

A note on functional adpositions

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1. Functional adpositions

A case can be made, as in Zwarts (1997), that all adpositions (pre- and postpositions) are nonlexical elements: adpositions form a closed class, they are often grammaticalized nouns or verbs, and they generally serve to link constituents (turning a noun phrase into a complement or adjunct). But unlike true functional elements, adpositions are generally not without referential content — albeit that the concept referred to is not an entity but an element of spatio-temporal organization. Discussion of the lexical-functional opposition with adpositions, then, often centers on the literal vs. metaphorical use of the adposition, as in *at home* vs. *(good) at math*. But as Tseng (2001) shows, the relevant distinction is not clear-cut and solid criteria for classifying adpositions along those lines do not exist.

Still, it would seem that referential content is a useful criterium for distinguishing lexical and functional adpositions. I take functional elements (with Abney 1987) to be devoid of descriptive content. A grammaticalized noun, such as Dutch *richting* ‘direction, in the direction of’ is not devoid of content and will therefore still count as a lexical adposition. The same holds for the more peripheral use of *at* in *(good) at math*. But *of* in *a hell of a story* or *the city of Boston* or *out of the blue* seems to function as a mere linker, without a trace of the core meaning of a lexical adposition *of* (see Zwarts 1997 and Van Eynde 2004 for similar considerations).

My tentative definition of a functional adposition, then, is in (1):

- (1) A functional adposition is a noninflectional dependency marking particle.

The definition in (1) implies a distinction between functional adpositions and case affixes, the latter being inflectional dependency marking elements. It may well be that this distinction is artificial, but for now I will assume that adpositions and case-markers are two distinct devices potentially serving the same purpose.

It is to be expected that languages will in general have a highly limited number of functional adpositions, since the lexical content of the functional

adposition is by definition arbitrary. If we are interested in finding functional adpositions, then, we should be on the lookout for general, all-purpose adpositions.

2. Some case studies

2.1 *The functional preposition in Mende*

Mende (a Niger-Congo language of the Mande group) is a head-final language in the sense that the verb follows the direct object and adpositions are postpositions (Migeod 1908). Still, Mende has a single preposition *a* which is presented as meaning ‘with’ (Migeod 1908:111), but in fact appears to have a range of uses. In contrast, the postpositions, a number of which are relational nouns, have well-defined meanings (including ‘with’, conveyed by the referential noun *ngeya* ‘hand’).

Some examples of the use of *a* are given in (2) (Migeod 1908:112f):

- (2) a. ye, bā gili á ná
 say 2SG.FUT.NEG think P DEM
 ‘He said, do not worry about it.’
- b. ndondo a sore !
 cease P noise
 ‘Stop that noise!’
- c. ī gu a li-la
 3SG.NEG can P go-INF
 ‘He cannot go.’
- d. i ti dewe a fe-fele
 3SG 3PL send P DISTR-two
 ‘He sent them two by two.’

I would like to suggest that the Mende element *a* is an all-purpose dependency marking particle, used for direct objects (2a-b), embedded infinitives (2c), secondary predicates (2d), among other uses (e.g. that of conjoining pronouns).

If we then hypothesize that Mende *a* is a functional adposition, the question may arise whether it is an accident that the only preposition in this head-final language is functional. My impression is that no head-initial languages exist where the functional adposition is a postposition. This suggests that the following generalization may hold:

- (3) If a language has both pre- and postpositions, and it has a general, all-purpose adposition *p*, *p* is invariably a preposition.

2.2. Complex adpositions in Tikar

Tikar (a Broad Bantu language spoken in Cameroon) is a head-initial language featuring both prepositions and postpositions, each class also containing a number of relational nouns (Stanley 1991). One of the prepositions, *kε*, appears to have a generic locative meaning. Apparently all postpositions and relational nouns may be combined with *kε* to form complex adpositions. This is illustrated with a true postposition in (4a) and with a relational noun in (4b) (Stanley 1991:345f):

- (4) a. m̀n pỳ d̄ye kε ndon zwê̄m
 1SG fall sleep LOC bed on
 ‘I fell asleep on the bed.’
 b. à k̀n l̀è mwô̄ kε nlim d̄u’
 3SG leave with child LOC heart river
 ‘He left with the child on the river.’

The complex adpositions express a range of spatio-temporal relations, the particular character of which is a function of the lexical content of the postposition/relational noun. It follows that *kε* in this particular use may well be characterized as a functional adposition.

