

## Inversion, Dislocation and Optionality in Russian

### Introduction

Russian word order shows remarkable freedom among constituents, as is well known. In generative grammar, this has been handled under the general reordering rule of Scrambling (Ross 1967). In original form, Scrambling was considered optional.<sup>1</sup> Under assumptions that language is organized "economically" (Chomsky 1995), purely optional rules should not exist.<sup>2</sup> Yet, reordering of constituents in Russian seems to be optional: such reordering does not change truth conditions, and is not related to distinct morphological form. However, given recent advances in syntactic theory, we are now in a better position than ever before to understand the motivation of "optional" Scrambling. In fact, it now appears possible to eliminate Scrambling as a descriptive device from the grammar, in core cases, and instead to analyze reordering of major constituents in language like Russian as resulting from independently motivated movement processes. In this article I argue that there are two distinct such processes, which I will term **Inversion** and **Dislocation**. I show that **Inversion** is syntactically-driven movement to SpecIP to satisfy the Extended Projection Principle (EPP). If we see such instances of left-fronting as a kind of modern-day "Raising to Subject", we find that much of Russian's distinct character comes from its parameterized ability to fulfill the EPP with a much wider range of constituents than, say, English, where the subject position is always filled by a Nominative subject, expletive, or locative PP. Such movement has various interesting characteristics, many of which are explored in greater detail in Bailyn (forthcoming). Primary among these is the fact that the movement shows clear A-movement properties, as is expected with movement into SpecIP. Second, the movement is accompanied by verb-movement, which I argue is related to a strong Tense feature. The **Dislocation** cases, on the other hand, are directly related to discourse factors, and represent an A'-movement similar to English Topicalization, both in form and motivation. Seen in this light, constituent reorderings can be related to independently motivated aspects of the grammar, and thus we can successfully eliminate any independent process of Scrambling in the grammatical description of Russian.

The article is structured as follows: In Section 1, I provide basic information on Russian word order, showing Russian is SVO. In Section 2, I analyze a subcase of non-SVO orders as **Inversion**, an A-movement accompanied by verb movement. In Section 3, I show there are also cases of A'-movement, without verb movement, and that this is **Dislocation** and is discourse-related. Conclusions are provided in Section 4.

### 1. Russian Word Order

It is generally acknowledged that Russian is an SVO language in neutral contexts (Isačenko 1967, Kovtunova 1976, Restan 1981, Bailyn 1995b), as shown in (1).

- (1) Mal'čik      čitaet      knigu.  
boy-Nom    reads      book-Acc  
"A/the boy is reading a book."

Furthermore, it has been recently shown that Russian does not have overt verb raising to INFL, contra King's (1993) analysis, in that it patterns with English (a non-verb-raising SVO language) and not with French (an SVO language with verb raising). This is shown in the

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<sup>1</sup> Indeed this optionality has been recast as semantic "vacuousness" in more recent accounts (Saito 1989, 1992).

<sup>2</sup> Although see Saito & Fukui (1998) for another view.

adverb-verb order in (2a), which follows the English equivalent and not the French ones, as shown in (3):<sup>3</sup>

- (2) (RUSSIAN)
- (a) Ja dumaju, što Ivan često celuet Mašu. [što [S-adv-V -O]]  
 I think that Ivan often kisses Mary  
 "I know that Ivan often kisses Mary."
- (b) \*Ja dumaju, što Ivan celuet často Mašu. \*[što [S-V-adv -O]]  
 I think that Ivan kisses often Mary  
 "I know that Ivan kisses often Mary."
- (3) (FRENCH)
- (a) Je vais que Jean embrasse souvent Marie. [that [S-V-adv -O]]  
 I know that Jean kisses often Mary  
 "I know that John kisses often Mary."
- (b) \*Je vais que Jean souvent embrasse Marie. \*[that [S-adv-V -O]]  
 I know that Jean often kisses Mary  
 "I know that John often kisses Mary."

