Non-Core Arguments in Verbal and Nominal Predication: High and Low Applicatives and Possessor Raising

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1. Introduction: Non-Core Arguments in English and Russian

Since the seminal dissertation of Pylkkanen (2002) much discussion has been centered on the syntax of non-core arguments. Non-core arguments are those arguments that are not strictly subcategorized for by the verb and are optional, as a result. In this paper, we will focus primarily on the distribution of non-core dative arguments (N-CDAs from now on) in Russian and English. Let us begin with an example. In (1a) we can add an indirect object to the verb, even though ‘buy’, unlike ‘give’ (1b), is not obligatorily ditransitive. In this sense, the argument ‘me’ in (1a) is non-core.

(1) a. John bought (me) a pie  
   b. John gave *(me) a pie

However, it is impossible to add a non-core dative argument to a nominal predicate in English (2a) vs. (2b), a PP must be used instead.

(2) a. *He was me a friend  
   b. He was a friend to me.

Russian, unlike English, allows non-core dative arguments in nominal predication (3a-c).

(3) a. Dima byl mne drugom  
    Dima was I-dat friend-inst  
    ‘Dima was my friend’

   b. Ona byla mne sestroj  
      She was I-dat sister-inst  
      ‘She was my sister’

   c. Misha byl emu nachal’nikom  
      Misha was he-dat boss-inst  
      ‘Misha was his boss’

In (3), the dative arguments are interpreted as possessors. In addition, only those nominal predicates that are compatible with a possessive meaning allow a non-core dative argument to be added, relational nouns being the best candidates, compare (4a) vs. (4b):

(4) a. Ona byla (mne) nachal’nikom  
      She was I-dat boss-instr  
      ‘She was my boss’

   b. *On byl mne proxozhim  
      He was I-dat bystander-instr  
      ‘*He was my bystander’

We would like to thank the participants of WCCF 27 for their useful comments and questions. All shortcomings are, of course, our own.

1 The example in (4b) gets less degraded under the relational interpretation of the noun ‘bystander’. If its meaning is type-shifted and is interpreted as ‘for X to be a bystander to Y’ = ‘X is not a friend for Y’, then the example b can be judged grammatical.

There are some commonalities between N-CDAs in verbal and nominal predications. Aside from the fact that in both cases they are non-obligatory and receive dative case, in both verbal and nominal predication non-core arguments must be animate, see (5a, b):

(5)  a. *Trjapka byla stolu skatert’ju
     Rag was table-dat tablecloth-instr
     ‘The rag was a tablecloth for the table’

     b. *My poslali ofisu poket
     We sent office-dat package-acc
     ‘*We sent the office the package’

We will touch upon the animacy requirement briefly in Section 3. However, an important difference between non-core dative arguments in verbal and nominal predication is that the non-core argument in nominal predication is interpreted as a possessor (cf. 3a-c), while that in verbal predication cannot be so interpreted in English or Russian. Instead, it must be interpreted as a recipient (6a, b) vs. (6a’, b’):

(6)  a. Dima byl mne drugom
     Dima was I-dat friend-inst
     ‘Dima was my friend’

     a’. Jon kupil mne pirog
     Jon bought I-dat pie
     ‘Jon bought me a pie’

     ≠ ‘Jon bought my pie’

     b. Ona byla mne sestroj
     She was I-dat sister-inst
     ‘She was my sister’

     b’. Dima privel mne loshad’
     Dima brought me horse-acc
     ‘Dima brought me a horse’

     ≠ ‘Dima brought my horse’

The above properties of constructions with non-core dative argument bring us to the following questions:

**Question 1**: Why are N-CDAs in Russian interpreted as possessors in nominal, but not in verbal predication?

**Question 2**: Why does English forbid N-CDAs in nominal predication (regardless of interpretation), though it allows them with verbal predicates?

In the following sections we will attempt to answer these questions.

2. The Proposal

2.1. The ‘Escape’ of the Possessor: External Possessors and Applicatives

At the risk of stating the obvious, we would like to point out that in addition to a dative possessor in (3), nominal predicates allow genitive possessors (7). The genitive possessor carries a slightly different shade of meaning, to which we will turn shortly.

