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Alexander Letuchiy

# CONSTRUCTIONS WITH COMPLEMENT CLAUSES IN RUSSIAN: SEMANTICS, SYNTAX, COMBINATIONAL PROPERTIES

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### Publications

The following fifteen publications in journals indexed by Scopus / Web of Science or belonging to the list of the Higher School of Economics reflect the findings of the dissertation:

1. Letuchiy A. On tense and irrealis marking in triclausal constructions (and what distinguishes them from biclausal constructions) // Linguistics. 2018. Vol. 56 (1) PP. 163-206.

2. Letuchiy A. Padež niotkuda (nestrukturnoe kopirovanie padeža) (in Russian, 'Non-structural case copying') // Trudy Instituta russkogo jazyka im. V.V. Vinogradova. 2019. Vol. XXII. No 4. Pp. 230-250.

3. Letuchiy A. Strannoe "soglasovanie vremen" v russkom jazyke (in Russian, 'Strange "sequence of tenses" in Russian') // Russkij jazyk v naučnom osveščenii. Vol. 1 (19). Pp. 210-221. 2010.

4. Letuchiy A., Viklova A. Podjem i smežnye javlenija v russkom jazyke (preimuščestvenno na material interpretacii mestoimenij (in Russian, 'Raising and similar phenomena in Russian (based mainly on the interpretation of pronouns)' // Voprosy jazykoznanija. Vol. 2. 2020. Pp 31-60.

5. Letuchiy A. O nekotoryx svojstvax sentencial'nyx aktantov v russkom jazyke (in Russian, 'On some properties of complement clauses in Russian') // Voprosy jazykoznanija. Vol. 5. 2012. Pp. 57-87.

6. Letuchiy A. Predikativ ili prilagatel'noe? Russkie konstrukcii s poluvspomogatel'nymi glagolami i prilagatel'nymi (tipa *Ja ščitaju nužnym učastvovat'*) (in Russian, 'Predicative or adjective? Russian constructions with semi-auxiliary verbs and adjectives (such as *I consider it necessary to participate*) // Voprosy jazykoznanija. 2018. Vol. 2. Pp. 7-28.

7. Letuchiy A. 'Tensed' and 'Non-Tensed' Predicatives in Russian // Komp'juternaja Lingvistika i Intellektual'nye Tehnologii. 2017. Vol. 23. No. 16. P. 249-260.

8. Letuchiy A. Glagoly s fiksirovanny porjadkom dopolnenij v russkom jazyke i svojstva sentencial'nyx aktantov (in Russian, 'Verbs with a fixed order of objects in Russian and properties of complement clauses' // Russkij jazyk v naučnom osveščenii. 2018. Vol. 2 (36). Pp. 180-198.

9. Letuchiy A. Modifikator "sam po sebe" i sintaksičeskaja struktura sentencial'nyx aktantov (in Russian, 'Modifier "sam po sebe" and the syntactic structure of complement clauses // Acta Linguistica Petropolitana. Vol. XII, part. 1. Pp. 548-573. 2016.

10. Letuchiy A. Vsjo ob odnom: ob odnoj konstrukcii s sentencial'nymi aktantami v russkom jazyke (in Russian, 'All about the same: on one construction with complement clauses in Russian') // Acta Linguistica Petropolitana. Vol. XII. n. 1. Pp.113-123. 2016.

11. Letuchiy A. Modeli upravlenija sentencial'nymi aktantami v russkom jazyke: centr i periferija (in Russian, 'Patterns of complementation in Russian: core and periphery') // Trudy Instituta russkogo jazyka im. V.V. Vinogradova. Vol. 10. Pp. 172-201. 2016.

12. Letuchiy A. Russian zero copulas and lexical verbs: Similar or different?// Lingue e linguaggio. 2015. XIV.2: P. 233–249.

13. Letuchiy A. Historical development of labile verbs in modern Russian// Linguistics. 2015. Vol. 53. No 3. P. 611-647.

14. Letuchiy A. Tri slučaja promežutočnoj perexodnosti glagolov i tipologija perexodnosti (in Russian, 'Three cases of intermediate verb transitivity and typology of transitivity') // Acta linguistica petropolitana. Vol. VI, Part 3. Pp. 101–108.

15. Letuchiy A. Sentencial'nye aktanty: aktanty ili net? (in Russian, 'Complement clauses: arguments or not?' // Acta linguistica petropolitana. Vol. VII, Part. 3. 2011. Pp. 346–353.

#### **Conference presentations and grants**

The main results of the present study have been presented in 2010-2020 in presentations at international conferences and research seminars, including:

- Complementation and modality conference in Mainz (2012)
- Diversity Linguistics: Retrospect and Prospect (2015)
- Formal Aspects of Slavic Linguistics (2020)
- Seminar of the linguistic department at the Hebrew University of Jerusalem (2018)
- International Computer Linguistics Conference "Dialog" (2011, 2017)
- Societas Linguistica Europaea conferences (2015, 2018)
- Syntax of the World's languages (2012)
- Slavic Linguistic Society conferences (2011, 2019)
- The Russian Verb (2010)
- Typology of Morphosyntactic Parameters (2014, 2018)
- Workshop on Replicative processes in Grammar (2015)

The dissertation focuses on the problems of complementation in Russian. Complementation is a situation when one clause is in the argument position under another one.

The **theoretical relevance** of the thesis is constituted by the fact that it contributes to overcoming the gap existing in syntactic research between formal, structure-oriented approaches, and functional approaches, that give the main importance to semantic and pragmatic features. I show that the putative incompatibility of approaches is false: the semantic features, such as complementizer choice and subject ellipsis, are closely related to semantic and pragmatic ones, e.g., interactions between verbal forms in the two clauses and the relevance of negation in the main clause for the embedded clause elements. The grammatical, semantic and pragmatic aspect do not contradict to each other, but interact in the behavior of complex sentences.