Furthermore, verb-initial constructions, which are rare, do not provide evidence for overt V-raising in Russian. Thus the story-initial sentence in (4a) has an old-fashioned and fairy-tale character, as opposed to the standard VSO order found in Celtic languages such as Welsh (4b).

- (4) (a) (RUSSIAN) Posadil ded repku. V-S-O  
 planted gramps turnip-Acc  
 "Gramps planted a turnip."
- (b) (WELSH) Gwelodd Mair y ddamwain. V-S-O  
 saw Mary the accident  
 "Mary saw the accident."

If we investigate ditransitive sentences, for example, the V-S-O-IO order is unavailable in Russian, as shown in (5), as opposed to the standard V-initial order in Welsh, given in (6):

- (5) (RUSSIAN) \*Dal učitel' knigu mal'čiku včera. \*V-S-O-IO  
 gave teacher book-ACC boy-DAT yesterday  
 "The teacher gave a book to the boy yesterday."
- (6) (WELSH) Rhoddodd yr athro lyfr i'r bachgen ddoe. V-S-O-IO  
 gave-3 sg the teacher book to.the boy yesterday  
 "The teacher gave a book to the boy yesterday."

We therefore conclude that Russian is an SVO language without verb movement in the standard cases.<sup>4</sup> However, as is well-known, SVO order is not attested in many commonly-found constructions, such as (7), where the order is Object-Verb-Subject.:

<sup>3</sup> Embedded clauses are used to neutralize discourse effects as much as possible. The same contrast holds in main clauses as well.

<sup>4</sup> For more evidence of basic SVO order, see Isačenko (1967), Restan (1981) and Bailyn (1995a).

- (7) **Ètu knigu** čitaet Ivan. O-V-S  
 [this book]-Acc reads Ivan  
 "Ivan is reading this book."

It is to such constructions that we turn in Section 2, arguing that these are syntactic variants of certain Inversion constructions in English.

## 2. Inversion

(7) has various salient characteristics. First, the direct object is in initial position. Second, the object is followed by the main verb and the subject is last. Direct English equivalents to (7) are ungrammatical (*\*The book reads John*). However, the construction is similar to English Locative Inversion, discussed in Collins (1997) and elsewhere, whereby a locative PP is followed by the main verb and then the subject, despite the general absence of V raising in English. An example is given in (8):

- (8) [Down the hill] rolled John.

(9) shows Russian locative inversion constructions, which share the basic word order properties of their English equivalents:

- (9) (a) **V klasse** pojavilsja noven'kij. (Babyonyshev (1996)) PP-V-subj  
 in class appeared new  
 "A new boy entered the class."
- (b) **Na stole** stojali pepel'nica i pustoj stakan. PP-V-subj  
 on table stood ashtray and empty glass  
 "On the table there stood an ashtray and an empty glass."

In what follows, I will show that (7) and (9) in Russian are variants of a common construction type, which I call **Inversion**. At the end of this section I return to the question of why some languages like English have equivalents of (9) but not (7). First, I provide examples of the construction in Russian, and then discuss its derivation and relevance for the theory of grammar.<sup>5</sup> Examples of some Russian "**Inversion**" construction are given in (10-15).

### i. Discourse Inversion (cf. (7) above)

- (10) **Ètu knigu** podaril Ivan studentam. O-V-S-IO  
 [this book]-Acc gave Ivan-Nom students-Dat  
 "This book was given by Ivan to the students."

The relative position of the subject and (non-fronted) Dative indirect object in (10) show that the V-S order results from Verb raising over the subject and *not* from Subject Extraposition.

### ii. Locative Inversion (cf. (9) above)

- (11) **Na posadočnuju polosu** prizemlilsja samolet. PP-V-S  
 onto runway-Acc landed airplane  
 "Onto the runway landed the plane."

<sup>5</sup> In Bailyn (forthcoming) I use the term Generalized Inversion to refer to this construction.

### iii. Quotative Inversion

- (12) (a) "**Ničego sebe!**" skazal Petja. Quot-V-S  
-exclamation- said Petja-Nom  
"Wow' said Petya."
- (b) "**Ničego sebe!**" skazal Petja Nataše. Quot-V-S-IO  
-exclamation- said Petja-Nom Nataše-Dat  
"Wow' said Petya to Natasha."

