PhD Kolloquium

Computing symbols as literacy and ability

WS 2013

Signification | Communication: theory and applications of glossematic coding as method for pre-specific modeling
Since Claude Shannon’s *Mathematical Theory of Communication* (1936), the notion of information in its technically treatable sense is often distinguished from its linguistic sense by ascribing to the former, as opposed to the latter, a purely quantitative treatment. Yet since the founding documents of a general linguistics in the late 19th century, it is clear for every linguist who affirms the break with the traditional way of studying language as philology, that the notion of the sign is to be treated purely quantitatively as well. Ferdinand de Saussure’s structuralist paradigm for understanding processes of signification views the linguistic sign as a quantitative value, yet as a negative one which cannot, in itself, be positivized. As a *negative value*, it can only be specified by „profiling“ it through infinitary lists and their net of contrasts: a ‚this‘ can never be signified directly, Saussure held, but only by labelling it as ‚not-that‘ and ‚not-that‘ and ‚not-that‘ etc. In short, a linguistic sign can only be determined structurally and differentially, within a framework of place-value distributions.

From a logical point of view, de Saussure’s paradigm of negative determination obviously entails problems regarding methodological feasibility, since it holds, by principle, that the necessary infinitary lists can never exhaustively be made explicit. This is the decisive reason why de Saussure himself considered his own structural approach, which attempted to conceive of language as a system, as having ultimately failed. Surely the post-structuralist critiques on such a notion of general linguistics are well known; yet from the point of view of algebraic computability (rather than that of logics), the situation looks different and is hardly explored today. Louis Hjelmslev is one of the very few linguists who continued the „differentiability within negativity“ approach initiated by de Saussure, by extending it mathematically. He considered Saussure’s „negative values“ in a generalized sense as „algebraic invariants“. Like this, the structuralist paradigm is open for taking probabilistic procedures like Markov Chains and other algorithms, with which the diverse programming languages ordinarily work today, into account. From the logical point of view, this can hardly count as a forward pointing path, since it does not clarify how a notion of system could be objectified. Yet with regard to the logistic networks, such fixation is (arguably) neither necessary nor desireable. Here, Hjelmslev’s algebraic approach offers a powerful alternative to the pre-dominant approaches in terms of semantic or object-oriented (informational) database logic and ontologies, because it is capable of abstracting from the distinction between natural language vs artifical/formal language and needs not subject one to the other: communication and signification can be treated as mutually complementary aspects.

In this kolloquium we will work through Hjelmselv’s *Prolegomena to a Theory of Language* (1943), and appropriate it methods in practice. We want to explore if and how structural linguistics as glossematics (in the sense of Hjelmslev) can be extended towards an *alphabet of things* that were capable of integrating the operability of generative linguistics (Chomsky etc), and hence could provide a powerful method of pre-specific modeling.
Meetings are held on Tuesdays, first meeting: Sept. 24th 2013 9 am at the CAAD Chair in Zürich.

program & tasks

**Tuesday September 24 2013**


**Tuesday October 1 2013**

The General Criteria for a Theory of Language (part I): Hjelmslev chapters 1–6. These chapters present the 'specification' of glossematics. Task for this meeting: extract its parameters, principles, and hierarchy of principles. List them as if you were devising the description for a design task. Format: Presentations by students and discussion

**Tuesday October 8 2013**

The General Criteria for a Theory of Language (part II): Hjelmslev chapters 7–10. These chapters present the horizon of application of the approach specified as glossematics. Task for this meeting: extract its outlooks, summarize them, make a list of possible objects of study. Format: Presentations by students and discussion

**Tuesday October 15 2013**

Glossematic Coding: Considering any artefact as 'text' in the glossematic sense (in terms of 'articulation' and 'partition'). Format: Lecture Vera Bühlmann. Task to prepare for the next meeting: choose an artefact with which you will work in the following sessions. Begin to organize your understanding of it as a 'text'.

**Tuesday October 22 2013**

no meeting (Seminarweek)
Tuesday October 29 2013

The specifics of glossematic coding: Hjelmslev chapter 11. This chapter introduces the role of «functions» in glossematics. Task for this meeting: think about how you can apply this distinction in the codification of your artefact-as-glossematic text. Format: Presentations by students and discussion

Tuesday November 5 2013

The specifics of glossematic coding: Hjelmslev chapter 12. This chapter introduces the role of «signs and figurae» in glossematics. Task for this meeting: think about how you can apply this distinction in the codification of your artefact-as-glossematic text. Format: Presentations by students and discussion

Tuesday November 12 2013

The specifics of glossematic coding: Hjelmslev chapter 13. This chapter introduces the role of «expression and content» in glossematics. Task for this meeting: think about how you can apply this distinction in the codification of your artefact-as-glossematic text. Format: Presentations by students and discussion

Tuesday November 19 2013

The specifics of glossematic coding: Hjelmslev chapter 14. This chapter introduces the role of «invariants and variants» in glossematics. Task for this meeting: think about how you can apply this distinction in the codification of your artefact-as-glossematic text. Format: Presentations by students and discussion

Tuesday November 26 2013

The specifics of glossematic coding: Hjelmslev chapter 15. This chapter introduces the role of «linguistic schema and linguistic usage» in glossematics. Task for this meeting: think about how you can apply this distinction in the codification of your artefact-as-glossematic text. Format: Presentations by students and discussion

Tuesday December 3 2013

The specifics of glossematic coding: Hjelmslev chapter 16. This chapter introduces the role of «variants in the linguistic schema» in glossematics. Task for this meeting: think about how you can apply this distinction in the codification of your artefact-as-glossematic text. Format: Presentations by students and discussion
program & tasks

Tuesday December 10 2013  The specifics of glossematic coding: Hjelmslev chapter 17. This chapter introduces the role of «function and sum» in glossematics. Task for this meeting: think about how you can apply this distinction in the codification of your artefact-as-glossematic text. Format: Presentations by students and discussion

Tuesday December 17 2013  The specifics of glossematic coding: Hjelmslev chapter 18. This chapter introduces the role of «syncretism» in glossematics. Task for this meeting: think about how you can apply this distinction in the codification of your artefact-as-glossematic text. Format: Presentations by students and discussion

Tuesday January 7 2014  The specifics of glossematic coding: Hjelmslev chapter 19. This chapter introduces the role of «catalysis» in glossematics. Task for this meeting: think about how you can apply this distinction in the codification of your artefact-as-glossematic text. Format: Presentations by students and discussion

Tuesday January 14 2014  The specifics of glossematic coding: Hjelmslev chapter 20. This chapter introduces the role of «entities of the analysis» in glossematics. Task for this meeting: think about how you can apply this distinction in the codification of your artefact-as-glossematic text. Format: Presentations by students and discussion

Tuesday January 21 2014  The specifics of glossematic coding: Hjelmslev chapter 21–23. These chapters reflect, from the point of view of glossematics, about the «language-non language» distinction. Task for this meeting: think about what Hjelmslev discusses from the point of view of replacing the sound unit (phoneme) with information as a constitutive unit. Format: Presentations by students and discussion

(date to be determined)  PhD Conference: «glossematic coding – from systems of objects to alphabets of things»

«The entities of linguistic form are of "algebraic" nature and have no natural designation; they can therefore be designated arbitrarily in many different ways.»

(Louis Hjelmslev)