(7)  a. Dima byl mne drugom
     Dima was I-dat friend-inst
     ‘Dima was my friend’

     a’. Jon kupil mne pirog
     Jon bought I-dat pie
     ‘Jon bought me a pie’

     ≠ ‘Jon bought my pie’

     b. Ona byla mne sestroj
     She was I-dat sister-inst
     ‘She was my sister’

     b’. Dima privel mne loshad’
     Dima brought me horse-acc
     ‘Dima brought me a horse’

     ≠ ‘Dima brought my horse’

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2 Moim / ego here is a kind of an agreeing possessive pronoun with both nominal and adjectival properties, but since the difference between the postnominal genitives and prenominal agreeing possessors does not play any role in N-CDA constructions, we will treat them alike here.
Now, the genitive and the dative possessor constructions are related. Specifically, we propose that what is happening in constructions such as (3) is this: the possessor in a construction such as (7) escapes from inside the DP (or possibly some smaller nominal projection) to check its dative case (see Shibatani 1994, Landau 1999, Lee-Schoenfeld 2006 on external possessors). But, having so escaped where does it go? We propose to answer this question as follows: it moves to the specifier position of a High Applicative Phrase, ApplHP (8), which is where the dative case is checked, see (Lee-Schoenfeld 2006 for a similar proposal). So, the structure for the N-CDA construction in (3a) is shown in (8):

Let us now do some unraveling of the structure in (8). First, the head ApplH in (8) is a High Applicative, (Pylkkänen 2002). High Applicatives relate an individual to an event / situation (Pylkkänen 2002). In other words, ApplH adds an affected argument (a beneficiary or a maleficiary) to an event / situation. It does not require that there be any transfer of possession.

High Applicatives select a predicative category such as a vP/VP or a PredP, as in (8). Evidence for the presence of the lower / secondary PredP in (8), in turn, comes from the instrumental case on the nominal predicate which is assigned by the secondary Pred, see (Bowers 1993, Bailyn & Rubin 1991, Bailyn & Citko 1998, Bailyn 2001). The above authors argue that instrumental case on the predicate arises only in situations when secondary predication is involved. Reasons of space do not allow us to address this question in-depth and we refer the interested reader to Bailyn and Rubin (1991) and Bailyn (2001) for discussion.

Now, as independently argued in (McGinnis 2001, 2005) on the basis of much cross-linguistic data, ApplH marks a phase and possesses the EPP feature, which allows the material underneath ApplH to be moved out, just as is illustrated in (8). The ‘escape’ of the possessor from inside the noun phrase in (8) is thus crucially facilitated by the presence of the EPP on ApplH. We will touch upon the question why the predicative noun phrase has the NP, not DP status shortly.

3 The presence of PRO in spec of PredP (8) does not block the movement of the possessor: extending the idea in (Moro 1997, Mikkelsen2004, a.o.) that the predicate DP may, in some cases, raise over the subject (e.g. The
As expected, having moved up to Spec of ApplH, the possessor in (8) acquires an ‘affected’ interpretation in addition to its inherent possessive interpretation (see Gueron1985; Lee-Shoenfeld 2006 for analyses allowing an argument to have two theta-roles). That is why constructions with N-CDAs (3a=9a), unlike regular possessives (9b), indicate that the possessor (‘1’) was affected by the possessee (‘Dima’) with respect to some specific relation (‘being a friend’). These constructions do not just assert the mere existence of a possessive relation. For example, in a context where something unfortunate happens to me, I may utter (9a), indicating that Dima helped me and acted as a friend. In contrast, (9b) would only convey the fact that Dima is my friend.

(9) a. Dima byl mne drugom
    Dima was I-dat friend-inst
    ‘Dima was my friend (a friend of mine)’

b. Dima byl moim drugom
    Dima was I-gen-instr friend-instr
    ‘Dima was my friend’

2.2. Independent Evidence for Possessor Raising

Now we would like to turn to the evidence that motivates possessor raising shown in (8). First, the impossibility of using an internal possessor together with the dative possessor provides independent support for the possessor movement analysis (10).

(10) a. *On byl mne Vانيةnym drugom
    He was I-dat Vania’s-instr boss-instr
    ‘He was Vania’s friend to me’

b. *Dima byl Pete nachal’nikom proizvodstva
    Dima was Peter-dat boss-instr production
    ‘Dima was Peter’s boss of production’

The use of an internal genitive possessor together with the dative one creates a situation where two possessors compete for the same position. We hypothesize that in (10a) the dative possessor mne competes with the internal possessor Vания instead of the internal possessor Vания for the same position in the noun phrase (11a). This hypothesis raises the following question: what about constructions of the type in (11b) in which the original, non-raising variant seems absolutely grammatical as opposed to that with two “pure” possessive nominals (11a)?