### iv. Adversity Impersonals (from Lavine 1998)

- (13) **Uši** založilo. O-V  
ears-Acc clogged-up  
"(my) ears got clogged up."

### v. Possessive PP constructions

- (14) (a) **U nix** est' problema. PP-V-Subj  
at them is problem-Nom  
"They have a problem."
- (b) **U nas** rodilas' dočka. PP-V-Subj  
at us was born daughter-Nom  
"We had a daughter born."

### vi. Dative experiencers

- (15) (a) **Saše** nrajatsja deti. DatExp-V-Subj  
Sasha-Dat likes-pl children-Nom  
"Sasha likes children."
- (b) **Soldatam** vidna doroga. DatExp-adj-Subj  
soldiers-Dat visible-fem sg road-Nom-f-sg  
"The soldiers can see the road."

All of the constructions in (10-15) show the same basic pattern: The first element is a fronted non-subject XP. This XP is followed by the main verb, and then the Nominative subject. General properties of the Russian **Inversion** construction are summarized in (16):

### (16) Properties of Russian "**Inversion**"

- (a) Non-Nominative XP in initial position, displaying subject properties (A-properties)
- (b) Verb raising over the subject
- (c) Nominative subject "stranded" to the right of the Inverted XP and raised verb

Similar "Subject-Object Reversal" constructions are found in various languages. An example from Kirundi is provided in (17) from Ndayiragije (1999):

(17) (KIRUNDI)

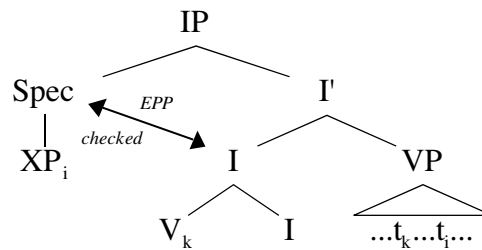
Amatá y-á-ra-nyôye abâna.  
 milk 3s-PST-drink:PERF children  
 "CHILDREN drink milk."

O-V-S

Following generally accepted analyses of Locative Inversion in both English and Russian (Collins 1997, Babyonyshev 1996), as well as analyses of Subject-Object Reversal, I propose that all the Russian constructions shown in (10-15) result from a non-canonical Raising to Subject process, driven by the same requirement that forces all English sentences to have overt subjects, namely the Extended Projection Principle (EPP). The **Inversion** construction subsuming (10-15) is schematized in (18):

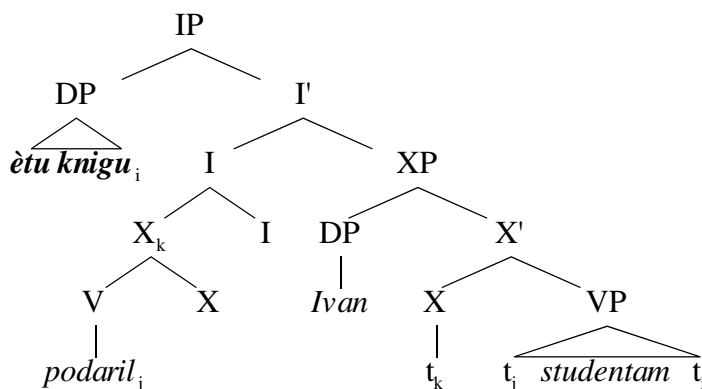
(18) **Inversion**

- **Inversion** moves XP into SpecIP, a kind of A-movement
- **Inversion** is feature-driven by the EPP and always involves V raising
- **Inversion** subsumes many constructions previously treated distinctly



Under (18), the construction in (10), for example, would have the structure shown in (19):<sup>6</sup>

(19) Structure of (10):



