained and forms a continuing challenge from mainstream Egyptology to many theoretical approaches.

In the area of determinative studies, the cognitive linguistic approach has occasionally been met with more principal criticism. For the most part, critique of the works in this area has tended to be concerned with the methods of study, rather than with the theoretical framework itself, which is often accepted and even explicitly praised in such contexts (e.g., Quack 2003; McDowell 2004b; Nyord 2007).

However, criticism has also occasionally been voiced, which questions the “classifier” framework on a more fundamental level. McDonald (2004a) has questioned

Goldwasser’s suggestion of replacing the Egyptological term “determinative” with that of “classifier,” pointing out the number of differences between the function of the Egyptian signs and the “numeral classifiers” in other languages that formed Goldwasser’s inspiration for this term. While this problem might in principle be overcome by using Rude’s (1986) more specific notion of “graphemic classifier” to signal such differences, or Lincke and Kammerzell’s (2012) broader conception of “classifiers” as covering both phonemic and graphemic phenomena, McDonald (2004a: 238) also argues that the use of the signs “often seems to go beyond any simply classificatory function.” McDonald thus stresses the need to include the specific context of occurrences in analyses (an argument also made in some detail by Loprieno 2003), and she takes this point further in another, more specific, contribution where she argues that “the words that may take Sethian determinatives should not be considered as a uniform group” (McDonald 2007: 33; cf. Allon 2007 for the opposite view). However, as Lincke and Kammerzell (2012) have shown in a recent article surveying the uses of classifiers in ancient Egyptian, the pragmatically motivated uses such as those pointed out by McDonald are in many ways analogous to cases found in other “classifier languages,” which could also be said frequently to “go beyond any simply classificatory function.” Most recently, Meeks (2015) has criticized the tendency in classifier studies to work on the basis of published sign lists and typeset hieroglyphs, which may obscure the intricacies of the hieroglyphic and hieratic writing systems.

While the cognitive linguistic approach to determinatives has generally been very successful in setting the agenda for specialized studies on this topic, there are also a few examples of fairly recent determinative studies that do not engage with these ideas at all (e.g., Beaux 2004; Spalinger 2008), and so far the approach has not had much influence on more mainstream Egyptological publications such as language textbooks (with Nyord 2008: 10–24 as an exception).

Bibliographic Notes

There are a number of introductory textbooks that provide good points of entry to the concepts, methods, and results of the cognitive linguistic tradition in general (Taylor 2002; Croft and Cruse 2004; Evans and Green 2007), and the most seminal early works are still well worth reading (e.g., Lakoff 1987; Lakoff and Johnson 2003). In an Egyptological context, a fairly detailed general overview of some of the central concepts can be found in Nyord (2009: 5-35), and this work also presents a detailed semantic analysis of concepts of the human body and its parts in an explicit cognitive linguistic framework. Collier (1994) analyzes grammatical categories in the earlier Egyptian verbal system drawing on cognitive grammar. A good introduction to the understanding of determinatives as classifiers can be found in Goldwasser (2005), and the “Berlin School” approach to determinatives is presented in Lincke and Kammerzell (2012). The usability of the concepts of prototype and radial structure for exploring lexical semantics has been explained and exemplified in Nyord (2012). The most recent works on classifiers (esp. Lincke and Kammerzell 2012; cf. also Goldwasser 2006) have countered most of the central points raised by earlier critics of the approach (Loprieno 2003; McDonald 2004a), and these works can be fruitfully read together. Meeks (2015) criticizes several recent articles drawing on different strands of cognitive linguistics, although the discussion is somewhat selective and should be read with the articles criticized at hand for a complete picture.

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