In my thesis, I solve **two main problems** that the typology of complementation faces. On the one hand, though complementation is among the most popular topics in typology of complex clauses, it is mainly described as a type of complex sentence. By contrast, the relations between complement clauses and nominal arguments (NPs / DPs) did not get sufficient linguists' attention (with important exceptions, such as Davies & Dubinsky 200 and Grimshaw 1990).

On the other hand, the same problem reflects on the methodological level. The syntactic criteria of argumenthood and syntactic priority (e.g., anaphor control, crossover tests, and so on) are mainly plausible for NPs, but not clauses. This means that a set of criteria that are plausible both for NPs and clauses must be put forward.

The following **tasks** had to be solved for achievement of the principal problems:

1) to describe semantics, syntax and combinational properties of each complementation strategy;

2) to find the differential features of complement clauses that distinguish them from adjunct clauses;

3) to describe common features and differences between complement clauses and NP arguments;

4) to analyze special properties of triclausal constructions that are not reducible to the sum of properties of two biclausal components;

5) to classify the types of interaction between the main and the embedded clause (both those that can be classified under the notion of syntactic government and those that do not fit into this notion;

6) to describe possible types of tense, aspect and modality marking in embedded clause and to find out which features are common for these categories and which ones draw them apart.

The following **results** will be put forward on the defence of the thesis:

- 1. In constructions with complement clauses, the main and the embedded clauses interact in many aspect. This interaction can be statistical (the tendency for the use of similar forms in both clauses) or grammatical (syntactic government and syntactic doubling.
- The syntactic doubling occupies and intermediate position between classical government and strategies of marking high degree of affinity, such as serialization and light verb constructions.
- 3. The strategies of complementation significantly differ from each other. They are motivated not only by the semantics of the matrix predicates, but also the relation between the main and the embedded situation and the real world.
- 4. Behavioral tests (e.g., possibility of argument omission, linear properties) also reveal significant differences between complementation strategies. They are often related to initial (non-complement) uses: for indirect questions analogy with direct questions is relevant, while for *kogda-* and *esli-*clauses basic adjunct uses matter.
- 5. Triclausal constructions are not entirely recursive: some aspects of their behavior can only be explained using all the three clauses, and not recursive chain of two biclausal sentences. For instance, the degree of transparency is different: in some cases, properties and selective restrictions of the main clause percolate to the third clause, and sometimes they are relevant only for the second clause.
- 6. Non-structural paramters, such as identity of formal properties, weight and syntactic complexity, linear position, pause are particularly relevant for complement clauses.

This fact results from intermediate properties of CC, which combine properties of a clause and an NP. These characteristics are useful for describing nominalizations, predicatives, relative ordering of NP arguments and CCs, and so on.

- 7. Restrictions on complementation are of different nature: some of them are related to syntactic position, others with semantic factors, finally, there are restrictions that result from specific (e.g., historical) properties of arguments. Importantly, very few restrictions are explicable from the direct impossibility of a situational argument with a large number of verb classes, such participant is semantically possible.
- 8. The restrictions on complementation as a whole or some types of complements do not follow directly from the predicate semantics either. The claim that the prohibition of some strategy with a verb class (e.g., impossibility of *čto*-complements with depiction verbs) does not suppose that this strategy is completely incompatible with their semantics. It is more plausible to say that the set of possible strategies result from grammaticalization of most natural and frequent structures, and rare patterns are sometimes imposible. The same pattern can result in the (im)possibility of infinitive with some verbs (if a complement clause is rare with a particular verb, the infinitive pattern is impossible or dubious, as with *dobivat'sja* and *izbegat'*.
- 9. Distinctive features that distinguish complement clauses from NP arguments result from different formal properties: big length and syntactic heaviness, non-standard characteristics of the head (a complementizer), absence of the case and number categories. Unexpectedly enough, the presence of case does not always result in NP-like syntactic behavior. The behavior of constructions with a correlative pronoun *to* retaining the nominal case paradigm differs from standard NPs. In cases when the main feature is syntactic heaviness (e.g., in the change of the linear position), infinitive shows more similarity to NPs than finite complements. By contrast, in case-oriented features, such as nominalization and syntactic priority properties, infinitive can behave less prototypically than finite complements.
- 10. Complement clauses can be ordered by the degree of affinity to NPs vs. fnite clauses. At the same time, 'nominal behavior' and 'clausal behavior' are not two ends of the same scale, they rather form two different scales. For instance, some properties of infinitive make it similar to nouns, because the infinitive clause is not too long and does not include finite projections. At the same time, the syntactic position distinguishes it from canonical NPs, for instance, it almost never occupies the A position of transitive verbs. We can distinguish the scale of nouninness and the scale of affinity to NPs: the first one is mainly related to syntactic weight, and the second one to nominal categories, such as case and gender.On the second scale, indirect

questions are close to NPs: they can be coordinated with nominal constituents, tolerate the initial position and even can be nominalized in the nominal techniques with the base transitive subject in instrumental case.

11. Some of Russian complementation strategies are not reducible to standard classification of finite and infinite complementation patterns. One of them are patterns with double expression where the clausal argument is supported by a co-referent NP expression. The other one is represented by raising-like strategies.

Some of the relevant data are taken from the Russian National Corpus (RNC, <u>www.ruscorpora.ru</u>) and Google search. Another portion of data is based on author's introspection and native speakers survey in Facebook and Google forms. Usually, 4-point system of marks was used: 4 (perfectly acceptable), 3 (normal, but not perfect stylistically or syntactically), 2 (bad, but can in principle be used) and 1 (totally unacceptable). When the data checked by native speakers were organized in minimal pairs or sets of variants, statistic significance was tested for distinctions observed in the survey. This, however, does not mean that results which are not statistically significant are not taken into account. Some stable but not significant distinctions are regarded as useful for the analysis.

