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On the oppositions that underlie the distinctions displayed by Russian causal clauses

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Abstract: This article studies Russian causal clauses employing formal contrasts that causal clauses manifest crosslinguistically. I explore two approaches that have been proposed to account for such contrasts: the *coordination-subordination* approach and the approach assuming that causal clauses represent different classes of *adverbial clauses* that differ in their *degree of syntactic integration* with the host clause. It is argued that the Russian data cannot be consistently accounted for unless a combination of the two approaches is applied. The analysis also reveals that the degrees of syntactic integration encoded by Russian causal clauses are different from those claimed for German causal clauses by previous research. Thus, while the degree of syntactic integration proves to be a valid parameter to compare systems of causal clauses crosslinguistically, its specific realizations may vary. Furthermore, the juxtaposition of the two approaches poses the question as to what the difference is between syntactically non-integrated adverbial clauses and coordinated clauses. I tentatively suggest that they too differ in terms of the degree of integration, but this difference belongs to the level of information packaging in discourse and not to the level of syntax.

Keywords: adverbial clauses; causal clauses; coordination; discourse structure; Russian; subordination; syntactic integration

1 Introduction

It has been noted that causal clauses display a number of similar distinctions in different languages, both syntactic and interpretative. These may be related to the options of variable binding into a causal clause (cf. the contrast between the German causal markers *weil* and *da* in (1)), the scopal properties, the focusability of

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the causal clause (cf. an example from Russian in (2)), root phenomena, the availability of speech act and epistemic reading of the causal marker and so on (see Charnavel [2019]; Rutherford [1970] for English; Groupe Lambda-1 [1975] for French; Frey [2016] for German; Iordanskaya [1988]; Weiss [1989] and Belyaev [2015b] for Russian; and Belyaev [2015a] for Ossetic).

- (1) *Kaum jemand_i war beleidigt, weil /*da er_i*
 hardly anyone was offended because/since he
unterbrochen wurde.
 interrupted was
 ‘Hardly anyone was offended because he was interrupted.’
 (Frey 2016: 157)
- (2) *Lužinym on zanimal'sja tol'ko poskol'ku*
 Luzhin.INS he.NOM occupy.PST.REFL.M.SG only since
*/*tak kak èto byl fenomen.*
 /as this.NOM be.PST.M.SG phenomenon.NOM
 ‘He occupied himself with Luzhin only because he was a phenomenon.’
 (RNC)

There are at least two competing approaches to dealing with these facts. According to one of them, considered by Weiss (1989) and Belyaev (2015b) for Russian causal clauses, such distinctions are best analyzed in terms of coordination and subordination. According to the second approach, the distinctions are due to the fact that causal clauses are adverbial clauses that can be attached at different structural levels, manifesting different degrees of syntactic integration with their licensing clause (Charnavel 2019; Frey 2016, among others). Three degrees of syntactic integration correspond to three types of adverbial clauses, usually distinguished in the literature: central, peripheral and non-integrated adverbial clauses (see Endo and Haegeman 2019; Haegeman 2012, among many others). Note that, according to the common assumptions, the coordination-subordination parameter is more generic than the distinction between central, peripheral and non-integrated clauses in that the latter refers to adverbial (hence, subordinated) clauses only.

In this article, I investigate the restrictions on the use of Russian causal clauses based on the Russian National Corpus (RNC) data. I suggest that in order to account for the overall picture of such restrictions, a mix of the two approaches is required, i.e., both the coordination-subordination parameter and the distinction between central, peripheral and non-integrated adverbial clauses underlie the observed restrictions. On the one hand, as I argue, there is a coordinating causal marker in Russian that differs from other causal markers in that they introduce adverbial

(hence, not coordinated) clauses. On the other hand, different adverbial causal clauses differ from each other in their potential for being central, peripheral and non-integrated, i.e., with regard to degree of syntactic integration with the licensing clause. If one considers the system of Russian causal clauses from this point of view, consistent correlations emerge between the properties of Russian causal clauses, both formal and interpretative, and their values in terms of the two parameters. Furthermore, the degrees of syntactic integration encoded by Russian causal clauses turn out to be different from those in German. While in German, according to (Frey 2016), the *da*-clause is a peripheral, and never a central, adverbial clause, the Russian *poskol'ku*-clause that seems to be the closest counterpart of *da* appears to be a central adverbial clause in some of its uses. A typologically particular phenomenon is the opposition of two Russian causal subordinators, *potomu čto* and *ottogo čto*, both meaning 'because'. Both prove to introduce central adverbial clauses but differ in that the latter is licensed in a very deep position of its host clause (most probably, within the VP).

A more general question that emerges from the analysis is the difference, if any, between coordinated and non-integrated adverbial clauses. Since the latter are syntactically non-integrated, their subordinate status is partly conventional and mainly due to the fact that one and the same adverbial marker can often introduce both integrated and non-integrated adverbial clauses, as Frey's (2016) analysis of German causal markers suggests. According to my analysis of the Russian data, coordinated clauses can be seen as less tightly integrated with their licensing clause than non-integrated adverbial clauses, while the nature of this distinction most probably lies not in syntax, but in discourse structure. Thus, the degree of integration can in fact be treated as a cover term for the coordination – subordination distinction, on the one hand, and the distinction between central, peripheral and non-integrated clauses, on the other.

The rest of the article is organized as follows. Section 2 presents five Russian causal markers (*potomu čto* 'because', *poskol'ku* 'since', *tak kak* 'since, as', *ottogo čto* 'because', *ibo* 'for') that are in the focus of the present study. In Section 3, I analyze the approach to Russian causal clauses in terms of coordination and subordination, elaborated by Belyaev (2015b). I argue that the causal markers he considers (*potomu čto*, *poskol'ku*, *tak kak*) cannot actually be differentiated in these terms. There is, however, a type of causal clause in Russian (the one introduced by the marker *ibo*) that manifests truly coordinating traits. In Section 4, I go on to analyze Russian causal clauses as adverbial clauses that differ in terms of the degree of their syntactic integration with the host clause. In doing so, I mainly follow the approach of Frey (2016) to German causal clauses. I suggest that the degree of syntactic integration is the relevant parameter for differentiating four causal markers (*potomu čto*, *poskol'ku*, *tak kak*, *ottogo čto*), including those

considered by Belyaev. In Section 5, I summarize the overall picture of Russian causal clauses. Since, according to the previous sections, Russian has both coordinated and non-integrated adverbial causal clauses, I also tackle the question of what the differences are between the two. Section 6 concludes.

2 On the causal markers under examination

Five Russian causal markers are investigated in the present article: *potomu što* (3), *ottogo što* (4), *poskol'ku* (5), *tak kak* (6) and *ibo* (7). *Potomu što*, *poskol'ku* and *tak kak* are by far the most frequent causal markers in Russian (see the quantitative data in Pekelis 2017). *Ottogo što* and *ibo* are crucial for the analysis presented below since the former displays peculiar traits with respect to the degree of syntactic integration (see Section 4), while the latter is special in terms of coordination and subordination (see Section 3.3).

- (3) *Naši otcy i dedy pobedili,*
 our.NOM.PL father.NOM.PL and grandfather.NPM.PL win.PST.PL
***potomu što** byli vmeste.*
 because be.PST.PL together
 'Our fathers and grandfathers won because they were together.'
 (RNC)

- (4) *Prosnulsja on v polnoj temnote,*
 wake.up.PST.SG.M he.NOM in complete.LOC darkness.LOC
***ottogo što** vnezapno prekratilas' kačka.*
 because suddenly stop.PST.SG.F pitching.NOM
 'He woke up in complete darkness because the pitching had suddenly stopped.'
 (RNC)

- (5) *Učitelej ne xvataet, poskol'ku nikto ne*
 teacher.GEN not be.enough.PRS.3SG since nobody.NOM not
xočet rabotat' za malen'kie den'gi.
 want.PRS.3SG work.INF for little.ACC money.AC
 'There are not enough teachers since no one wants to work for little money.'
 (RNC)

- (6) *Roman ne možet byt' xakerom, tak kak*
 Roman.NOM not can.PRS.3SG be.INF hacker.INS as
on gumanitarij.
 he.NOM humanist.NOM
 'Roman cannot be a hacker, as he is a humanist.' (RNC)

- (7) *Oxotno mogu soobščit' èto, ibo ja*
 readily can.PRS.1SG report.INF this.ACC for I.NOM
byl svidetelem ètogo.
 be.PST.M.SG witness.INS this.GEN
 'I can readily report this, for I have witnessed it.'
 (RNC)

A brief comment is in order regarding the morphosyntactic properties of the markers in question. Both *potomu čto* and *ottogo čto* go back to a three-word combination *po tomu čto/ot togo čto*, where *po/ot* are prepositions with the causal meaning, *tomu/togo* are the Dative/Genitive forms of the distal demonstrative *tot*, and *čto* 'that' is the general subordination marker. Synchronically, *potomu/ottogo* and *čto* are separable both by pauses and other words, cf. the "split" variant of *potomu čto* in (8a) and the "unified" variant in (8b). The two variants differ prosodically (*potomu/ottogo* bears a pitch accent in case it is part of the split variant) and in terms of information structure, i.e., the causal meaning expressed by the unified *potomu čto/ottogo čto* tends to be focus, while that expressed by the split *potomu čto/ottogo čto* tends to be topic (Paducheva 1977). Syntactically, the split variant seems to be a step behind the unified one on the grammaticalization path between the original prepositional phrase and the causal conjunction. This is supported primarily by the separability of the components, which characterizes the split variant. While for reasons of space I will not point out the differences between the variants in what follows, I will mostly focus on the unified *potomu čto* and *ottogo čto*. Note, however, that any negative statement I will make with regard to these markers, i.e., a statement that says that a phenomenon X is disallowed or problematic for them, is to be understood as valid for both variants.

- (8) a. *Potomu smeětsja, čto skazat' emu nečego.*
 therefore laugh.PRS.3SG that say.INF he.DAT nothing
 'And therefore [he] laughs that he has nothing to say.'
 (RNC)
- b. *Smeětsja, potomu čto skazat' emu nečego.*
 laugh.PRS.3SG because say.INF he.DAT nothing
 '[He] laughs because he has nothing to say.'

Tak kak is originally a manner construction consisting of a free combination of the demonstrative pronoun *tak* 'thus' and the relative pronoun *kak* 'how'. As a causal marker, it has been substantially grammaticalized and synchronically its two components cannot be separated from each other either prosodically or by a punctuation mark (Belyaev 2016b: 38).

Poskol'ku is similar to *tak kak* in that it goes back to a two-word combination *po* 'by, via' and *skol'ko* 'how much', originally a degree construction. Synchronically,

the two components are no longer separable either prosodically or by a punctuation mark or even orthographically.

Ibo, originally a combination of particles *i* and *bo*, goes back to Church Slavonic (Fasmer 1986: 113). It is the oldest of the five markers and the only one that does not originate from a combination of a head and its complement (for *potomu čto*, *ottogo čto* and *poskol'ku*, the original “head” is the preposition, for *tak kak* it is the demonstrative *tak*). It does not seem to be a coincidence that *ibo* is also the only truly coordinating causal marker in modern Russian, as suggested in Section 3.3.

3 A coordination-subordination approach to Russian causal clauses

I start with a brief survey of the approaches to coordination and subordination and the essentials of the (Belyaev 2015b) approach to Russian causal clauses in Section 2.1. In Section 2.2, I argue that treating the three most frequent Russian causal markers (*potomu čto*, *poskol'ku* and *tak kak*) within the latter approach fails to account for the differences between them. However, in Section 2.3, I demonstrate that a coordinating causal marker does exist in Russian, thus suggesting that the coordination-subordination parameter is relevant to the Russian system of causal clauses.

3.1 Approaches to coordination and subordination with the focus on Belyaev's (2015b) approach

It is well known that treating coordination and subordination as a binary opposition runs into problems. A range of typological data shows that various types of complex clause structures do not clearly fall in either of these two categories (see, among others, Comrie 2008; Cristofaro 2003: 18; Haspelmath 1995; Kazenin and Testelefs 2004). There are essentially two different ways in which typologists have approached the discrepancies between coordinate and subordinate properties. One way is to consider coordination and subordination as a *continuum* of clause linkage ranging from prototypical coordination to prototypical subordination. This is the approach taken in Weiss (1989) with regard to Russian causal clauses (see also Lehmann [1988]), where the continuum approach is exemplified by the typologically diverse data. The main problem with the continuum idea is that the picture of polipredicative constructions it provides, though descriptively adequate, lacks consistency and predictability since any construction of any

language can be located at a certain point of the continuum simply due to an arithmetic “summation” of its subordinate or coordinate traits.

Another way to deal with the coordination-subordination discrepancies is the *multi-level* approach, according to which the distinction between coordination and subordination remains binary but applies separately at different levels of the language structure. Within this approach, which goes back to such seminal works as Culicover and Jackendoff (1997) and Yuasa and Sadock (2002), constructions with “mixed” coordinate and subordinate properties are treated in terms of a mismatch between syntax and semantics. A serious advantage of the multi-level approach compared to the continuum approach is that the former provides a way to make predictions as to which kind of discrepancies may or may not be attested in the languages. It is to be expected, indeed, that there can be a conflict between different levels, i.e., between semantic and syntactic properties of a construction, but not within one and the same level (Belyaev 2015a: 274).

