

FROM SIGHT TO THOUGHT. A DIACHRONIC VIEW ON THE GREEK VERBS OF COGNITION

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ABSTRACT

THIS PAPER LOOKS AT THE SEMANTIC EVOLUTION OF THE VERBS OF THOUGHT IN GREEK, NAMELY VERBS WHICH MEAN 'UNDERSTAND', 'KNOW' AND 'THINK', FROM A COGNITIVE PERSPECTIVE (COGNITIVE SEMANTICS AND THE THEORY OF FRAMES). INTERESTINGLY, AFTER INVESTIGATING THE LEXICAL FIELD UNDER DISCUSSION, WE HAVE IDENTIFIED THE FOLLOWING PATTERN OF EVOLUTION FOR SOME OF THE VERBS: THEY ORIGINALLY HAD THE MEANING 'SEE', 'WATCH', 'LOOK', 'OBSERVE' AND DEVELOPED THE SECONDARY SENSE 'UNDERSTAND', WHICH BECAME SALIENT AND REPLACED THE PREVIOUS MEANING. MORE PRECISELY, SOME VERBS, WHICH DERIVED FROM INDO-EUROPEAN ROOTS DENOTING 'SIGHT' ('SEE', 'WATCH', 'EYE' ETC.), UNDERWENT A SEMANTIC SHIFT AND, FINALLY, DENOTED AN ABSTRACT AND INTELLECTUAL SENSE. THE FINDINGS OF THIS PAPER, NAMELY THIS PARTICULAR SEMANTIC PATTERN, COULD BE COMPARED TO THE EVOLUTION OF THE SAME SEMANTIC FIELD IN OTHER LANGUAGES, IN ORDER TO IDENTIFY A MORE GENERAL LINGUISTIC TENDENCY AND SOME UNIVERSALS WHICH ARE VALID BEYOND LINGUISTIC BORDERS.

KEY-WORDS: GREEK, VERBS OF THOUGHT, SEMANTIC EVOLUTION, FRAME SEMANTICS, COGNITIVISM

INTRODUCTION

Our paper envisages the evolution of the Greek verbs of 'though'² from the perspective of cognitive semantics. Moreover, the emphasis will lay on the mental rapport between 'sight' and 'thought' and how it is represented in the lexicon. The relation between these two concepts is a very complex one and it could be investigated from a logical, psychological, cognitive and linguistic point of view.

When dealing with semantic evolution, traditional linguistics tends to relate the semantic shifts to different processes, such as specialization, generalization, narrowing, extension, metonymy and metaphor etc., but all these do not explain the specific changes of meaning. Linguists just describe what a particular word has undergone and try to classify the results (i.e. denotational changes) of a process. On the other hand, cognitive semantics tries to offer satisfactory explanations for these changes of meaning. It does not just describe the

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² They are also called *verbs of cognition* or *verbs of cognitive attitude*.

mechanism of a change, but it tries to identify the cause(s), the reason(s) why speakers used a particular mechanism to change the meaning of a word. So this would be the main advantage of analysing the evolution of the Greek intellectual verbs from the angle of frame semantics theory and cognitivism.

This lexical field of the verbs which mean ‘understand’, ‘know’ and ‘think’ will be investigated using the means offered by the cognitive semantics and the theory of semantic frames. Briefly, the theory formulated by Fillmore claims that all words and concepts are linked together in a well-organized and hierarchic semantic net³ and, therefore, it can explain the semantic evolution of the verbs of ‘thought’ within a conceptual frame.

Moreover, a diachronic investigation can reveal significant semantic changes by comparing semantic frames from two different periods of time. Due to its long history, Greek offered us the best analysis framework, as we are able to follow the evolution of the lexical paradigm under discussion over many centuries. A great deal and a wide range of literary works were produced within this long period of time. We should mention here poetry, theatre, historiography, philosophy and treaties, texts that cover a great deal of topics, with a specific (poetic or specialized) vocabulary, capable to express abstract ideas and concepts. Plato, for instance, was the creator of a complex philosophical system that required novel terms in order to express new concepts and abstract notions.

VERBS OF ‘SIGHT’ AND ‘THOUGHT’ IN GREEK - ETYMOLOGY AND MEANING

First of all, we should look at the paradigm of the verbs of ‘thought’ in Greek. We will focus only on those lexical units derived from Indo-European (IE) roots that denoted ‘sight’ and developed the meaning ‘thought’. In the following, we will explore the verbs under discussion from an etymological perspective in order to identify their primary meaning and its diachronic development. In other words, our investigation starts from the analysis of Indo-European roots denoting ‘sight’ and their heritage into Greek.