This raises the question of whether in complex adpositions the functional element is ever a postposition. Van Riemsdijk (1990) argues that in Continental Westgermanic circumpositions of the type of German *auf mich zu* ‘towards me’ [lit. on_{LOC} me_{ACC} to_{DIR}] the final adposition is functional, but this assumes a different definition of ‘functional’ since the final adposition is not semantically vacuous (Van Riemsdijk 1990:239).

Perhaps significantly, in head-final languages featuring circumpositions, the final element always appears to bring in descriptive content, and the first element may be an all-purpose preposition, as in Southsemitic Zay *bε-...dεr* ‘on’, *bε-...ʔafāf* ‘beside’, *bε-...ʔančī* ‘(temporal) after’, *bε-...yεnεqε* ‘based on’, etc. (Meyer 2005:274f). This suggests the following generalization:

- (5) If a language has circumpositions consisting of a lexical and a functional adposition, the functional element is a preposition.

2.3. Relational noun constructions

Many languages express spatio-temporal relations in a possessive construction where the relational concept is expressed by a (grammaticalized) noun, such that for example *in the house* is rendered as *(the) inside (of) the house*. The relational noun may either precede or follow its complement, depending on the organization of possessive constructions.

It seems to be generally the case that relational nouns may be supported by a second adposition, as in Eastern Kayah *dʒ toə khu* [lit. ‘on table’s top’] ‘on the table’ (Solnit 1997:209). In these situations the preposition may easily become a generic relation marker, as in the Tikar examples above, or in the West-Atlantic (Niger-Congo) Fulani language Toucouleur (Sylla 1993:94):

- (6) a. mi naat-ii (e) nder suudu
 1SG enter-ASP P inside hut
 ‘I entered the hut.’
 b. mi yan-ii (e) dow joowre pataas
 1SG fall-ASP P top heap potato
 ‘I fell on a heap of potatoes.’

As Sylla (1993:92) argues, *e* no longer functions as a productively used directional preposition, suggesting that it has become a functional element.

In view of Greenberg’s (1966:78) Universal 2 (stating that postpositional languages have preposed genitives and prepositional languages postposed genitives) we expect P-initial languages to show the order in (7a) and P-final languages the order in (7b):

- (7) a. P — [relational noun — NP_(GEN)]
 b. [NP_(GEN) — relational noun] — P

I have seen a number of languages where the P element precedes an NP_(GEN)relational noun complex, such as verb-initial Eastern Kayah (Solnit 1997:209) and verb-final Zay (Meyer 2005:274f). But I have not seen any languages where the P-element follows a relational noun_(GEN)NP complex, in violation of (7a). This leads to a hypothesis stating that functional adpositions occupying unexpected positions are always prepositions.

It would be interesting to see if that hypothesis could be strengthened to (8):

- (8) If a language has a relational noun construction which requires or allows support from a functional adposition, the latter is invariably prepositional.

The data at my disposal suggest a number of counterexamples to (8), namely all those languages instantiating the type of (7b), e.g. Supyire (Carlson 1994:181), Kham (Watters 2002:137), possibly Zaghawa (Jakobi and Crass 2004:162), and presumably quite a number of others. Clearly, it would have to be established in each case whether the P-element is an adposition or something else (such as a case marker or some other type of suffix). But until that work has been done, there is reason to believe that (8) may be too strong.

3. Complex adpositions

The observations in section 2 suggest that functional adpositions are at least preferably prepositions. From this perspective, it would appear that the analysis of Germanic complex adpositions of the type *auf mich zu* (see above) in Van Riemsdijk (1990) and Rooryck (1996), where the postposition is taken to be a functional adposition, compels us to think of the relevant languages as typologically marked. In view of this, a reconsideration of the analysis of the Germanic type as involving stacked lexical prepositions, comparable to English *onto me*, might be called for (cf. Zwart 1993:359f).

Slightly different is the type of *out of the house* where it is reasonable to consider *of* as a functional element. However, whereas Rooryck (1996:234) takes *of* to be a postposition taking *out the house* as its complement (leading to the anomaly of a functional postposition in a head-initial language), I would like to suggest that *of* functions as a linker between *out* and *the house*, i.e. as a minor adposition in the sense of Van Eynde (2004) or a functional adposition in the sense of Zwarts (1997).

This approach has more in common with that of Koopman (1997) and Den Dikken (2003), where complex adpositions are analyzed as spell-outs of lexical adpositions in combination with some adpositional functional material reflecting aspects of spatial organization. However, the circumstance that these functional elements are associated with descriptive content would again lead me to apply a different terminology to them.

Clearly, I was unable in this squib to do justice to the full array of data and analyses, but if this small contribution could somehow be grafted onto

Henk van Riemsdijk's majestic adpositional oeuvre, the effort will not have been in vain.

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