Belyaev (2015b) applies the multi-level approach to the analysis of Russian causal clauses. Therefore, his results are of primary importance for the present research. Contrary to Culicover and Jackendoff (1997), Belyaev suggests distinguishing between three levels of coordination and subordination instead of two. He relies on the Lexical Functional Grammar framework to spell out his proposal, hence the levels on which coordination and subordination are being separately defined are the constituent structure (c-structure) level, the functional structure (f-structure) level, and the semantic level. The c-structure level of coordination and subordination roughly corresponds to what Culicover and Jackendoff (1997) call the syntactic level, while the f-structure level corresponds to what they call semantics. The semantic level within Belyaev’s approach has no correspondence in Culicover and Jackendoff’s terminology.

What motivates the three-level distinction for coordination and subordination is essentially the fact that there is a cluster of semantic features according to which coordinate and subordinate clauses pattern differently, but which do not correspond to the diagnostics employed by Culicover and Jackendoff when they illustrate the notions of semantic coordination and subordination. This suggests that what Culicover and Jackendoff discuss as the semantic level, is in fact, not semantics.

A famous example of the semantic contrast between coordination and subordination are the German causal markers *weil* and *denn*. As is well known, clauses introduced by these markers differ syntactically in that *weil*-clauses display verb-final word order, typical of subordinate clauses in German, while *denn*-clauses display verb-second word order, typical of main clauses. Importantly, the two clauses also pattern differently with respect to focusing on the meaning expressed by the causal marker, i.e., putting it within the scope of an external operator

(negation, modals, *why*-question and so on). Only *weil* can be subject to such focusing, cf. (9).

- (9) A: *Warum ist Otto zu Hause?* B: *Weil/*denn es regnet.*
 why is Otto at home because/for it is.raining
 A: 'Why is Otto at home?' B: 'Because it's raining.'
 (Sohmiya 1975, cited from Belyaev 2015b: 37)

Thus, Belyaev (2015b) treats coordination and subordination separately at two syntactic levels and one semantic level, making the *focusability of the meaning* of the conjunction the basis for the coordination-subordination distinction at the semantic level. The meaning of a semantically subordinating conjunction can be focused by means of an external operator, while that of a semantically coordinating one cannot. Two alternative theoretical generalizations are considered in order to account for this semantic difference. According to one of them, coordinating conjunctions introduce conventional implicatures, while subordinating conjunctions introduce at-issue meanings. The second tentative generalization is that coordinate clauses correspond to different speech acts, which are linked by a rhetorical relation introduced by a coordinating conjunction, while a subordinating conjunction serves to link content within one and the same speech act. Being located beyond the speech acts expressed by the clauses, coordinating conjunctions operate at a higher level than ordinary predicates and subordinating conjunctions do, hence they cannot be focused by means of an operator that is located within these speech acts (I will come back to the second generalization when discussing the difference between coordinated and syntactically non-integrated adverbial clauses in Section 5.3).

For each level of coordination and subordination, a number of criteria are considered that serve to identify the status of a construction at the respective level. For the syntactic level, the criteria are mostly well known and often mentioned in the literature on coordination and subordination. These are criteria that test the linear order constraints, the possibility of extraction out of the clauses, and so on (see more on Belyaev's criteria in Section 3.3). The semantic criteria test whether the conjunction meaning can be focused as an answer to a *why*-question or under the scope of negation, modals, focus particles, or other external operators. Strictly speaking, some of these criteria concern the information-structure level rather than semantics. However, they are semantic in that they serve to test the distinction between coordination and subordination at the semantic level, according to the definition of this distinction proposed by Belyaev.

In what follows, I will generally adhere to Belyaev's approach to coordination and subordination sketched out above. Still, two caveats should be mentioned. On the one hand, Belyaev's distinction between two different syntactic levels of

coordination and subordination is, in my view, not put clearly enough and deserves further investigation. It is not to be excluded that the criteria associated with the second syntactic level (f-structure) can in fact be successfully distributed between one syntactic and one semantic level, i.e., that one syntactic and one semantic level would suffice to account for the whole range of coordination-subordination mismatches. On the other hand, the definition of semantic coordination and subordination in Belyaev’s terms seems to be a very insightful one. In fact, treating coordinated clauses as different speech acts, each with its own illocutionary force or its own information structure is not unprecedented; see similar proposals in Weiss (1989), Kobozeva (2000), and Verstraete (2005), among others. What is fundamentally new in Belyaev’s approach is the suggestion to define the semantic coordination and subordination within the multi-level view in these terms. Culicover and Jackendoff (1997), who were the first to propose the multi-level approach to coordination and subordination, have been much less explicit regarding what exactly lies behind the semantic distinction.

3.2 Russian causal clauses in terms of coordination and subordination: pros and contras

The multi-level approach to coordination and subordination, albeit insightful in its essentials, does not seem to account for the distribution of the causal clauses introduced by *potomu čto*, *poskol’ku* and *tak kak* (pace Belyaev [2015b], who refers to these conjunctions in order to illustrate the three-level approach). Belyaev’s analysis of *potomu čto*, *poskol’ku* and *tak kak* in terms of coordination and subordination is based on a range of diagnostics, each of which is assumed to be linked to a particular level of coordination and subordination. The major conclusions are summarized in Table 1.

Table 1: Russian conjunctions (Belyaev 2015b: 59).

Connective	c-structure	f-structure	Semantics
<i>potomu čto</i>	coordination	subordination	subordination/coordination
<i>tak kak</i>	subordination	subordination	coordination
<i>poskol’ku</i>	subordination	subordination	subordination

All three markers are deemed to be subordinating in the Russian grammatical tradition (Shvedova 1980: 578), so the assumptions in Table 1 contradict the traditional view in three aspects:

- *tak kak* is coordinating in semantics;
- *potomu čto* is coordinating in syntax (more precisely, in *c-structure*);
- in some of its uses, *potomu čto* is coordinating in semantics.

In the following subsections, I will try to show for each debatable point in Table 1 that the linguistic data that are assumed to support it, in fact, cannot be convincingly accounted for in terms of coordination and subordination. Note that for the time being, I will leave aside the analysis of *ottogo čto* and *ibo*, which are two more Russian causal markers introduced in Section 2. I will turn to the analysis of *ibo* in Section 3.3 and to the analysis of *ottogo čto* in Section 4.

3.2.1 Is *tak kak* coordinating in semantics?

In what follows, I consider one by one the arguments that according to Belyaev (2015b) give evidence in favor of the assumption that *tak kak* is semantically subordinating.

- *Èto*-focus construction

The term *èto*-focus refers to a construction as in (10), in which the semantic relation expressed by a conjunction is focused by means of the anaphoric pronoun *èto* ‘this’ that substitutes the main clause and refers to the pre-text. In (10), the situation ‘snow fell on the street’ is said to be simultaneous with the situation ‘snow had already melted in the city’, which runs contrary to expectations, and not with another situation and another point in time, which would be more to be expected. Only (semantically) subordinate clauses may be focused in this way.

- (10) *Na ulice povalil sneg! I èto kogda*
 on street.LOC fall.PST.M.SG snow.NOM and this when
 v gorode vsjo stajalo.
 in city.LOC all.NOM melt.PST.N.SG
 ‘Snow fell on the street! And this [was] when all the snow had already
 melted in the city.’
 (RNC)

Belyaev (2015b: 46) assumes that *tak kak* cannot participate in the *èto*-focus under any circumstances, while two other markers can, but *poskol’ku* is used only marginally in this construction. This description seems to be insufficient. First, a few examples with *tak kak* can be found on the internet (consider (11)). Second, the

fact that *poskol'ku* is marginal within the *èto*-focus seems to be important and not negligible. Example (12) is the only example with *poskol'ku* attested in the main corpus of the RNC.

- (11) *Pljaž i pesok čistyj, no èto*
 beach.NOM and sand.NOM clean.NOM but this
tak kak obščestvennyj.
 as public.NOM
 'The beach and the sand are clean, but this (is) because it's public.'
 (Google)
- (12) *Vsjo èto – poskol'ku my obladaem veroj,*
 all this since we.NOM have.PRS.1PL faith.INS
to est' uverenostju v suščestvovanii Boga.
 that be.PRS.3SG confidence.INS in existence.LOC God.GEN
 'All this because we have faith, that is, confidence in the existence of God.'
 (RNC)

As the data in Table 2 show, *potomu čto* is more than a hundred times more frequent in this context (the difference is statistically significant, χ^2 (1, $N = 226,596$) = 152.102, $p < 0.001$).

Table 2: The frequency of *potomu čto* and *poskol'ku* within the *èto*-focus construction (Main corpus of the RNC).^a

	<i>èto</i>	<i>no èto</i>	Total	% of uses with <i>èto</i> out of the total number of uses of <i>potomu čto/poskol'ku</i>
<i>potomu čto</i>	831	190,164	190,995	0.44%
<i>poskol'ku</i>	1	35,600	35,601	0.003%
total	832	225,764	226,596	

^aIn Tables 2 and 3, data for both the unified and split variants of *potomu čto* are taken into account.

– Focus particles

As is claimed by Belyaev (2015b: 46–47), *tak kak* differs from *poskol'ku* and *potomu čto* in that it cannot be focused by means of focus particles including negation or *only*-focus. But here again, it is worth noting that focusing is also rather problematic for *poskol'ku*. According to the data in Table 3, *poskol'ku* combines with the particle *tol'ko* 'only' more than 30 times less frequently than *potomu čto* (the difference is statistically significant, χ^2 (1, $N = 226,596$) = 1,040.389, $p < 0.001$).

Table 3: The frequency of *tol'ko* potomu čto and *tol'ko poskol'ku* (Main corpus of the RNC).

	<i>tol'ko</i>	no <i>tol'ko</i>	Total	% of uses with <i>tol'ko</i> out of the total number of uses of <i>potomu čto/poskol'ku</i>
potomu čto	5,801	185,194	190,995	3.04%
<i>poskol'ku</i>	31	35,570	35,601	0.09%
total	5,832	220,764	226,596	

– *Why*-question

Belyaev (2015b: 47–48) claims that *tak kak* cannot be used as an answer to a *why*-question, while *poskol'ku* can, albeit somewhat marginally. However, examples with *tak kak* can be found not only on the internet but also in the RNC. Consider the example in (13), taken from the multimodal corpus of the RNC:

- (13) – *Tak značit oni v ljubom*
so mean.PRS.3SG they.NOM in any.LOC
slučae skoro isčeznut?
case.LOC soon disappear.FUT.3PL
– *Počemu?*
why
– *Nu tak kak ne smogut razmnožat'sja.*
well as not be.able.FUT.3PL multiply.INF
– ‘So, they will disappear anyway soon, won’t they? – Why should they? –
Well, because they will not be able to multiply.’
(RNC)

– Epistemic and illocutionary cause

As is well known, a causal relation can be interpreted on three different levels: the content domain, as in (14), the epistemic domain, as in (15), and the speech act domain, as in (16) (Sweetser 1990, among others).

- (14) *Maria is very pale because she is ill.*
(15) *Maria is ill, because she is very pale.*
(16) *Since you are always interested in Maria, she is ill.*

Two assumptions are made in (Belyaev 2015b) in regard to this distinction. According to the first one, if a conjunction can be used epistemically or on the speech

act level, this is a symptom of its being semantically coordinating. According to the second assumption, *poskol'ku* cannot be used as an epistemic causal marker, while *tak kak* can (hence, it is semantically coordinating due to the first assumption).

I disagree with both assumptions but will turn to the first one in Section 4 when discussing the approach to causal markers developed by Frey (2016). As for the second assumption, it is false since *poskol'ku* and *tak kak* pattern in the same way. Instances of the epistemic use are attested in the RNC for both of them, consider (17) and (18).

- (17) *Voditel', navernoe, ponjal, čto ja*
 driver.NOM probably realize.PST.M.SG that I.NOM
dezertir, tak kak sprosil, kuda mne nado – v
 deserter.NOM as ask.PST.M.SG where I.DAT need in
gorod ili srazu na vokzal.
 city.ACC or immediately to station.ACC
 'The driver probably realized that I was a deserter, since he asked [me]
 where I needed to go, to the city or immediately to the station.'
 (RNC)

- (18) *Navernoje, u Vitalija ot udivlenija vytjanulos'*
 probably at Vitalij.GEN from surprise.GEN stretch.out.PST.N.SG
lico, poskol'ku oficery i admiraly
 face.NOM since officer.NOM.PL and admiral.NOM.PL
rassmejalis'.
 laugh.PST.PL
 'Probably, Vitaly's face stretched out in surprise, as the officers and
 admirals laughed.'
 (RNC)

To summarize, the contrast between *tak kak* and *poskol'ku* does not seem to be pronounced enough for qualifying one of them (*tak kak*) as semantically coordinating and the other one (*poskol'ku*) as semantically subordinating.

3.2.2 Is *potomu čto* coordinating in syntax?

The assumption that *potomu čto* is syntactically coordinating is based on the linear order data (Belyaev 2015b: 42). *Potomu čto* generally disallows both embedding, as in (19a), and preposing, as in (19b).

- (19) a. ??*Vasja, potomu čto u nego bolit*
 Vasja.NOM because at he.GEN hurt.PRS.3SG
golova, ne pošjol v školu.
 head.NOM not go.PST.M.SG at school.ACC

- b. ??*Potomu čto* *u* *Vasi* *bolit* *golova*,
 because at Vasja.GEN hurt.PRS.3SG head.NOM
on *ne pošjol* *v školu*.
 he.NOM not go.PST.M.SG at school.ACC
 ‘Vasya did not go to school because his head hurts.’