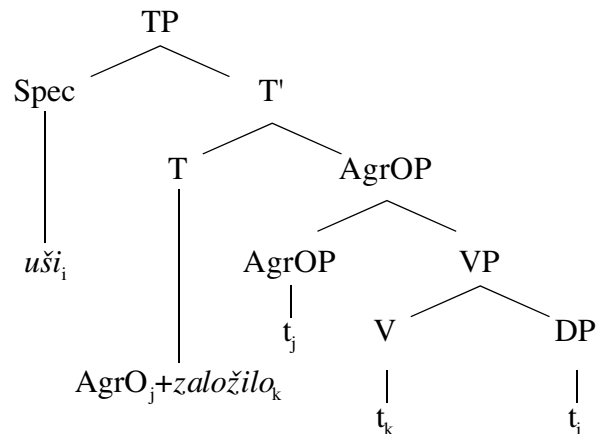
In (19), the Direct Object (in bold) has undergone **Inversion**. The verb has raised by Head Movement, through intermediary projections, to adjoin to the head of IP, stranding the subject to its right. Note that in (19) the Subject has raised out of VP to a second subject position in SpecXP, as argued by Bobaljik and Jonas (1996).<sup>7</sup> (19) is similar to structures proposed in the

<sup>6</sup> Issues of Nominative case checking and evidence for verb movement can be found in Bailyn (forthcoming).

<sup>7</sup> In an articulated IP structure such as that proposed by Pollock (1989), adapted in Chomsky (1989), and assumed in Bobaljik and Jonas (1996) and elsewhere, IP in (19) would be AgrSP and XP would be TP. In Bailyn (1995a,b), I assume XP to be PredP. The exact category of the lower subject position does not affect the analysis given here.

literature for some of these constructions, such as Adversity Impersonals (Lavine 1998), Locative Inversion (Babyonyshev 1996), Subject-Object Reversal (Ndayiragije 1999). Lavine's structure for Russian Adversity Impersonals is given in (20):

(20) Structure of (13): (from Lavine 1998)



In what follows, I turn to three central questions about this construction:

- A. What is the evidence that the fronted XP in these constructions is really in subject position?
- B. Why is there always accompanying verb-movement, when Russian SVO sentences do not show verb-movement (as seen above)?
- C. What forces the movement into SpecIP, and why is such movement (generally) impossible in English?

## 2.1. Evidence of A-movement

I have proposed that in Russian **Inversion** constructions, there is movement of a non-Nominative XP into subject position. If this analysis is correct, the inverted XP should demonstrate subject properties. Such properties should include the ability of the fronted XP to bind anaphors, and a general lack of Reconstruction effects (Reconstruction is generally known not to hold of A-movement). For example, a violation of Principle C of the Binding Theory should be fed by **Inversion** when the inverted XP is coreferent with a referring expression embedded within the Nominative subject.<sup>8</sup> In this light, consider the examples in (21-25). In each case, the (a) sentence represents the uninverted, SVO order, in which an R-expression embedded within the Nominative subject can easily be interpreted as coreferent with a pronominal object, since there is no c-command of the R-expression by the pronoun. In the (b) sentences, however, the VP-internal pronoun has been fronted by **Inversion** (note the tell-tale V-raising, to which we return in 2.2 below) and is predicted to cause a Principle C violation on the assumption that A-movement does not reconstruct. The ungrammaticality of the (b) sentences attests to the validity of this prediction.<sup>9</sup>

<sup>8</sup> Many other subject properties hold of the **Inversion** construction; for details, see Bailyn (forthcoming).

<sup>9</sup> Wherever possible, an English passive, also showing A-properties, has been used in translation to give a flavor of this construction. Note, however, that the **Inversion** constructions are *not* passive; there is no passive morphology or other voice-related morphology.

### i. discourse fronting

- (21) (a) [Novye znakomye Ivana<sub>i</sub>] predstavili ego<sub>i</sub> predsedatelju.  
new friends of Ivan introduced him-Acc chairman-Dat  
"Ivan's<sub>i</sub> new friends introduced him<sub>i</sub> to the Chairman."  
(b) \*Ego<sub>i</sub> predstavili [novye znakomye Ivana<sub>i</sub>] predsedatelju.  
him introduced new friends of Ivan chairman-Dat  
\*"He<sub>i</sub> was introduced to the chairman by Ivan's<sub>i</sub> new friends."