The Proto-Indo-European language had three main roots expressing ‘sight’: **derk-*, **spek-* and **ok^w-*. They all were inherited into Greek, but with a semantic shift as we will explain hereinafter. On the other hand, the neuter Greek verb of ‘sight’ did not derive from any of these roots in particular. The Ancient Greek verb *horáō* was created on the IE root **(s)wer-* / **(s)wor-* which did not feature the general and neuter meaning ‘see’⁴, but a narrow one, namely ‘observe, pay attention’⁵. Interestingly, *horáō*, a verb with a very irregular inflection, had more forms in the perfective aspect, namely *ópōpa* / *heōraka* and *oida*. The former two were created on the IE roots **ok^w-*⁶ ‘eye’ (cf. Lat. *oculus*) and **(s)wer-* / **(s)wor-*, while the latter derived from **weid-* / **woid-* ‘knowledge’⁷. All these verbal forms conserved the semantic content of the root they derive from, and meant ‘I have seen’ (*ópōpa* / *heōraka*), respectively ‘I know’ (the resultative perfect inflections function as present tense)⁸. As known, the perfective aspect of a verb expresses the completed action and the result in

³ Charles J. Fillmore, *Frame semantics and the nature of language*, in *Annals of the New York Academy of Sciences: Conference on the Origin and Development of Language and Speech*, Volume 280, 1976, pp. 20-32.

⁴ In Modern Greek, the intricate flection of this irregular verb was replaced by a more regular one, *blepo*, which denotes the general and neuter meaning ‘see’.

⁵ Julius Pokorny, *Indogermanisches Etymologisches Wörterbuch* (Bern: Francke, 1959), p. 1164. For this meaning, cf. Lat. *vereor* ‘respect’, ‘fear’, Eng. *beware*, *warrant*, *ward*, *warn*, *guard*, Germ. *wahren* ‘protect’, *Gevähr* ‘warrant’, *warnen* ‘warn’, *Warte* ‘guard’, *wehnehmen* ‘observe’ etc.

⁶ On this radical was created the future tense form *ὄψομαι* ‘I will see’ and the verb *ὄσσομαι* ‘I see’, which conserve the original semantic context of the root.

⁷ Vassilis Anagnostopoulos, *Λεξικό Ρημάτων της Αρχαίας Ελληνικής* (Athens: Patakis, 2004), s.v.

⁸ The form *oida* is generally considered to be a distinct verb, with a particular inflection, not part of the verbal paradigm of *horao*.

present⁹. Thus, the perfect *oida* was interpreted as the result of the act of sight in present: ‘I have seen’, so ‘I know’. Consequently, grammar (morpho-syntax) emphasizes the relation between ‘sight’ and ‘knowledge’, as the verbal aspect plays an important role in establishing the meaning of a verb. In the case of this verb, judging by its etymology, the sense oscillates between ‘sight’ and ‘think’, which mean that speakers tend to overlap these two conceptual domains.

The IE radicals mentioned above were maintained in other derivatives and compounds. Another interesting evolution was the case of the verb *sképtomai*, derived from the IE root **spek-* ‘watch (attentively), observe, examine’¹⁰ (*skēp-* reconverted from **spek-*). Its meaning preserved the original one, namely ‘I look (attentively), I observe’ and, consequently, ‘I examine, I think’¹¹. In its evolution, speakers selected only the intellectual sense so that, in Modern Greek, *sképtomai* has become the common verb for the sense ‘I think’. Generally, speakers’ semantic, lexical or grammar choices can be explained by the need of expressivity. If there are two or more elements (i.e. words, senses, grammatical forms etc.), speakers tend to use the most semantically expressive or grammatically regular one. This is how the system renews itself and language evolves.

The verb *dérkomai* ‘I look, I keep the eyes open’, derived from the IE radical **derk-* ‘look’¹². No other Ancient Indo-European language had a present verbal form derived from this root. With respect to this verb, we should make two remarks concerning its meaning. First and foremost, it does not express the general and neuter sense ‘see’. On the other hand, it does not develop an intellectual meaning (‘I think’ or ‘I know’), so it cannot be included in our semantic paradigm.