(11) a. *moj Vanin drug
    I-nom Vania’s-nom boss-nom
    ‘Van’a’s friend of mine’

b. *Petin nachal’nik proizvodstva
    Peter’s-nom boss-nom production-nom
    ‘Peter’s boss of production’

We attribute the ungrammaticality of (10b) to the fact that not all the regular nominal functional structure is present in predicate nominals with N-CDAs. If we treat the external possessor Peter’s in (11b) as originating in Spec DP, the ungrammaticality of (10b) may be due to the fact that predicate noun phrases in constructions with N-CDAs such as (10b) are not full DP (cf Pereltsvaig 2007). The fact that such predicative nominals lack the high-level structure is shown by the following examples:

(12) a. *Dima byl mne etim drugom
    Dima was I-dat this-instr friend-instr
    intended: ‘Dima was this friend of mine’

culprit is John), we treat the possessor at the edge of the predicate nominal as also capable of raising across the subject PRO into Spec of ApplH for feature checking.
b. *Oni byli mne dvum’a bratjami
They were me-dat two-instr brother-instr
intended: ‘They were two my brothers’

As one can see, neither determiners nor numerals are allowed in predicate nominals containing N-CDAs. We consider this as evidence that there are only bare relational NPs in such constructions. To sum up our first argument: there is only one position for the possessor in N-CDA predicative nominals and this position cannot be filled with a possessor other than the one that raises to Spec of ApplHP and gets dative case marking.

Our second argument deals with adjectives which allow reciprocal and generic interpretation simultaneously. The Russian adjective obschij = ‘common’ has two meanings: being used with the internal possessor (for instance, ih obschij nachal’nik, ‘their common boss’; Sashin i Mashin obschij brat, ‘the common brother of Sasha and Masha’) it means that every possessor establishes the same relationships to the possessee (‘the only boss for every mentioned participant’, ‘the brother to X and Y’ etc.). Another meaning of obschij is the generic ‘common’, ‘everybody’s’. This meaning becomes prominent in contexts without explicit possessors, e.g. obschij kljuch = ‘the common key’, i.e. the key used by everyone. Interestingly, N-CDA constructions have only the first, reciprocal reading and lack the generic one:

(13) a. Pet’a byl im obschim nachal’nikom
Peter was they-dat common boss
‘Peter was a boss for everybody of them’
‘*Peter was the general supervisor for every employee in this area’

b. Novorozhdennyj budet Sashe i Mashe obschim bratom
new-born will.be Sasha and Masha common brother
‘The new-born will be a brother for both Sasha and Masha’
‘*The new-born will be a brother to everyone in this area’

In contrast, non N-CDA instances of dative “obschij” allows for both readings, (14).

(14) Ohrannik otdal Sashe i Mashe obschie kl’uchi
guarder return Sasha and Masha common key
‘The guarder gave Sasha and Masha the key belonging to both of them’
‘The guarder gave Sasha and Masha the key used by everybody in this area’

Third, possessor extraction is blocked if the predicate is a PP: the P in (15) is a barrier for extraction. The presence of a P does not affect internal possessors:

(15) a. *On byl mne sredi vragov
He was I-dat among enemies
b. On byl sredi moih vragov
He was among my enemies
‘He was among my enemies’

Finally, a dative possessor can be separated from the possessum by a phrase such as ‘many years’ (16a), indicating that they are not a constituent. In contrast, a genitive possessor cannot be so separated from the possessum (16b):

(16) a. Dima byl mne mnogo let drugom
Dima was I-dat many years friend-instr
b. *Dima byl moim mnogo let drugom
Dima was I-gen many years friend-instr
‘Dima was my friend for many years’

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4 Note that these examples are absolutely ok with internal possessors: Dima byl etim moim drugom = Dima was this my friend; Oni byli dvum’a moimi bratjami = They were two my friends.
Thus, the above facts independently support the claim that the non-core dative argument in nominal predicates is actually a possessor that has moved out from the noun phrase into an external position. To summarize so far: we now have a partial answer to the first question, namely, why N-CDAs in nominal predication are possessors, while those in verbal predication are not. The non-core dative argument in (3) is interpreted as a possessor because it actually is a possessor, raised from the nominal predicate. The raising is made possible, in turn, by the presence of the EPP feature on the High Applicative head, ApplH, into whose Spec the possessor raises.

