1. Axial complexes

Axial prepositional complexes are widespread cross-linguistically:

1. El libro está de la mesa.
   the book is front-of-the table
   The book is in front of the table.
   a. El libro está de la mesa.
   b. Ha visto el libro.
   c. S-perdió el gato.

2. Place
   Place
   in AxPart
   front
   Some Prepositions
   Problems: AxParts seem to be nominal
   The projective component is disregarded
   Semantics and the connection to corresponding concrete parts is not established
   Functional elements (P, D inside the complex) are disregarded
   Cross-linguistic syntax of axial complexes is not the same

2. The lexical nature of AxParts

The majority of axial elements are nominal:

• They are historically derived from (body/part) and (top) (nouns)
• They show case morphology consistent with the embedding context
• They have inherent gender reflected on the article (e.g., a head vs. la ile)
• Their meaning can be highly idiosyncratic (e.g., on board is only compatible with NPs denoting means of public transportation)
• They resemble weak deponents in that the overt deponent alternates with zero (e.g., at the foot of the bed) and modification, pluralization, preposing, etc., are disallowed

Some AxParts are underlyingly adjectival (e.g., in the left)

3. The semantics and syntax of AxParts

In a number of languages AxParts do not require an external proposition:

1. María es mi hermana.
2. María es mi esposa.

We propose that AxPs can denote in the spatial domain, defining gûrû "top" as an AXIS

4. What does the definite article do?

What it doesn’t do: it does not go away.
If the AxPart is nominal, the presence of the definite article entails uniqueness

10a. El libro
10b. El libro de la mesa

Answer: it can if the DP denotes a spatial kind

4. The weak definite connection

The lack of the article in on top of is not evidence for the functional status of top

11a. north of the mountain
11b. in front of the mountain

All these are clearly projective (and therefore do not involve concrete material parts)

12a. El libro de la mesa
12b. El libro de la mesa

Proposal (Aguilar Guevara and Zwarts 2010, 2013, Aguilar Guevara 2014): kind-denotation Intuition: A WD noun like foot can have spatial instantiations: as a set of vectors PROJECT can apply to this set

5. Summary

There is support for the cascading structure in (2), but with certain modifications
There is no support for the hypothesis that AxParts are functional
There is evidence for an additional functional component (PROJECT) in axial complexes

7. Putting axes in the lexicon

What does the English AxPart top mean?
It cannot be (4), because then it would not require a preposition
It must be kind-denoting (a weak definite)
Thus: [top] = NOM [TOP AX]
What does the English AxPart front mean?
[Front] = NOM • PROJECT • FRONT AX
This is why the tree in (10a) is misleading for English
But justified for languages where PROJECT is instantiated as a separate term

8. Further semantic issues: the outer P

Story so far: AxParts have denotations based on spatial notions.
The core meaning is spatial
The presence of the definite article indicates kind-denotation
Kinds need to be instantiated, and this is what P does
Hence two possible approaches to the outer P:
• the same semantics (instantiation of a spatial kind, INST) different realizations in function of the noun they combine with
• the prepositions have their normal semantics and the choice depends on how the axial noun is conceived of (e.g., in the ground, ground is not a container but the preposition in is used because ground has a privileged way of accessing it), cf. at school vs. in yeshiva

9. Bonus: Path-based axial complexes

Source-based axial complexes provide further evidence against simplistic unification and for the weak definite connection:

13a. The goat is grazing in the field.
13b. The goat is grazing in the field.

The inner preposition is a dynamic one creating paths rather than places
• a transition from paths to places is necessary
• the composition requires a different constituency from (2)

The structure in (2) would combine an AxPart with a path or a location, from which it will be impossible to extract the source object (the ground), because loci do not have functions

But then what are we in this business for?

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