Last, but not least, we should focus on the couple *theáomai* (*theoûmai*) / *theōrō* (*theōrō*), which have the same etymological origin. More etymological interpretations have been proposed so far, but one of the etymologies widely accepted is that both verbs derive from *théa* ‘view’ and *horáō* ‘see’. The verb *theoûmai* ‘I view, I watch, I observe’, most of the times with amazement¹³, while *theōrō* means ‘I observe (attentively)’. In spite of its lexical components (‘view’ and ‘see’), but not surprisingly, *theōrō* developed the abstract meaning ‘observe, examine’. Cognitivism offers the following explanation: when looking attentively at a particular object we examine and try to analyse it. Therefore, philosophers use it to express the meaning ‘think, consider’. A great deal of modern philosophical and abstract terms, such as *theory*, *theoretical*, *theorem* etc., come from the Greek words *theōrō*, *theōria* etc., which denoted abstract notions even from the classical period.

From the list above, only two verbs expressing ‘thought’ can be found in Modern Greek, namely *sképtomai* (inherited *sképtomai*) and *theōrō* (borrowed from Ancient Greek). Interestingly, in Modern Greek, *theōrō* ‘consider’ was inherited under the form *thōrō* ‘watch’ with some phonetic changes from. As one can notice, it preserves the original meaning of the Ancient Greek lexical family.

⁹ Pierre Chantraine, *Morphologie historique du grec* (Paris: Librairie C. Klincksieck, 1961).

¹⁰ Cf. Gr. *skopos* ‘aim, purpose’, *skopeo* ‘observe, aim’, Lat. *specio* ‘watch’, *perspicio* ‘observe carefully, scout’, *adspicio*, *auspex*, *haruspex*, *extispex*, *specula*, *specular*, *speculator*; Umbrian divinity *Speture*; Old Germ. *spehōn* (> Fr. *espier*); Skr. *pácyaati* ‘see, watch’, etc. (Julius Pokorny, *Indogermanisches Etymologisches Wörterbuch* (Bern: Francke, 1959), p. 984. Generally, as we can notice, the words cited here were religious or military term, so they had a narrow and technical meaning, not a neuter one.

¹¹ In Plato’s philosophical works, this verb is used with the meaning ‘look in order to find out and know’.

¹² Julius Pokorny, *Indogermanisches Etymologisches Wörterbuch* (Bern: Francke, 1959), p. 213. Pokorny mentions other words derived from this root, for instance Sanskrit *ádarçi*, *dadárça*, Old Irish *ad-con-d^h* *irc*, Gothic *ga-tarhjan* etc., which conserve the original meaning.

¹³ Cf. the lexical and semantic features shared with the noun *thauma* ‘wonder’.

A SEMANTIC FRAME OF THE GREEK VERBS OF ‘THOUGHT’

As we could notice from the analysis above, there is a close relation between ‘sight’ and ‘thought’, which permitted to some verbs (along with their lexical family) to develop a metaphorical, abstract and intellectual meaning on the basis of roots expressing ‘sight’. This relation between ‘sight’ and ‘thought’ mirrors the relation between some internal mental processes: sensations, perceptions, on one hand, and thought, on the other hand. In other words, the act of thinking could be considered as a result of the previous act of seeing. The former is a more complex cognitive process, which entails analysis, synthesis, interpretation etc., based on the information provided by the sense organs (eyes, ears, etc.). Subsequently, psychology proves that there is a relation between these two concepts and this relation is reflected in our conceptual representations (semantic frames).

From the perspective of cognitive semantics, we can claim that the two frames organized around the concepts of ‘sight’ and ‘thought’ are interrelated. Generally, frames are characterized by the fuzziness of borders, namely they do not have clear borders and, therefore, these two frames overlap parts of the same cognitive and conceptual domain. Thus, fuzziness of borders permits frames to interfere and develop metaphorical senses. Human mind integrates words (that is concepts) in a certain net and hierarchy, developing a sort of scenarios. Concepts are characterised by attributes, values and aspects of meaning, which are part of a frame, but not all aspects are manifested in instances of use. The semantic relation between the verbs of perception and those of cognitive attitude was claimed by other researchers, such as Biriş¹⁴.

Within the frame under discussion, organised around the concept of ‘thought’, we can identify two main categories. The first one is made up by general, common verbs whose basic meaning is a neuter one: ‘see’. They engender a variety of figurative senses (polysemy)¹⁵, have a rich lexical family and high frequency. The figurative senses that they usually develop are context-dependent, such as: ‘born’ or ‘appear’ (cf. *see the light of day*), ‘think’, ‘consider’ (cf. *As I see it, we can solve the problem quickly.*), ‘meet’ (cf. *I’m seeing the manager tomorrow.*) etc. In this category we should include verbs like *faínetai* and *horáō / blépō*.