3. Why Non-obligatory Arguments in Verbal Predication are not Possessors

Here, we turn to non-core dative arguments in verbal predicates, i.e. to the second part of the first question. Why is the dative argument added to a verbal predicate not interpreted as a possessor? This is true of both Russian and English. We repeat the relevant examples below in (17):

(17) a. Dima byl mne drugom
    Dima was I-dat friend-instr
    ‘Dima was my friend’

b. Dima privel mne loshad’
   Dima brought I-dat horse
   ‘Dima brought me a horse’    NOT: ‘*Dima brought my horse’

Following Pylkkanen (2002), McGinnis (2001, 2005) let us treat di-transitive verbs (17b) as also involving an applicative. However, the applicative in (17b) is a Low Applicative. According to Pylkkanen (2002), Low Applicatives relate an individual to another individual. This is supported by the fact that Low Applicatives can only appear with verbs that have a direct object and only with those that require a transfer of possession, cf. (18a) vs. (18b,c). We will return to the latter shortly.

In (18a) shown in (19), the Low Applicative (ApplL) relates the indirect object me and the direct object pie:

(18) a. John baked me a pie  (i.e. ‘I am the recipient of the pie, not a beneficiary of the baking’)
    b. *John held Bill the bag  (i.e. ‘John held the bag for Bill’)
    c. *John ran Bill  (i.e. ‘John ran for Bill’)

(19)

VP
  V
  bake
  I. Obj
  Me
  ApplL
  ApplL’
  D. Obj
  Ø
  a pie

Another crucial difference between Low and High Applicatives is that Low Applicatives are not phases and lack the EPP feature. McGinnis (2001, 2002, 2005) adduces much evidence from Bantu languages to that effect. Now, if the Low Applicative head lacks the EPP feature, it follows that the dative argument in double object constructions cannot be interpreted as a possessor, since EPP is required to trigger possessor raising. As a result, the non-core dative argument acting as the indirect object in he bought me a pie (in English or Russian) must be generated in Spec of ApplIL (20a); it cannot be moved there (20b).

(20) a. vP
    VP
    buy
    DP
    John
    D. Obj
    Ø
    pie

b. ApplIL
    ApplL’
    Appili
    Ø
    D
    pi


Once a DP is generated as the applied argument in the subject of ApplL, it can only have the ‘applied’/recipient interpretation, but not the possessive interpretation. So, the full answer to the Question 1 is:

i. Non-core dative arguments in nominal predication are interpreted as possessors because they are possessors, raised from an NP-internal position into a specifier of a High Applicative phrase.

ii. The movement from inside the nominal into the specifier of a High Applicative phrase is allowed because the ApplH has the EPP feature and can trigger movement.

iii. In contrast, Low Applicatives involved in verbal predication lack the EPP property and cannot pull up the possessor from an NP-internal position.

iv. Hence, non-core dative arguments cannot be interpreted as possessors in verbal constructions that involve a Low Applicative.

As a final note, let us also touch upon the problem of animacy restrictions in constructions with N-CDAs. Why are the non-core arguments in verbal and nominal predication subject to the same constraint on inanimate dative participants, shown in (21a,b), see also (5)?

\[(21)\]
\[\begin{align*}
\text{a.} & \quad \text{*Knigi byli stolu nozhkoj} \\
& \quad \text{'Books served as a leg for the table'} \\
\text{b.} & \quad \text{*Kollegi kupili ofisu pirog} \\
& \quad \text{'*Our colleagues bought the office a pie'}
\end{align*}\]

Our answer is as follows: the Applicative (High or Low) imposes the same semantic requirements on its argument. Since the non-core dative argument in nominal predication (3) is not just a possessor, but also a beneficiary, it must be animate: a rock or a table cannot benefit from anything. Similarly, Low Applied arguments (recipients) must be animate: an inanimate object cannot receive anything.

