

A uniform dynamic semantics for impersonals.

The Problem. Crosslinguistic investigations into the semantics of “arbitrariness” provide a range of data and approaches to the issue (Jaeggli 1986, Cinque 1988, Condoravdi 1989, Chierchia 1995b, Koenig and Mauener 1999, Alonso-Ovalle 2001, Hofherr 2002, inter alia). However, no uniform compositional semantic analysis of constructions with arbitrary interpretations has emerged. In this paper I propose a dynamic-semantics analysis of the 3rd person plural null subject construction in Russian that accounts for the range of interpretations this construction has, explores the interaction between null pronouns and discourse anaphora, and explains the difference between nulls and overt NPs with respect to their ability to serve as antecedents for overt pronouns. The analysis accounts for the interpretation of the implicit argument in the passive construction, and has explanatory potential for cross-linguistic data.

The Phenomenon. The sentence in [1] is an example of a 3rd person plural null subject construction. A close examination of the truth-conditions of [1] reveals that [1] has 3 different interpretations, termed here episodic, habitual, and generic given in [2a–c]. Truth-conditionally, the null subject construction on the episodic reading is equivalent to a construction with an overt indefinite given in [3]. However, the null pronoun in the null construction does not support discourse anaphora with the same ease as an overt NP does [4a,b]. Crucially, when a null construction on the habitual and generic readings is followed by a pronoun, the result is significantly worse [4c]. When a null subject sentence includes a locative expression modifying the agent, it has an additional reading in which the null can be paraphrased as the definite expression “the people” [5a]. This reading can support intersentential anaphora more easily than a reading in which the null can be paraphrased with an indefinite [5b].

The Analysis. To account for the three different readings of the null subject construction as well as for their different ability to antecede pronouns [cf 4], I adopt a compositional dynamic semantics framework of Chierchia 1995a and argue that the null pronouns on all the readings can be treated as special kinds of indefinites. Indefinites for Chierchia are existential generalized quantifiers, as opposed to free variables, but can bind variables outside of their syntactic scope [6]. The latter property accounts for their ability to antecede pronouns.

To account for the truth-conditional equivalence between indefinites and null pronouns on the episodic reading, I propose that null pronouns also involve an existential quantifier. However, unlike the existential quantifier in a Chierchian indefinite, the existential quantifier in a null pronoun cannot bind a variable outside its scope [7a, similar to universal in 7b], which accounts for the difficulty in anteceding pronouns exhibited by nulls [cf contrast in 4a,b].

Turning now to the different readings of nulls, it is argued that while the episodic is derived when the construction contains an existential quantification over events introduced by tense, the habitual and generic interpretations obtain when the sentence contains a habitual or a modal operator over events. The existential introduced by the null will then be in the scope of this operator. While none of these interpretations introduce a discourse marker, the existential will be easily accommodated since the existence of a referent is already asserted. Accommodation for the habitual or the generic would be more difficult, however, since the agents for the different instantiations of the habitual are potentially different, and for the generic the agent might not even exist in the actual world. Hence, we get a contrast in anaphoric possibilities between the episodic, habitual and generic readings of the null construction (cf 4).

The analysis can also account for the interpretation of the implicit argument in passives. Koenig and Mauener 1999 note for English that this argument can sometimes support an overt plural pronoun in subsequent discourse. In fact, Russian short passives pattern exactly like episodic 3rd person plural arbitrary nulls, both with respect to their truth-conditions [8a,b] and to anaphora [e.g., continuation in 8c]. This is explained if the denotation of the implicit argument introduced by passive Voice is the same as the denotation of the arbitrary null pronoun.

The arbitrary pronoun is still analysed as ambiguous between the narrow-scope existential denotation [7a] and a definite one exhibited when the sentence includes a locative [cf 5]. As the proposed denotation in [9] shows, only the presence of a restriction provided by the locative licenses this reading. The (plural) individual denoted by the definite can support intersentential anaphora better than an existential in the scope of a generic or a habitual operator. The ambiguity in the pronoun parallels the behaviour of bare nominals in Slavic, which are known to serve double duty with definite and indefinite-like interpretations.

Conclusion. The proposed account derives the range of interpretations available for the 3rd person plural arbitrary construction in Russian in a uniform and compositional way, also accounting for the similarity between this construction and the passive. This analysis is applicable to a variety of constructions involving arbitrary interpretations in English, Spanish, and French, among other languages. This extension to account for cross-linguistic facts is currently in progress.