The second category comprises verbs with an abstract meaning, whose primary sense is related to ‘thought’ and ‘knowledge’: ‘think’, ‘consider’, ‘know’. Generally, they are derived from IE radicals that originally referred to ‘sight’, such as *sképtomai* ‘think’ and *theōrō* ‘consider’.

As we have already seen, this ‘sight’ – ‘thought’ relation is bidirectional. In other words, not only the verbs or radicals expressing ‘sight’ developed a metaphorical and abstract meaning (cf. *sképtomai, horáō / blépō*). We also could identify verbs, which originally (i.e. in Proto-Indo-European) denoted ‘thought’, while in Greek they expressed ‘sight’. For instance, **weid- / *woid-* ‘knowledge’ was integrated in the irregular inflection of the verb *horaō* ‘see’ as the past tense form: *éidon* ‘I saw’. Moreover, the same IE radical **weid- / *woid-* was later reinterpreted as a radical of ‘knowledge’ in order to express abstract and philosophical concepts, such as *idéa* ‘idea’, *éidos* ‘appearance, form, sight’, *eidēsis* ‘knowledge’ and so on¹⁶.

¹⁴ In her article *Verbe de cogniție cu potențial de pragmaticalizare* (Iași: Editura Universității „Alexandru Ioan Cuza”, 2013), Gabriela Biriş claims that: “Am integrat în clasa verbelor de cogniție și verbe de percepție, de tipul a auzi și a asculta, deoarece credem că sunt parte integrantă a clasei, putând explica în acest fel frecvențele „glisării” semantice dinspre percepții fizice propriu-zise înspre înțelesuri epistemice”, 33.

¹⁵ Charles Fillmore claims that: „For many instances of polysemy it is possible to say that a given lexical item properly fits either of two different cognitive frames. One possibility is that a word has a general use in the everyday language but has been given a separate use in technical language”, in “Frame Semantics”, Chapter 10 (pp. 373-400), (Ed.) Geeraerts, D., *Cognitive Linguistics: Basic Readings* (Berlin / New York: Mouton de Gruyter, 2006), 386

¹⁶ Cf. Plato’s *Dialogues*.

This reinterpretation of the radical was possible in the context of the development of philosophy. Language and, especially, vocabulary mirror the socio-cultural development of the speakers' community and the most prolific and creative period in the evolution of the Greek abstract vocabulary was the development of philosophy and sciences¹⁷. It is then when a great deal of philosophical and technical terms was created, while other terms changed their meaning in order to denote abstract and novel notions, concepts, objects etc.¹⁸

FINAL REMARKS AND CONCLUSIONS

The relation between 'sight' and 'thought' can be explained both from a psychological and linguistic (grammatical and semantic) point of view, as the representations of these two concepts in speakers' mind share common areas and semantic features.

One other final remark concerning the conceptual field of verbs expressing 'thought' and their interface with the frame of 'sight' is that we deal with a complex and dynamic conceptual field, in permanent development and mutual interference.

According to cognitive semantics, vocabulary is organized in dynamic lexical-semantic fields (called frames) and our verbalization follows socio-cultural norms and determined mental patterns. The semantic evolution that we have analysed mirrors a certain way of thinking of the speakers and a mental pattern¹⁹. As we can see in Fig. 1, the frame of 'sight' overlaps with the frame of 'thought', as they reflect the cognitive rapport between 'sight' and 'thought' and express two aspects of the same internal process. That is why these denotational changes are not surprising and, interestingly, they are bidirectional ('see' ↔ 'think'), as these concepts are closely interrelated in speaker's mind.

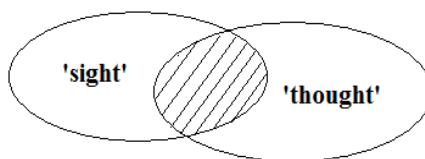


Fig. 1 – Relation between the frame of 'sight' and 'thought'

A concluding remark is that the evolution of sense follow this pattern of schematisation:

'see' → 'watch' / 'look' → 'observe' / 'examine' → 'know' → 'understand' → 'think' / 'consider'

Other researchers call this pattern a continuum, where verbs do not have a stable position. They represent values that change according to semantic or pragmatic context²⁰.