In the **Introduction**, I address the problem of combinational restrictions. Although it may seem that the class of complement-taking predicates is defined very naturally in semantic terms (e.g., speech act predicates, cognition predicates, emotional predicates), the fact that a given verb is incompatible with complement clauses cannot be trivially explained. Several factors are responsible for those restrictions. First, in some syntactic positions, complement clauses are impossible. The most prominent case are comparative constructions where the standard of comparison cannot be clausal, but must be marked for case. This is why constructions like *Plavat' prijatnee nyrjat'* 'To swim is more pleasant than to dive' are ungrammatical. Another position of this sort is the agent position in passive constructions. Sentences like *Petja byl šokirovan čto proigral* 'Petja was shocked that he lost' are either impossible or possible if the complement clause is attached to the passive participle separately from the base transitive verb (the latter case is realized with the participle *udivlen* 'surprised').

Other factors to be mentioned are related to the verb class. Some verbs do not take only clauses but are compatible with the pronoun *ėto* referring to situations. This is how causative deadjectival verbs like *zagrjaznjat*' 'soil' behave. Though no complement clause except mixed structures with *to* is compatible with the verb *zagrjaznjat*', examples like *Ne brosajte musor, ėto zagrjaznjaet ulicy* 'Do not throw litter, this makes our streets dirty' are perfectly acceptable. The restriction on the complement clause results from the semantic role of the clause: with 'soil', the CC can be

classified as a causer or reason. These generalized semantic roles are almost never expressed with either a finite clause or an infinitive construction. However, some verbs like *razbit*' 'break' behave stricter and do not allow any situational argument in the causer position: examples like *Eto razbilo čašku* 'Because of it, the cup broke / This made the cup break' are ungrammatical. Here, the reason is semantic, rather than syntactic. If the causer is situational (as, for instance, in *This made him forget about his book*), it is regarded as causing the situation in an indirect way (contrary to physical agents that can break or soil something directly). Presumably, Russian transitive verbs of physical affect are incompatible with indirect causation readings and, thus, with situational agents.

Some verb classes are compatible with complement clauses but only if these clauses are doubled by a nominal argument. Here belong some evaluation predicates, such as *osuždat*' or *cenit*'. For instance, the example below with *tebja* 'you' is acceptable. With the pronoun *tebja* omitted, it becomes dubious:

Ja že tebja ne osuždaju, čto ty udral ... [Elena Khaeckaja. Xal'dor iz svetlogo goroda (1997)]

#### ?Ja že ne osuždaju, čto ty udral ...

At the same time, this structure cannot be analyzed as a clausal adjunct construction. In examples above, *čto*-clause cannot be regarded as a reason adjunct because it is incompatible with most predicates in the reason meaning:

\*My ne pošli guljať, čto šel dožd'.

#### \*Ja ne ljublju Petju, čto on vsegda grubit.

**Chapter 1** adresses in brief the place of complement clauses with respect to other dependent clauses and problem of syntactic hierarchy in the system of complement clauses (the individual criteria are considered later). It turns out that, in the absence of case marking, the syntactic role is problematic to be defined (see Davies and Dubinsky 2009 on the problem of sentential subject description<sup>1</sup>). However, some criteria can be proposed:

S (subject), contrary to other syntactic roles, is badly compatible with topicalization together with the matrix verbs. If topicalization takes place, the S complement clause is pronounced together with the matrix verb, as if being a part of the VP.

<sup>&</sup>lt;sup>1</sup> Davies, William, and Stanley Dubinsky. 2009. On the existence (and distribution) of sentential subjects. In Hypothesis A/hypothesis B: Linguistic explorations in honor of David M. Perlmutter, ed. Donna B. Gerdts, John C. Moore, and Maria Polinsky. Cambridge, MA: MIT Press, 2009. Pp. 111–128.

DO (direct object) can be promoted to the subject position of the passive construction, though more restrictedly than nominal direct objects.

IO (indirect object) differs from S and DO by the fact that it hardly allows left dislocation (constructions with an IO before the matrix verb get worse marks from native speakers than their analogues with dislocated S and DO).

Obl (oblique) differs from other positions by the fact that it usually does not tolerate constructions where they are syntactically parallel with PPs.

Finally, arguments of the copula constitute a special position. Since they do not have case, they allow the other (nominal) argument to be in nominative – even in cases where it is impossible in constructions with two NPs (e.g., *Moja zadača byla sobirat' informaciju* is much better than \* *Moja zadača byla sbor informacii*).

In **Chapter 2**, the problem of tense marking in complement clauses is addressed. The TAM form in the embedded clause varies from one type to another, and also depends on the matrix verb semantics. Normally, in complement clauses, relative tense marking is the main option, while absolute tense marking is often possible but more restricted in use (see Barentsen 1995, Say 2016, Schnitke 2020 for details<sup>2</sup>). By contrast, in adjunct clauses, the default marking type is absolute. This makes us think that absolute tense marking has two functions in the Russian system. On the one hand, it is used in relative and adjunct clauses which show a big degree of autonomy from the main clause. In this case, absolute tense marking show that the embedded clause has its own link to the speech act outside the main clause. On the other hand, absolute tense marking is used with verbs like *slučit'sja* or *polučitsja* having no specific reference and denoting the same event as the embedded verb. In this case, absolute marking signals a high degree of affinity between the two verbs which manifests itself in the similarity of marking. By contrast, when the link between the situations is not too strict and not too loose, the relative interpretation is used: it does not lead to the occurrence of the same form in the two clauses and, on the other hand, the embedded clause does not have an autonomous reference to the speech act, but chooses the main event as an anchor.

