On the Syntax of U-Possessor Phrases in Ukrainian and Russian

Svitlana Antonyuk and Peter Hallman
University of Vienna
March 7-9, 2018

Workshop on Possessive relations: interpretation, syntax and argument structure

40th annual DGfS meeting, University of Stuttgart
Possession as location:

Syntactic representation of possession as a location
Freeze (1992):
universal locative paradigm which consists of the predicate
locative, the existential and the ‘have’=possessive predication all
derived from the same underlying structure.

We present syntactic evidence from the distribution of
purpose clauses (Hallman 2015) that syntactic encoding of
possession as a locative structure is incorrect:
evidence that u-PP possessors in Russian and Ukrainian can be
merged in different positions in the tree:
possessor u-PP >> locative u-PP, while possessor-locatives are
ambiguous (compatible with two different attachment sites for
the u-PP)
Freeze (1992):

1a. Kniga byla na stole
   Book was on table
   ‘The book was on the table’

b. Na stole byla kniga
   On table was book
   ‘The was a book on the table’

c. U menja byla sestra
   At me was sister
   ‘I had a sister’

Single underlying structure with two thematic arguments, LOCATION and THEME
Underlying structure for 1a-c:
1d.
2. U menja byla sestra  
At me was sister  
‘I had a sister’

a. Russian: IP

XP
I
[ + TNS]
[ + LOC]
NP
PP
P
NP

[IP [XP e] [I [PP [NP Theme] [P P Location]]]]

b. [IP [P' u menja] [I [+ TNS] [PP [NP sestra] [P t]]]]

at 1sg-GEN [+ LOC]  
sister-NOM

c. u menja byla sestra.

at 1sg.gen cop sister-NOM

‘I had a sister.’
Purpose clauses as a diagnostic of deep structure (Hallman 2015)

3.  a. John has a puppy [to play with]
    b. Mary gave John a puppy [to play with]

4.  a. John has a puppy [CP Op_i [PRO to play with t_i]]
    b. Mary gave John a puppy [CP Op_i [PRO to play with t_i]]

The object gap is arguably derived by A’-movement of an operator to the left edge of the purpose clause, deriving a predicate over potential fillers of the gap (Faraci 1974, Chomsky and Lasnik 1977, Chomsky 1981, Whelpton 1995 i.a.)

Hallman (2015) analyzes the purpose clause as a nonfinite CP (Whelpton 1995).
Purpose clauses in English ditransitives:

**DP+DP frame**

5. a. Mary gave John a puppy [PRO to play with e]
b. Mary sent John a manuscript [PRO to read e]
c. Mary assigned John a job [PRO to do e]
d. Mary offered John her apartment [PRO to stay in e]

**DP+PP frame**

6. a. Mary gave a puppy to John [PRO to play with e]
b. Mary sent a manuscript to John [PRO to read e]
c. Mary assigned a job to John [PRO to do e]
d. Mary offered her apartment to John [PRO to stay in e]

Importantly, such alignment of gaps in the purpose clause with arguments in the matrix predicate is not typical of locative constructions:
Such constructions look superficially identical to the DP+PP frame, but they do not readily accept purpose clauses with the argument alignment seen in (6), where PRO is identified by the LOCATION argument of the matrix clause and the object gap is identified by the THEME.

7. a. *Mary put the child$_j$ on the horse$_i$ [PRO$_i$ to carry $e_j$]  
    b. *Mary led the horse$_j$ to John$_i$ [PRO$_i$ to feed $e_j$]  
    c. *Mary poured honey$_j$ on her little brother$_i$ [PRO$_i$ to lick off $e_j$]  
    d. *Mary immersed the cloth$_j$ in oil$_i$ [PRO$_i$ to permeate $e_j$]

Faraci (1974) and Jones (1991): purpose clauses do not escape ellipsis and other operations on verb phrases and so must attach VP-internally. Whelpton (1995): purpose clauses modify the V’ that introduces the argument that the purpose clause is predicated of (similar to Nissenbaum’s 1998, 2000 treatment of parasitic gap constructions)
8. John put his *Complete Works of Shakespeare* on the floor to sit on.
The LOCATION argument is not able to control PRO, since it is lower in the structure than the THEME argument and the purpose clause is predicated of the THEME.

5. a. Mary gave John a puppy [ PRO to play with e]
Hallman (2015) argues that since the POSSESSOR argument in DP+PP frame is able to control PRO, in contrast to the LOCATION argument in (8), this means that the DP+PP frame does not share the syntactic structure of verbs such as *put*.

That the POSSESSOR in DP+PP frame can bind PRO means that it c-commands the purpose clause PRO and therefore the purpose clause itself.

