LOCATIVE INVERSION AND VERB MOVEMENT IN RUSSIAN

This paper discusses formal and functional characteristics of the so called Locative Inversion (LI) in Russian. This phenomenon is typical of free word order languages, which don’t have the Verb-Second constraint but nevertheless frequently make use of linear orders where verbal forms take second position. In Russian, ‘V2-like orders’ are triggered by movement of locative adverbial into sentence-initial position (labeled SpecCP or TopicP in different formalisms). The neutral word order in Russian is Subject — Verb — Loc, cf. Красивая девушка (S) стоит (V) у окна (L) lit. “An attractive girl (S) stands (V) by the window (Loc)”, but if the sentence begins with a locative adverbial, the prescribed order will be Loc — Verb — Subject: У окна (L) стоит (V) красивая девушка (S), lit. “By the window (L) stands/is standing (V) an attractive girl (S)”. With intransitive verbs, word order Loc-Subject-Verb is bad — *У окна красивая девушка стоит/курит, lit. “By the window an attractive girl is standing/smoking”, so that LI in this case is obligatory. LI has been discussed in a number of papers by Pesetsky, Babyonyshev etc, but the comprehensive description of this phenomenon in Russian is missing. We will argue that with transitive predicates, LI is optional — У окна красивая девушка (S) курит (V) сигареты (O)/ У окна (L) курит (V) сигареты (O) красивая девушка (V) and the last NP in sentences with LI always bears the focal accent, irrespective of the fact, whether it is subject NP (cf. девушка-Nom), or object NP (cf. сигареты-Acc). Thus, LI in Russian (and probably, in typologically similar languages) instantiates not Verb Movement to second position, but Right Focus Movement of NPs. We are aware that such an analysis is incompatible with any version of Chomsky’s framework, which withholds Fieno’s postulate that only upward, i.e. right-to-left movement patterns should be possible. We argue that all accounts of LI, which don’t apply to the notion of downward, i.e. left-to-right movements, fail to provide a comprehensive description of LI, both on the semantic level and on the syntactic level.

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We are aware of the problem that the cover term “free word order” needs clarification and there is a wide number of approaches to word order studies.

- In the typological school based on the ideas of Joseph Greenberg, free word order languages are generally neglected, since Greenbergian typology aims at postulating a rigid underlying order for all languages and at explaining all word order constraints in terms of local rules of the type Head → Complement. This approach fails short of explaining Scrambling and constraints on movement, since both phenomena can only be explained in terms of global linearization principles.

- An analysis in terms of Scrambling is borrowed from computational linguistics and parsing studies. Scrambling is defined as a condition where complements belonging to one head (=bounded scrambling) or complements belonging to different heads (=unbounded scrambling) may permute freely. Scrambling is a feature of both formal grammars and natural languages. The ideology of Chomsky’s Minimal Program is strongly based on the assumption that it may be used a formal grammar for languages with Scrambling, but all versions of the Minimal Program fail short of parsing languages with Unbounded Scrambling, such as e.g. Modern Russian or even Modern German, cf. [Kobele, Michaelis 2005; Perekrestenko 2007].

- An analysis in terms of Movement is a certain degree compatible with an analysis in terms of Scrambling. A movement analysis aims at finding such a relation of different linear orders possible in one and the same syntactic structure, which can be explained on the assumption that one and the same element may take different positions in this structure. A problem with Movement analysis is that one has to postulate an underlying order and establish, which linear orders are basic and which ones are derived.

- A pragmatically/semantically oriented approaches of word order proceed from the assumption that only those movement patterns/linear permutations take place, that have some communicative or pragmatic function. A problem with this claim is that it is very difficult to prove it empirically.

  Our own theory of word order aims at combining the advantages of Movement analysis and pragmatically oriented approaches.

1. **Locative Inversion** (LI) in English is sensitive to the status of the Locative Phrase: intransitive verbs with Locative Arguments may be inverted, whereas intransitive verbs with Locative Adjuncts may not.

\[ SV_{\text{intr}} \text{ Loc} \rightarrow \text{Loc} V_{\text{intr}} S \]

(1a) A lamp was **in the corner**.
In the corner was a lamp.

My friend Rose was sitting among the guests. Among the guests was sitting my friend Rose.

