On snakes, locative binding and complex predicates

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1. Background Coreference marking in English locative PPs can be achieved either via the use of a pronominal or a reflexive form (1). In the standard LFG analysis, the non-complementarity of the pronoun and the anaphor is captured by assuming that there is an asymmetry in the binding theoretically relevant domain of the two elements (Bresnan et al. 1985, Bresnan 2001, Dalrymple 1993, 2001; cf. also Büring for a similar approach outside of LFG). Reflexives are +NUCLEAR in the sense that they must find an antecedent within the *minimal complete nucleus*, i.e., the smallest f-structure that contains the f-structure of the anaphor and a SUBJ. Pronouns are –NUCLEAR in the sense that they are constrained to be disjoint from their coarguments. The coargument domain is defined by the PRED feature, and this domain need not include a SUBJ. Therefore locative PPs, being predicative, will constitute a negative binding domain for pronouns, but, lacking a SUBJ, they will not constitute a (positive) binding domain for anaphors.

This analysis rests, among others, on three important assumptions. First, binding constraints are lexically associated with anaphoric/pronominal elements (in the general LFG-spirit). Second, the locative PP in question can in principle be an argument or an adjunct (see, for example, Dalrymple 2001: 280, and Lødrup 2007 for a specific discussion of this issue). Third, what matters for Binding Theory is whether the P-element itself is predicative or not. A P-element is arguably not predicative if it is directly selected by the verb (possibly as part of a larger idiomatic unit) and lacks independent semantic content. In such cases, only the anaphor can encode coreference (cf. 2).

2. The problem It is also quite well-known, however, that the cross-linguistic facts are more complex. In particular, languages differ wrt whether they only *allow* or *require* a reflexive strategy to apply in locative PPs (see Faltz 1985 for an overview). For example, in the German equivalent of (1), only the reflexive element is acceptable and the pronoun is ungrammatical (3). In the above described approach, the German facts can be explained by either of the following two ways. It could be assumed that the German pronoun (*ihm*) is associated with binding constraints in the lexicon that differ from those of the English pronoun *him*. For example, *ihm* can be taken to be –NUCLEAR in the sense that it cannot be bound in the *minimal complete nucleus* (i.e., there is no domain asymmetry in German between *ihm* and *sich*). Second, it can be argued that the constructions in the two languages are in fact not equivalent.

Reuland (2001, 2006) makes use of this second strategy to explain the difference between the French (4a) and the Dutch (4b): a corefering pronominal is licensed only in the former case (note that his particular examples do not represent locative contexts). Dutch licenses preposition stranding, which Reuland interprets as the sign of the covert reanalysis of the P-element with verb. The result is a covert complex predicate V-P, and only one binding domain for (4b). French does not allow preposition stranding, hence there is no covert complex predicate formation. The French pronoun survives in (4a) because the preposition does not incorporate into the verb and no complex predicate is formed.

This account does not readily explain the difference between the English (2a) and the French (4a), for in both cases we have what looks like a semantically empty P. This is a contrast that I will not explain here, and I also remain agnostic about the general feasibility of the covert complex predication formation analysis of Dutch. My aim in this paper is to scrutinize the delicate pattern of coreference marking in Hungarian PPs, and to show that the data can be explained within standard LFG-theoretic assumptions under recognition of the binding theoretic relevance of *overt* P-V complex predicate formation.

3. The Hungarian facts

Hungarian has two different types of postpositions (one set takes case-marked complements, the other takes caseless complements), plus a handful of locative case suffixes. All these P-elements used to be possessive structures historically, which origin has become obscure to different degrees. As a synchronic reflex of this etymology, the pronominal form of case suffixes and that of postpositions taking caseless complements is formally identical to possessive structures (with the possessor being *pro*-dropped). See (5).

At first sight, Hungarian seems to pattern up neatly with German, and not with English, inasmuch as it normally does not allow 3SG coreferential pronouns in locative PPs (6a). However, as (6b) testifies, pronominal coreference becomes an option in first and second person (there is some variation across speakers, but everyone finds a clear contrast between (6a) and (6b)). Notice that in (6b) the inflected PP is in the postverbal domain.

Directional postpositions/case suffixes by default occupy an immediately pre-verbal position. When this happens, pronominal coreference marking becomes very marginal or unacceptable (7a). If however, the (first or second person) pronominal P is a postverbal associate of an incorporated adverbial, as in (7b), then coreference becomes grammatical. I will show that this pattern is pervasive: pronominal marking of coreference in Hungarian PPs is best if the PP itself does not occupy the immediately preverbal position.

