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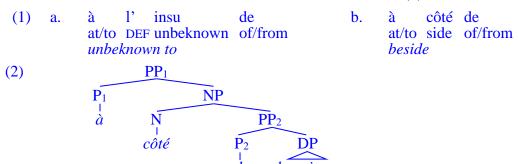
PARAMETERS OF NOMINAL DEFICIENCY IN COMPLEX PREPOSITIONS

Setting the stage: examples like (1) are described as "complex prepositions" in traditional grammars of many languages and Melis 2003, Fagard and De Mulder 2007, Fagard, Stosic and Pinto de Lima 2020, Huddleston and Pullum 2002, etc. However, as shown by these authors and earlier, Quirk and Mulholland 1964, these preposition-noun-preposition sequences (PNPs) do not form a uniform class, nor is this class closed. We will argue (cf. Seppänen, Bowen and Trotta 1994) that the variation exposed below can be explained if PNPs are regular PPs formed on the basis of a weak relational nominal with the structure in (2).

(1) a. à   l'   insu   de   b. à   côté   de
       at/to DEF unbeknown of/from   at/to side   of/from
       unbeknown to   *beside*

(2)

$$PP_1$$
$$P_1 \quad NP$$
$$à$$
$$N \quad PP_2$$
$$côté$$
$$P_2 \quad DP$$
$$de \quad la\ voiture$$

Internal structure: PNPs cannot be treated as constituents. The inner preposition (P_2) can be repeated across conjunction (for some PNPS, like (3), from Fagard and De Mulder 2007) and the outer one (P_1) can vary in function of direction ((4), cf. Melis 2003), directionality (*in/into*) or polarity (*avec/sans*). The combination of P_2 and the following NP can be replaced by a possessive (if P_2 is *de* or its equivalent, (5)) or by an R-pronoun PP (e.g., *worauf* in German *im Hinblick auf* 'in terms of', cf. Trawiński 2003), or dislocated (Seppänen, Bowen and Trotta 1994). The fact that the prepositions involved retain their properties (case-assignment in German or Russian, or the lack of an article for *en*) shows that they are just regular prepositions.

(3) Je travaille à   l'aide   **de**   jeux   de   rôles et **de** Gestalt-thérapie.
     I work   at/to DEF+help of/from game of   roles and of   Gestalt-thérapy
     I work using roleplay and Gestalt-therapy.

(4) **en/ par** dessus de   (5) a   son   insu
     in   by   top   of/from   at/to 3SG.POSS unbeknown
     on top of/over   *unbeknown to him/her*

The nominal core: the internal non-functional element in "complex prepositions" is generally a noun (on exceptions see below). That the distribution of the noun may be limited to the PNP in question (1a) is unproblematic in view of the existence of fossil words (Aronoff 1974, aka cranberry words, Richter and Sailer 2003): freestanding morphemes appearing only in one particular environment or a few (6). Following Matushansky and Zwarts 2019, we propose that the lexical core of PNPs is a **weak noun**, i.e., a noun that allows its definite instantiation to have non-unique reference, typically in the context of prepositions (e.g., *in the <u>hospital</u>* in a context with multiple hospitals). The article can often be dropped (e.g., *in hospital*), modification is restricted (e.g., **in old hospital*), and the meaning is often shifted away from its literal meaning (e.g., to 'being a patient' for *in (the) hospital*) (Ross 1995, Stvan 1998, 2007, Carlson and Sussman 2005, Aguilar-Guevara and Zwarts 2010, 2013, Aguilar-Guevara 2014, etc.). We will show that the variation in the internal syntax of PNPs (Quirk and Mulholland 1964, Fagard et al.) can be derived from this assumption.

(6) a. **kith** and kin
     b. mettle (*in high mettle, test/prove/show (one's) mettle, on (one's) mettle*)

Overt article: The overtness of the article depends on the preposition, the noun or on both, just like with weak nouns in general (7).