In terms of cognitive scenarios, the act of *seeing* is the first step of the process, through which we get information from the environment. Most of the times, we do not merely perceive an object, but we *look* at it attentively, if we are interested in it. This is the

¹⁷ Francisco R. Adrados, *Historia de la lengua griega de los orígenes a nuestros días* (Madrid: Gredos, 1999), pp. 137-146; Paraskevi Kotzia, *To φιλοσοφικό λεξιλόγιο*, in *Ιστορία της ελληνικής γλώσσας. Από τις αρχές έως την ύστερη αρχαιότητα* (Thessaloniki: Kentro Ellinikis Glossas & Institutou Neoellinikon Spoudon, 2001).

¹⁸ Terms such as *idéa* 'idea', *eídos* 'appearance, form, sight', *eidēsis* 'knowledge', abstract nouns in *-ma*, *-sis*, *-ía*, *-os*, *-syne*, *-tēt* etc.

¹⁹ Referring to the Romanian verbs of thinking, Gabriela Biriş says that *a vedea* 'see' and *a şti* 'know' overlap their semantics as a result of the origin of the verb *a vedea* < IE *weid-, which denoted both 'sight' and 'knowledge', in *Verbe de cogniție cu potențial de pragmaticalizare* (Iași: Editura Universității „Alexandru Ioan Cuza”, 2013), p. 36. Etymology is merely the result that mirrors a deep mental structure, in which sight and knowledge are considered parts of the same process or cognitive scenario.

²⁰ Gabriela Biriş, *Verbe de cogniție cu potențial de pragmaticalizare* (Iași: Editura Universității „Alexandru Ioan Cuza”, 2013), 34.

next level of abstraction, which entails other cognitive and semantic features. After *observing* and *examining* a particular object, concept or idea, we know something about them, we have certain information – third level. In our view, there are two final levels of abstraction, namely *understanding* and *thought*. If we understand and have a clear image about something, we are ready to formulate an opinion, through the act of thinking.

Sight plays an important role in our lives. Many researches in the domain of psychology demonstrate that the most important part of information is provided by sight and people are highly receptive to visual stimuli (images). Moreover, images can impress us more than other stimuli (noises, tastes etc.) and, therefore, they have a greater impact upon us and our feelings. Eye-witnesses are more credible than those who have just heard the information. Sight is a basic sense and the central concept of the pattern presented above²¹.

Some verbs can feature one or more senses listed above, as primary, secondary or figurative senses, which coexist in their semantic structure. Their conceptual development consists in gradually changing their basic meaning (for instance, ‘see’ → ‘think’). Nevertheless, as we have already demonstrated, the verbs listed above are not merely cases of polysemy. They underwent semantic shifts with a permanent character, which entered the vocabulary and the conceptual system of the Greek language.

The findings of this investigation should be compared with the frames of ‘sight’ and ‘thought’ in other languages in order to identify general tendencies in the semantic evolution of concepts and the verbalization of the extra linguistic reality. If we look at the field of ‘sight’ in other languages, we notice that verbs expressing this concept are highly polysemic. They denote not only ‘sight’, but they develop context-specific features. This is the case of the verbs Sp. *ver*, Fr. *voir*²², Eng. *see*²³, which can also mean ‘understand’. Such a comparison would be very useful in order to understand the deep semantic structure of languages.

Greek developed a highly abstract vocabulary, due to its lexical and semantic possibilities of creation. It was also able to express novel and abstract notions in domains such as literature, poetry, theatre, philosophy, religion and science – some of the peaks of the Ancient Greek civilisation. That is why one could think that only in Greek the conceptual frame of ‘sight’ could develop such intellectual senses. Nevertheless, as we demonstrated, the relation between ‘sight’ and ‘thought’ is deeply rooted into our mental linguistic schemata and we expect to find it in other languages, as well.

²¹ Interestingly, some verbs of hearing can develop a cognitive meaning. For instance, Rom. *a auzi* ‘hear’ means in some contexts ‘understand’: *Ai auzit?* (‘Did you hear me?’) as a discourse marker, which is equivalent to ‘Did you understand?’.

²² These verbs (Sp. *ver*, Fr. *voir*), along with Rom. (*a*) *vedea* come from the Lat. *video* ‘I see’, formed on the IE root **(s)weid-* / **(s)woid-* ‘knowledge’. Another relevant example is that of the Skr. Aorist (past tense) *viddhi* meant both ‘I found out’ and ‘I saw’.

²³ Cf. *I see what the problem is.* for ‘I understand...’.

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