The LOCATION argument does not.
PRO can be bound by a quantifier in the matrix clause, confirming that the subject gap in the purpose clause is identified by syntactic binding (Nishigauchi 1984), which requires c-command:

9. Mary gave a puppy\_j to every child\_i [PRO\_i to play with e\_j]

**Conclusion:** the possessor argument of the verbs like *give* occurs in a higher syntactic position than the locative argument of a verb like *put* even when it surfaces in a PP form.

**OUR MAIN CLAIM:** the purpose clause diagnostic can be used to determine whether Russian and Ukrainian u-PPs are true possessors or are indeed human locations, as argued in Freeze (1992) and elsewhere. It suggests that when u-PPs encode location they are merged lower than the u-PPs that encode possession.
U-PPs have been argued to mark a possessor, a location, or a ‘human location’ (Arylova 2013, Chvany 1975, Błaszczak 2008, Harves 2003, Jung 2011, Kondrashova 1996, Livitz 2012, i.a.).

We claim that the u-PPs found in East Slavic can indeed function as possessors, locations and human locations and as such can be merged either in a high position (possessor), a low position (location) or be ambiguous between the two (human location), meaning the same string can be be associated with two distinct structures in which the u-PP is either high or low, thus providing evidence against Freeze (1992).
10a. U Masi est’ ščenok [čtoby PRO i igrat’ e j]
   At Masha is puppy in.order.to play
   ‘Masha has a puppy to pay with’ (POSSESSIVE)

b. U Koli est’ mašina [čtoby PRO i ezdit’ na rabotu e j]
   At Kolia is car in.order.to drive on work PREP
   ‘Kolia has a car to drive to work’ (POSSESSIVE)

11a. *Kolja byl v Moskve [čtoby PRO i vpečatlit’ e j]
   Kolia was in Moscow in.order.to impress INF
   ‘Kolia was in Moscow to be impressed’ (LOCATIVE)

11b. *Kolja byl u Maši [čtoby PRO i vpečatlit’ e j]
   Kolia was at Masha in.order.to impress INF
   ‘Kolia was at Masha’s for the place to impress him’ (LOCATIVE)
Purpose clauses in “possessive-locative” (Kondrashova 1996) sentences have an intermediate status, indicating that the human u-PP can be marginally construed as a possessor:

12. (?)Vaše pis’moj budet u sekretarja, [čtoby PROi proverit’ ej]
   Your letterNOM will.be at secretaryGEN in.order.to checkINF.
   ‘Your letter will be with the secretary to check’
   (LOCATIVE-POSSESSIVE)
Our claims:
The possessor u-PPs (10) are generated in a high position, possibly Spec,ApplP.

The location u-PPs (11) are generated low, in the complement of V.

Locative-possessive u-PPs (12) prefer to function as locations but may also occur in a high position like possessors.
Ditransitives

Russian:
13. Maša dala Ivanu ščenka [čtoby PRO poigrat’ e]
   Masha NOM gave Ivan DAT puppy ACC in.order.to play INF
   ‘Masha gave Ivan a puppy to play with’

Ukrainian:
14. Marija dala Miškovi pesyka [ščob PRO pogratysja e]
    Mary NOM gave Mishka DAT puppy ACC in.order.to play INF REFL
    ‘Mary gave Mishka a puppy to play with’

cf. 10b.

    U Masi est’ ščenok [čtoby PRO igrat’ e]
    At Masha is puppy in.order.to play
    ‘Masha has a puppy to pay with’ (POSSESSIVE)
10b. U Masi\textsubscript{i} est’ ščenok\textsubscript{j} [čtoby PRO\textsubscript{i} igrat’ e\textsubscript{j} ]
At Masha is puppy in.order.to play
‘Masha has a puppy to pay with’
13. Maša dala Ivanu ščenkaď [čtoby PRO poigrat’ e]
Masha NOM gave Ivan DAT puppy ACC in. order to play INF
‘Masha gave Ivan a puppy to play with’
11a. *Kolja\textsubscript{NOM} byl v Moskve\textsubscript{i} \[čtoby PRO\textsubscript{i} vpečatlit’ e\textsubscript{j}\]

‘Kolia was in Moscow to be impressed’  

11b. *Kolja\textsubscript{NOM} byl u Maši\textsubscript{i} \[čtoby PRO\textsubscript{i} vpečatlit’ e\textsubscript{j}\]

‘Kolia was at Masha’s for the place to impress him’
Additional evidence against Freeze (1992):
Freeze (1992): evidence that ‘have’ constructions are locations

15. a. The tree has a nest in it.
   b. The flour has weevils (in it).
   c. I have a needle (on me).

The PP must be coreferential with the subject.

16. *The flour has weevils in the canister.