I suggest, however, that these linear constraints are due to the information structure properties of *potomu čto* rather than to its syntactic status: a clause introduced by *potomu čto* can only convey new information (for more detail, see Pekelis 2017). This explains why such a clause is infelicitous in clause-initial position, since the latter is associated with topicality. This also explains why a clause introduced by *potomu čto* is infelicitous when embedded since embedded clauses are also associated with given and less important information. Not surprisingly, parenthetical clauses are typically clause medial (Zaliznjak 1992: 436–450). Crucially, a clause introduced by *potomu čto* is infelicitous in clause-final position when it conveys given information. In (20), it is clear from the context that the piece of information ‘they were going to see him off’, expressed by the causal clause, is given. Accordingly, *potomu čto* cannot be used instead of *ottogo čto*. Note that it would be particularly hard to account for this fact if one assumes that the linear order constraints are syntactic in nature and are due to the properties of *potomu čto* in terms of coordination and subordination.

- (20) *On* *ne byl* *rad*, *no i ne*
 he.NOM not be.PST.M.SG happy but also not
razdražalsja, *ottogo čto/??potomu čto* *ego*
 get.annoyed.PST.M.SG because/because he.ACC
sobralis’ *provožat*. *Emu bylo* *vsjo ravno*.
 be.going.PST.PL see.off.INF he.DAT be.PST.N.SG all the.same
 ‘He was not happy, but he was not annoyed because they were going to see him off. He didn’t care.’
 (RNC)

Finally, the constraint on preposing of *potomu čto* is not that strict: it can be violated if the *potomu čto*-clause is modified by a focus particle, as in (21). This fact is also in line with a pragmatic account of the linear order restrictions rather than a syntactic one.

- (21) *No* *imenno* *potomu čto* *fel’dšer* *očevidno* *ne*
 but precisely because medic.NOM obviously not
želal *vpustit’* *tuda*, *Rostov* *vošjol* *v*
 want.PST.M.SG let.in.INF there Rostov.NOM enter.PST.M.SG in

soldackie palaty.
 of.soldier.ACC.PL chamber.ACC.PL
 ‘But precisely because the medic obviously did not want to let him in,
 Rostov entered the soldiers’ chambers.’
 (RNC)

I conclude, therefore, that the linear order constraints are not sufficient for qualifying *potomu čto* as a syntactically coordinating marker.

3.2.3 Can *potomu čto* be coordinating in semantics?

The idea that *potomu čto* can be semantically coordinating is based on the observation that when it is used as an epistemic or a speech act conjunction, it loses its semantically subordinating properties, namely the capacity to be within the scope of external operators. In particular, it can no longer participate in the *éto*-focus (Belyaev 2015b: 54). In (22a), *potomu čto* introduces an *eventuality-related causal clause* (from here on, and following Frey (2016), I will use this term to refer to a causal relation within the content domain) and it is felicitous as a part of the *éto*-focus construction, while in (22b), *potomu čto* is used as an epistemic marker and is inappropriate within the *éto*-focus.

- (22) a. *Asfal't mokryj. Èto potomu, čto dožd' prošjol.*
 asphalt.NOM wet this because rain.NOM pass.PST.M.SG
 ‘The asphalt is wet. This (is) because it has been raining.’
 b. *Dožd' prošël. #Èto potomu, čto asfal't mokryj.*
 rain.NOM pass.PST.M.SG this because asphalt.NOM wet
 ‘It has been raining. This (is) because the asphalt is wet.’
 (Belyaev 2015b: 54)

Furthermore, a clause introduced by an epistemic or a speech act *potomu čto* exhibits main clause phenomena (Belyaev 2015b: 56). Consider Example (23), in which *ohota že* is used, a special construction that is semantically close to a rhetorical question.

- (23) *Vy sami vo vsjom vinovaty,*
 2PL.NOM yourself.PL.NOM in everything.LOC guilty.PL
potomu čto ohota že vam bylo ženit'sja.
 because willingness PTCL 2PL.DAT be.PST.N.SG marry.INF
 ‘You yourselves are to blame for everything, because why did you have to marry?’
 (Kobozeva 2000)

However, *potomu čto* is not the only marker whose use epistemically or as a speech act conjunction is associated with properties that Belayev assumes to be symptomatic of semantic coordination. Almost *all* adverbial subordinators pattern in the same way. I will illustrate this with a few examples.

Just as *potomu čto*, the causal marker *poskol'ku* and the concessive marker *nesmotrja na to čto* 'despite the fact that' stop being compatible with the *èto*-focus as soon as they are used epistemically or at the speech act level. In (24a), *poskol'ku* participates in the *èto*-focus and its use is eventuality-related, while in (24b), *poskol'ku* is used as an epistemic marker and the *èto*-focus construction is not available, according to (24c).

- (24) a. *Mne bylo očen' zabavno, no èto poskol'ku*
 I.DAT be.PST.N.SG very funny but this since
ja znaju mnogix iz tex, o
 I.NOM know.PRS.1SG many.people.ACC from those.GEN about
kom idët reč'.
 who.LOC go.PRS.3SG speech.NOM
 'It was very funny for me, but this [is] since I know many of those about whom the story is concerned.'
 (Pekelis 2009: 96)
- b. *Naverno, on prodeševil, poskol'ku dama*
 probably he.NOM sell.too.cheap.PST.M.SG since lady.NOM
bukval'no rascvela ot radosti.
 literally blossom.PST.F.SG from joy.GEN
 'Probably, he sold too cheap, because the lady literally blossomed with joy.'
 (RNC)
- c. *Naverno, on prodeševil. ??Èto poskol'ku*
 probably he.NOM sell.too.cheap.PST.M.SG this since
dama bukval'no rascvela ot radosti.
 lady.NOM literally blossom.PST.F.SG from joy.GEN
 'Probably, he sold too cheap. This [is] because the lady literally blossomed with joy.'

Similarly in (25a), *nesmotrja na to čto* is part of the *èto*-focus construction and its use is eventuality related, while in (25b) it is used at the speech act level and the *èto*-focus construction is infelicitous, as is illustrated in (25c).

- (25) a. *Na Oke prekrasnye, širokie i čistye*
 on Oka.LOC beautiful.NOM wide.NOM and clean.NOM
pesčanye pljaži <...>. I èto nesmotrja na to, čto
 sandy.NOM beach.NOM and this despite.the.fact.that
v 1930 godu zdes' postroili gorod ximikov
 in 1930 year.LOC here build.PST.PL city.ACC chemist.GEN
Dzeržinsk.
 Dzerzhinsk.ACC
 'On the Oka there are beautiful wide and clean sandy beaches. And this despite the fact that in 1930 the city of chemists Dzerzhinsk was built here.'
 (RNC)
- b. *Nikogda ne putajte intelligentnost' s*
 never not confuse.IMV.2PL intelligence.ACC with
obrazovannostju, nesmotrja na to čto oni sčitajutsja
 education.INS despite.the.fact.that they.NOM consider.PASS.PRS.3PL
davno i pročno kontekstnymi sinonimami.
 for.a.long.time and firmly contextual.INS.PL synonym.INS.PL
 'Never confuse intelligence with education, despite the fact that they have long been firmly considered contextual synonyms.'
 (RNC)
- c. *Nikogda ne putajte intelligentnost' s*
 never not confuse.IMV.2PL intelligence.ACC with
obrazovannostju. ??Èto nesmotrja na to čto oni
 education.INS this despite.the.fact.that they.NOM
davno i pročno sčitajutsja kontekstnymi
 for.a.long.time and firmly consider.PASS.PRS.3PL contextual.INS.PL
sinonimami.
 synonym.INS.PL
 'Never confuse intelligence with education. This [is] despite the fact that they have long been firmly considered contextual synonyms.'

Furthermore, Example (26) gives evidence to the assumption, spelled out in (Coniglio 2011) and (Frey 2016), that epistemic and speech act clauses typically exhibit main clause phenomena. In (26), the conditional subordinator *esli* 'if' is used as a speech act connector: the speaker puts the truth of 'you still remember this' as a condition for posing the question 'what happened?' to the addressee. At the same time, the *esli*-clause contains the parenthetical word *konečno* 'of course', which belongs to main clause phenomena in Russian according to Paducheva (1990).

- (26) *Vslux on sprosil: kak èto proizošlo?*
 aloud he.NOM ask.PST.M.SG how this happen.PST.N.SG
Kak bylo delo? Esli, konečno, ty eščio
 how be.N.SG matter.NOM if of.course you still
pomniš.
 remember.PRS.2SG
 ‘Aloud, he asked: how did this happen? How was it? Unless, of course, you
 still remember.’
 (RNC)

Thus, the data that, according to Belyaev (2015b), prove *potomu čto*-clauses to be semantically coordinating, turn out to be not *specific* to *potomu čto*-clauses, but rather common to epistemic and speech act clauses in general. If one remains within Belyaev’s approach to Russian causal clauses, it is to be concluded that all epistemic and speech clauses are coordinating in semantics. This would mean, in turn, that a wide range of adverbial subordinators can be used as semantic coordinators, which seems a rather counter-intuitive conclusion. A more convincing interpretation of the facts under discussion is the one proposed by Frey (2016) (see also Haegeman 2012: 181), who argues that the epistemic and speech act clauses represent syntactic types of adverbials that are attached higher in the syntactic structure than the eventuality-related adverbials. I will come back to this proposal in Section 4.

3.2.4 Interim conclusions

My preliminary conclusions are as follows. It does not seem to be true that the formal distinctions displayed by three major causal markers in Russian (*potomu čto*, *poskol’ku* and *tak kak*) should be accounted for in terms of coordination and subordination. Instead, I would like to suggest in Section 4, following the approach developed by Frey (2016), that these markers are best described as adverbial clauses that differ in degree of their syntactic integration with the licensing clause. This does not mean, however, that the coordination-subordination parameter is irrelevant at all to the system of Russian causal clauses. In the following Section, I will turn to the causal clauses introduced by the marker *ibo* ‘for’, which prove to be both syntactically and semantically coordinated within the approach to coordination and subordination elaborated by Belyaev (2015a, 2015b).

3.3 Marker *ibo* as a coordinating causal conjunction in Russian

The conjunction *ibo* is supposed to be subordinating in the Russian grammatical tradition (Švedova 1980: 578). However, I will demonstrate in the present Section that *ibo* patterns as a coordinating marker according to the majority of criteria used by Belyaev, including those that test coordination and subordination in semantics.

It is worth noting that the very existence of causal coordinating conjunctions poses a theoretical question as to what the general relation is between the causal semantics and the coordination-subordination parameter. The typological data are rather contradictory here. On the one hand, causal markers that display coordinating traits are not a rarity at least in European languages (cf. the German *denn* or the English *for*). On the other hand, it has been noticed that causal clauses tend to be subordinated. According to Kazenin and Testelefs (2004), the converb construction in Tsakhur exhibits syntactic properties of subordination in case the converb clause has the causal interpretation, but it turns out to be coordinated if no causal semantics are at play. This ambiguity is reflected in the properties of *ibo*, which, as I will show, patterns as a coordinating conjunction, but not as a canonical one.

Following Belyaev (2015b), I will distinguish between three groups of criteria, which correspond to three levels of coordination and subordination: linear order criteria (constituent structure level); Across-the-Board (ATB) extraction, gapping and scope of mood criteria (functional structure level); and a group of semantic criteria.

3.3.1 Linear order

According to the linear order criterion, subordinating markers, contrary to coordinating ones, typically allow both embedding and preposing of the clause they introduce. *Ibo* patterns as a coordinating marker with respect to this criterion. It disallows both preposing, as in (27b), and embedding, as in (27c).

- (27) a. *Konservanty maslu ne nužny, ibo*
 preservative.NOM.PL oil.DAT not necessary.PL for
mikroby v njom ne vyživajut.
 microbe.NOM.PL in it.LOC not survive.PRS.3PL
 ‘Oil does not need preservatives, for microbes do not survive in it.’
 (RNC)
- b. ??*Ibo mikroby v masle ne vyživajut,*
 for microbe.NOM.PL in it.LOC not survive.PRS.3PL
konservanty emu ne nužny.
 preservative.NOM.PL it.DAT not necessary.PL

- c. ??*Konservanty, ibo mikroby v masle ne*
 preservative.NOM.PL for microbe.NOM.PL in it.LOC not
vyživajut, emu ne nužny.
 survive.PRS.3PL it.DAT not necessary.PL

In the Russian dependency treebank SynTagRus, which is a subcorpus within the RNC, no instances of *ibo*-clauses have been attested that are center-embedded or preposed to the main clause.

3.3.2 ATB, gapping, scope of mood

The criteria in the second group at first sight go contrary to the assumption that *ibo* is coordinating. *Ibo* disallows ATB extraction, i.e., an extraction in which the extracted constituent is simultaneously related to a gap in every clause, as in (28). The ban on ATB extraction is typical of subordinating markers.

- (28) ??*Čto Ivan ljubit_, ibo Vasja nenavidit_?*
 what.ACC Ivan.NOM love.PRS.3SG for Vasja.NOM hate.PRS.3SG
 ‘What does Petya love_ for Vasya hate _?’

Ibo disallows gapping as well, which is also deemed to be a symptom of subordination. Cf. (29).

- (29) ??*Respublikancy polučili men’sinstvo mest,*
 republican.NOM.PL receive.PST.PL minority.ACC seat.PL.GEN
ibo bol’sinstvo – demokraty.
 for majority.ACC democrat.NOM.PL
 ‘The Republicans have received the majority of seats, for the Democrats [received] the minority.’
 (Adapted from Belyaev 2015b: 44)

However, the possibility of ATB seems to be linked directly to some sort of semantic symmetry of the interclausal relation, which is clearly absent from the case of the causal *ibo*, and only indirectly to the coordination-subordination distinction. Another conjunction that gives evidence to this assumption is the Russian *tak čto* ‘so’, cf. (30). *Tak čto* introduces result clauses, so it is as semantically asymmetric as *ibo* is. And exactly like *ibo*, it displays the majority of properties of a coordinating marker except for the possibility of ATB extraction (see Pekelis 2015 for details).

