## Wh-extraction, BE, and Argument Structure of Russian Existentials/Possessives

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**Context.** The semantic architecture of an existential sentence and its syntactic mapping have been explored with a focus on the position of the post-copula theme NP. One possibility is to view this NP as the predicate of a clause embedded under the copula BE (Stowell 1978, Chomsky 1982, 1988, Williams 1994, Hazout 2004, *inter alia*). On the contrary, Moro (1997) and den Dikken (1995), for instance, consider the post-copula NP to be the subject in an inverted copula structure. Central to this debate is the extractability of a constituent out of the theme NP, as shown in English and Italian existentials (1), which supports the view of the theme NP as the predicate (Left Branch Condition, Ross 1967; Kayne 1984). Moro (1997), however, argues that expletives *there* and *ci* turn the copula BE to an L-marker (à *la* Chomsky 1986) so that extraction out of the subject governed by BE is possible. This paper argues for the theme-as-predicate analysis by considering relative degradation of *wh*-extraction in Russian existentials (including possessives).

Wh-extraction in Russian existentials/possessives. The Russian existential/possessive sentence consists of a pre-copular location/possessor PP, BE, and a theme noun. In Russian, wh-extraction must involve pied-piping. While the lack of pied-piping always degrades sentences, the degree of degradation varies depending on from where a constituent is extracted. The sentences in (2-3) illustrate relative degradation caused by the movement of a wh-element in transitive sentences with a clear tendency: Wh-extraction from the object is more acceptable than that from the subject, and a sentence in which a moved wh-word is adjacent to the rest of the phrase is more acceptable than a sentence in which a wh-element and the rest of the phrase are separate. The instances of the moved wh-word adjacent to the rest of the phrase in (2a/2c/3a/3c) must result from the movement of the whole phrase containing a wh-word to Spec,CP, along with the subsequent wh-movement to Spec,DP within the moved phrase. In this case, pied-piping actually takes place and the wh-word is not extracted out of the DP, which must make (2a/2c/3a/3c) more acceptable than (2d/3d) with wh-extraction out of the subject. The contrast between relatively acceptable sentences (2b/3b) with wh-extraction out of the object and totally unacceptable ones (2d/3d) clearly reflects the asymmetry between an object and a subject in terms of wh-extraction.

The same relative acceptability is observed with wh-extraction out of the post-copula theme NP in existential/possessive sentences (4-5). The sharp ungrammaticality of (4d/5d) tells us nothing definitive about the status of the u+Gen possessor phrase. (4d/5d) could be ruled out either because a wh-element is extracted out of the subject, thus violating the Left Branch Condition, or because the possessor/location phrase is an adjunct. However, crucial to the argument structure are sentences (4b/5b), in which wh-extraction out of the theme phrase does not trigger sharp ungrammaticality. This indicates that the theme phrase is not the subject but the predicate. In other words, (4b/5b) are not inverse but canonical copula sentences. The weaker degradation of (2b/3b/4b/5b) is due solely to the lack of pied-piping, in contrast with the absolute unacceptability of the sentences in (2d/3d/4d/5d) due to the Left Branch Effect (or possibly due to the adjunctive status of the possessor/location in the case of (4d/5d)) in addition to the lack of pied-piping.

**BE** and argument structure. Moro's assumption concerning the theme NP as the subject is crucially based on his contention that expletives *there* and *ci* lexicalize the originally functional predicate BE. In the Russian existential/possessive construction, there is no expletive that fills Spec,TP. Can we, then, construe BE as lexical and not functional in the existential/possessive sentence? Although the copular in the possessive/existential sentence is overt in the present tense (*est*' 3.SG[-Agr]), in contrast with the zero-copula in other types of copula sentences, it is implausible that BE is the only verb in Russian that can be lexical or functional depending on the semantics (à la Harves 2002; cf. Kondrashova 1996; *contra* Chvany 1975). Furthermore, the existential semantics does not seem to derive from *est*' lexically. This semantic factor is present and brings a syntactic effect such as Genitive of Negation in non-copula sentences as well as in copula constructions. Given that *wh*-extraction out of the theme NP is consistently allowed in

Russian, English, and Italian, it is much simpler and more straightforward to conclude that the existential construction is a non-inverted structure, rather than to justify a lexical BE in varying ways across languages. The construal of the theme NP as the predicate elegantly and consistently explains *wh*-extraction phenomena in all three languages, while Moro's solution costs various additional assumptions.

