

# HJELMSLEV AS A 'FORERUNNER' OF THE SEMANTIC MAP METHOD IN LINGUISTIC TYPOLOGY

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The Dynamics of Language

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### 1. Introduction

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- 2. Mentions of Hjelmslev in the literature on semantic maps
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- 4. Contrasting Hjelmslev and semantic maps
  - Structuralism vs. substantialism
- 5. Conclusions
  - Historical: Hjelmslev as a forerunner?
  - Methodological: impact on contemporary methods?
  - Comparative epistemology: dialogue between structuralism and substantialism?



Figure 1. A map of the Comitative-Instrumental domain (Narrog & Ito 2007)



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"Recently, the issue of applying semantic maps to lexical typology—as anticipated already in the **early studies by Hjelmslev** and Lazard—has also been taken up by Majid et al. (2008) and François (2008)" (Cysouw et al. 2010: 1)

"The multivariate probabilistic effects, which reflect various salience phenomena, cannot be captured **by semantic maps like Hjelmslev's (1959) [1957]** or, more recently, Haspelmath's (2003)" (Levshina et al. 2013: 826)

But the first explicit mention of Hjelmslev is in Haspelmath (2003)

| two  | Baum | arbre |  |
|------|------|-------|--|
| træ  | Holz | bois  |  |
| skov | Wald | forêt |  |

**Figure 3.** Partitioning of the TREE–WOOD–FOREST semantic domain in three languages (Hjelmslev 1965\*: 54)

#### But the first explicit mention of Hjelmslev is in Haspelmath (2003)

| tro  | Baum | àrbre |  |
|------|------|-------|--|
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**Figure 3.** Partitioning of the TREE–WOOD–FOREST semantic domain in three languages (Hjelmslev 1965\*: 54)

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"(...), but from the present perspective, **the differences are not all that great**. One could easily imagine the differences to be such that no non-trivial universal semantic map can be drawn. Thus, Hjelmslev's own example can be used to make a very different point, **not for relativism, but for universalism of meaning**."

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| tum     | Baum | àrbre | = TREE (concept) |
|---------|------|-------|------------------|
| <i></i> | Holz | bois  |                  |
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= FOREST (concept)

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|                      |                | Lexical items |        |        |         |
|----------------------|----------------|---------------|--------|--------|---------|
|                      |                | Danish        | French | German | Spanish |
|                      | TREE           |               | arbre  | Baum   | árbol   |
| IGS/<br>ICAL<br>VES  | WOOD (mat.)    | træ           |        | Holz   | madera  |
| ANIN<br>LYTI<br>MITI | FIREWOOD       |               | bois   | ΠΟΙΖ   | leña    |
| Me/<br>Ana<br>Pri    | FOREST (small) | akay          |        | Mold   | bosque  |
|                      | FOREST (large) | SKOV          | forêt  | vvalu  | selva   |

Even if Hjelmslev's diagrams in *Prolegomena* have paved the way for comparison, they were conceived for **an entirely different purpose**, namely to show the difference between linguistic *form* and *substance* in a reader-friendly fashion

What is visualized is the *theoretical principle* underlying comparison, not the method, which is provided elsewhere, i.e., *La catégorie des cas* (1935-1937)

**Linguistic comparison cannot be carried out directly**, by singling out linguistic units from various languages and comparing them, since each unit has no value *per se*: its proper definition comes from the place it occupies within the system (the corresponding paradigm or *category*)

For Hjelmslev, what can be compared is the formal articulation of each linguistic domain (e.g., lexical, morphological, phonological, etc.). Briefly: one does not compare things, but different internal boundaries

The general procedure follows three steps:

1. Analysis: the paradigm (category) is set up, by identifying all its constitutive units (*taxemes*) using standard criteria and operations (commutation, etc.);

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- *3. Reduction*: units are further decomposed into components (smallest invariants or *glossemes* = formal version of "distinctive features")

A category is conceived as an area whose boundaries are fixed from a crosslinguistic perspective, and whose formal definition is given morphosyntactically (ex.: case = pure 'homonexual government')

What ensures the possibility of comparison (= by superposition) is uniform extension



PARAMETERS

1. Fundamental meaning of the category as a whole: *direction* 



Figure 5. Modern English (Hjemslev 1935: 119)

- Fundamental meaning of the category as a whole: *direction*
- 2. Up to three (implicational) *dimensions*:
  - a. proximity/distance



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Figure 6. Chechen (Hjemslev 1935, II: 55)

- Fundamental meaning of the category as a whole: *direction*
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#### PARAMETERS

- Fundamental meaning of the category as a whole: *direction*
- 2. Up to three (implicational) *dimensions*:
  - a. proximity/distance
  - b. coherence/incoherence

Chechen Ablative receives the 'cartesian' definition +1B+2B, which is interpreted semantically as [distance] [without contact]

Figure 6. Chechen (Hjemslev 1935, II: 55)