### ii. adversity impersonals<sup>10</sup>

- (22) \*Ego<sub>i</sub> uneslo v storonu doma morjaka<sub>i</sub>.  
him-Acc swept away in direction of house sailor-Gen  
\*"He was swept away in the direction of the sailor's house."

### iii. locative inversion

- (23) (a) [Znakomye Ivana<sub>i</sub>] byli [u nego<sub>i</sub> doma].  
friends of Ivan were at him at home  
"Friends of Ivan's<sub>i</sub> were at his<sub>i</sub> house."  
(b) \*[U nego<sub>i</sub> doma] byli [znakomye Ivana<sub>i</sub>].  
at him at home were friends-Nom of Ivan's  
"At his<sub>i</sub> house were friends of Ivan's<sub>i</sub>."

### iv. possessive-PP inversion

- (24) (a) ?[Igruški Ivana<sub>i</sub>] byli [u nego<sub>i</sub>].  
toys-Nom of Ivana were at him  
?"Toys of Ivan<sub>i</sub> he<sub>i</sub> had."  
(b) \*[U nego<sub>i</sub>] byli [igruški Ivana<sub>i</sub>].  
at him were toys-Nom of Ivan  
\*"He<sub>i</sub> had toys of Ivan's<sub>i</sub>."

### iv. dative experiencers

- (25) (a) [Znakomye Ivana<sub>i</sub>] nravjatsja emu<sub>i</sub>.  
friends-Nom of Ivana like him-Dat  
"Friends of Ivan<sub>i</sub> please him<sub>i</sub>." (cf \*"He likes friends of Ivan.")  
(b) \*Emu<sub>i</sub> nravjatsja [znakomye Ivana<sub>i</sub>].  
he-Dat like-pl friends-Nom of Ivan  
\*"He<sub>i</sub> is liked by friends of Ivan<sub>i</sub>."

In Section 3 we will look at cases of leftwards fronting in which the XP does *not* show the A-movement characteristics seen above. Rather, it reconstructs, as expected for A'-movement. Crucially, in such cases, there is no overt verb movement, to which we turn next.

## 2.2. Verb movement in Inversion

(21-25) show that **Inversion** involves A-movement into subject position. We have also seen that **Inversion** involves V-raising to I. Yet at the outset we saw that Russian SVO transitives

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<sup>10</sup> In this example, an equivalent (a) construction with SVO-type order is impossible to construct, since there is no overt agent. However, the predicted lack of Reconstruction here still supports the **Inversion** analysis.

do *not* exhibit verb raising, and unwelcome apparent optionality. **Inversion** involves V-raising, SVO transitives do not. However, the situation is *extremely* reminiscent of the English WH-movement. English WH words raise to SpecCP to check some kind of [*wh*] or [Q] feature, analogous here to the EPP feature checked in SpecIP in Russian **Inversion**. When the raised *wh*-phrase is not a nominative subject, there is also I-->C raising, as shown in (26).

- (26) (a) Where **did** you go? (not *Where you went?*)  
 (b) What **will** John do tomorrow? (not *What John will do tomorrow?*)

Nominative *wh*-phrases do not trigger I-->C movement, as shown in (27), just as Russian SVO transitives (with Nominative subject checking the EPP) do not show V-->I movement (see (27)):

- (27) (a) Who left? (not *Who **did** leave?*)  
 (b) What happened? (not *What **did** happen?*)

Pesetsky & Torrego (1999) analyze this well-known mystery as the requirement that a tensed element raise to C in English WH-questions. In cases such as (27), the [+T] feature is checked by the *Nominative subject itself* which has tense-like properties. Russian appears to have the same requirement holding in the IP domain: The EPP feature must be checked by a raised XP. Additionally, a strong [+T] feature must be checked. This is achieved by the Nominative subject in standard SVO transitives, as in English Nominative WH-questions. However, in cases where a non-Nominative XP checks the EPP, the verb must raise to achieve this result, just as in English non-Nominative WH-questions. Thus an apparent paradox turns out to be a reflex of a known checking requirement, and the Russian **Inversion** construction reflects nothing more than a tense requirement alongside the EPP requirement.