<sup>&</sup>lt;sup>2</sup> Barentsen, Adrian. 1995. Shifting points of orientation in Modern Russian. Tense selection in 'reported perception'. In Theo Janssen & Wim van der Wurff (eds.), Reported speech: form and functions of the verb, 15-55. Amsterdam & Philadelphia: John Benjamins.

Say, Sergei S. Vremja v russkix finitnyx sentencial'nyx aktantax: nejtralizacija i točka otščeta. Trudy IRYa RAN X. 2016. 256-274.

Shnitke, Ekaterina L. K voprosu o soglasovanii vremen v sovremennom russkom jazyke: korpusnoe issledovanie distributivnyx xarakteristik vremennyx form v sentencial'nyx aktantax. *Voprosy jazykoznanija* 2020. Vol. 3. 26-51.

The relation between the complementizer choice and the tense interpretation can be observed on the pair *kak* and *čto*. The latter shows relative tense marking more often than the former. For instance, *Ja videl, kak Vasja vyxodil iz doma* is better than *Ja videl, čto Vasja vyxodil iz doma* (in this case, *Ja videl, čto Vasja vyxodit iz doma* sounds better). Another factor is related to the context: absolute tense marking freely allows recursive embedding, and in the resulting triclausal structure, C2 and C3 both contain verbs with absolute tense marking. By contrast, with relative tense marking in C2, triclausal structure with relative tense is sometimes impossible. The reason is that the absolute tense is a default interpretation, and a long structural distance between C3 and C1 does not restrict this reading. By contrast, relative interpretation requires the anchor (the main verb) to be accessible, this is why this tense use is sometimes impossible or restricted when the verb form is situated too far from the anchor.

As Barentsen (1996), Say (2013) and Schnittke (2020) show, the verb class is also relevant. For instance, with *dumat*' 'think' that represents the embedded event as existing only in subject's mind, the relative tense is normally preferred over the absolute one. This is not the case with emotional predicates which presuppose that the embedded situation exists in reality, and the subject only perceives it: absolute tense marking shows that the embedded event is more autonomous from the main one.

Another factor that has previously been understudied is aspectual type: the aspectual properties of the main and embedded clause are relevant for the choice of tense marking. I used a three-way aspectual classification including (i) process, (ii) punctual event and (iii) repeated event. This yielded nine value combinations for the main and the embedded clause:

- 1. Main process, embedded process
- 2. Main process, embedded punctual,
- 3. Main process, embedded repeated,
- 4. Main punctual, embedded process,
- 5. Main punctual, embedded punctual,
- 6. Main punctual, embedded repeated,
- 7. Main repeated, embedded process,
- 8. Main repeated, embedded punctual,
- 9. Main repeated, embedded repeated.

For instance, variants (1) and (4) differ in the choice of tense interpretation: for (1) (*Ja ponimal*, *čto vël sebja stranno*), the absolute interpretation is easier than for (4) (*Ja ponjal, čto vël sebja stranno*, where the past tense in the embedded clause denotes precedence, rather than simultaneity). Thus, the absolute interpretation is facilitated by the similarity of the two aspectual types.

**Chapter 3** is basic related to the rest of the thesis. Here I describe the Russian strategies of complementation. Russian has two subsystems of complementizers: 'real' (*čto, kak,* and *kogda* in the argument use) and 'unreal' (*čtoby, esli, budto, kak by ne,* as well as infinitive that usually describes irreal situations). The irreal group is bigger than the real one because irreal markers interact with the meaning of the construction in different ways. *Budto* and *čtoby* denote the non-reality of the embedded situation (though *čtoby* in one of the uses is related to the reality of the matrix clause), while *esli* is compatible mainly with factive verbs presupposing the reality of the embedded situation. *Esli* makes the whole construction unreal: the main situation remains non-realized and, correspondingly, the embedded situation cannot be described as realized either. Infinitive is a form with the broades combinational properties.

Here the property of **transparency** is introduced. Some markers and some verb features can influence not only the clause that is embedded under this verb, but also the next one. For instance, the marker *budto* is used when the content of the emotional or cognitive attitude marked with the verb in the matrix clause is characterized as false. However, if the verb in the upper clause is not false (e.g, *dokazat*' 'prove'), *budto* can also be used if the modal or negative meaning is contained one more clause higher (e.g., *pytalsja dokazat*' '(he) tried to prove').

In the same chapter, restrictions on the use of forms are discussed. For instance, infinitive and *čtoby* are frequently distributed with the same verb as markers, respectively, of the same-subject vs. different-subject configuration. However, there are exceptions in both directions: on the one hand, verbs like *planirovat'*, *nadejat'sja*, *bojat'sja*, and some others take only infinitive but are incompatible with *čtoby*. On the other hand, lexemes like *predupredit'*, *dobit'sja*, *sledit'* are incompatible with *čtoby* and compatible with infinitives. Both types of cases are explicable. The former are, according to Dobrushina (2012, 2016)<sup>3</sup>, verbs with epistemic meaning component, and this type of meaning is usually served by *čto*, rather than *čtoby*. However, there is another reason: verbs like *nadejat'sja*, contrary to *xotet'*, are compatible with a type of context where the

<sup>&</sup>lt;sup>3</sup> Dobrushina, Nina R. 2012. Subjunctive complement clauses in Russian. Russian Linguistics, vol. 36, issue 2. 121-156.

