MAPPING THE DIACHRONY OF CONTENT WORDS: ANCIENT GREEK AND ANCIENT EGYPTIAN AS SOURCES FOR DIACHRONIC SEMANTIC MAPS OF LEXICAL ITEMS

Thanasis Georgakopoulos*, Stéphane Polis**
Université de Liège*, Université de Liège/ F.R.S.-FNRS **
athanasios.georgakopoulos@ulg.ac.be, s.polis@ulg.ac.be

Keywords: Semantic maps, semantic change, Ancient languages, metaphor, metonymy

This paper aims at demonstrating how information on the paths of semantic extensions undergone by content words may be incorporated into semantic maps. For this purpose, particular changes that affected the meanings of words in the course of the Ancient Greek and of the Ancient Egyptian language history will be investigated.

The semantic map model was initially created in order to describe the polysemic patterns of grammatical morphemes (e.g. Haspelmath, 2003). However, recent studies by François (2008), Perrin (2010), Wälchli and Cysouw (2012), and Georgakopoulos et al. (2016) have drawn attention to the lexical domain, showing that the model can be extended to lexical items. It should be noted that the bulk of research has been adopting a synchronic perspective and the limited research that has added the diachronic dimension, has focused mostly on the grammatical domain (e.g. Narrog, 2010).

In this paper, we analyze the diachronic evolution of the polysemy network of lexemes in order to produce 'dynamicised semantic maps' (Narrog & van der Auwera, 2011) of lexical items. More specifically, we study 20 concepts from the semantic domains of space, body parts, perception-cognition, and from more abstract domains (e.g. BREATHE, TIME). The data are extracted from dictionaries, grammars, and the Perseus digital library (http://www.perseus.tufts.edu/hopper/) for Ancient Greek, and from the Thesaurus Linguae Aegyptiae (http://aaew.bbaw.de/tla/), the Ramses corpus (http://ramses.ulg.ac.be), and etymological dictionaries for Ancient Egyptian. Information on synchronic lexical associations are extracted from CLICS (List et al., 2014), an online database containing tendencies of meaning associations. In CLICS, concepts are represented as nodes in the network and instances of polysemy are visualized as links between the nodes.

Fig. 1 exemplifies how the diachronic dimension of meaning extension may be added to such a network. On the basis of a diachronic analysis of TIME in Ancient Greek (lexical unit: $h \acute{o} r a$), which reveals that the meaning 'time' is historically prior to the meaning 'hour,' we may add a directed arrow representing directionality of change. However, historical priority is not a sufficient criterion for an arrow to be added. Rather, one should be able to show that meaning extensions have a clear motivation.

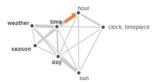


Fig. 1 | Polysemy network of time with directionality of meaning extension (cf. CLICS)

As such, we suggest identifying the cognitive (e.g. metaphor, metonymy, etc.) and the cultural factors that lie behind the observed evolutions. For example, in the case of the Greek concept TIME, one could establish a metonymic motivation between TIME and HOUR, which arises due to the correlation between the canonical time periods and the time these take to unfold.

The present study will provide answers to the question of the directionality of change in two particular languages, namely Ancient Greek and Ancient Egyptian. However, our expectation is that by looking at diachrony in this fashion, significant dimensions of directionality of change with cross-linguistic extensions can be revealed.

Selected references

François, A. (2008). Semantic Maps and the Typology of Colexification: Intertwining Polysemous Networks across Languages. In: M. Vanhove (Ed.), *From Polysemy to Semantic Change. Towards a Typology of Lexical Semantic Associations* (pp. 163–215). Amsterdam/Philadelphia: John Benjamins.

Georgakopoulos, Th., Werning, A.D., Hartlieb, J., Kitazumi, T., van de Peut, E.L., Sundermeyer, A., & Chantrain, G. (2016). The meaning of ancient words for 'earth'. An exercise in visualizing colexification on a semantic map. *eTopoi. Journal for Ancient Studies* 6, 1–36.

- Haspelmath, M. (2003). The geometry of grammatical meaning: Semantic maps and cross-linguistic comparison. In: M. Tomasello (Ed.), *The new psychology of language*, Vol. 2 (pp. 211–242). Mahwah/ New Jersey: Lawrence Erlbaum Associates.
- List, J.-M., Mayer, Th., Terhalle, A., & Urban, M. (2014). *CLICS: Database of Cross-Linguistic Colexifications*. Marburg: Forschungszentrum Deutscher Sprachatlas (Version 1.0, online available at http://CLICS.lingpy.org, accessed on 2016-27-10).
- Narrog, H. (2010). A Diachronic Dimension in Maps of Case Functions. *Linguistic Discovery, 8*(1), 233–254.
- Narrog, H., & van der Auwera, J. (2011). Grammaticalization and Semantic maps. In: H. Narrog & B. Heine (Eds.), *The Oxford Handbook of Grammaticalization* (pp. 318-327), Oxford: OUP.
- Wälchli, B., & Cysouw, M. (2012). Lexical typology through similarity semantics: Toward a semantic map of motion verbs. *Linguistics*, *50*(3), 671–71.