- (30) *Vasja slomal tvoju mašinku, tak čto*
 Vasja.NOM break.PST.3SG POSS.2SG toy.car.ACC so
Petja ejo vykinul.
 Petja.NOM she.ACC throw.away.PST.M.SG
 ‘Vasya broke your toy car, so Petya threw it away.’

Note also that according to relatively recent proposals such as (Nunes 2001), the structure of the sentences with ATB-extracted elements is similar to the structure of the sentences with parasitic gaps, which usually occur in adverbial (hence, subordinate) clauses.

Gapping does not seem to be a reliable criterion for coordination and subordination either, at least in Russian. What is relevant to gapping in Russian is the presence of a semantic contrast between topics and/or foci of the combined clauses. Such a contrast is present in constructions with the Russian coordinating marker *a*, but is absent in constructions with the coordinating marker *i*, albeit both mean roughly ‘and’ (see Uryson 2011 for a detailed semantic analysis of *a* and *i*). Accordingly, gapping is felicitous with *a*, but unnatural with *i*:

- (31) *Ivan igraet na skripke, a / ?i*
 Ivan.NOM play.PRS.3SG on violin.LOC and / and
Petr – na rojale.
 Peter.NOM on piano.LOC
 ‘Ivan plays the violin, while/and Peter plays the piano.’

The last criterion in this group is the scope of subjunctive mood assigned by the matrix verb. In this regard, *ibo* does not pattern as a subordinating marker. As shown in (32a) and (32b), *ibo* differs from *potomu čto* in that it cannot remain out of the scope of subjunctive assigned by the verb *hotet* ‘want’.¹ However, it does not pattern with the canonical coordinating marker *i* ‘and’ either, since it cannot be within the scope of the subjunctive, cf. (32b) and (32c). *Ibo* is simply unembeddable together with its licensing clause, so the criterion yields no clear results.

Presumably, this again is due to the fact that *ibo* is coordinating, on the one hand, and introduces a semantically asymmetrical relation, on the other. Being coordinating, *ibo* disallows focusing of the causal relation, which occurs in embedding contexts like (32a), where the cause introduced by the *potomu čto*-

¹ Russian subjunctive verb forms are morphologically identical to indicative past tense forms. The form *ljubil*, as in (32), if taken out of context, is homonymous between past and subjunctive. However, in addition to the verbal affix, subjunctive is also marked analytically by the particle *by* (*b*), which cannot be separated from the complementizer *čto* ‘that’ in complement clause, cf. *čto by* in (32a), (32b), and (32c). Thus, the form *ljubil* in (32) stands unequivocally for subjunctive (see Brext (1985) for details).

clause is being implicitly compared with other eventual causes. At the same time, due to its asymmetric (causal) semantics *ibo* cannot avoid focusing of the relation it expresses, as semantically symmetric coordinate markers normally do. Consider Example (32c), in which the symmetric relation expressed by the coordinating *and* is *not* being focused while the *and*-clause is being embedded under the verb *hotet*’ together with its licensing clause. For space reasons, I will not expand on the details of this contrast here.

- (32) a. *Esli ty budeš ženit'sja na devuške, to*
 if you.NOM AUX.2SG marry.INF on girl.LOC then
ja hoću, čtoby ty ženilsja na
 I.NOM want.PRS.1SG that you.NOM marry.SBJV.SG on
*nej, **potomu što** ejo **ljubiš** / ***ljubil**.*
 she.LOC because she.ACC love.PRS.2SG/ love.SBJV.SG
 ‘If you marry a girl, I want you to marry her because you love her. [And not because she’s rich.]’
 (Belyaev 2015b: 44)
- b. *Esli ty budeš ženit'sja na devuške, to*
 if you.NOM AUX.2SG marry.INF on girl.LOC then
ja hoću, čtoby ty ženilsja na
 I.NOM want.PRS.1SG that you.NOM marry.SBJV.SG on
*nej, **ibo** ejo **??ljubiš** / ***ljubil**.*
 she.LOC for she.ACC love.PRS.2SG/ love.SBJV.SG
 ‘If you marry a girl, I want you to marry her because you love her. [And not because she’s rich.]’
- c. *Ja hoću, čtoby ty ženilsja i*
 I.NOM want.PRS.1SG that you.NOM marry.SBJV.SG and
***podaril** mne vnukov.*
 give.SBJV.SG I.DAT grandchild.ACC.PL
 ‘I want you to marry and give me grandchildren.’

Thus, although this group of criteria apparently gives a piece of evidence in favor of the subordinating status of *ibo*, I suggest that in actual fact it fails to qualify *ibo* in terms of coordination and subordination.

3.3.3 Semantic criteria

Contrary to the previous group of criteria, the semantic criteria, which test whether the semantic relation expressed by the marker can be focused by external operators (see Section 3.1), allow qualifying *ibo* as a coordinating marker in a uniform way.

First, *ibo* can be used neither with focus particles *tol'ko* 'only' or *imenno* 'exactly', nor under negation. No instances have been attested either in the main corpus or the newspaper corpus of the RNC except for one, Example (33), which is highly stylistically marked.

- (33) A *potomu-to* *xudožniku* *i* *nadležit* *tverdo*
 and therefore-PTCL artist.DAT PTCL must.PRS.3SG firmly
verovat' *v* *načala* *i* *koncy!* **Ne** **ibo**
 believe.INF in beginning.PL.ACC and end.PL.ACC not for
absurdno, **a** **ibo** ... *T'ma*.
 absurd but for darkness.NOM
 'Therefore, the artist must firmly believe in the beginnings and the ends!
 Not because it is absurd, but because ... Darkness.'
 (RNC)

Second, *ibo* cannot participate in the *èto*-focus construction, as shown in (34). No instances of *ibo* within the *èto*-focus have been attested either in the main or the newspaper corpus.

- (34) *Paru* *dněj* *nazad* *my* *govorili* *ob*
 couple.ACC day.PL.GEN ago we.NOM talk.PST.PL about
ètom *s* *truppoj*, *i* *ni* *odin* *tenor* *ne*
 this.LOC with troupe.INS and not one.NOM tenor.NOM not
obidelsja <...>. — **Èto** *potomu čto/ ??ibo* *vy*
 be.offended.PST.M.SG this because for 2PL.NOM
mètr, *inače* *oni* *by* *posporili*.
 master.NOM otherwise they.NOM SBJV argue.SBJV.PL
 'A couple of days ago we talked about this with the troupe, and not a single
 tenor was offended. – This [is] because you are a master, otherwise they
 would argue.'
 (RNC)

Third, *ibo* does not allow extraction out of its licensing clause, just as a coordinating marker would do in accordance with the Coordinate Structure Constraint (CSC). In Example (35), a *yes/no*-question with the focus in the main clause is felicitous with *ottogo čto* and is infelicitous with *ibo*. Note that Belyaev (2015b: 55), following Kehler (2002), argues that CSC serves to test coordination and subordination in semantics.

- (35) *Pravil'no* *li* *osudit'* *prozu* *Lermontova*,
 right Q condemn.INF prose.ACC Lermontov.GEN
ottogo čto / **??ibo** *on* *dvaždy* *ssylaetsja* *na*
 because / for he.NOM twice refer.PRS.3SG to

kakogo-to *nevozmožnogo* “*krokodila*”?
 some.ACC-INDF impossible.ACC crocodile.ACC
 ‘Is it right to condemn Lermontov’s prose because he refers twice to some
 impossible “crocodile”?’
 (RNC)

Instances of *ibo* in the RNC containing a *wh*-word within the licensing clause are all instances of the speech act use of *ibo*, as in (36). In such cases, the *ibo*-clause is not in the scope of the *wh*-word, hence, no violation of the CSC occurs.

- (36) *Do kakix že predelov on možet*
 to what.GEN PTCL limit.GEN he.NOM can.PRS.3SG
pojti v svojom želanii zagladit’ vinu pered
 go.INF in his.LOC desire.LOC amend.INF fault.ACC before
xozjaevami, ibo oni ot nego za ètu
 owner.INS.PL for they.NOM from he.GEN for this.ACC
statju mogut potrebovat’ očen’ mnogogo?
 article.ACC can.PRS.3PL demand.INF very much.GEN
 ‘To what extent can he go in his desire to make amends to the owners,
 because they can demand a lot from him for this article?’
 (RNC)

Fourth, and finally, *ibo* can only very marginally introduce an answer to a *why*-question. Example (37), found on the internet, sounds rather awkward.

- (37) *Počemu? Ibo tot, kto rešil*
 why for that.NOM who.NOM decide.PST.M.SG
pervym razorvat’ otnošenija, stalkivaetsja s
 first.INS break.off.INF relationship.ACC.PL face.PRS.3SG with
somnenijami otnositel’no pravil’nosti vybora.
 doubt.INS.PL about correctness.GEN choice.GEN
 ‘Why? For the one who decided to break off the relationship first is faced
 with doubts about the right choice.’
 (Google)

3.3.4 *Ibo*: interim conclusions

The results of different criteria applied to *ibo* in the previous subsections are summarized in Table 4. The shaded cells refer to the criteria that I deem to be unreliable for distinguishing coordination and subordination in Russian. My main conclusions are as follows: I assume *ibo*-clauses to be coordinated both in syntax

Table 4: *Ibo* according to coordination-subordination tests.

	Linear order	ATB	Gapping	Scope of mood	èto- focus	Focus particles, NEG	CSC	why- question
<i>ibo</i>	COOR	SUB	SUB	?	COOR	COOR	COOR	COOR

and semantics.² I suggest that one of the reasons for which the ATB, gapping and scope of mood criteria yielded doubtful or unclear results are the causal (asymmetric) semantics of *ibo*. These criteria are based mainly on canonical coordination and subordination cases, while the causal semantics are a strong bias towards subordination. For the same reason, *ibo* marginally allows patterns associated with subordinate structures (cf. its occasional use under negation or as an answer to a *why*-question).

However, the portrait of *ibo* remains incomplete unless its stylistic traits are taken into consideration. *Ibo* is qualified as an archaic marker by a number of dictionaries of Russian (cf. Evgen’eva 1985: 626). But for present-day Russian, this does not seem to be correct, since *ibo* is frequent enough in the newspaper corpus of the RNC (6,322 instances, compared with 1,242 of *ottogo čto*). Interestingly, *ibo* was perceived as archaic in the Russian language as early as the first half of the 19th century according to Bulachovsky (1954: 395). What is therefore puzzling about *ibo* is the fact that a marker that has been perceived as archaic for two centuries has “survived” and is being productively used in modern newspaper texts. Given what was said above, one may speculate that one of the reasons why *ibo* is still in use is that it satisfies the need for a coordinating causal conjunction.

4 Russian causal clauses as syntactically different types of adverbial clauses

In this section, I analyze Russian causal clauses introduced by *potomu čto*, *ottogo čto*, *poskol’ku* and *tak kak*. Based on a number of syntactic and interpretative features displayed by these clauses, I argue that they are better differentiated as

² Strictly speaking, my analysis has demonstrated that *ibo* is coordinating at the constituent structure level, which is the first syntactic level of coordination and subordination in Belyaev’s terms, while the criteria associated with the second syntactic level, the functional structure, yielded no clear results. However, as I noted in Section 3.1, the validity of the distinction between two syntactic levels of coordination and subordination has to be investigated in more detail. The latter issue lies beyond the scope of the present article.

belonging to different classes of adverbial clauses, which differ in degree of syntactic integration with the host clause, than in terms of coordination and subordination. *Ottogo čto*-clauses turn out to be more tightly integrated than *potomu čto*-clauses, which, in turn, are more tightly integrated than both *poskol'ku*- and *tak kak*-clauses. Interestingly, the preposition *ot*, which is part of *ottogo čto* (cf. Section 2), differs from the preposition *po*, which is part of *potomu čto*, in that the former presupposes a tighter link between cause and effect than the latter (Boguslavskaja and Levontina 2004: 83). Most probably, this difference between the prepositions gave rise to the difference in terms of degree of integration that we find in the respective conjunctions.

Since I generally follow the (Frey 2016) approach when interpreting the distinction between different classes of adverbial clauses (central, peripheral and non-integrated clauses), I start with the essentials of this approach in Section 4.1. In Sections 4.2 and 4.3, I introduce my analysis of *potomu čto*-, *poskol'ku*-, *tak kak*- and *ottogo čto*-clauses. In Section 4.2 I survey a number of properties of these clauses, which, as I suggest, indicate different degrees of their syntactic integration. I go on to characterize *potomu čto*-, *ottogo čto*-, *poskol'ku*- and *tak kak*-clauses as belonging to different classes of adverbial clauses in Section 4.3.

4.1 The essentials of Frey's (2016) approach to German causal clauses

The approach is based on the well-known distinction between three syntactic classes of adverbial clauses, namely, the central adverbial clauses (CACs), the peripheral adverbial clauses (PACs), and, in the terminology of Frey (2012), the non-integrated dependent clauses (NonICs). According to Frey's (2016) treatment of this distinction, which is in many respects congruent to other approaches (Endo 2012; Endo and Haegeman 2019; Haegeman 2012, among others), the differences between the classes can be summarized as follows. A CAC is licensed in the standard way inside its host's TP by the verb or one of its functional projections. A PAC is also syntactically licensed by its host, but contrary to a CAC is licensed in a very high position by the host's Force-projection. A NonIC is not part of the syntactic structure of its associated clause; it is a "syntactic orphan". Its licensing happens semantically by a rhetorical relation that connects it with its associated clause.³

³ Whether the relation that connects a NonIC to its associated clause is in fact rhetorical by nature, i.e., whether it belongs to the type of relations that emerge in discourse, remains to be clarified. My analysis of NonICs and coordinated clauses in Section 5 suggests that only in the latter case a conjunction can be assumed to introduce a rhetorical relation.