(7) a. Sue took her nephew **to college/to prison/to class**. Carlson and Sussman 2005
     b Sue took her nephew **to the hospital/to the store/to the beach**.

Modification: Since weak nouns resist modification, PNPs with a bare noun also do, unless it is P_1 that forces the bareness of the noun ((8a), but not (8b)) or the noun is mass (8c). In general, only adjectives yielding degree interpretation are possible (8b,c).

(8) a. en prise (directe) avec   b. by (*late/*sheer/*big) car
         in grip (direct)   with   c. in (sore/desperate) need of
         in (close) contact with

Idiomaticity: As discussed by Svenonius 2006, 2008 for locative PNPs, the interpretation of the noun inside a PNP (9a) may differ from its regular interpretation (9b). This is not the reason to treat PNPs as syntactically simple, as the same is true for idioms, including those with weak nominals (10). As discussed by Aguilar-Guevara 2014, a.o., weak nominals often give rise to meaning shifts, just like the nominal core of PNPs (8a), and the shift is not always predictable (see Lauwers 2014 for one approach to this issue with "complex prepositions").

(9) a. in **front** of   (10) a. adding **insult** to **injury**
     b. in **the front** of   b. think/*act out of **the box**

Reduced PNPs: Further evidence for the decomposition of PNPs comes the fact that many of them allow the omission of the complement. Thus for the vast majority of PNPs formed with *avec* as P_2 a plural subject with no complement entails the same semantics (11a), and the same is true in Dutch and English (even though different sets of collocations are regarded as complex prepositions in different languages). Likewise many axial PNPs without a complement (11b) begin to function as adverbials with a contextually provided reference point (GROUND).

(11) a. Mais le couple est **en bisbille**   depuis plusieurs années.
         but the couple is   in   LOGGERHEADS since   several   years
         But the couple has been at loggerheads (with each other) for several years.

     b. Sa   soeur a   remarqué un véhicule suspect **aux   alentours**.
         his/her sister has noticed a vehicle suspicious at/to+DEF vicinity.PL
         His/her sister has noticed a suspicious vehicle in the vicinity.

Expansion: The question arises how to situate such reduced PNPs in the broader space between idiomatic PPs (including those with weak nominals or fossil words, as in (12), from Baldwin et al. 2006) and (semi)idiomatic VPs involving a PP argument (13). Moreover, modification is obligatory in some PNPs (14) and some can be restricted to combine with one verb only (10b), (15), suggesting that PNPs are merely a point or region in a multi-dimensional space of idioms with nominal core.

(12) a. at bay   (13) a. go to bed (= 'go to sleep')
     b. by rote   b. take __ to bed (= 'sleep with')

(14) a. en *(bons) termes (avec)   b. sur le pied *(de guerre (avec))
         in   good   terms with   on the foot of   war   with
         on good terms with   *on the war footing (with)*

(15) come/*fall/*get to terms with

Conclusion: Treating PNP "complex prepositions" as non- or partially compositional on the semantic side yet syntactically regular PPs with the lexical core that may be a weak noun and/or a fossil word accounts for some of their idiosyncratic properties in an insightful way while retaining their syntax transparent. This approach also offers a meaningful way of evaluating "grammaticalization" in this context (Fagard and De Mulder 2007), including transition to the category P (e.g., in *(du) côté santé* 'regarding health').

Further questions: While PNPs are not the only things called "complex prepositions", we will argue that this concept is of no theoretical value. Firstly, different lists of complex prepositions

have been proposed for different languages. Secondly, PPs involving directional layers (e.g., *from under*) and gerund-based "prepositions", such as *concerning*, are both syntactically and semantically distinct from PNPs. Thirdly, cross-linguistic persistence (including the ease of translation) and productivity of the PNP class is opposed to the variability and unpredictability in all other classes. Finally, an umbrella term does not explain their varied behavior.

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