### 2.3. The Russian EPP

Central to this analysis of **Inversion** is the possibility that the EPP in Russian can be checked by a wider range of XP arguments than it can, say, in English. Miyagawa (in press) analyzes local A-scrambling of objects in Japanese as non-canonical EPP checking in a manner quite similar to **Inversion**. However, for Miyagawa, the EPP must still be checked by a Nominal, and one that shows some kind of agreement, in the broad sense of the term. However, we know from English Locative Inversion (see Collins 1997) that there are instances of EPP checking by PPs and other non-nominals. Indeed, Alexiadou and Anagnostopoulou (1998) argue that the EPP is parameterized such that it not necessarily be checked by a Nominative subject, or even a Nominal. In particular, Alexiadou and Anagnostopoulou argue that VSO languages and pro-drop languages need not check the EPP with an XP at all, but may achieve it with head-raising. They relate this to the existence of a subject position lower than SpecAgrS, in the spirit of Bobaljik & Jonas (1996), who argue that some language have 2 overt subject positions (SpecAgrS and SpecT for them), whereas others, such as English, have only the former. In Bailyn (forthcoming) I argue that Russian, not being pro-drop or VSO, does not appear to have the head-raising version available, but does have the second subject position, allowing non-subject XPs to fulfill the EPP. In this respect, Russian looks typologically similar to Icelandic, only without overt expletives. For more detailed discussion, see Bailyn (forthcoming).

Thus we have seen that one subclass of scrambling cases is in fact a generalized EPP movement, with accompanying V-movement. Observed subject properties of the raised XP follow automatically. Next we turn to another kind of left fronting in Russian, **Dislocation**.

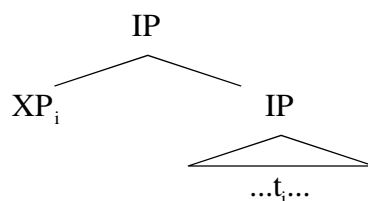
### 3. Dislocation

Russian clearly has many instances of XP fronting to the left of the sentence that do not show A-properties, do reconstruct, and are not accompanied by verb movement (meaning that the Nominative subject has fulfilled the EPP; see above). An example is given in (28):

- (28) **Ètogo čeloveka**<sub>i</sub>, [znakomye Ivana<sub>a</sub>] predstavili **t**<sub>i</sub> predsedatelju.  
 [this person]-acc [friends of Ivan]-nom introduced chairman-Dat  
 "This person, Ivan's friends introduced to the chairman."

In (28), the direct object *this person* is fronted to the left of the subject. On the analysis proposed above, the Nominative subject checks the EPP feature in (28), and there is no verb movement. Therefore the fronted object must be adjoined to IP or higher. Such movement is essentially identical to English Topicalization, adjunction to S, and I refer to it as "**Dislocation**".<sup>11</sup> **Dislocation** involves no verb movement, and patterns with other cases of adjunction (Topicalization) in all respects. **Dislocation** is schematized in (29):

- (29) **Dislocation:** (Müller & Sternefeld 1993, Bailyn 1999)



- **Dislocation** is A'-movement
- **Dislocation** does not affect binding (reconstructs)
- **Dislocation** involves no verb-movement

Note that English allows sentences of this kind freely (*Beans I like*). We return below to the interpretive contribution of such fronting. **Dislocation** is clearly predicted to have properties of A'-movement, such as full reconstruction. Recall the evidence for lack of such reconstruction under **Inversion**. (22b), repeated as (30), shows that **Inversion** is A-movement (to satisfy the EPP), does not reconstruct, and as such feeds a Principle C violation:

- (30) \***Ego**<sub>i</sub> predstavili [novye znakomye Ivana<sub>a</sub>] predsedatelju.  
 him introduced new friends of Ivan chairman-Dat  
 \*"He<sub>i</sub> was introduced to the chairman by Ivan's<sub>i</sub> new friends."