The tax collector came back to the village. Back to the village came the tax collector.

No LI with transitive verbs:

My friend Rose seated my mother among the guests of honor. *Among the guests of honor seated my mother my friend Rose. *Among the guests of honor seated my friend Rose my mother.

A lucky hiker can find the reclusive lyrebird in this rainforest. *In this rainforest can find the reclusive lyrebird a lucky hiker. *In this rainforest can find a lucky hiker the reclusive lyrebird.

2. Split intransitivity. LI in English does not apply to ALL intransitive verbs. Intransitives split as to whether they allow it.

Among the guests was sitting my friend Rose. *Among the guests was knitting my friend Rose.

Onto the ground had fallen a few leaves. *Onto the ground had spit a few sailors.

Toward me lurched a drunk. *Toward me looked a drunk.

On the corner was standing a woman. *On the corner was drinking a woman.

3. Informal interpretations of LI:

- An ‘Argument-Structure - hypothesis’ (Bresnan 1994, Babyonyshev 1996). In languages like English and Chichewa (Bantu family) LI is characteristic of a relatively small subclass of intransitive verbs. These verbs take Locative Arguments (cf. 6a, 7a, 8a, 9a). Verbs with Locative Adjuncts (cf. 6b, 7b, 8b, 9b) do not allow LI. Locative Arguments (in the preverbal position) display some features characteristic of grammatical subjects, while NPs (in the postverbal position) do not behave as regular grammatical subjects.

- [A radical variant of the same conception]. For ALL languages, where LI is attested, it must be explained in terms of ‘argument structure’.

- An alternative hypothesis. LI may be better explained in terms of Topic-Focus Articulation. Inverted Locative Arguments are Topics, while postverbal NPs are Foci. The verbs as e.g. to be, to come, to stand, to lurch are dispositional predicates, they
convey an existential meaning that \( X \) exists and is just being introduced on the foreground, to the listener. The verbs as e.g. to seem, to knit, to drink etc. are not dispositional and normally cannot signal an existential meaning. LI is possible in sentences, where the locative element (irrespective of its status as Argument vs Non-Argument) can be arranged as Topic, and the postverbal NP as Focus.

- [A strengthened variant of the same conception]. LI is a syntactic phenomenon and not a lexical feature of a small group of intransitive predicates. All languages, which make use of LI, apply to similar mechanisms of Topicalization and Focalization in sentences with LI.

4. ‘Shifting’ sentence patterns in Russian:

There is a class of Russian (quasi)-existential and (quasi)-possessive constructions where word order change arguably has effect on subject-predicative articulation. In binominative structures the subject normally precedes the predicate, but the interpretation of (10a) and (10b) is different. According to (Arutynova, Shiryaev 1983), (10a) belongs to the “CHARACTERISATION” predicational type: the sentence tells that certain feature \( \phi \) is ascribed to a definite NP. Meanwhile, (10b) belongs to the “IDENTIFICATION” predicational type: the sentence tells that the bearer of the feature \( \phi \) is identified as X, not Y.

(10a) **Вася-Nom** — негодяй-Nom. Subject > Predicate

\[
\text{Vasja scoundrel}
\]

“Vasja is a scoundrel”

(10b) **Негодяй-Nom** — Вася-Nom. Subject > Predicate

\[
\text{Scoundrel Vasja}
\]

“The scoundrel is Vasja”

Along the same lines, sentence (11a) can be analyzed as belonging to a Nominative-subject sentence pattern, while (11b) is build with a Non-nominative sentence pattern and has a subject-like NP in an oblique case (prepositional genitive). The first of the two sentences belongs to the “CHARACTERISATION” predicational type, while the second one belongs to the “POSSESSIVE” predicational type\(^2\).