Frey (2016) considers three types of German causal clauses: *da* ‘since’-clauses, *weil* ‘because’-clauses that have the finite verb in second position (*weil*-V2-clause) and *weil* ‘because’-clauses that have the finite verb in final position (*weil*-Vf-clause). According to his analysis, these types differ in terms of the above syntactic classification. A *weil*-Vf-clause is by default a CAC, but, if supported by indicators (i.e., words or constructions that emphasize the respective interpretation), it can occur as a PAC or a NonIC. A *da*-clause occurs as a PAC; if supported by indicators, it can occur as a NonIC. A *weil*-V2-clause necessarily occurs as a NonIC. Note that Frey treats both *weil*-Vf, *weil*-V2 and *da*-clauses as adverbial clauses. This means that, contrary to what Belyaev (2015b) suggests for Russian causal clauses, Frey does not propose to interpret any distributional differences between *weil*-Vf, *weil*-V2 and *da*-clauses in terms of coordination and subordination (As mentioned in the Introduction, the term “subordinate” is substantially conventional when applied to NonICs. See more on the relationship between NonICs and coordinated clauses in Section 5).

The examples in (38) and (39) illustrate the syntactic differences between *weil*-Vf-, *da*- and *weil*-V2-clauses. As follows from (38), the *weil*-Vf-clause, on the one hand, and *da*- and *weil*-V2-clause, on the other, pattern differently with respect to variable binding. In (38a), we observe binding of a quantified DP into a *weil*-Vf-clause. But the binding is possible neither into a *da*-clause, as in (38b), nor into a *weil*-V2-clause, as in (38c). This contrast is accounted for by the assumption that, being a CAC, the *weil*-Vf-clause is base generated in a deep position of the host clause, which is inside the c-command domain of the subject of the host. On the contrary, neither a *da*-clause nor a *weil*-V2-clause can occur as a CAC, hence they are base generated in a position that is outside of the c-command domain of the subject of the host.

- (38) a. *Kaum jemand_i war beleidigt, weil er_i unterbrochen wurde.*
 hardly anyone was offended because he interrupted was
 ‘Hardly anyone was offended because he was interrupted.’
 b. **Kaum jemand_i war beleidigt, da er_i unterbrochen wurde.*
 hardly anyone was offended because he interrupted was
 ‘Hardly anyone was offended since he was interrupted.’
 c. **Kaum jemand_i war beleidigt, weil er_i wurde unterbrochen.*
 hardly anyone was offended because he was interrupted
 ‘Hardly anyone was offended because he was interrupted.’

While the *da*- and *weil*-V2-clauses pattern together with respect to binding, they behave differently with respect to the option of being positioned in the prefield of a

German verb-second clause. Both CACs and PACs, hence both the *weil*-Vf- and *da*-clauses, can be positioned in the prefield, while NonICs, hence the *weil*-V2-clauses, cannot. Cf. (39).

- (39) a. *Weil sie krank ist, ist Maria sehr bleich.*
 because she ill is is Maria very pale
 ‘Because she is ill, Maria is very pale.’
 b. *Da sie krank ist, ist Maria sehr bleich.*
 since she ill is is Maria very pale
 ‘Since she is ill, Maria is very pale.’
 c. **Weil sie ist krank, ist Maria sehr bleich.*
 because she is ill is Maria very pale
 ‘Because she is ill, Maria is very pale.’

The central idea of Frey’s (2016) approach is that there is *a one-to-one mapping between the external syntax of a causal clause and its semantic type*, i.e., the interpretative level of a causal clause corresponds to the degree of its integration with the licensing clause. Thus, a causal CAC is base generated inside its licensing clause in a deep position and refers to a relation between *eventualities* (so it can only express an eventuality-related meaning, but not, say, an epistemic meaning). A causal PAC is base generated inside its licensing clause in a high position and refers to a relation between *propositions*, understood as functions saying whether an eventuality is realized in certain worlds or not. A causal *NonIC* is a syntactic orphan and refers to a relation between speech acts.

As an illustration, consider the contrast between (40a) and (40b). In both examples, the causal relation is to be interpreted at the epistemic level. That is why (40a) is ill-formed: the *weil*-Vf-clause, being by default a CAC, can only refer to a relation between eventualities. However, in (40b), the epistemic interpretation is forced by the epistemic particle *wohl*. As a special “indicator” of the epistemic reading, *wohl* allows the *weil*-Vf-clause to be a PAC and to refer to a relation between propositions.

- (40) a. **Weil sie sehr bleich ist, ist Maria krank.*
 because she very pale is is Maria ill
 ‘Because she is very pale, Maria is ill.’
 b. *Weil sie sehr bleich ist, ist Maria wohl krank.*
 because she very pale is is Maria probably ill
 ‘Because she is very pale, Maria is probably ill.’

Without going into further details of the assumptions that underlie this reasoning, I will try to show in the following sections that the Russian data fit this analysis very well, though not exactly in the same way German causal clauses do.

4.2 *Ottogo čto*-, *potomu čto*-, *poskol'ku*- and *tak kak*-clauses: further properties

In the present section, I consider a number of further syntactic and semantic properties displayed by *ottogo čto*-, *potomu čto*-, *poskol'ku*- and *tak kak*-clauses. These properties, as I argue in Section 4.3, reveal that the causal clauses under examination represent different syntactic classes of adverbial clauses.

4.2.1 Scope of negation

Only *ottogo čto*-clauses may occur inside the scope of the matrix negation. Consider example (41a), in which it is denied that she falls into a trance because people die. *Ottogo čto* cannot be substituted here with any of the other three markers, since in this case the causal meaning is outside the scope of negation, which creates a rather contradictive meaning (41b).

- (41) a. *Žizn' priučila ejo ne vpadat' v*
 life.NOM teach.PST.F.SG she.ACC not fall.into.INF in
trans, ottogo čto vokrug poroj umirajut ljudi.
 trans.ACC because around sometimes die.PRS.3PL people.NOM
 'Life taught her not to fall into a trance because sometimes people die around.'
 (RNC)

- [Neg > *ottogo čto*]
- b. *Žizn' priučila ejo ne vpadat' v*
 life.NOM teach.PST.F.SG she.ACC not fall.into.INF in
trans, #potomu čto / #poskol'ku / #tak kak vokrug poroj
 trans.ACC because/since/as around sometimes
umirajut ljudi.
 die.PRS.3PL people.NOM
 'Life taught her not to fall into a trance since sometimes people die around.'

[*Potomu čto/poskol'ku/tak kak* > neg]

(42), (43) and (44) are examples with *potomu čto*, *poskol'ku* and *tak kak* from the RNC, in which the causal meaning is outside the scope of negation. These examples do not allow an interpretation according to which the causal relation is inside the scope of negation, although semantically such an interpretation is not to be excluded. Example (42), for instance, gives a cause for why he was not capricious. The reading according to which it is denied that he was capricious because it was difficult for him to scream is not available for (42), although it would make sense.

- (42) *No ne kaprizničal, potomu čto emu uže*
 but not be.capricious.PST.M.SG because he.DAT already
bylo trudno kričat'. Mog tol'ko xripet'
 be.PST.N.SG difficult scream.INF can.PST.M.SG only wheeze.INF
negromko, i zakryval glaza.
 quietly and close.PST.M.SG eye.PL.ACC
 'But [he] was not capricious, because it was already difficult for him to
 scream. He could only wheeze quietly, and closed his eyes.'
 (RNC)

[*Potomu čto* > neg; ??neg > *potomu čto*]

- (43) *On nikogo ne ubil, poskol'ku ego operedili ...*
 he.NOM nobody.ACC not kill.PST.M.SG since he.ACC be.ahead.PST.PL
 'He didn't kill anyone, because someone was ahead of him ...'
 (RNC)

[*Poskol'ku* > neg; ??neg > *poskol'ku*]

- (44) *Ja tože ne nervničaju, tak kak čitaju*
 I.NOM also not be.nervous.PRS.1SG as read.PRS.1SG
"Koronaciju" Akunina.
 coronation.ACC Akunin.GEN
 'I'm not nervous either, as I read The Coronation of Akunin.'
 (RNC)

[*Tak kak* > neg; ??neg > *tak kak*]

4.2.2 Scope of epistemic modals

Contrary to negation, with respect to the scope of epistemic modals, all four clause types pattern identically: all of them can occur inside the scope of epistemic modals.⁴ Examples (45)–(48) illustrate this for each clause type. In (46), for instance, it is assumed that the reason why my friend writes me rarely is that he found another woman. Example (46) does not give a reason for the assumption 'my

⁴ The contrast between a *potomu čto*-clause that is inside the scope of an epistemic modal and the one outside the scope of a modal was considered in (Weiss 1989: 313). Weiss analyzes this contrast in terms of coordination and subordination, arguing that being inside the scope of a modal indicates a tighter link between the clauses, hence, a tighter "degree" of subordination than being outside the scope of a modal. However, as already mentioned above and elaborated in detail in Section 4.3, my analysis suggests that this and similar contrasts are in line with treating *potomu čto*-clauses as occurring in different classes of adverbial clauses.

friend writes me rarely’, as it would be if the causal meaning were outside the scope of the modal *verojatno* ‘probably’. In (47) and (48), the causal meaning is inside the scope of *verojatno*, too. In (47), it is supposed that the reason why the legislators took June 20, 1991, as the basis is that before that date Sberbank remained state owned. Example (47) does not give a reason why the assumption ‘the legislators took June 20, 1991, as the basis’ is made. Similarly in (48), the assumption concerns the reason why the residents did not open the door for a long time. (48) does not give a reason for the assumption, ‘the residents did not open the door for a long time’.

- (45) *Oni, verojatno, nelovko sebja čuvstvovali,*
 they.NOM probably uncomfortable themselves feel.PST.PL
ottogo čto ehali vmeste, da eščë ne odni.
 because travel.PST.PL together and even not alone
 ‘They probably felt uncomfortable because they were traveling together,
 and not even alone.’
 (RNC)

[Mod > *ottogo čto*]

- (46) *Kakoj-to gvardii major, osetin,*
 some.NOM-INDF guard.GEN major.NOM Ossetian.NOM
pytalsja uxazivat’ za mnoj i staralsja
 try.PST.M.SG court.INF about I.INS and try.PST.M.SG
dokazat’, čto, verojatno, moj drug redko
 prove.INF that probably my.NOM friend.NOM rarely
pišet,
 write.PRS.3SG
potomu čto našjol druguju.
 because find.PST.M.SG another.woman.ACC
 ‘A Guards major, an Ossetian, tried to court me and tried to prove that,
 probably, my friend rarely writes because he found another [woman].’
 (RNC)

[Mod > *potomu čto*]

- (47) *Počemu kompensirujut tol’ko vklady,*
 why compensate.PRS.3PL only deposit.ACC.PL
otkrytye strogo do 20 ijunja 1991 goda <...>?
 open.PP.PL.ACC strictly up.to 20 June.GEN 1991 year.GEN
Verojatno, zakonodатели vzjali za osnovu
 probably legislator.NOM.PL take.PST.PL as basis.ACC
ètu
 this.ACC
datu, poskol’ku do 20 ijunja 1991 goda
 date.ACC since until 20 June.GEN 1991 year.GEN

Sberbank ostavalsja gosudarstvennym.

Sberbank.NOM remain.PST.M.SG state.owned.INS

‘Why are only deposits compensated that were opened strictly up to June 20, 1991? Probably, the legislators took this date as the basis because until June 20, 1991 Sberbank remained state-owned.’

(RNC)

[Mod > *poskol’ku*]

- (48) *Kak ustanovili sotrudniki milicii, v*
 as find.PST.M.SG officer.PL.NOM police.GEN in
kvartire varilsja “vint” – proizvodnoe
 apartment.LOC brew.PASS.PST.M.SG “screw”.NOM derivative.NOM
amfetamina. Verojatno, žil’cy dolgo ne
 amphetamine.GEN probably resident.PL.NOM for.a.long.time not
otkryvali dver’, tak kak vylivali preparaty
 open.PST.PL door.ACC as pour.PST.PL preparation.PL.ACC
v vannu
 in bathtub.ACC

‘As police officers found, the “screw”, an amphetamine derivative, was brewed in the apartment. Probably the residents did not open the door for a long time because they poured the preparations into the bathtub.’

(RNC)

[Mod > *tak kak*]

4.2.3 Epistemic use

While, as shown in the previous section, the causal relation introduced by any of four conjunctions may occur inside the scope of epistemic modals, the opposite is not true. Not all of them may occur outside the scope of an epistemic modal, or, in other words, not all of them can be used epistemically. The instances of the epistemic use of *poskol’ku* and *tak kak* were given in Section 3.2.1, cf. Examples (17) and (18)). The example in (49) shows that the epistemic use is also possible for *potomu što*, while *ottogo što* disallows it.