Dobrushina, Nina R. 2016. Soslagatel'noe naklonenie v russkom jazyke: opyt korpusnogo issledovanija. Praga: Animedia.

embedded situation precedes the main one, as well as the reverse case. Only with *čto*, but not *čtoby*, can the relative localization be designated: *čtoby* is only compatible with infinitive and subjunctive that are insensible to tense distinctions. The prohibition of infinitive is related to gramaticalization, rather than components of meaning. Verbs like *dobivat'sja* are rather rare in the same-subject context. They are possible, but, due to the rarity of these examples, the infinitive expression was not grammaticalized. In other words, infinitive is the most grammaticalized strategy of complementation, and it is used when the same-subject context is prototypical. This logic is confirmed by statistical data: in verbs like *dobit'sja*, the proportion of complement clauses (including finitie ones with *čtoby*) compared to genitive NPs is much lesser than its proportion compared to genitive with verbs like *xotet'*.

The section about infinitives touches upon a question that has rarely been discussed for Russian, namely, the rasing vs. control distinction. Cotnrary to English and, to certain degree, Romance languages, English is not considered a 'raising language' in the sense that it does not have structures like *I believe Jim to be a fool* generated by raising. However, some structures like *Mne smešno tebja učit'* 'For me it is ridiculous to teach you / It is ridiculous if I teach you' remind of raising. First, semantically, *mne* has no semantic role in the main clause: the sentence does not mean 'The situation is ridiculous for me / makes me laugh'. The only senseful interpretation is that *mne* acquires a semantic role from the embedded verb (as in *Smešno jesli ja budu tebja učit'* 'It will be ridiculous if I teach you'), and then it rises to the main clause. The second non-canonical property is that some structures allow a non-canonical negative concord configuration, such as *Nikomu lučše etogo ne videt'* 'Nobody should see it' or *Nikto okazalsja ne nužen* 'Nobody turned out to be needed' where the NPI *nikomu* or *nikto* are situated lower thn the predicate negation *ne*. This behavior is accounted for by regarding the NPI as generated in the embedded clause.

**Chapter 4** is one of the central parts of the study. It compares complement clauses to nominal phrases. A wide range of criteria is used, including passivization of the matrix verb; control of PRO in converbial construction, and floating quantifiers; control of verbal agreement; linear position; behavior in nominalization of the matrix verb, and so on. It turns out that the differences between nominal and clausal arguments result from various factors:

- (i) absence of case
- (ii) absence of canonical non-grammaticalized head
- (iii) big length and syntactic complexity

For instance, inability to control verbal agreement is due to the absence of the nominative head that is usually a necessary condition for agreement. Restricted control of floating quantifiers can

also be related to the absence of case – however, given the fact that infinitives control floating quantifiers better than finite complements, this feature primarily results from the fact that the head of complement clauses is not nominal and often not lexical. The fact that complement clauses usually precede nominal arguments derives from the length and syntactic complexity of the former.

Among floating quatnifiers, only *samo po sebe* 'by itself' is compatible with clausal anchors. Interestingly, it is subject to another syntactic restriction: it can be controlled by a clausal subject, but not a clausal object. Thus, its behavior speaks in favor of existence of the syntactic hierarchy among clausal constituents.

Complement clauses in the direct object position differ from their nominal analogues by their behavior in passivization. Promotion of complement clauses is restricted: some of restrictions (\*bylo načato razgovarirat') are explicable with the fact that the main and the embedded clause with phasal verbs behave as one clause (see Wurmbrand's restructurization account); other restrictions do not have a clear motivation: for instance, the verb *obeščat'* cannot be passivized (*Nam bylo obeščano pozvonit'* is hardly possible in the sense 'Someone promised to call us'), while *velet'* can (*Nam bylo veleno pozvonit'* is perfectly possible). Rather often, only one of the two Russian passive formation types (passive on *-sja* and passive with the verb *byt'* 'be' and a passive participle) is possible: cf. *bylo rešeno vyxodit'* and its unacceptable version *rešaetsja vyxodit'*.

Nominalization of matrix verbs with complement clauses differ from nominalization of nominal arguments in many respects. The main one is that the classical 'ergative-like' pattern of nominalization of transitive verb (when the base subject is marked with instrumental, and the base DO bears the genitive marking) is impossible with complement clauses. This fact shows that this pattern is related not only to transitivity, but also to case morphology: the instrumental agent marking is licensed by the presence of genitive-marked object, and if there is no object that can be marked with genitive, the instrumental is also impossible. By contrast, genitive of subject (agent) is sometimes possible, e.g., *znanie Peti čto on postupil nepravil'no* 'Petja's knowledge that he made something wrong, but only in a part of cases – sometimes no way of marking is possible.

Another difference between NP and CC arguments is that complement clauses are not always retained under nominalization: nominals like *ljubov*' 'love', *grust*' 'sadness', *strannost*' 'strangeness' never take complement clauses, though their base predicates: *ljubit*' 'love', *grustnyj* 'sad' or *grustit*' 'be upset', *stranno* '(it is) strange' are compatible with them. Multiple accounts of these facts have been proposed. I demonstrate that the behavior of complement clauses cannot be accounted for just by one factor. The relevant factors are (i) syntactic position (argument proper

vs. modifier); (ii) semantic role (content vs. stimulus or other non-content role); (iii) Result vs. complex event nominalization; (iv) situation in the proper sense vs. single occurrence of a situation; (v) syntactic position and others. For instance, two factors account for the impossibility of complement clauses with property nouns like *strannost*': the fact that their complements are in the argument proper position and the fact that they do not have a syntactic role of complement, but are property bearers. The same features have other values with nouns *neobxodimost*' and *vozmoznost*': their complements have the semantic role of content and are syntactically modifiers (that can be replaced with adjectival modifiers like *etat* (*eta neobxodimost* 'this necessity'). The complement of the noun *dokazatel'stvo* does not have a content role and is not a syntactic modifier but the construction denotes an occurrence, and not a regular generalized situation. Though Knyazev (2014)<sup>4</sup> argues that the impossibility of noun complement clauses in some contexts results from their argument position, the same tendency can be accounted for using pragmatic factors. Complement clauses are long and heavy, this is why they tend to be situated in the rightmost position of the sentence. The argument position usually conflicts with this tendency, since nouns with its arguments are not in the right periphery.