Russian:
17. U menja, pri sebe est’ liš 20 evro [čtoby PRO zaplatit’ tj za taksi]  
   At me by self is only 20 euros in order to pay for taxi  
   ‘I only have 20 euros on me to pay for the taxi’

=> pri sebe, which encodes location, is not present in the deep structure
Further problems for Freeze (1992):

18. Marija u menja (locative)
   Maria at me
   ‘Maria is at my place’

19. U menja Marija (possessive)
   At me Maria
   ‘I have Maria’ (=divorce scenario)

BUT:

20. Marija u menja
    Maria at me
    1. ‘Maria is at my place’ (locative)
    2. ‘I have Maria’ (=the Russian mob scenario)

(20) represents the base order for Freeze, the locative one. Thus the sentence is correctly predicted to have reading 1. But Freeze’s account cannot accommodate reading 2 since it requires fronting of the u-PP to Spec, TP.
20. Marija u menja
  Maria at me
  1. ‘Maria is at my place’
  2. ‘I have Maria’

21. Marijaₐ u menjaᵢ [čtoby PROᵢ prodat’ tᵢ]
    Maria at me in order to.sell
    ‘I have Maria in order to sell her’

22. *Marijaₐ u menjaᵢ [čtoby PROᵢ vpečatlit’ tᵢ]
    Maria at me in order to.impress
    ‘Maria is at my place in order for it to impress her’
Some interesting cases I:
Ukrainian impersonal passives:
23. Xatu zavždy prybrano
    HouseACC always cleanedPASS.NON-AGR
    ‘The house is always cleaned’

Lavine (2010) argues that Ukrainian impersonal passives are necessarily dyadic, requiring two arguments, one to identify the main event, one the causing sub-event. Accusative case licensing is dependent on the presence of a higher non-Theme argument, which may be explicit or implicit. The non-Theme argument identifies a causative feature in \( v \), which serves as an Accusative probe, following Pylkkänen (2008).

External Possessor Causer:
24. U mene xatu zavždy prybrano
    At meGEN houseACC always cleanedPASS.NON-AGR
    ‘My house is always tidied up’
We argue that (24) is grammatical with the $u$-PP EP exactly because the EP functions as the higher argument that is interpreted as an (affected) Causer. Thus, the referent of the $u$-PP is interpreted as someone who causes the house to always be clean, irrespective of who does the actual cleaning. ExtPCauser occupies a thematic position and has causative semantics. While the default interpretation for the $u$-PP in (24) is that of a causer and a possessor of the house, it is possible that the house belongs to someone else, as in (25), which suggests a base-generation rather than raising analysis.

25. U mene jogo xatu zavždy prybrano
   At me his house always cleaned
   ‘I keep his house always tidied up’
ExtPCauser can act as a binder of PRO in purpose clauses, further suggesting that it is base-generated in a high position rather than raised from inside a possessum DP.

26. U mene \_ \_ xatu \_ \_ zavždy prybrano [ ščob PRO \_ fotografuvaty e \_ ]
   At meGEN house always cleaned in.order.to photograph
   ‘My house is always tidied up (for me) to photograph’
Some interesting cases (II):
Matushansky et al. 2017: possessive PP complexes in Russian, where NP complement of the first PP is interpreted as the possessor of the NP complement of the second PP.

27. Vor vytaščil košelěk u neē iz sumki.
   Thief pulled.out wallet at her out.of bag
   ‘The thief pulled the/a wallet out of her bag’

   Put.IMP matches towards me in backpack.ACC
   ‘Put the matches in my backpack’
Proposed structure of **possessive PP complexes**: 29.
Matushansky at al. (2017) propose that the interpretation of such structures is derived semantically through predicate modification, which derives the welcome result that if PP2 is locative/directional, then so is PP1.

**Needed:** a means for converting PP1 meaning from possession into a type of location.

**Proposal:**
1) possession can be recast as a locative notion.
2) key concept: the sphere of influence/the purview of a sentient individual

**Deriving possession:** predicate modification in the structure (29) yields the intersection of two locations, one of which is a sphere of influence:

[[U Sasha]] = in Sasha’s sphere of influence
[[U Sasha in the bag]] = in Sasha’s sphere of influence and in the bag

=> **deriving possession in pragmatics:** “for an object to be in Sasha’s sphere of influence and in a/the bag, the bag in question must itself be in Sasha’s sphere of influence, which generally entails that the bag is in Sasha’s possession”

29
30. Ja ostanovljus’ u Mariny (na Arbate)  
   I will stay at Marina on Arbat.LOC  
   I will stay at Marina's place (on the Arbat Street).

Matushansky et al. claim that in the sentence in (30) no possession relation is 
established, “pragmatics is necessary to determine what an animate u-PP 
denotes”.