- 1. Fundamental meaning of the category as a whole: *direction*
- 2. Up to three (implicational) *dimensions*:
  - a. proximity/distance
  - b. coherence/incoherence
  - c. subjectivity/objectivity



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- Fundamental meaning of the category as a whole: *direction*
- 2. Up to three (implicational) *dimensions*:
  - a. proximity/distance
  - b. coherence/incoherence
  - c. subjectivity/objectivity
- Reduction: each unit is further decomposed into ultimate invariants (*glossemes*): α, Α, β, Β, γ, Γ, Γ<sub>2</sub>) ← pure structural (formalistic) issue

Conceived as a superposition between languages (structures), linguistic **comparison cannot be carried out directly** by relying on single forms (cases), since there is no guarantee that these units are uniform (thus comparable)  $\rightarrow$  squinting grammar (Jespersen)



"The very terms 'locative' and 'nominative' are ambiguous, and their content may vary from a linguistic state to another. The definitions provided are only valid for some particular systems of some languages" (Tr. of Hjelmslev 1935: 100)



|                      | glossematics | semantic maps    |
|----------------------|--------------|------------------|
| 1. Domain            | category     | conceptual space |
| 2. Extension         |              |                  |
| 3. Method            |              |                  |
| 4. Approach          |              |                  |
| 5. Set of primitives |              |                  |
| 6. Point of view     |              |                  |

|                      | glossematics  | semantic maps    |
|----------------------|---------------|------------------|
| 1. Domain            | category      | conceptual space |
| 2. Extension         | predetermined | ad libitum       |
| 3. Method            |               |                  |
| 4. Approach          |               |                  |
| 5. Set of primitives |               |                  |
| 6. Point of view     |               |                  |

#### Hjelmslev

The definition of a category, depends on functional facts arranged deductively. This relies on a methodo-/epistemological principle: *structural reduction* (from open to closed sets of elements)

"In order to formulate the problem in a correct way (...) a definition must be given that allows the **category to be rigorously delimited** without violating the fact, by identifying (...) the semantic zone specific to the category as a whole and by later showing how particular cases are distributed on this scale of meaning"

(Tr. of Hjelmslev 1935: 3)

#### Hjelmslev

### Semantic maps

The definition of a category, dep- The conceptual space is envisioned ends on functional facts arranged as a continuum, and the maps deductively. This relies on a capture bits and pieces of this methodo-/epistemological principle: continuum depending on the focus structural reduction (from open to of each study closed sets of elements)

"In order to formulate the problem in a correct way (...) a definition must be given that allows the category to be rigorously delimited without violating the fact, by identifying (...) the semantic zone specific to the category as a whole and by later showing how particular cases are distributed on this scale of meaning"

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**Figure 8.** A map of typical dative functions (Haspelmath 2003: 213)



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|                      | glossematics  | semantic maps    |
|----------------------|---------------|------------------|
| 1. Domain            | category      | conceptual space |
| 2. Extension         | predetermined | ad libitum       |
| 3. Method            | deductive     |                  |
| 4. Approach          | monosemic     |                  |
| 5. Set of primitives | closed        |                  |
| 6. Point of view     |               |                  |

|                      | glossematics  | semantic maps    |
|----------------------|---------------|------------------|
| 1. Domain            | category      | conceptual space |
| 2. Extension         | predetermined | ad libitum       |
| 3. Method            | deductive     | inductive        |
| 4. Approach          | monosemic     | polysemic        |
| 5. Set of primitives | closed        | open             |
| 6. Point of view     |               |                  |

### Hjelmslev

"A case, as any other linguistic form in general, doesn't have many different meanings: **it has just one meaning**, supporting a single abstract notion from which all different concretes instantiations can be deduced ... to each single unity of the system must correspond a single value"

(Tr. of Hjelmslev 1935: 85)

#### Hjelmslev

"A case, as any other linguistic form in **Inductive** approach that relies on general, doesn't have many different language comparison for identifying the meanings: it has just one meaning, different meanings of linguistic expressupporting a single abstract notion from sions (**polysemy**), hence resorting to an which all different concretes instan- open set of primitives tiations can be deduced ... to each single unity of the system must correspond a single value"

(Tr. of Hjelmslev 1935: 85)

### Semantic maps



|                                  |                | Lexical items |        |        |         |
|----------------------------------|----------------|---------------|--------|--------|---------|
|                                  |                | Danish        | French | German | Spanish |
| s<br>s                           | TREE           |               | arbre  | Baum   | árbol   |
| IEANINGS<br>VALYTICA<br>RIMITIVE | WOOD (mat.)    | træ           | bois   | Holz   | madera  |
|                                  | FIREWOOD       |               |        |        | leña    |
|                                  | FOREST (small) | akay          |        | Mold   | bosque  |
| ≥ ₹ <sup>™</sup> FOREST (large)  |                | SKOV          | forêt  | vvalu  | selva   |