Now consider the minimally different surface string (31), which is a case of **Dislocation** with a fronted direct object, but without verb movement:

- (31) **Ego**<sub>i</sub> [znakomye Ivana<sub>a</sub>] predstavili **t**<sub>i</sub> predsedatelju. O-S-V  
 him friends of Ivan introduced chairman-Dat  
 "This person, Ivan's friends introduced to the chairman."

<sup>11</sup> We assume here that Topicalization is adjunction to IP (Lasnik & Saito 1992) and do not discuss the possibility of SpecCP Topicalization for these constructions. Conclusions about the binding possibilities would be predicted to obtain in either case.

In (31), the direct object undergoes **dislocation** and reconstructs at LF. Principle C is predicted not to be violated, and this is confirmed by the possibility of coreference. Thus, this kind of movement is structurally parallel to English Topicalization. In the next section we will see that this correspondence is more than simply technical.

### 3.1. Motivating Dislocation

There is a general trend in the recent literature on Scrambling to seek a motivation for Long Distance Scrambling, which is known to have A'-movement properties (Saito 1992, Webelhuth 1989, Mahajan 1990). Partly, this is a natural consequence of the Minimalist assumption that there are no purely optional movements in a derivation, an economy principle. The apparent optionality must reduce to something else. Two general directions can be discerned. The first, exemplified in Fukui (1993) and Saito & Fukui (1998), is to define carefully a narrow set of circumstances in which (pure) optionality is possible. In particular, Saito and Fukui argue that Japanese Scrambling is permitted because it is leftward movement, and as such is compatible with the language's primary branching direction. Left scrambling is free in left-branching languages. (English Heavy NP-Shift to the right is accounted for by such a parameter as well). And indeed many left-Scrambling languages are verb-final (Japanese, Turkish, Persian, Korean, German, Dutch etc.). However, this clearly fails to hold for the Slavic languages, as shown in Stjepanović (1998). Thus the free word order found throughout the Slavic languages, which are primarily SVO, provides good typological evidence that directionality of branching is *not* the determining factor in whether or not Scrambling is generally possible in a language.

The second approach is to eliminate the optionality involved; that is, to understand it as part of a distinct, and independently motivated process. All movement, under such accounts, is subject to Last Resort. Various recent attempts fall into this general category, notably Bošković and Takahashi (1998), Zubizarreta (1998) and Miyagawa (1997). Bošković and Takahashi (1998) claim that Long Distance Scrambling is base-generation followed by feature-driven *obligatory* LF Lowering. In this account, theta-roles are features whose strength is parameterized. Languages like Japanese have weak theta-features, so arguments Merge into IP-adjoined position and then *lower at LF* (to check their theta-features). Lowering is possible because it is post-syntactic and does not leave a trace. However, Bailyn (1999) points out various difficulties with this view. First, the LF Lowering as proposed should be subject to no constraints (no chain being formed). This contradicts significant evidence to the contrary from Japanese, German, Hindi, Russian and other languages that Scrambling is restricted by Subjacency, the ECP, the CED, the *that*-trace effect and other movement constraints (Webelhuth 1989, Mahajan 1990, Saito 1992, Müller and Sternefeld 1993, Bailyn 1995a among many others). Second, the LF Lowering account does not explain the optionality involved in generating, say, an embedded direct object in scrambled position (adjoined to matrix IP), versus generating it in theta-position; they both derive from the same Numeration and have the same LF representation. Yet the IP-adjoined option involves an extra step (the LF Lowering) and as such should be ruled out by Economy. Under Bošković's and Takahashi's account the optionality is simply moved to the base component. The problem is thus restated, not solved.