4. Why not in English?

Let us now turn to our second question: why does English prohibit non-core dative arguments in nominal predication, but allows such arguments in verbal predication? Why is (2a), repeated in (22) ungrammatical?

\[(22)\] *He was me a friend

As was already illustrated by the examples in (18b,c) repeated below in (23), English does not have High Applicatives, i.e. dative arguments can only be added to predicates that: a) have a direct object and b) imply a transfer of possession, see (Pylkkänen 2002). Hence, (23a,b) are impossible:

\[(23)\]
\[\begin{align*}
\text{a.} & \quad \text{*He sang me} \quad \text{b.} & \quad \text{*He held me a bag}
\end{align*}\]

Now, since the Applicative involved in nominal predication is a High Applicative – it expresses a relationship between an individual and a situation – it follows that English cannot have such a construction. Thus, a preliminary answer to our Question 2 is as follows: N-CDAs in nominal predication (22) are ungrammatical in English because in order to be grammatical these constructions would have to involve ApplH, which is absent in English.

Having only Low, or High and Low Applicatives is a parameter along which languages can vary. For example, English seems to have only the Low Applicative, while Russian seems to have both. In the rest of the section, we will suggest that there may a deeper reason why English only has Low Applicatives.

Returning to the ungrammatical (22) *He was me a friend, we know that ‘me’ cannot be a possessor because English lacks High Applicatives. But why can’t (22) mean something like ‘He was a friend for me’ whereby ‘me’ is introduced by a Low Applicative? Related to the question why (22) is ungrammatical in English is the fact that English also does not allow constructions such as (24), which arguably involve a Low Applicative:
Extending the so-called ‘head-bundling’ parameter, proposed in (Pylkkanen 2002) to account for the properties of causative constructions, we propose that English ‘bundles’ the Applicative and the verb. In other words, English only has an ‘applicativized’ V and lacks a separate Applicative head. Modifying Pylkkanen’s (2002:23) structure for English di-transitives, we propose the following structure:

Since Appl is ‘bundled’ with the V in English (a la Pylkkanen 2002), it follows that English must lack High Applicatives that appear above the VP/PredP (8) and crucially, it must also lack ‘bare’ applicatives such as those in (24) which do not involve a verb. In this sense, when we say that English has optionally ditransitive verbs such as ‘buy’, what we are actually saying is that English has two verbs: the applicativized ‘buy’ and the regular transitive ‘buy’. This is similar to the situation with the verb ‘eat’ which can be transitive (I eat dinner) or intransitive (I eat).

Thus, a more complete answer to Question 2 is as follows: English lacks non-core arguments in non-verbal predication because the presence of the Applicative head, responsible for introducing such arguments, necessarily requires the presence of the Verb. In contrast, Russian does not bundle the Applicative head with any other head. This is supported by the existence of ‘bare’ applicatives in Russian (26), where the non-core dative argument added via an ApplL appears without verbal or nominal predication, (27):

Importantly, since bare applicatives are Low Applicatives (by definition, they relate two individuals), the applied argument cannot be a raised possessor. Hence, only the recipient reading exists in (26).

5. Conclusion

We have argued that non-core dative arguments in nominal predication in Russian, (3), are raised internal possessors that receive dative case in the specifier of ApplH, thus getting an additional affected interpretation. This movement is made possible by the fact that ApplH possesses the EPP property. In contrast, because the Low Applicative, ApplL, has no EPP property to trigger possessor movement, the non-core argument ‘me’ in examples like He bought me a pie can never be interpreted

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5 Pylkkanen’s formulation of the head-bundling parameter states that some languages realize the syntactic head ‘Caus’ which introduces a causative event only together (i.e. bundled) with another head such as the Agent-introducing (Active) head Voice. For example, in English we can express a transitive construction with a causative meaning only if the Agent of the action is also present: e.g. They killed him. *Him killed, meaning ‘He got killed’ or ‘Something killed him’, is ungrammatical in English because the Agent/Causer is missing. English thus bundles Caus and Voice. In contrast, Russian allows causative constructions without Causers. For example, the exact analogue of Him killed is ok in Russian (see Markman 2004 for discussion).
as a possessor. We further argued that English, unlike Russian, lacks High Applicatives and hence lacks non-core dative arguments in nominal predication. Moreover, because English has no independent Applicative, the language can only have Low Applicatives and only in the presence of a Verb. In contrast, Russian does not bundle Appl and V, and has low, high, and ‘bare’ applicatives. A more general implication of this proposal is that the head-bundling parameter, proposed in (Pylkkanen 2002) to account for the properties of causative constructions across languages, is more robust and encompasses constructions involving Applicatives in addition to causative constructions.

References


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