|                                 |                | Lexical items |        |        |         |
|---------------------------------|----------------|---------------|--------|--------|---------|
|                                 |                | Danish        | French | German | Spanish |
| s<br>S                          | TREE           |               | arbre  | Baum   | árbol   |
|                                 | WOOD (mat.)    | træ           | bois   | Holz   | madera  |
|                                 | FIREWOOD       |               |        |        | leña    |
| lea<br>Val                      | FOREST (small) | akov          |        | Mold   | bosque  |
| ≥ ₹ <sup>™</sup> FOREST (large) |                | SKOV          | forêt  | vvalu  | selva   |

|                                 |             | Lexical items |        |        |         |
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|                                 |             | Danish        | French | German | Spanish |
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|                                 | WOOD (mat.) | træ           | bois   | Holz   | madera  |
|                                 | FIREWOOD    |               |        |        | leña    |
| IEA<br>VAI<br>°RIN              |             | akay          |        | Mold   | bosque  |
| ≥ ₹ <sup>™</sup> FOREST (large) |             | SKOV          | forêt  | vvalu  | selva   |

**Figure 4.** Partitioning of the TREE–WOOD–FOREST semantic domain in four languages (Haspelmath 2003, inspired by Koch 1998, etc.)

|        |       | MEANINGS/ ANALYTICAL PRIMITIVES |              |              |                   |                   |
|--------|-------|---------------------------------|--------------|--------------|-------------------|-------------------|
|        |       | TREE                            | WOOD (mat.)  | FIREWOOD     | FOREST<br>(small) | FOREST<br>(large) |
| Daniah | træ   |                                 | $\checkmark$ | $\checkmark$ | _                 | _                 |
| Danish | skov  | _                               | _            | _            | $\checkmark$      | $\checkmark$      |
| French | arbre |                                 | _            | _            | _                 | _                 |
|        | bois  | _                               |              | $\checkmark$ | $\checkmark$      | (√)               |
|        | forêt | _                               | _            | _            | (√)               |                   |
| German | Baum  |                                 | _            | _            | _                 | _                 |
|        | Holz  | _                               |              | $\checkmark$ | _                 | _                 |
|        | Wald  | _                               | _            | _            | $\checkmark$      |                   |

Figure 9. Lexical matrix for the 'tree/wood/forest' domain



|                      | glossematics  | semantic maps    |
|----------------------|---------------|------------------|
| 1. Domain            | category      | conceptual space |
| 2. Extension         | predetermined | ad libitum       |
| 3. Method            | deductive     | inductive        |
| 4. Approach          | monosemic     | polysemic        |
| 5. Set of primitives | closed        | open             |
| 6. Point of view     | (hyper-)emic  | etic (& emic)    |

### Hjelmslev

From Hjelmslev's point of view, the etic operations and labels strongly depend on the general **emic** structure of language ('etic' values are variants of linguistic forms); his approach can thus be defined as **hyperemic** 

### Hjelmslev

### **Semantic maps**

From Hjelmslev's point of view, the etic Distinction between:

operations and labels strongly depend a. on the general **emic** structure of language ('etic' values are variants of linguistic forms); his approach can thus b. be defined as **hyperemic** 

- the map = language-independent etic grid, i.e., "a coherent chunk of a universal network"
- language-specific (emic) categories are mapped onto this universal network of meanings

(François 2008)









# **Conclusions (1/3)**

1. Historical: Hjelmslev as a forerunner?

- $\rightarrow$  As regards the theory as a whole:  $\mathbf{no}$
- $\rightarrow$  For some specific ideas: **yes** 
  - 1) structuring the content-plane
  - 2) ... of cross-linguistically comparable semantic zones
  - 3) ... using graphical representations

# **Conclusions (2/3)**

- 1. Historical: Hjelmslev as a forerunner?
- 2. Methodological: impact on contemporary methods?
  - $\rightarrow$  As regards the theory as a whole:  $\mathbf{no}$
  - $\rightarrow$  For some specific ideas: **yes** 
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    - 2) ... of cross-linguistically comparable semantic zones
    - 3) ... using graphical representations

# **Conclusions (2/3)**

- 1. Historical: Hjelmslev as a forerunner?
- 2. Methodological: impact on contemporary methods?

 $\rightarrow$  As regards the theory as a whole: **no** 

- $\rightarrow$  For some specific ideas: **yes** 
  - 1) structuring the expression-plane
  - 2) ... of cross-linguistically comparable phonetic zones
  - 3) ... using graphical representations

# **Conclusions (2/3)**

- 1. Historical: Hjelmslev as a forerunner?
- 2. Methodological: impact on contemporary methods?



# **Conclusions (3/3)**

- 1. Historical: Hjelmslev as a forerunner?
- 2. Methodological: impact on contemporary methods?
- 3. Comparative epistemology: dialogue between structuralism and substantialism? (cf. Haspelmath 2015)
  - → No obvious intermediary position between the two frameworks
  - → Both theories construct their objects in radically different ways (constructivism vs. realism), which are consequently hardly comparable

# Thanks!

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