However, there is another approach to eliminating optionality that appears more promising. Were there evidence that the orders derived by A'-Scrambling were systematically distinct in some way, we would hold the key to understanding the source of the apparent optionality. And of course, the discourse status of variant surface orders has been the focus of a long tradition of descriptive work by the Prague School since at least Mathesius (1939). Functional accounts (Sirotnina 1965, Adamec 1966, Kovtunova 1976, Švedova 1980, Prince 1984, Yokoyama 1986, Hajičová and Sgall 1987 among many others) plainly demonstrate that "Word order can vary, but at the same time *it is not free*: the meaning of a sentence, its communicative goal, differs with different word orders." (Kovtunova 1976: 191). **Dislocation**

is thus truly parallel to English Topicalization: it affects Discourse (information) structure in a particular way, using A'-movement (adjunction to IP) as a mechanism.<sup>12</sup>

Recent attempts to integrate such notions into a derivational account are found, for example, in Miyagawa 1997 and Zubizarreta 1998. (Other related works include Partee 1991, Vallduví 1992, King 1993, Lambrecht 1994, Junghanns/Zybatow 1997, Rizzi 1997, Erteschik-Shir 1997, Bailyn 1999, Jelinek 2000, Karimi 2000, Kappus 2000, Szczegielniak forthcoming and many others). All these authors assume or argue that reorderings of this kind are related to Focus structure, loosely understood. Zubizarreta explains subject extraction into post-verbal position in Romance languages, for example, as satisfying Last Resort in that the interaction of the Informational (Discourse) component and the prosodic component require it. They would be incompatible were the movement not to occur. Miyagawa (1997) also relates A'-Scrambling to Focus.

For Russian, King (1993) first proposed that leftward movement was (always) associated with Topic Focus structure. In Bailyn 1999, I propose that it is Kiss' (1998) notion of "Information Structure" that Russian represents overtly as opposed to Identificational (Contrastive, Quantificational) Focus movement in Hungarian. On this view, Discourse Structure is overtly realized in scrambled Russian sentences, in a kind of Discourse Earliness analogous to how Hungarian treats overt quantifiers (Kiss 1986, 1991). Hungarian demonstrates overt movement of LF relevant entities. Scrambling languages appear to use the A'-movement strategy *to disambiguate distinct information loads*, something other languages do with intonation, clefts, particles and so on. In Bailyn (1999) I therefore argue that Russian A'-Scrambling is directly related to discourse, proposing the Scrambling Generalization (32):

(32) **The Scrambling Generalization** : (from Bailyn 1999)

- (a) *A'-Scrambled orders are always associated with different discourse/informational interpretations from non-scrambled orders*.<sup>13</sup>
- (b) *The movement deriving scrambled orders is motivated by discourse/informational considerations*.

The direction for future work is clear: to formalize (32b) in a way that maintains mental modularity, a derivational approach to word order, and allows an economical minimalist approach to linguistic operations.

#### 4. Conclusion

In this article, I have argued that there are (only) two leftward movement processes of constituents in Russian, both found in other languages, **Inversion** and **Dislocation**. **Inversion** is A-movement into subject position (SpecIP) to check the EPP and is accompanied by verb raising, required by the INFL system of Russian when a non-Nominative argument fills SpecIP. **Dislocation** is standard A'-movement, reconstructing at LF, but motivated by a language's overall preference to disambiguate discourse relations with surface word order. This approach has various advantages. First, it unifies various non-canonical constructions in Russian under **Inversion**. Second, it eliminates the need for optional verb movement in the description of Russian. Third, it eliminates the descriptive notion of "Scrambling" as a unified process from the grammar. Fourth, it eliminates optionality in the description of derivation of variant word orders in so-called free word order languages. Finally, it points to a rich area for future research, namely the interaction of syntax and discourse.

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<sup>12</sup> I have not touched here upon the complex issue of how such a property is parameterized, and learned during acquisition. I leave this to further research, although see Otsu (1992) for interesting discussion.

<sup>13</sup> (33) is limited to A'-Scrambling because A-scrambling appears to be less discourse-related (if at all), as seen in Section 2. On the other hand, A-scrambling presents less of an optionality problem because of its association with the formal feature of the EPP.

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