- (49) *Oni, navernoe, oba kurili, potomu što/*
 they.NOM probably both.NOM smoke.PST.PL because/
??ottogo što kogda on vošel, komnata
 because when he.NOM enter.PSR.M.SG room.NOM

byla sinjaja ot dyma.
 be.PST.F.SG blue from smoke.GEN
 ‘They probably both smoked, because when he entered, the room was
 blue with smoke.’
 (RNC)

4.2.4 Speech act use

The phenomenon of speech act use shows a more sophisticated contrast between the four types of Russian causal clauses. *Ottogo čto* cannot be used as a speech act conjunction. It is ungrammatical in (50), where *potomu čto* is used at the speech act level, i.e., to introduce the reason why the speaker is performing the imperative speech act.

- (50) *Berite menju i zakazyvajte, potomu čto/*
 take.IMV.2PL menu.ACC and order.IMV.2PL because/
 ??*ottogo čto ja umiraju s golodu.*
 because I.NOM die.PRS.1SG from hunger.GEN
 ‘Take the menu and order, because I’m starving.’
 (RNC)

Potomu čto, as (50) illustrates, can be used as a speech act conjunction. However, this is the case only if the illocutionary force of the main clause is imperative (cf. *berite* ‘take’ in (50)). If the main clause is declarative, as in (51), or interrogative, as in (52), *potomu čto* cannot be used at the speech act level unless the *potomu čto*-clause and the question it refers to belong to different sentences, as in (53a).⁵ Example (53b), where *potomu čto* refers to a question within the same sentence, is ill-formed. Note also that the English translations of (51) and (52) are perfectly acceptable, hence *potomu čto* differs in this respect both from the English *since* and *because*.

- (51) **Ivan ušjol, potomu čto ty*
 Ivan.NOM leave.PST.M.SG because 2SG.NOM
vsjo znaeš?
 everything.ACC know.PRS.2SG
 ‘Did Ivan leave, since you know everything?’
 (The English example adapted from Charnavel 2019: Example (73a))

5 I am grateful to an anonymous reviewer who brought Example (53a) to my attention.

- (52) **Ivan zdes', potomu što ja ne xoču,*
 Ivan.NOM here because I.NOM not want.PRS.1SG
čtoby ty natknulsja na nego neožidanno.
 that you.NOM run.into.SBJV.M.SG on he.ACC suddenly
 'John is here, because I don't want you to run into him unprepared.'
 (The English example from Verstraete 1999: Example (6))

- (53) a. – *Nu on iz teatra ne uxodil?* – *Net.*
 well he.NOM from theater.GEN not leave.PST.M.SG no
 – *Potomu što kak-to govoril što vot uxodit v*
 Because once say.PST.M.SG that PTCL leave.PRS.3SG in
teatr odnogo aktera.
 theater.ACC one.GEN actor.GEN
 '– Did he leave the theater? –No. – [I am asking you] Because [he] once
 said that he was leaving for a one-man show.'
 (Zemskaja 1978: 206, cited from Weiss 1989: 312)
- b. ??*On iz teatra ne uxodil, potomu što*
 he.NOM from theater.GEN not leave.PST.M.SG because
kak-to govoril što uxodit v teatr odnogo
 once say.PST.M.SG that leave.PRS.3SG in theater.ACC one.GEN
aktera?
 actor.GEN
 'Did he leave the theater, since [he] once said that he was leaving for a
 one-man show?'

The special status of the imperative is presumably due to the fact that the causal sentences with an imperative main clause always require a speech act interpretation, hence the imperative within these sentences serves to *explicitly indicate* that the causal clause is to be interpreted at the speech act level. In this respect, the imperative sentences differ from the interrogative and declarative ones, which normally allow an eventuality-related reading. This assumption is corroborated by the fact that *ottogo što* cannot co-occur at all with an imperative main clause, whereas it can co-occur with an interrogative main clause. In the RNC, no instances of *ottogo što* within an imperative sentence have been attested, while there are instances of *ottogo što* within questions, which require an eventuality-related reading (cf. (54)).

- (54) *Čto izmenitsja ottogo, što narod*
 what.ACC change.FUT.3SG because people.NOM
vyskažet svojo mnenie?
 express.FUT.3SG their.ACC opinion.ACC
 'What will change because people express their opinion?'
 (RNC)

Separating a *potomu čto*-clause and a question it refers to as different sentences, as in (53a), actually serves the same purpose. Due to such separation the causal relation is to be obligatorily interpreted at the speech act level, since the components of one and the same question (which the clauses in (53a) would be if the link between them were eventuality-related) cannot belong to different sentences. In (53b), with no separation, hence, no special indication of the speech act reading, this reading is not admissible.

It follows from this reasoning that while *ottogo čto* cannot be used at all as a speech act conjunction, *potomu čto* requires a special indicator that supports the speech act use to be present in the sentence. Note that the role of “indicators” is emphasized within Frey’s (2016) approach as well. According to Frey, a *da*-clause can occur as a NonIC only if supported by indicators.

Contrary to *potomu čto*, both *poskol’ku* and *tak kak* allow the speech act reading regardless of any special indicator being present in the sentence. In Examples (55) and (56), *poskol’ku* and *tak kak* occur within a question and both must be interpreted at the speech act level. Thus, neither of the markers, when used on this level, is limited to the imperative structure.

- (55) <Ne uveren, čto my govorim ob
not sure that we.NOM talk.PRS.1PL about
odnoj i toj že istorii ...> No **poskol’ku**
one.LOC and that.LOC PTCL story.LOC but since
zašla reč, znaeš li ty, ved’ma,
go.PST.F.SG speech.NOM know.PRS.2SG Q 2SG.NOM witch.NOM
počemu u dramy mužskaja maska, a u
why at drama.GEN male.NOM mask.NOM and at
komedii –ženskaja?
comedy.GEN female.NOM
‘<I’m not sure that we are talking about the same story ...> But since we
are talking about it, do you know, witch, why does drama have a male
mask and comedy a female one?’
(RNC)

- (56) **Tak kak** vseh del ne peredelaeš, to
as all.GEN work.GEN not do.FUT.2SG then
nado li tak xlopotať?
necessary Q so work.hard.INF
‘Since you cannot do all the work, is it necessary to work so hard?’
(RNC)

4.2.5 Relative versus absolute tense marking

One more parameter according to which Russian causal clauses differ is the possibility of the relative interpretation of the tense form they contain. A tense form within a subordinate clause is used relatively if it anchors the event temporal localization to the main event, and it is used absolutely if it anchors the event temporal localization to the speech act (Comrie 1985: 36). In this respect, again, *ottogo čto*-clauses are opposed to other clause types being the only ones to allow the relative tense marking. Consider the examples in (57): In (57a), the embedded predicate *možet* ‘can’ within the *ottogo čto*-clause is marked for present tense, which serves to express simultaneity with the time point in the past encoded by the main predicate *zaperežival* ‘got upset’. Thus, *možet* in (57a) is used relatively. None of the three other markers are admissible in the same context. Note that all of them are felicitous if the embedded predicate is marked for past tense, hence, used absolutely, as in (57b).

- (57) a. *Vljubljonnyj v Tanju rebėnok slegka*
 fall.in.love.PP.NOM in Tanya.ACC child.NOM a.bit
zaperežival, ottogo čto/??potomu čto/??poskol’ku/??tak kak
 be.upset.PST.M.SG because / because / since / as
ne možet poučastvovat’ v ètom zanimatel’nom
 not can.PRS.3SG participate.INF in this.LOC dispute.LOC
spore
 entertaining.LOC
 ‘The child who was in love with Tanya was a bit upset because he could not participate in this entertaining dispute.’
 (RNC)
- b. *Vljubljonnyj v Tanju rebėnok slegka*
 fall.in.love.PP.NOM in Tanya.ACC child.NOM a.bit
zaperežival, ^{OK}potomu čto / ^{OK}poskol’ku / ^{OK}tak kak ne
 be.upset.PST.M.SG because / since / as not
mog poučavstvovat’ v ètom zanimatel’nom
 can.PST.M.SG participate.INF in this.LOC entertaining.LOC
spore.
 dispute.LOC
 ‘The child who was in love with Tanya was a bit upset because he could not participate in this entertaining dispute.’

Table 5: *Ottogo čto*, *potomu čto*, *poskol’ku*, *tak kak*: formal distinctions.

	Cause < mod	Cause < NEG	Rel. tense	Epistemic (cause > mod)	Speech act
<i>ottogo čto</i>	+	+	+	–	–
<i>potomu čto</i>	+	–	–	+	+/– (only if supported by indicators)
<i>poskol’ku</i>	+	–	–	+	+
<i>tak kak</i>	+	–	–	+	+

4.2.6 *Ottogo čto*, *potomu čto*, *poskol’ku* and *tak kak*: interim conclusions

The formal distinctions between the four clause types sketched out in Sections 4.2.1–4.2.5, are summarized in Table 5. One can see that *potomu čto*, *poskol’ku* and *tak kak* form a perfectly homogenous group with the only exception being that which concerns the speech act parameter. *Ottogo čto* behaves differently with respect to all parameters, excluding the scope of epistemic modals.

4.3 *Ottogo čto*-, *potomu čto*-, *poskol’ku*- and *tak kak*-clauses as different types of adverbial clauses

Based on the facts introduced in Section 4.2, in the present Section I characterize the *ottogo čto*-, *potomu čto*-, *poskol’ku*- and *tak kak*-clauses with respect to CAC-, PAC- or NonIC-classes. I argue that the formal distinctions observed for the four clause types are due to different degrees of syntactic integration associated with CACs, PACs and NonICs. In doing so, I reject the analysis of these clauses and of the contrasts they display in terms of coordination and subordination, proposed by Belyaev (2015b) (see also Weiss 1989). Once *ottogo čto*-, *potomu čto*-, *poskol’ku*- and *tak kak*-clauses are recognized as adverbial clauses, they cannot simultaneously be coordinated, with adverbial clauses being a subclass of subordinate clauses according to the common view.

Summarizing what is generally assumed within cartographic syntax (see in particular Cinque (1999: 106, 124); Krifka (2013: 5); Rizzi (1997: 297)), the hierarchical structure of the left periphery of a clause can be presented as in (58). Importantly, for my analysis of Russian causal clauses, the Force projection is at the very top of the clause structure, while the epistemic modality is supposed to be higher than negation, which, in turn, is higher than VP.

(58) *Force* > *Mod*_{epistemic} > (*Neg*) > *TP* > (*Neg*) > *VP*

If one roughly accepts the structure in (58), the distributional data observed for *ottogo čto*-, *potomu čto*-, *poskol'ku*- and *tak kak*-clauses can be accounted for by the following assumptions. An *ottogo čto*-clause is a CAC – it can be neither a PAC nor a NonIC. It is integrated with its licensing clause somewhere at the VP level or at least lower than negation. Based on the structure in (58), these suggestions allow to account for the facts from (i) to (iv):

- (i) an *ottogo čto*-clause may occur inside the scope of matrix negation;
- (ii) it can be used neither epistemically nor at the speech act level;
- (iii) it may occur inside the scope of epistemic modals;
- (iv) it allows the relative tense marking of its predicate.

The points in (i) and (iii) follow from (58) and my assumptions straightforwardly; (ii) follows from the idea, developed by Frey (2016), that the external syntax of a causal clause maps its semantic type so that a causal CAC can only refer to a causal relation between eventualities. With respect to (iv) note that complement clauses, contrary to adverbial clauses, tend to have relative tense marking (Šnittke 2020), on the one hand, and are generated inside the VP, on the other. The assumption that the *ottogo čto*-clause is generated somewhere at the VP level is thus perfectly in line with the fact that it allows relative tense marking.

I suggest furthermore that a *potomu čto*-clause is by default a CAC or a PAC; if supported by indicators, it can be a NonIC. When it is a CAC, it is attached to the matrix clause higher than VP and higher than Negation, but lower than Epistemic modality; hence, it is attached higher than an *ottogo čto*-clause. This accounts for the facts observed so far:

- (i) contrary to an *ottogo čto*-clause, a *potomu čto*-clause may not occur inside the scope of matrix negation;
- (ii) it can be used both epistemically and on the speech act level, but the latter is possible only when a *potomu čto*-clause co-occurs with an imperative main clause or refers to a question located in a separate sentence;
- (iii) it may occur inside the scope of epistemic modals;
- (iv) it does not allow the relative tense marking of its predicate.

Points (i), (iii) and (iv) follow from (58) and my assumptions straightforwardly. As for (ii), it is again based on Frey's idea of the mapping between the external syntax of a causal clause and its semantic type, according to which only NonICs can refer to a causal relation between speech acts. Since, as I assumed, a *potomu čto*-clause needs an indicator in order to function as a NonIC, it can be used on the speech act

level only if combined with imperatives or when referring to “separated” questions, with both being indicators of the speech act use.

Finally, *poskol’ku*- and *tak kak*-clauses can be both CACs, PACs and Non-ICs. When they are CACs, they are attached roughly at the same level as *potomu čto*-clauses, i.e., higher than negation and lower than Epistemic modality, and higher than *ottogo čto*-clauses. This analysis, if correct, accounts for the following facts:

- (i) neither *poskol’ku*- nor *tak kak*-clauses may occur inside the scope of matrix negation;
- (ii) both can be used epistemically and as speech act clauses without any indicators being present (contrary to *potomu čto*);
- (iii) both may occur inside the scope of epistemic modals;
- (iv) neither *poskol’ku* nor *tak kak*-clause allow the relative tense marking of the predicate.

All the points in (i)–(iv) follow from (58) and my previous assumptions.