(11a) **[Книга-NomSgF у него-GenPrep] интересная- NomSgF.**

\[
\text{book by.him interesting}
\]

“His book is interesting”

(11b) **У него-GenPrep [интересная- NomSgF. S>P книга- NomSgF]**

\[
\text{by.him book interesting}
\]

\(^2\) In Modern Russian, the Possessor is marked with Prepositional Genetive Case (with the preposition у “by”) in a BE-construction, while the Possessee get Nominative Case in the same construction.
“He has an interesting book” or: “He has written an interesting book”

It pairs like (10ab), (11ab) the first of the two NPs is always topical, while the second NP is focus or part of the focus. But the difference between (10a) vs (10b), (11a) vs (11b) does not amount to communicative values only: (10a) vs (10b), (11a) vs (11b) differ by their predicative semantics. It is therefore natural to assume that these structures have different subject-predicate articulation and that in Russian bi-nominative structures with BE and Russian possessive structures with BE the first NP/PP behaves as grammatical subject, irrespective of the fact, whether it has overt Nominative Case (cf. (10a), (10b), (11a)) or not (cf. (11b)).

It would be tempting to expand this analysis to Russian sentences with LI and investigate whether the preposed Locative Phrase is subject-like or not. The tests suggest that the answer is negative. The examples (12a-d) all belong to one and the same predicational type “LOCALIZATION” (event \( x \) is localized at locus \( L \)), irrespective of the surface linear order.

What really differs in (12a-d) is the choice of Topics and Foci, but not the underlying predicative meaning.

(12a) В Калуге (T) проводилась конференция (R)
In Kaluga was.organized conference
“There was organized a conference in K.”
(12b) Конференция (T) проводилась в Калуге (R)
Conference was.organized in Kaluga
(12c) В Калуге (T) конференция проводилась (RContr)<a в Туле — нет>
In Kaluga conference was.organized <but not in Tula>
“The conference was organized in K., not in T.”
(12d) [Конференция в Калуге] (T) проводилась (RContr) <а в Туле — нет>
Conference in Kaluga was.organized <but not in Tula>

Contrariwise, in (quasi)-possessive structures with BE in (13a) vs. (13b) the shift of the predicative meaning brings about syntactic restructuring: in (13a) the Possessor is raised to the subject position, while in (13b) the Possessor is a complement of the subject NP.

(13a) У него-GenPrep (T) [была-BE.PstSgF интересная-NomSgF книга-NomSgF] (R)
by.him was interesting book
“He had an interesting book”

(13b) [Книга у него](T) была-BE.PstSgF интересная-NomSgF (R)
book by.him was interesting
“His book was interesting”

- Conclusion: There is no evidence that LI triggers syntactic restructuring in Russian. Variants (12a-d) differ by their topic-focus articulation, but have one and the same argument structure.

5. The Movement Metaphor:
• Word order in all natural languages is predictable. Different linear orders, which are linked with the same syntactic structure, are derivable from each other, cf. (Ковтунова 1976; Падучева 1984; Янко 2001).
• Context-free grammars are unable to generate all well-formed syntactic structures. Every theory in syntax needs context-sensitive rules of the type \( XY \rightarrow (Z) YZ \). (Гладкий, Мельчук 1969, Gazdar et alii 1985).
• Movement rules are a subclass of Context-sensitive rules. A Movement operation preserves the number of syntactic positions, but changes their filling.
• Restrictive postulates, claiming that only Movement from Right-to-the-Left is possible, are aprioristic and cannot be verified empirically.

6. Multiple Movement [Циммерлинг 2006; Zimmerling 2006]:

• In groups consisting of 4 or more elements, two or more elements may change their location simultaneously (at least, there is no independent ground to assume that one of the movement cases precedes the other ones). In this case, different linear orders cannot be derived from each other in one step.

(14a) психологи (1) рекомендовали (2) ему (3) любить (4) себя (5) psychologists recommended him to love himself

“the psychologists recommended him to love himself”

\[ \rightarrow \]

(14b) себя (5) любить (4) ему (3) рекомендовали (2) психологи (1) the same

In (14ab) we have two groups — \([\text{NP}_S + \text{V}_{\text{fin}}] \& [\text{V}_{\text{inf}} + \text{Pron}_{\text{Refl}}]\), the constituent order in both of them being permutable. The difference between (14a) and (14b) is that in (14a) the reflexive pronoun \( сеbь \) may be coindexed with either of the antecedents — both the nominative subject and the dative object, while in (14b) it must be coindexed with the object.