In **Chapter 5**, relations between the main and the embedded clause are addressed. The main type of interaction discussed in previous research is subcategorization: for instance, the verb *bojat'sja* is compatible with complements introduced by *kak by ne* (the apprehensive complementizer), and for *pugat*' 'frighten' and *xotet*' 'want', this option is impossible. A more exotic subtype of government is represented by cases where a grammatical meaning associated with the main verb changes the embedding strategy: Dobrushina (2016) discusses verbs like *dumat*' 'think' and *somnevat'sja* 'doubt' that are compatible with *čtoby* only when negated (or, for 'doubt', only without negation). If the condition is not borne out, *čtoby* is ungrammatical. However, it turns out that a whole bunch of other, often statistical and not grammatical phenomena reflects the interaction between the two clauses.

One of them is syntactic doubling, the type of form assignment that has not been previously regarded as a special phenomenon and was only sporadically mentioned by Lyutikova (2009) in relation to relative inclauses. it turns out that in some constructions with phasal verbs (*načat'* 'begin') and, rarely, with emoitional causatives (*obradovat'* 'rejoice'), the form of the embedded verb can just copy the form of the main one. This form can be, alongside indicative and subjunctive forms, imperatives, which, normally, do not occur in embedded clauses, and infinitives, which are

<sup>&</sup>lt;sup>4</sup> Knyazev M. Structural licensing of sentential complements: evidence from Russian noun-complement constructions. In Avram L. (ed.). Bucharest working papers in linguistics 2. Bucharest University Press, 2014. P. 21–45.

incompatible with the complementizer  $\check{c}to$  outside the doubling construction. Doubling occupies an unusual position in the system of syntactic relation marking. On the one hand, it is not a typical government strategy because the main element does not choose for a specific form of the embedded verb: the main form always repeats in the complement clause. On the other hand, it is not a case of agreement because cross-clausal agreement is highly untypical for Indo-European languages. The most close type of phenomena is serial verb construction and double verbs: in doubling construction, the two verbs refer to one situation, just as in serial verb construction. However, a striking property of doubling construction is that the verbs are linearly separated by a heavy embedding marker *to*,  $\check{c}to$  – thus, the morphological similarity is not supported by syntactic integration of clauses.

Another type of phenomena considered in this chapter is statistical correlation between characteristics of the main and the embedded clause. For instance, it turns out that when some verbs, such as *bojat'sja* or *nadejat'sja* are negated, the proportion of non-finite (infinitive) complements rises. With other matrix predicates, such as *prijatno*, the proportion of finite complements rises. The reason is different semantics of those predicate groups: when epistemic predicates are negated, this means by default that the embedded event will not take place. Alongside with the impact of negation, a close effect that can be called 'polarity agreement' is considered. It turns out that verbs associated with high possibility of the embedded event, such as *soglasit'sja* 'agree', *priznat'* 'admit', and so on, are more frequently used with complement clauses when they are not negated. By contrast, with predicates implying or associated with non-occurrence of the embedded event, e.g., *otricat'* 'negate', *somnevat'sja* 'doubt', etc., negation raises the proportion of complement clauses. This means that the use of complement clauses with *čto* has a slight tendency to denote an event occurred in reality and, thus, becomes better when the main clause is associated with reality of the embedded clause.

Some other aspects of interaction are related to pragmatic features of the embedded clause, such as length and explicitness. It turns out that the use of imperative in the main clause influences properties of the embedded one. First, the subject of the embedded clause is more freely omitted if the main clause is imperative. Second, the corpus data show that the average length of embedded clauses is greater with indicative main clauses than with imperative ones. Both tendencies result from the properties of imperatives: the addressee of imperative (= the person who is supposed to make what the imperative form denotes) is often omitted, and the clause as a whole tends to be shorter (the command expressed by imperative construction is more effective if it is not too long). Since the general tendency is that the embedded clause is not significantly longer and more explicit than the main one, the embedded clause of imperative construction tends to be short.

In **Chapter 6**, the behavior of triclausal structures is discussed. These constructions, largely ignored by typologists and descriptive linguists, are important in one more aspect. In today's syntactic research, the issue of recursion is largely discussed: people consider that the many units of language can be recursively branched: for instance, construction with a relative clause allows addition of one more relative clause that defines an element of the first relative clause. The same is true for complement clause construction. The problem I am interested in is whether all properties in a recursive construction like *I know that Peter thinks that Maria deceived him* can be described using simpler constructions *I know that Peter thinks it* and *Peter thinks that Maria deceived him*. The answer is no: although complement clause construction are subject to recursive branching, not all of their properties follow from that of biclausal structures it includes. For instance, if two complement clauses are inserted one into another, the interpretation of tense is restricted. Theoretically, four variants are possible:

Absolute + absolute

Absolute + relative

Relative + absolute

Relative + relative

The third variant is impossible. This may be due to the processing needs: the structure where the deepest clause is anchored to the most external situation (moment of speech) is hard to proced. However, a purely syntactic explanation is also possible. One can claim that a clause with a relative tense forms a type of syntactic island, which no interpretation of lower tense forms can leave.

Another restriction which is not predictable from biclausal structure properties either is observed in structures where an adjunct clause is embedded under a complement one. Here, the two tense interpretations must coincide, either being absolute or relative. Recall that normally (in biclausal constructions) adjunct clauses tend to contain absolute tense forms.