The conclusion that a *poskol’ku*-clause and a *tak kak*-clause may be as tightly integrated as a *potomu čto*-clause, i.e., that all three clauses may be CACs, may seem surprising at first sight given that *poskol’ku* and especially *tak kak*, contrary to *potomu čto*, only marginally allow focusing (for which reason Belyaev (2015b), as discussed in Section 3.2.1, deems *tak kak* to be semantically coordinating). However, a number of additional facts support the assumption that both *poskol’ku* and *tak kak* can indeed be CACs:

- (v) both *poskol’ku* and *tak kak* can, albeit marginally, introduce an answer to a *why*-question (Section 3.2.1);
- (vi) both can, even though marginally, be used within the *èto*-focus construction (Section 3.2.1).

It can be argued, indeed, that both the capacity to serve as an answer to a *why*-question and to be used within the *èto*-focus are indices of a CAC structure. The former assumption is corroborated by the fact that a string of a *why*-question and an answer to it obligatorily requires an eventuality-related interpretation, exactly as CACs do according to Frey (2016).⁶ Consider the examples in (59). Both in (59a) and (59b), an answer to a *why*-question is introduced by *potomu čto*, but only the answer in (59a) is felicitous. The difference between (59a) and (59b) is that in (59a) *potomu čto* is used as an eventuality-related marker, while in (59b) it is used epistemically.

⁶ According to Zaika (2019: 24), the observation that an answer to a *why*-question can only be interpreted as eventuality-related is crosslinguistically valid.

- (59) a. –*Počemu Ivan doma?* – ^{OK}*Potomu čto on pribolel*
 why Ivan.NOM at.home because he.NOM fall.ill.PST.M.SG
 ‘Why is Ivan at home? – Because he is ill.’
- b. –*Počemu Ivan doma?* – [#]*Potomu čto v ego okne gorit svet.*
 why Ivan.NOM at.home because in his
 window.LOC be.on.PRS.3SG light.NOM
 ‘Why is Ivan at home? – Because light is on in his windows.’

The second assumption, namely that being used within the *éto*-focus is a symptom of being a CAC, is similarly supported by the fact, already discussed in Section 3.2.3, that only eventuality-related causal clauses can participate in the *éto*-focus (cf. Example (24)).⁷

To summarize, the syntactic analysis proposed above for *ottogo čto*-, *potomu čto*-, *poskol’ku*- and *tak kak*-clauses allows accounting for the whole range of formal and interpretative contrasts between them, discussed in Section 4.2, including some of those observed by Belyaev (2015b). I argue, thus, that these clause types represent different classes of adverbial clauses, and none of them (pace Belyaev 2015b) enters the class of coordinated clauses either syntactically or semantically.

5 Summarizing the oppositions encoded by Russian causal clauses

In the present Section, I unify the analysis of the four causal markers considered in Section 4 with the analysis of the marker *ibo* in an attempt to gain an integral picture of the system of Russian causal clauses. *Ibo*-clauses, as I suggested in Section 3.3, are coordinated, while *potomu čto*-, *ottogo čto*-, *poskol’ku*- and *tak kak*-clauses, according to the data in Section 4, are all subordinate adverbial clauses that differ in degree of their syntactic integration with the host clause. Further questions are linked to the relationship between coordinated clauses and NonICs:

⁷ It remains to be clarified as to why both *tak kak* and *poskol’ku* avoid focusing, *tak kak* being even more marginally focused than *poskol’ku*. This seems to be due to the two markers’ specific semantic and morphosyntactic traits. The semantic factor restricting focusing is that both *poskol’ku* and *tak kak* express the causal relation between *p* and *q* not directly (as a matter of assertion they introduce), but rather indirectly via a presupposition that *p* and *q* normally go together (Latysheva 1982). Now, when the causal relation is being focused, the direct expression of cause, denoted in Russian by *potomu čto* or *ottogo čto*, is preferred over the indirect one, denoted by *poskol’ku* or *tak kak*. I will not expand on this issue for space reasons, but see (Pekelis 2017) for a detailed analysis.

since both of them are supposed to be syntactic orphans, it remains unclear as to what the differences between them are and what the reasons are, if any, to treat them as opposed in terms of coordination and subordination.

In order to answer these questions, in what follows I compare the properties of *ibo*-clauses, on the one hand, and *poskol'ku*- and *tak kak*-clause, on the other, with the former being coordinated and the latter non-integrated in some of their uses. As shown in Section 5.1, the prediction is borne out that both *ibo*-, *poskol'ku*- and *tak kak*-clauses share features associated with syntactic orphans. However, Section 5.2 reveals that there are also features, not necessarily associated with syntactic orphans, according to which *ibo*-clauses differ from both *poskol'ku*- and *tak kak*-clauses. I attribute such differences to the fact that *ibo*-clauses are coordinated, while *poskol'ku*- and *tak kak*-clauses are adverbial clauses, which confirms the need for demarcation between the two classes. A holistic picture of properties with respect to which *ibo*-, *potomu čto*-, *ottogo čto*-, *poskol'ku*- and *tak kak*-clauses differ is presented. Finally, in Section 5.3 I tentatively tackle the question as to what the difference between coordinated and non-integrated clauses is from a more general perspective.

5.1 Shared properties of *ibo*-, *poskol'ku*- and *tak kak*-clauses

According to what was proposed so far, an *ibo*-clause is coordinated, hence, a syntactic orphan, while *poskol'ku*- and *tak kak*-clauses are syntactic orphans when used as NonICs. If this analysis is correct, it is to be expected that *ibo*-, *poskol'ku*- and *tak kak*-clauses pattern identically with respect to the properties associated with syntactic orphans. This expectation is indeed borne out.

An *ibo*-clause, like both *poskol'ku*- and *tak kak*-clauses, cannot occur inside the scope of matrix negation. In (60), the version (a) with *ottogo čto* differs from the version (b) with *ibo* in that in the former, the causal relation is inside the scope of matrix negation ((60a) denies that Russian science lost because Russian scientists took part in organizing national research centers), while in the latter it is outside the scope of negation ((60b) gives a cause for why Russian science did not lose).

- (60) a. *Russkaja nauka ne proigrala, ottogo čto*
 Russian.NOM science.NOM not lose.PST.F.SG because
russkie učěnye prínimali učastie v
 Russian.NOM.PL scientist.PL.NOM take.PST.PL part.ACC in
organizacii nacional'nyh naučnyx centrov v našej
 organizing.LOC national.GEN research.GEN center.GEN in our.LOC

strane. Ona obogatilas' i prodolžayet
 counry.LOC she.NOM enrich.REFL.PST.F.SG and continue.PRS.3SG
obogaščat'sja.

enrich.REFL.INF

'Russian science did not lose because Russian scientists took part in organizing national research centers in our country. It has enriched itself and continues to be enriched.'

(RNC)

[*ottogo čto < neg*]

- b. *Russkaja nauka ne proigrala, ibo*
 Russian.NOM science.NOM not lose.PST.F.SG because
ruskie učěnye prinimali učastie v
 Russian.NOM.PL scientist.PL.NOM take.PST.PL part.ACC in
organizacii nacional'nyh naučnyx centrov v našej
 organizing.LOC national.GEN research.GEN center.GEN in our.LOC
strane.

counry.LOC

'Russian science did not lose, for Russian scientists took part in organizing national research centers in our country.'

[*ibo > neg*]

Like *poskol'ku* and *tak kak*, *ibo* can be used both epistemically and at the speech act level. Consider examples (61) and (62) respectively. When used at the speech act level, *ibo* is not limited to imperative structures (cf. *ibo* within a question in (62)), so one may conclude that it does not require any special indicators to support the speech act reading. In this respect, again, it patterns with *poskol'ku* and *tak kak*.

- (61) *Navernoe, eë molitvy byli uslyšany,*
 probably her prayer.PL.NOM be.PST.PL hear.PP.PL
ibo ej ne prišlos' dolgoe vremja
 for she.DAT not have.to.INF long.ACC time.ACC
podyskivat' sebe zanjatije.
 look.for.INF herself.DAT occupation.ACC
 'Her prayers must have been answered, for she did not have to look for an occupation for a long time.'

(RNC)

- (62) *Kak sdelat' vlast' èffektivnoj, no i*
 how make.INF power.ACC effective.INS but also
podkontrol'noj narodu, ibo čelovek sozdaet
 under.control.INS people.DAT for man.NOM create.PRS.3SG

vlast', a ne vlast' sozdaet čeloveka?
 power.ACC and not power.NOM create.PRS.3SG man.ACC
 'How to make power effective, but also controlled by the people, for man
 creates power, and not power creates man?'
 (RNC)

An *ibo*-clause is also similar to *poskol'ku*- or *tak kak*-clauses in that it does not support the relative tense marking of its predicate. In (63), *ibo* cannot be used since the present tense of the embedded predicate *možet* marks simultaneity with a time point in the past encoded by the main predicate *zaperežival*.

- (63) *Vljubljonnyj v Tanju rebenok slegka*
 fall.in.love.PP.NOM in Tanya.ACC child.NOM a.bit
zaperežival, ottogo čto / ??ibo ne mozet
 be.upset.PST.M.SG because / for not can.PRS.3SG
poučastvovat' v ètom zanimatel'nom spore.
 participate.INF in this.LOC entertaining.LOC dispute.LOC
 'The child who was in love with Tanya was a bit upset because he could
 not participate in this entertaining dispute.'
 (RNC)

Unexpectedly enough, an *ibo*-clause patterns differently than both *poskol'ku*- and *tak kak*-clauses as far as the scope of modals is concerned – it cannot occur inside the scope of an epistemic modal. Consider the examples in (64). (64a) with *poskol'ku* can express an assumption that he visited Russia for the reason that his daughter lived there, with the causal relation being inside the scope of the epistemic modal *verojatno*. This reading is unnatural in (64b), where *ibo* is used. The most feasible interpretation of (64b) is one in which the causal relation is outside the scope of the epistemic modal, i.e., (64b) gives the reason for the assumption that he visited Russia.

- (64) a. *Verojatno, on byval v Rossii,*
 probably he.NOM visit.PST.M.SG in Russia.LOC
poskol'ku tam žila ego doč.
 since there live.PST.F.PST his daughter.NOM
 'He probably visited Russia because his daughter lived there.'
 [Mod > *poskol'ku*]
- b. *Verojatno, on byval v Rossii,*
 probably he.NOM visit.PST.M.SG in Russia.LOC
ibo tam žila ego doč.
 for there live.PST.F.PST his daughter.NOM
 'He probably visited Russia, for his daughter lived there.'
 [*Ibo* > mod]

However, this contrast in fact does not contradict the idea that *ibo-*, *poskol'ku* and *tak kak*-clauses may share properties of syntactic orphans, since being inside the scope of epistemic modals is a property associated with CACs, and not with syntactic orphans. Both *poskol'ku*- and *tak kak*-clauses can be CACs, according to my assumption. In this case, they are attached to the matrix clause lower than Epistemic modality, hence, may occur inside the scope of epistemic modals (Section 4.3). An *ibo*-clause, on the contrary, is supposed to be coordinated, hence a syntactic orphan, in all of its uses.

The presented data are summarized in Table 6. We can see that *ibo* patterns identically to *poskol'ku* and *tak kak* according to all parameters except for the scope of modals. Thus, the hypothesis that *ibo*-clauses share with *poskol'ku*- and *tak kak*-clauses traits, associated with the absence of syntactic integration, has been confirmed.

5.2 Contrasting properties of *ibo-*, *poskol'ku-* and *tak kak*-clauses and the system of Russian causal clauses in general

If it is true that *ibo* is a coordinating marker, while both *poskol'ku* and *tak kak* introduce adverbial clauses, there must be a formal manifestation of this distinction. I suggest that the distinction is manifested in that *poskol'ku*- and *tak kak*-clauses can *precede* their host clause (as in Examples (55) and (56)), while an *ibo*-clause must *follow* its host clause (cf. (27)). Importantly, both *poskol'ku*- and *tak kak*-clauses can be preposed even when they are used at the speech act level, i.e., when they are guaranteed to be NonICs according to my assumptions. In

Table 6: *Ottogo čto*, *potomu čto*, *poskol'ku*, *tak kak* and *ibo*: formal distinctions, associated with degree of syntactic integration.

	Cause < NEG	Cause < mod	Rel. tense	Epist. use (cause > mod)	Speech act use (without indicators)
<i>ottogo čto</i>	+	+	+	–	–
<i>potomu čto</i>	–	+	–	+	–
<i>poskol'ku</i>	–	+	–	+	+
<i>tak kak</i>	–	+	–	+	+
<i>ibo</i>	–	–	–	+	+

Table 7: Russian causal markers: degree of syntactic integration versus coordination-subordination.

	CACs vs. PACs vs. NonICs					Coord. vs. subord. Preposing
	Cause < neg	Cause < mod	Rel. tense	Epist. use (cause > mod)	Speech act use (without indicators)	
<i>ottogo čto</i> (CAC)	+	+	+	–	–	+
<i>potomu čto</i> (CAC, PAC or NonIC if supported by indicators)	–	+	–	+	–	+ ^a
<i>poskol’ku</i> (CAC, PAC or NonIC)	–	+	–	+	+	+
<i>tak kak</i> (CAC, PAC or NonIC)	–	+	–	+	+	+
<i>lbo</i> (coordinated)	–	–	–	+	+	–

^aAlthough, as shown in Section 3.2.2, preposing is generally problematic for *potomu čto*, I mark *potomu čto* in Table 7 as compatible with preposing since, first, *potomu čto* can be preposed if contrastively focused, and, second, it is not the coordination-subordination distinction, but the information structure that lies behind the linear order constraint according to my assumptions.

Examples (55) and (56), indeed, the preposed *poskol’ku* and *tak kak* are used as speech act conjunctions.