One of the most straightforward and widely attested instances of Multiple Movement is Multiple Movement in Adversative Phrases. Negation and Adversative Conjunction change their relative placement (NEG > ADVERS \( \rightarrow \) ADVERS > NEG); simultaneously, the conjuncts change their relative placement, too:

<table>
<thead>
<tr>
<th>NOT X BUT Y</th>
<th>( \rightarrow ) Y BUT NOT X</th>
</tr>
</thead>
<tbody>
<tr>
<td>не X, а Y  ( \text{‘not X, but Y’} )</td>
<td>( \rightarrow ) Y, а не X ( \text{‘Y, but not X’} )</td>
</tr>
</tbody>
</table>

(15a) Это не щука, а целая акула
This not pike, but whole shark

(15b) \( \rightarrow \) Это целая акула, а не щука.
this whole shark, but not pike

“This is not a pike, but a whole shark”
• Is Multiple Movement possible in groups consisting of 3 overtly expressed elements?


• The Locative element is moved in the sentence initial position. This triggers the inversion of Subject and Finite Verb (Predicate Inversion).

(16a) Красивая девушка (1) стоит (2) у окна (3)  
Beautiful girl stands by window  
“A beautiful girl is standing by the window”

→

(16b) у окна (3) стоит (1) красивая девушка (2).  
By window stands beautiful girl  
“By the window is standing a beautiful girl”

• Sentences with the order Locative + Subject + Verb are ungrammatical or marked, cf.

(16c) *У окна красивая девушка стоит.  
By window beautiful girl stands

• NO language with LI has the Verb-Second-Constraint.

7. What is actually moving in Russian sentence with LI: Verb Movement vs NP movement.

(i) The Hypothesis of Verb Movement. The Locative moves to the sentence-initial position. This brings about an ill-formed configuration, where two different categories precede the finite verb. In order to avoid this ill-formed configuration, the Verb moves to the left and overrides the Subject position.

• This explanation amounts to postulating the Verb-Second-Constraint for Russian.

(ii) The Locative moves to the sentence-initial position. Afterwards, or parallel with this the Subject moves out from Left-to-Right and takes the position adjacent to VP.

(18) S+ V + Loc ⇒ Loci + tj + V + ti + Sj  
• This explanation amounts to postulating Multiple Inversion.

8. Communicative Structure of sentences with LI:

<table>
<thead>
<tr>
<th>Loc = Topic</th>
<th>V = Transition</th>
<th>S = Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>У окна</td>
<td>Стоит</td>
<td>красивая девушка</td>
</tr>
</tbody>
</table>
9. Typological data: LI in Russian, Lithuanian, Spanish, Modern Greek, Albanian:

(i) LI is regular only in intransitive sentences (Loc + V + S) and optional or impossible in transitive sentences (Loc + S + V + O ~ Loc + V + S + O).

(ii) Intransitivity split (unergative vs unaccusative verbs etc.) seems to be irrelevant for LI in these languages.

(iii) In intransitives sentences with LI, subject NP is always rhematic (focal).

(iv) In transitive sentences with a Locative element in the initial position, all final NPs will be interpreted as Focus Proper, whether it is subject NP or not.

Russian Examples (19b), (20b) show that in intransitive sentences with a Locative Phrase verb-final orders are bad, irrespective of the fact whether LI is present or not. The ungrammaticality of (20b) is higher than of (19b), but both sentences sound unnatural if the predicate is pronounced with a standard focal accent — ‘Intonation Pattern I’ or ‘Intonation Pattern II’ in the Russian accentological tradition. The neutral, i.e. non-contrastive and non-emphatic rhematic (=focal) accent is realized in Russian as a falling tone, it is marked below with the symbol ‘\(\downarrow\)’, whereas neutral thematic (=ante-focal) accent is realized in Russian as a rising tone (followed by a fall on the posttonic syllables); this accent is called ‘Intonation Pattern III’ in Russian accentological tradition — it is marked with the symbol ‘\(\uparrow\)’ below. It should be mentioned that the rules of accent placement within thematic and focal constituents should not concern us here, since the bearer of the main phrasal accent of Russian NPs, VPs and PPs in neutral (i.e. non-contrastive and non-emphatic) sentences is chosen automatically. The rules of accent placement in Russian are complex, but highly formalized, cf. the detailed descriptions in (Kovtunova 1976:146), (Kodzasov 1993: 183) and (Yanko 2001: 64-129; 188-196). These rules predict, e.g. that the neutral option for accent placement in thematic NPs is [Красивая девушка \(\uparrow\)]\(_T\), not *[\(\uparrow\)Красивая девушка \(\downarrow\)]\(_T\). Along the same principles, the bearer of the main phrasal accent (=focus proper) in the rhematic phrase must be the adverbial, not the verb —[курит у окна \(\downarrow\)]\(_F\), not *[\(\downarrow\)курит у окна] \(\uparrow\)]\(_F\).\(^3\)