There are also other cases in which the 'normal' absolute tense interpretation changes to the relative one in C3. For instance, in a sentence *Petja xočet, čtoby emu vse aplodirovali, kogda on vyxodit na scenu* 'Petja wants everyone to applaud when he goes to the stage' the relative present in C3 is acceptable for 67% native speakers in the native speaker survey. This is much higher than 37% who allow the relative marking when the same temporal clause is situated in C2 of the biclausal structure.

Finally, in triclausal structures, nonstandard syntactic doubling is observed. The subjunctive marker *by* inside the complementizer *čtoby* in clause II can expand its scope to clause III. This phenomenon is mainly possible if clause III if it immediately follows *čtoby*. This makes suspect that this construction type results from a mistake, but this is far from being the whole explanation: the same is impossible if the *čtoby* complement clause contains an infinitive form. Another piece of explanation is that the resulting structure in clause III must coincide with some standard type of temporal adjunct clause: this is true for subjunctive but false for infinitive that never occurs in temporal clauses.

**Chapter 7** is a case study of predicatives (predicate adjuncts) in structures like *Popast' tuda prosto* 'It is easy to get there'. The main question is if the ability of the majority of predicatives to host complement clauses take them apart from the class of adjectives or they are just adjectives with a situational referent (in this case, structures like *popast' tuda prosto* should be analyzed similarly to *Zadača prosta* 'The task is easy: in both examples, the adjective in the predicate position refers to the subject NP, but in the first example, the adjective does not agree with the subject due to the fact that complement clauses are unable to control agreement). Note that dative arguments of predicates, described in detail by Bonch-Osmolovskaya (2003) and Say (2013) are not considered here.<sup>5</sup>

It turns out that predicatives differ in their syntactic properties, and this difference is isomorphic to a semantic one. For instance, predicatives of emotions mainly have a complement clause in the subject position, while predicatives of physical perception (e.g., *xolodno* '(it is) cold') mainly behave as impersonals. Finally, predicatives with the meaning of evaluation and modal components (*prosto* 'easy', *legko* 'easy', *trudno* 'difficult', *xorošo* 'good', *ploxo* 'bad') demonstrate intermediate behavior. The two main tests are (1) ability of the complement clause to be replaced with the pronoun *ėto* and (2) ability of the structure to be transposed to the secondary clause of matrix verbs like *ščitat*' 'consider', *kazat'sja* 'seem', and so on.<sup>6</sup>

A special problem is constituted by the form like *trudnym* 'difficult.N.SG.INS' that occurs in constructions like *Delo kazalos' trudnym* 'The case seemed difficult'. The predicative is

<sup>&</sup>lt;sup>5</sup> Bonch-Osmolovskaya, Anastasija A. Konstrukcii s dativnym subjektom v russkom jazyke: opyt korpusnogo issledovanija. Candidate degree diss. Moscow: MSU, 2003.

Say, Sergey. On the nature of dative arguments in Russian constructions with "predicatives". In: Kor Chahine, Irina (ed.). Current Studies in Slavic Linguistics [Studies in Language Companion Series, 146]. Amsterdam: John Benjamins, 2013. 225–245.

<sup>&</sup>lt;sup>6</sup> See Zimmerling 2009 (Zimmerling, Anton. Dative Subjects and Semi-Expletive pronouns // G. Zybatow, U.

Junghanns, D. Lenertová, P. Biskup (eds.). Studies in Formal Slavic Phonology, Syntax, Semantics and Information Structure. Frankfurt am Main; Berlin; Bern; Bruxelles; New York; Oxford; Wien, 2009) for another point of view to the subject in constructions with predicatives.

transformed here in the full form with case inflection. Normally, predicatives do not change for case, and it is tempting to regard this form as an adjective. However, the form has a special property: it hosts a complement clause which is impossible for adjectives outside constructions like *gordyj nosit' eto imja* 'proud to have this name'. The solution is to regard *trudnym* in these examples as a predicative and *ščitat' trudnym* 'consider (it) difficult' as a single syntactic unit.

In **Chapter 8**, the linear position of complement clauses is discussed. Although the general tendency agrees with Diessel & Schmidtke-Bode's (2017) findings, and finite complement clauses tend to be situated postpositionally, the class of finite CCs is not uniform. Preposition is easy for indirect questions, possible for clauses with *čto* and *kak* of direct perception and impossible for clauses with *čtoby*, *kogda*, and *esli*.

Indirect questions tolerate the initial position due to their similarity to direct questions (they begin with a question word). By contrast, complementizers that totally do not tolerate it are adjunct clause markers in their first use. Thus, the impossibility of their preposition can be due to the fact that if the complement clause begins the sentence, then the rest is syntactically not finished, as in *??Čtoby Petja priexal, ja prikazal* (which conflicts with the initial use like *Čtoby pogovorit's nim, ja priexal v centr*, where *Ja priexal v centr* is a full sentence). Another function of the ban on the preposition can be discriminating: in this way, adjunct uses are distinguished from argument ones.

In **Chapter 9**, I discuss three types of omission in constructions with complement clauses: omission of the main subject, embedded subject and embedded object. The distribution and relevant factors is different for each of the three processes.

Omission of the embedded subject is conditioned by the following factors:

- 1) degree of topicality;
- presence / absence of an explicit verb form (with zero predicates, omission results in bad sentences, such as *Ja ponjal, čto durak*);
- properties of the coplementizers (with the complementizer *čto*, omission is better than with *kogda*, cf. strange ?*Ja ne ljublju, kogda padaju v luži*).

