Semantic maps

Questions ... and some possible answers from an outsider

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Opening address

Semantic maps:
Where do we stand and where are we going?

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Historically, semantic maps

- deal with morphs,
- are synchronic,
- are typologically oriented, i.e. based upon inter-linguistic comparisons,
- are a tool for presenting results.
As Egyptologist, I feel deeply concerned by the following issues:

1. how the corpus is constituted (a recurrent question in typology, but also in comparative linguistics);
2. how to use semantic maps with an open lexicon (not only morphs);
3. how to integrate dynamicity, or at least some kind of temporal vectoriality;
4. are semantic maps tailored for the (fine-grained) study of one single language?
5. how to integrate semantic maps into a larger project, to be more precise, how to plug semantic maps in a dictionary?
1. The corpus

• the validity of the data (informants, thesauri, existing dictionaries)
  • specific questions for dead languages, more specifically isolated dead languages with a broken tradition, like Ancient Egyptian;
  • linguistics with(out) philology?

• selected examples, samples of examples, or (quasi-)exhaustiveness?

• corpus that allows statistical approaches?
2. Close or open vocabulary?

- Semantic maps were first used to treat grams (negations, modal operators), and connectors, like prepositions.

- They gradually opened up to open lexical lists.
  - This is what I am interested in,
    - with a first low-scale project on the verbs of cognition (Winand 2015),
    - and a more ambitious project (still in progress) on the verbs of motion in Late Egyptian, (350+ different lexemes representing roughly 10,000 tokens).

- Two different perspectives:
  - The top-down approach (esp. for grams and morphs),
  - The bottom-up approach (for open vocabulary, even if some preliminary general ideas are inevitable, and necessary)
    - This once more highlights the relevance of a sound philological study
3. Dynamicity (diachrony)

- There is (almost) nothing that could be really called a synchronic stage in any linguistic study of Ancient Egyptian.
- Diachrony amounts to reconstructing vectorialities leading from one stage to the next one. This comes with a lot of questions:
  - how to explain the semantic processes at work (restriction or extension of meaning, metaphorical or metonymic uses, etc.)? do we need to do so?
  - how to assess the productivity of a connection: is it central or peripheral in the history of the language?
  - This last question brings with it the issue of the quantitative analysis of the data
    - For the dead languages,
      - it largely depends on how the corpus has come down to us,
      - how well it is distributed according to different criteria (date, provenance, textual genres, etc.).
    - For modern languages, it depends
      - on how fine-grained the (now largely electronic) thesauri one relies on are analyzed.
      - For exotic languages, the quality of the informants, the validity of the dictionaries must be relentlessly questioned.
4. One or several languages?

- Semantic maps were first intended to compare several languages. Interesting results have however been achieved by comparing two genetically related languages.
- The decisive criterion is of course comparison. But comparing between what?
  - One can deal with lexemes, or rather lexical units, involved in any semantic domain (parasyonyms)
    - That was the aim of the contrastive study of two semantically very close Egyptian verbs, *ph* and *spr*, both meaning “to reach”, but from two different perspectives;

\[ \text{ph} \quad \rightarrow \quad \text{spr} \]

- It is also possible to compare different synchronic stages for one single semantic domain:
  - that was a significant part in the study on verbs of cognition in Earlier Egyptian, embracing more than one millennium of data.
5. Semantic maps: a stand-alone, autonomous product, or a part of a larger project?

- an insightful manner of presenting results,
- a powerful tool for asking new questions,
- a possible interface for organizing dictionaries and lexica.
The graphic system of ancient Egyptian as a principled way of organizing the lexicon

The system of the semantic classifiers

- Moving legs: 🔼
- Moving legs (backwards): 🔻
- Navigating (boat, sail, oar): 🚣‍♀️ 🚁
- Flying: 🪤
verbs with

A possible semantic map of for classifiers?
Here with the wing classifier as pivot
Navigating the lexicon ...
from a semantic map (here VoM) ...
verbs of motion

Navigating the lexicon ...

to a general database of Egyptian words
6. By way of conclusion

Who should be involved?

• specialists of a (several) linguistic domain(s), with a sound philological experience

• linguists interested in modelling (typologists, comparatists, cognitivists)

• IT-guys
“That’s all Folks!”