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(1) a. [Which man]<sub>i</sub> do you think that there was [a picture of t<sub>i</sub>] in the room?
     b. [di quale libro]; credi che ci fossero [molte copie t_i] nello studio?
                                                                                                        [Moro 1997: 103]
        of which book you think there were many copies in the studio
        'Which book do you think there were many copies of in the studio?'
(2) ?a. [[Kakogo avtora]<sub>i</sub>
                                   knigi
                                                              chital t<sub>i</sub>?
                                              t_i]_i
                                                       ty
        what author:GEN
                                   books:ACC
                                                              read
                                                       you
        'What author's books did you read?'
   ??b. [Kakogo avtora]<sub>i</sub>
                                           chital
                                                      [knigi
                                                                 t_i ]?
   ??c. [[Kakogo fakul'teta]<sub>i</sub>
                                   studenty
                                                                 chitali
                                                                            eti knigi?
                                                 t_i]_i
                                                         t_i
        what department:GEN students
                                                                 read
                                                                            these books
        'What department's students read these books?'
    *d. [Kakogo fakul'teta]<sub>i</sub>
                                    eti knigi
                                                 chitali [studenty t<sub>i</sub>]?
                                                                               avtora t<sub>i</sub>]<sub>i</sub>
(3) ?a. Ei
                      nravitsia
                                   tot roman.
                                                         [kotorogo<sub>i</sub>
                                                                                                        kogda-to videl ti.
                                                                                                  ja
                                                                               author:ACC
        her:DAT
                     like
                                   that novel:NOM
                                                         which:Rel.GEN
                                                                                                        once
                                                                                                                  saw
        'She likes that novel, the author of which I once saw.'
   ??b. Ej
                                                                               ja kogda-to videl [avtora t<sub>i</sub>].
                      nravitsja
                                   tot roman,
                                                         kotorogo<sub>i</sub>
   ??c. Ej
                      nravitsja
                                   tot roman,
                                                         [kotorogo<sub>i</sub>
                                                                               avtor t_i]<sub>i</sub>
                                                                                               t<sub>i</sub> podaril
                                                                                                                ej konfety.
        her:DAT
                     like
                                   that novel:NOM
                                                         which:Rel.GEN
                                                                               author:NOM
                                                                                                  presented her candy
        'She likes that novle, the author of which presented her candy.'
    *d. Ei
                                   tot roman,
                                                                               konfety
                     nravitsja
                                                         kotorogo<sub>i</sub>
                                                                                                  podaril
                                                                                                               [avtor t<sub>i</sub>].
                                                                                            ej
(4) ?a. [[Kakogo avtora]<sub>i</sub>
                                                                               byli
                                 knigi t<sub>i</sub>]<sub>i</sub> zdes'/u vas
                                                                                          t<sub>i</sub>?
                                              here:Adv/at you:PPGEN
        what author:GEN
                                 books
                                                                               be:Past
        'What author's books did you have/were there here?'
   ??b. [Kakogo avtora]i
                                 zdes'/u vas
                                                    byli
                                                           [knigi t<sub>i</sub>]?
   ??c. [[Kakogo fakul'teta]i
                                      v auditorii/u studentov
                                                                                             byli
                                                                                                          slovari?
                                                                    t_i]<sub>i</sub>
        what department:GEN
                                      in auditorium:PPLOC/at students:PPGEN
                                                                                             be:Past
                                                                                                          dictionaries
        'What department's students had dictionaries?'In what department's classroom were there dictionaries?'
    *d. [Kakogo fakul'teta]
                                      eti knigi
                                                      byli [ v auditorii/u studentov
                   ponravilsja
(5) ?a. Ei
                                      tot avtor.
                                                      [kotorogo<sub>i</sub>
                                                                       knigi t<sub>i</sub>]<sub>i</sub> u nee
                                                                                                     byli
        her:DAT liked
                                                      which:GEN
                                      that author
                                                                      books
                                                                                    at her:PP<sub>GEN</sub> be:Past
        'She liked that author, whose books she had.'
    ?b. Ej
                   ponravilsja
                                      tot avtor,
                                                   kotorogo<sub>i</sub>
                                                                       u nee
                                                                                          byli
                                                                                                     [knigi t<sub>i</sub>]
                                                                                               byl
    ?c. Ej
                   ponravilsja
                                      tot roman, [kotorogo<sub>i</sub>
                                                                       u avtora t<sub>i</sub>]<sub>i</sub>
                                                                                                          kakoj-to vkus.
                                                                       at author:PPGEN
        her:DAT liked
                                      that novel which:GEN
                                                                                               be:Past some taste
        'She liked that novel, the author of which had some taste.'
    *d. Ej
                                      tot roman, kotorogo<sub>i</sub> byl kakoj-to vkus [u avtora t<sub>i</sub>].
                   ponravilsja
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