Omission of the embedded clause object is better in finite than in nonfinite clauses (sentences like *Petja obeščal Vase, čto svodit v muzej* may be dubious, but sound better than *Petja obeščal Vase svodit' v muzej*). In this sense, this omission type reminds of anaphoric pronouns (pronominals) behavior. It is well-known that pronominals prefer being situated far from their antecedents linearly and structurally. If we adopt the same type of analysis for omission, it turns out that the

structural distance is longer with finite complement clauses than with non-finite complement clauses, and longer with finite adjunct clauses than with finite complement clauses.

The set of factors responsible for omission of the main clause subject remains unclear. Although I propose some preliminary hints for an explanation, in principle, this question remains a topic for future research.

**Chapter 10**, related to Chapter 7, discusses non-syntactic (often non-structural at all) factors that influence the structure and degree of acceptability of structures complement clauses. Complement clause data are crucially important because of their big length and syntactic complexity. According to Diessel & Schmidtke-Bode 2017, in the world's languages, finite complement clauses tend to be situated postpositionally.

The relevance of length is most obvious with predicative constructions. For instance, (i) predicatives without any dependent elements are unacceptable or awkward when situated after the embedded clause; (ii) predicatives without dependent elements rarely allow expression of the experiencer with the preposition *dlja*; (iii) adverbials like *vsegda* or *postoyanno* with the meaning of repeatedness sound strange if the predicative does not have any dependent elements.

Sometimes, the length of the clause is relevant for the choice of the strategy; for instance, the verb *privyknut*' allows embedded clauses, marked with absolute tense, only if they are rather long:

??On privyk, čto bolel.

#### On privyk, čto vsë vremja čem-to bolel.

Another relevant factor is pausation or, in written speech, punctuation. Sometimes a particular strategy is impossible when not separated from the head with a pause, but possible with a head:

— Kogda sošješ rjukzaki, - skazala tetja Dusja, - srazu budet jasnost': čto brat', čto net. [Vera F. Panova. Valja (1959)]

(with a comma instead of the colon, srazu budet jasnost' čto brat', a čto net sounds dubious).

In the last section, the following conclusions are proposed:

 In constructions with complement clauses, the main and the embedded clauses interact in many aspect. This interaction can be statistical (the tendency for the use of similar forms in both clauses) or grammatical (syntactic government and syntactic doubling.

- 2. The syntactic doubling occupies and intermediate position between classical government and strategies of marking high degree of affinity, such as serialization and light verb constructions.
- 3. The strategies of complementation significantly differ from each other. They are motivated not only by the semantics of the matrix predicates, but also the relation between the main and the embedded situation and the real world.
- 4. Behavioral tests (e.g., possibility of argument omission, linear properties) also reveal significant differences between complementation strategies. They are often related to initial (non-complement) uses: for indirect questions analogy with direct questions is relevant, while for *kogda-* and *esli*-clauses basic adjunct uses matter.
- 5. Triclausal constructions are not entirely recursive: some aspects of their behavior can only be explained using all the three clauses, and not recursive chain of two biclausal sentences. For instance, the degree of transparency is different: in some cases, properties and selective restrictions of the main clause percolate to the third clause, and sometimes they are relevant only for the second clause.
- 6. Non-structural paramters, such as identity of formal properties, weight and syntactic complexity, linear position, pause are particularly relevant for complement clauses. This fact results from intermediate properties of CC, which combine properties of a clause and an NP. These characteristics are useful for describing nominalizations, predicatives, relative ordering of NP arguments and CCs, and so on.
- 7. Restrictions on complementation are of different nature: some of them are related to syntactic position, others with semantic factors, finally, there are restrictions that result from specific (e.g., historical) properties of arguments. Importantly, very few restrictions are explicable from the direct impossibility of a situational argument with a large number of verb classes, such participant is semantically possible.
- 8. The restrictions on complementation as a whole or some types of complements do not follow directly from the predicate semantics either. The claim that the prohibition of some strategy with a verb class (e.g., impossibility of *čto*-complements with depiction verbs) does not suppose that this strategy is completely incompatible with their semantics. It is more plausible to say that the set of possible strategies result from grammaticalization of most natural and frequent structures, and rare patterns are sometimes imposible. The same pattern can result in the (im)possibility of infinitive with some verbs (if a complement clause is rare with a particular verb, the infinitive pattern is impossible or dubious, as with *dobivat'sja* and *izbegat'*).

9. Distinctive features that distinguish complement clauses from NP arguments result from different formal properties: big length and syntactic heaviness, non-standard characteristics of the head (a complementizer), absence of the case and number categories. Unexpectedly enough, the presence of case does not always result in NP-like syntactic behavior. The behavior of constructions with a correlative pronoun *to* retaining the nominal case paradigm differs from standard NPs. In cases when the main feature is syntactic heaviness (e.g., in the change of the linear position), infinitive shows more similarity to NPs than finite complements. By contrast, in case-oriented features, such as nominalization and syntactic priority properties, infinitive can behave less prototypically than finite complements.

10. Complement clauses can be ordered by the degree of affinity to NPs vs. fnite clauses. At the same time, 'nominal behavior' or 'clausal behavior' are not one scale, but rather several scales. For instance, some properties of infinitive make it similar to nouns, because the infinitive clause is not too long and does not include finite projections. At the same time, the syntactic position distinguishes it from canonical NPs, for instance, it almost never occupies the A position of transitive verbs. Indirect questions are by many properties the closest type to NPs: they can be coordinated with nominal constituents, tolerate the initial position and even can be nominalized in the nominal techniques with the base transitive subject in instrumental case.

11. Some of Russian complementation strategies are not reducible to standard classification of finite and infinite complementation patterns. One of them are patterns with double expression where the clausal argument is supported by a co-referent NP expression. The other one is represented by raising-like strategies.

Finally; the dissertation includes two appendices. In Appendix 1, some relevant properties of complement clauses are listed in the table format, and Appendix 2 is a typological questionnaire on complementation.