4. An explanation of the Hungarian facts

These data raise two immediate questions. First, why do we have the binding theoretically relevant difference between third and non-third person pronominal PPs in Hungarian? Second, what is the actual relevance of the immediately preverbal position (known as a host of *verbal modifiers* in Hungarian grammars) for Binding Theory?

I will argue that the answers to these two questions are interrelated. When a PP licenses pronominal coreference, its structure is actually reanalyzed as a possessive construction: (5b) or (5c) may reactive the underlying (historical) possessive structure, and they synchronically become more similar to a real possessive (5a). Informally, the PP *alattam*

'under me' is reanalyzed as 'under my place', and (6b) is in fact interpreted as 'I saw a snake under my place [i.e. the place associated with me].' Coreference is then between the possessor (represented by agreement morphology) and the subject antecedent. See (8) as an illustration for a simplified f-structure of (7b).

I will show that sometimes there is overt morphological evidence of this possessive reanalysis. I will also argue that it is blocked in 3SG because there is independent evidence that third person possessors do not agree with the possessum, and this lack of agreement precludes the possibility of possessive reanalysis in the PP cases.

Finally, possessive constructions are known not to be able to occupy the preverbal position in neutral sentences in Hungarian. This explains the ungrammaticality of (7b): the pronominal PP could be coreferent with the (*pro*-dropped) subject only as a reanalyzed possessive structure, but as such, it cannot occupy the preverbal position. It follows that only free pronominal PPs (which need not be reanalyzed as possessives) may occur preverbally, which is in fact the case (not shown). In fact, preverbal occurrence in neutral sentences will be analyzed as an instance of P-V complex predicate formation (and concomitant predicate composition in semantic structure), and whenever this happens, the incorporated PP cannot have a clause-mate antecedent (as suggested in Reuland 2006 for the Dutch (4b)).

All in all, Hungarian *is* like German: regular pronouns cannot code clause-internal coreference in PPs, *except* when they are reanalyzed as possessive structures. Such reanalysis is not available in German. What this account does not explain is why English differs from German (and from Hungarian) in allowing coreferent *simple* pronouns in PPs, which is a problem that needs an independent explanation.

(1) a. *John*$_i$ *saw a snake beside him*$_{i/k}$ / *himself*$_i$.

(2) a. *John*$_i$ *believes in him*$_{*i/k}$ / *himself*$_i$.
b. *John was beside *him/ himself with rage*.

(3) a. *Hans*$_i$ *sah eine Schlange neben ihm*$_{*i/k}$ / *sich*$_i$. German
Hans saw a snake beside him self

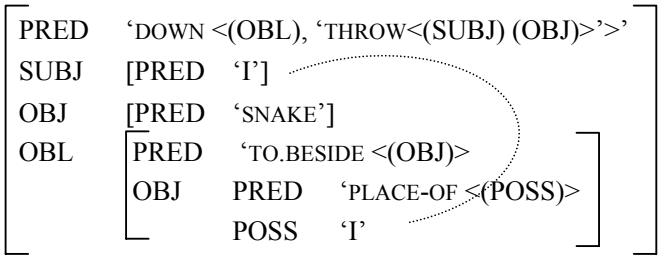
(4) a. *Jean*$_i$ *parle de lui*$_{i/k}$ / *lui-même*$_i$. French (Reuland 2006:65)
'Jean talks of him/himself.'
b. *Jan*$_i$ *praat over *zich*$_i$ / *hem*$_{*i/k}$ / *zichzelf*$_i$. Dutch
'Jan talks of himself/him.'

(5) a. *ház-am* [possessive] b. *nál-am* [case suffix] c. *alatt-am* [postposition]
house-1SG at-1SG under-1SG
'my house' 'at me' 'under me'

(6) a. *János*$_i$ *látott egy kígyó-t maga mellett*$_i$ / **mellett-e*$_i$
John saw a snake-ACC himself beside beside-3SG
'John saw a snake beside himself.'
b. *Látt-am*$_i$ *egy kígyó-t mellett-em*$_i$.
saw-1SG a snake-ACC beside-1SG
'I saw a snake beside me.'

(7) a. */$^{??}$*Mellé-m-dobt-am a kígyó-t.*
to.beside-1SG-threw-1SG the snake-ACC
'I threw the snake beside me.'
b. *Le-dobt-am a kígyó-t mellé-m*.
down-threw-1SG the snake-ACC to.beside-1SG
'I threw the snake down beside me.'

(8) (→7b)



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