Insights from the purpose clause diagnostic:

31. *Ja_j ostanovljus’ u Mariny_i [čtoby PRO_i vpečatlit’ e_j ]  
   I will stay at Marina in.order.to impress  
   ‘I will stay at Marina’s place in order to be impressed by it’  
32. *Ja_j ostanovljus’ u Mariny_i (na Arbate) [čtoby PRO_i vpečatlit’ e_j ]  
   I will stay at Marina on Arbat in.order.to impress  
   ‘I will stay at Marina’s on Arbat street in order to be impressed by it/for 
the place to impress me’
another explanation: the interpretation of the u-PP is not determined through pragmatics in such cases, but is syntactically encoded.

Since animate u-PPs in object positions are ambiguous between a possessor and a location interpretation which stems from two different heights of attachment (and since the possessive PP complex requires the two PPs to match in interpretation, as observed by Matushansky et al.), (30) is derived by selecting the lower attachment site of the first PP (the animate u-PP) corresponding to the locative interpretation, which explains why *u Mariny na Arbate* does not have a possessive interpretation.
Some interesting cases (III):

Markman (2009) proposed the following base-generated positions for Russian possessors:

regular possessors: Spec,LowApplAT
possessors in DOC: Spec, LowApplTO

If this were correct, we would predict regular possessors and possessors in DOC to not accept purpose clauses with the possessor binding the PRO subject and the possessee identifying the object gap, contrary to fact.

(33)  U Masi est’ ščenok [čtoby PRO i igrat’ e j ]
   At Masha is puppy in.order.to play
   ‘Masha has a puppy to play with’  (POSSESSIVE)

(34) Maša dala Ivan ščenka [čtoby PRO i poigrat’ e j ]
   MashaNOM gave IvanDAT puppyACC in.order.to playINF
   ‘Masha gave Ivan a puppy to play with’  (DOC)
Grashchenkov and Markman (2008) argue that the non-core dative argument in (35) and DOC (36) must be base-generated in Spec of LowApplP (following Pylkannen 2002)

(35) John baked me a pie.
(36) John bought me a pie.
(37) the proposed structure for (35):

```
  VP
   \_____ V
       \_____ ApplLPhrase
           \_____ I.Obj
               \_____ Me
                   \_____ ApplL
                       \_____ Ø
                       \_____ D.Obj
                           \_____ a pie
```

bake

I. Obj

Me

ApplL

Ø

D. Obj

a pie
The claim: the dative argument in Spec, LowApplP can only be interpreted as a recipient, not a beneficiary and cannot have a possessor interpretation.

Thus, on this analysis we predict regular ditransitive predicates and verbs with non-core dative arguments to fail the purpose clause diagnostic, since they are arguably too low to bind the subject of the non-finite purpose clause, PRO.

Compare:
38. John gave me$_i$ a puppy$_j$ [PRO$_i$ to play with e$_j$].
39. John baked me$_i$ a pie$_j$ [PRO$_i$ to take e$_j$ to a B-day party].
Markman (2009) proposes that sentences such as (40) contain a HighApplP with the Dative External Possessor raising into Spec, HighApplP, thus on her analysis we predict (40) to allow purpose clauses and (41) not to allow purpose clauses due to being generated too low in Spec, LoweApplP.

40. *Dima* i sjel nam ves’ supj [čtoby PROi prigotovit’ ešče ej ]
   Dima ate usDAT all soup in.order.to cook more
   ‘Dima ate up all soup on us to cook some more’
41. *Dima* ispek nami pirogi [čtoby PROi vzjat’ ej na den’ rozdenija ]
   Dima baked usDAT pie in.order.to take to the birthday party
   ‘Dima baked us a pie (for us) to take to the birthday party’

Note: for Markman the External Possessor Dative is derived by raising the possessor from inside the possessum DP. Assuming the raising analysis of ExtPossDat would explain why it is not able to control PRO, unlike the non-core Dative in (41), which is arguably in its base-generated position (recall that the purpose clause diagnostic is a deep structure diagnostic).
CONCLUSIONS

The purpose clauses of the kind discussed in this talk (Hallman 2015) provide a useful diagnostic tool to probe the structure of possessive and locative sentences.

They provide evidence against Freeze (1992), suggesting that u-PPs that have true possessive interpretation are not derived from locative structures.

The purpose clause diagnostic suggests true possessor u-PPs are generated high and u-PPs with locative meaning are generated low in the tree while sentences which are ambiguous between a possessive and a locative interpretation (“possessive-locative” sentences) owe their ambiguity to two possible sites of attachment for the u-PP.
SELECTED REFERENCES


**Chvany, Catherine V. 1975.** On the syntax of be-sentences in Russian. Slavica Publishers, Inc.


**Ora Matushansky, Nora Boneh, Léa Nash and Natalia Slioussar. 2017.** TO PPS IN THEIR PROPER PLACE Handout of the presentation, Formal Approaches to Slavic Languages 26 meeting. , UIUC, May 19-21, 2017.