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\(^3\) Т. Yanko (Yanko 2001: 188-196) argues that Russian has a strict accentual hierarchy, with each word class having a certain rank in it. In terms of the current paper it amounts to a claim that rules for accent placement in Russian are paradigmatic, not syntagmatic, since it is usually possible to predict the placement of the phrasal accents already on the level of word classes. It makes sense to draw an analogy between rules for accent placement and local vs global rules of linearization. The results are not quite straightforward for languages like Modern Russian. On the one hand,
The first pair of examples shows the constraints on linearization in Russian sentences without LI, with an intransitive verb and a postponed Locative Phrase. Note that the verb itself (курить) does not belong to the focus proper (the latter is marked with an index ‘F’).

(19) \([S]_{T} [V +\text{Loc}]_{F}\)
(19a) \([\text{Красивая девушка}\ (1) [\text{курить} (2) у окна } \backslash (3)]_{F}\].
(19b) \([\text{Красивая девушка}\ (1) [\text{у окна} \backslash (2)]_{F} \text{курить} (3)].\]

The next pair of examples shows the constraints on linearization in Russian sentences with LI.

(20) \([\text{Loc}]_{T} [V +\text{S}]_{F}\)
(20a) \([\text{У окна}\ (3) [\text{курить} (2) \text{красивая девушка} \backslash (1)]_{F}\].
(20b) \([\text{У окна}\ (3) [\text{курить} (2) \text{красивая девушка} (1)]_{F}\].

(21a) Красивая девушка (1) [курить (2) сигареты (3) у окна] 4.
(21b) У окна (4) [курить (2) сигареты (3) красивая девушка (1)].

10. Spanish:

(22a) A la ventana está una chica guapa / ?A la ventana está la chica guapa
by the window is a girl beautiful by the window is the girl beautiful
“By the window stands a beautiful girl”

(22b) *A la ventana una/la chica guapa está
by the window a/the girl beautiful stands
(22c) A la ventana está fumando cigarillos una chica guapa
by the window is smoking cigarettes a beautiful girl
(22d) A la ventana una chica guapa está fumando cigarillos

(23a) En I. se sulfuran los fundamentalistas
ср. рус. В И. злобствуют фундаменталисты
(23b) *En И-e. los fundamentalistas se sulfuran
ср. рус. *В И-е. фундаменталисты злобствуют
(23c) En I. se sulfuran los fundamentalistas demasiado
ср. рус. В И-е. злобствуют фундаменталисты вовсю
(23d) En I. los fundamentalistas se sulfuran demasiado
ср. рус В И-е.фундаменталисты злобствуют вовсю»

11. Conclusions:

Russian rules for accent placement operate on the constituent level, i.e. appear to be local. On the other hand, these rules involve an appellation to such communicative/informative characteristics as ‘± given’, which can be obtained from any morphological/syntactical principles; in that sense Russian rules for accent placement may be called global.

4
• Sentences with LI embody a ternary communicative structure: Locative (Topic) + Verb + NP (Focus), where the verb is neither Focus Proper nor Topic. Languages with LI avoid word orders, where the verb takes final position and move focalized elements in the Right Focus position. In intransitives sentences with LI, grammatical Subject is the best candidate for the role of Focus Proper. In transitive sentences with LI, each NP may be chosen as Focus Proper and placed in the Right Focus position.

• Formalization of LI must both account for the Locative Movement to the sentence-initial position, and the NP Movement in the opposite direction, to the Right Focus position. An analysis along these lines will probably lead to the revision of current syntactic formalisms.

\[
(24) \text{S + V + Loc } \Rightarrow \text{[TOPIC] + t}_j \text{ + V + t}_i + \text{[FOCUS]}
\]

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