

A (Purely) Derivational Approach to Russian Scrambling

This paper is an attempt to account for the 3 most salient properties of scrambling in Russian within a purely derivational framework, in the sense of Epstein et al (1998). The properties in question are: **(i)** Scrambling is (apparently) optional, which is surprising given minimalist assumptions about the economical nature of the linguistic system. The best-known attempt to derive this (apparent) optionality, found in Fukui (1993) and Saito and Fukui (1998), claims that it is a side-effect of being a left-branching language, a proposal that clearly fails for the Slavic languages, as demonstrated by Stjepanović (1998). **(ii)** Local scrambling appears to have a "mixed" character, in terms of movement properties. (Webelhuth (1992) and Mahajan (1990)). Some instances show A-properties and some show A'-properties, the primary data coming from reconstruction (examples (1)). This mixed character will be shown to be related to the syntactic vs discourse motivation of the two of scrambling, respectively. **(iii)** Long-distance scrambling, for example out of Russian *čtoby*-clauses, shows only A'-properties. This fact is well established for Japanese (Saito 1992), and holds for Russian as well (see (2)). Here there has been no account within Slavic linguistics, as far as I know, and very little discussion on other languages other than noting the problem, except within the theory of Müller & Sternefeld (1993).

With respect to scrambling in the Slavic languages, more attention has been paid to the relation of various word order patterns to discourse structure (traditionally "theme-rheme structure" -- Adamec 1966, Kovtunova 1976, and more recently King 1994, Bailyn 1995) and less on the nature of the movement involved. However, the theoretical climate has changed with the advent of the minimalist program, and general questions of "why" certain processes exist, and why they have the character they have, rather than just how they function, has brought attention squarely on the issue of why the three properties at hand should hold at all, and with so much consistency across languages.

In this paper I show that some headway can be made in this area by appealing to the purely derivational approach to syntactic relations proposed in Epstein et al (1998) and discussed with respect to Japanese scrambling by Saito (2001). The analysis has two main parts. First, following Miyagawa (1999). I show that local scrambling cases showing A-properties are in fact driven by the Extended Projection Principle (EPP), in the spirit of recent EPP analyses of Russian (Babyonyshev (1996), Lavine (1998)), whereby the moved constituent occupies the local subject position (SpecTP) rather than an adjoined position. This is shown in (3). Crucially, I assume that the EPP feature is a [D] feature (Collins (1997)). Thus for these cases, the movement is syntactically driven (solves issue **(i)** for these cases). Next, I show that A'-scrambling is syntactic in its mechanisms but driven by discourse factors in the sense imagined by Zubizarreta (1998) for Romance, as a Last Resort measure to avoid a conflict between the prosodic requirements of particular discourse structures. Thus A'-cases as well are in this sense not optional, resolving issue **(i)**.

The crucial innovation of the paper that goes to issues **(ii)** and **(iii)**, based on Epstein et al (1998) and Saito (2001), is that interpretations are built up derivationally. Assuming lexical items are bundles of features, we can identify as potentially relevant (at least) 3 features on scrambled constituents: a [P] feature (PF material in earlier frameworks), a [D] feature (interpretive material) and what Saito (2001) calls an [OP] feature (topic/focus relations, WH-features etc.). Only those features required by the movement process at hand are in fact moved in a given process (or, under the Copy Theory, only those remain after deletion of features). Since the EPP is driven by a D-feature, the XP in question is interpreted in moved position, accounting for derived binding effects seen in (1). A'-scrambling involves only the OP feature, and the XP is always interpreted in its pre-scrambled position (the Radical reconstruction property). (See example (4)). Thus all three salient properties of Russian scrambling can be handled within the framework at hand, and the movement system of Russian falls into its natural place alongside various typologically unrelated languages, certainly a welcome result in the search for universal principles of human language.

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(data and references)

- 1) A-properties of local scrambling: (scrambling of object pronoun triggers Principle C violation)
 - a. [Novye znakomye Ivana]_i predstavili ego_i predsedatelju.
new friends of Ivan introduced him-Acc chairman-Dat
"Ivan's new friends introduced him to the Chairman."
 - b. *Ego_i predstavili [novye znakomye Ivana]_i predsedatelju
him introduced new friends of Ivan chairman-Dat
*"He_i was introduced to the chairman by Ivan's_i new friends" (cf. English passive)

- 2) A'-properties of long-distance scrambling: (Reconstruction: anaphor bound in base position)
 - a. [Knigi drug o druge]_k ja xoču, čtoby studenty_i pročitali t_k
books about each other I want that students read
"The books about each other, I want the students to read." (cf. English Topicalization)

- 3) EPP account of local scrambling: (scrambled XP moves to SpecT, checking [D] feature = (EPP))

$$[_{TP} \mathbf{XP}_i [_{T'} T+V_k [_{VP} \text{subject} [_{VP} \dots \mathbf{t}_k \dots \mathbf{t}_i \dots]]]]$$

- 4) Derivational account of scrambling behavior: ([D] feature crucial for binding relations)
 - a. EPP-driven scrambling: (local, A) b. Discourse-driven Scrambling: (long, A')
$$[_{TP} \mathbf{XP}_i [_{D}], [P] [_{T'} \dots \mathbf{t}_i [_{\emptyset}], [P] \dots]]$$

$$[_{TP} \mathbf{XP}_i [_{P}], [OP] [_{TP} \dots \mathbf{t}_i [_{D}], [P], [OP] \dots]]$$

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