More generally, coordinated clauses can be assumed to differ from non-integrated adverbial clauses in that only the latter allow preposing (see Haegeman (2012: 167–168) for a similar proposal). The formal contrasts displayed by Russian causal clauses, and the oppositions that lie behind these contrasts, can thus be summarized as in Table 7.

5.3 Coordinated versus non-integrated adverbial clauses: attempt of demarcation

As both coordinated and NonICs are syntactically not integrated, it is to be clarified as to what level of language the differences between them relate to. I suggest that it is the level of information packaging in discourse. Adapting the approach to coordination according to which coordinating conjunctions introduce rhetorical relations (see Section 3.1), one may speculate that subordinating conjunctions do

not introduce rhetorical relations even if they are part of a NonIC. While coordinated clauses always form independent speech acts, a NonIC may constitute a speech act not on its own, but together with its host clause. In (65) (=56), the non-integrated *tak kak*-clause does not comprise part of the interrogative speech act of the main clause, nor does it seem to constitute a declarative speech act.

- (65) *Tak kak vseh del ne peredelaesh, to*
 as all.GEN work.GEN not do.FUT.2SG then
nado li tak xlopotať?
 necessary Q so work.hard.INF
 ‘Since you cannot do all the work, is it necessary to work so hard?’
 (RNC)

It follows from this reasoning that while a coordinated clause independently participates in the rhetorical structure, a NonIC enters this structure together with its licensing clause. Compare the assumption, spelled out in (Frey 2012: 426), that a combination of a NonIC and its associate clause may describe “one single complex event”, whereas two independent clauses describe “a sequence of two events”. This may be the reason why the linear order of clauses is looser for NonICs than for coordinated clauses: the former do not interact with the discourse context on their own, hence the position they have with respect to their host clause does not affect the rhetorical relation with this context. I leave for the future a detailed elaboration of this tentative analysis.

If my proposal is on the right track, coordinated clauses can be assumed to be more loosely integrated with their host clause than NonICs. This results in an “integration hierarchy” (66), which ranks different clause types according to the degree of their integration with the host clause (from the less integrated on the left to the most integrated on the right). Note that “integration” refers to syntactic structure with respect to three upper nodes of the hierarchy (66) and to discourse structure with respect to two lower nodes.

- (66) *Coordinated clauses < NonICs < PACs < CACs*

6 Conclusions

In the literature on causal clauses, attempts have been made to account for the syntactic and interpretative contrasts between different clause types in terms of coordination and subordination. My analysis of five Russian causal markers (*potomu čto*, *ottogo čto*, *poskol’ku*, *tak kak* and *ibo*) suggests that only one marker (*ibo*) is coordinating. Other markers introduce adverbial (hence, subordinate)

clauses, while the contrasts between them are due to different degrees of syntactic integration with the host clause, associated with different classes of adverbial clauses (CACs, PACs and NonICs). An *ottogo čto*-clause can only be a CAC; a *potomu čto*-clause is by default a CAC or a PAC, but if it is supported by indicators it can also be a NonIC; *poskol'ku*- and *tak kak*-clauses are the least integrated ones – they can freely be CACs, PACs and NonICs. A consistent picture of Russian causal clauses thus cannot be obtained unless both the coordination-subordination distinction and the distinction between classes of adverbial clauses are taken into consideration.

The phenomena that turned out to be useful when comparing causal CACs, PACs and NonICs in Russian regard scope of matrix negation, scope of epistemic modals, the possibility of the relative tense marking and the epistemic and speech act use of conjunctions. Some of these phenomena were treated in the literature – erroneously, in my view – as criteria of coordination and subordination. On the contrary, the possibility of positioning a causal clause before the host clause, which is another well-known criterion of coordination and subordination, turned out to be helpful indeed for differentiating adverbial clauses and coordinate clauses.

While the contrast between CACs, PACs and NonICs seems to be typologically valid as far as the systems of causal clauses are concerned, the realizations of this contrast are language specific. Russian possesses an opposition of two causal CACs, similar both semantically and morphosyntactically, one of which (an *ottogo čto*-clause) is base generated in a deeper position than the other (a *potomu čto*-clause). I am not aware of this kind of opposition in English, German or French, languages that have been said to manifest formal contrasts between causal clauses similar to those that one finds in Russian. Furthermore, different degrees of syntactic integration underlie the formal differences between the German *weil* and *da*, on the one hand, and the Russian *potomu čto* and *poskol'ku*, on the other, although, at first sight, these two pairs seem to be very close counterparts. Both the Russian *potomu čto*- and *poskol'ku*-clauses can be CACs, while the German *da*-clause can only be a PAC or a NonIC according to Frey (2016).

The analysis I have proposed also raises a more general question as to what level of language the difference between coordinated and non-integrated adverbial clauses relates to, with both being syntactic orphans. I suggest tentatively that coordinated clauses are less integrated with the licensing clause than NonICs in terms of discourse structure. A kind of integration hierarchy thus emerges: coordinated clauses < NonICs < PACs < CACs.

Abbreviations

1	first person
2	second person
3	third person
ACC	accusative
AUX	auxiliary
DAT	dative
F	feminine
FUT	future
GEN	genitive
IMV	imperative
INDF	indefinite
INF	infinitive
INS	instrumental
LOC	locative
M	masculine
N	neuter
NOM	nominative
PASS	passive
PL	plural
PP –	passive participle
PRS	present
PST	past
PTCL	particle
SG	singular
SBJV	subjunctive.

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References

- Belyaev, Oleg. 2015a. Systematic mismatches: Coordination and subordination at three levels of grammar. *Journal of Linguistics* 51. 267–326.

- Belyaev, Oleg. 2015b. Cause in Russian and the formal typology of coordination and subordination. In Peter Arkadiev, Ivan Kapitonov, Yuri Lander, Ekaterina Rakhilina & Sergey Tatevosov (eds.), *Donum semanticum: Opera linguistica et logica in honorem Barbarae Partee a discipulis amicisque Rossicis oblata*, 35–66. Moscow: Jazyki slavjanskix kul'tur.
- Boguslavskaja, Olga Ju & Irina B. Levontina. 2004. Smysly 'pričina' i 'cel' v estestvennom jazyke [Meanings 'reason' and 'purpose' in natural language]. *Voprosy jazykoznanija* 2. 68–88.
- Brext, Ričard D. 1985. O vzaimosvjazi meždu nakloneniem i vremenem: sintaksis časticy by v russkom jazyke [On the relationship between mood and time: syntax of the particle *by* in Russian]. In Tatjana V. Bulygina & Aleksandr E. Kibrik (eds.), *Novoe v zarubežnoj lingvistike*. Vypusk XV. Sovremennaja zarubežnaja rusistika [New Research in Foreign Linguistics. vol. XV. Contemporary Russistics Abroad], 101–117. Moscow: Progress.
- Bulachovsky, Leonid A. 1954. *Russkij literaturnyj jazyk pervoj poloviny XIX veka. Fonetika. Morfologija. Udarenie. Sintaksis*. [Russian literary language of the first half of the XIX century. Phonetics. Morphology. Stress. Syntax.]. Moscow: Učpedgiz.
- Charnavel, Isabelle. 2019. Perspectives in causal clauses. *Natural Language & Linguistic Theory* 37(2). 389–424.
- Cinque, Guglielmo. 1999. *Adverbs and functional heads: A cross-linguistic perspective*. Oxford: Oxford University Press.
- Comrie, Bernard. 1985. *Tense*. Cambridge: Cambridge University Press.
- Comrie, Bernard. 2008. Subordination, coordination: Form, semantics, pragmatics. In Edward J. Vajda (ed.), *Subordination and coordination strategies in North Asian languages* (Current Issues in Linguistic Theory 300), 1–16. Amsterdam & Philadelphia: John Benjamins.
- Coniglio, Marco. 2011. *Die Syntax der deutschen Modalpartikeln: Ihre Distribution und Lizenzierung in Haupt- und Nebensätzen*. Berlin: Akademie Verlag.
- Cristofaro, Sonia. 2003. *Subordination*. Oxford: Oxford University Press.
- Culicover, Peter W. & Ray Jackendoff. 1997. Semantic subordination despite syntactic coordination. *Linguistic Inquiry* 28. 195–218.
- Endo, Yoshio. 2012. The syntax-discourse interface in adverbial clauses. In Lobke Aelbrecht, Liliane Haegeman & Rachel Nye (eds.), *Main clause phenomena: New horizons*, 365–383. Amsterdam & Philadelphia: John Benjamins.
- Endo, Yoshio & Liliane Haegeman. 2019. Adverbial clauses and adverbial concord. *Glossa: A Journal of General Linguistics* 4(1). 48.
- Evgen'eva, Anastasija P. (ed.). 1985. *Slovar' russkogo jazyka (Malyj akademičeskij slovar')* [Dictionary of Russian (Small Academic Dictionary)], vol. 1. Moscow: Russkij jazyk.
- Fasmer, Maks. 1986. *Ėtimologičeskij slovar' russkogo jazyka*. [Etymological dictionary of Russian], vol. 2, 2nd edn. [Muza A. Oborina (ed.)]. Moscow: Progress.
- Frey, Werner. 2012. On two types of adverbial clauses allowing root-phenomena. In Lobke Aelbrecht, Liliane Haegeman & Rachel Nye (eds.), *Main clause phenomena: New horizons*, 405–429. Amsterdam & Philadelphia: John Benjamins.
- Frey, Werner. 2016. On some correlations between formal and interpretative properties of causal clauses. In Ingo Reich & Augustin Speyer (eds.), *Co- and subordination in German and other languages* (Linguistische Berichte Sonderhefte 21), 153–179. Hamburg: Helmut Buske Verlag.
- Groupe λ-l. 1975. Car, parce que, puisque. *Revue Romane* 10(2). 248–280.

- Haegeman, Liliane. 2012. *Adverbial clauses, main clause phenomena and the composition of the left periphery: The cartography of syntactic structures (Oxford Studies in Comparative Syntax 8)*. Oxford: Oxford University Press.
- Haspelmath, Martin. 1995. The converb as a cross-linguistically valid category. In Martin Haspelmath & Ekkehard König (eds.), *Converbs in cross-linguistic perspective* (Empirical Approaches to Language Typology 13), 1–55. Berlin & New York: Mouton de Gruyter.
- Iordanskaja, Lidija N. 1988. Semantika russkigi sojuza *raz* (v sravnenii s nekotorymi drugimi russkimi sojuzami) [Semantics of the Russian conjunction *raz* (in comparison to some other Russian conjunctions)]. *Russian Linguistics* 12(3). 239–267.
- Kazenin, Konstantin I. & Yakov G. Testele. 2004. Where coordination meets subordination. In Martin Haspelmath (ed.), *Coordinating constructions*, 227–241. Amsterdam & Philadelphia: John Benjamins.
- Kobozeva, Irina. 2000. The problem of identification and syntactic representation of Russian complex sentences with illocutionary-independent subordinate clauses. In Gerhild Zybatow, Uwe Junghanns, Grit Mehlhorn & Luka Szucsich (eds.), *Linguistische Arbeitsberichte 75 (3. Europäische Konferenz “Formale Beschreibung slavischer Sprachen”, Leipzig 1999)*, 67–79. Leipzig: Institut für Linguistik/Universität Leipzig.
- Krifka, Manfred. 2013. Response particles as propositional anaphors. In Snider Todd (ed.), *Semantics and linguistic theory (SALT) 23*, 1–18. Washington, D.C.: LSA Open Journal Systems.
- Latysheva, Alla N. 1982. O semantike uslovnnyh, pričinnnyh i ustupitel'nyh sojuzov v russkom jazyke [On semantics of conditional, causal and concessive conjunctions in Russian]. *Vestnik Moskovskogo Universiteta* 5(serija Filologija). 51–59.
- Lehmann, Christian. 1988. Towards a typology of clause linkage. In John Haiman & Sandra A. Thompson (eds.), *Clause combining in grammar and discourse* (Typological Studies in Language 18), 181–226. Amsterdam & Philadelphia: John Benjamins.
- Nunes, Jairo. 2001. Sideward movement. *Linguistic Inquiry* 31(2). 303–344.
- Paducheva, Elena V. 1977. Ponjatje prezumpcii v lingvističeskoj semantike [The notion of presupposition in linguistic semantics]. *Semiotika i informatica* 8. 91–124.
- Padučeva, Elena V. 1990. Meždu predloženiem i vyskazyvaniem: sub'ektivnaja modal'nost' i sintaksičeskaja nepodčinnost' [Between sentence and utterance: subjective modality and root phenomena]. *Revue des études slaves* 62(1–2). 303–320.
- Pekelis, Olga E. 2009. *Sočinenie i podčinenie v kontekste pričinnnoj semantiki* [Coordination and subordination in the context of causal semantics]. Moscow: Russian State University for the Humanities Cand. thesis.
- Pekelis, Olga E. 2015. *Coordination and subordination [Sochinenije i podchineije]. Materialy dlja proekta korpusnogo opisanija russkoj grammatiki* [Towards a corpus description of Russian grammar]. Moscow: Manuscript. <http://rusgram.ru> (accessed 29 May 2020).
- Pekelis, Olga E. 2017. Pričinnnye pridatočnye [Causal clauses]. In Vladimir Plungjan & Natalya Stojnova (eds.), *Materialy k Korpusnoj grammatike russkogo jazyka: sintaksičeskie konstrukcii i grammatičeskie kategorii* [Towards a corpus-based Russian grammar: syntactic constructions and grammatical categories], vypusk II, 55–131. Saint Petersburg: Nestor-Istorija.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegeman (ed.), *Elements of grammar: A handbook of generative syntax*, 281–337. Dordrecht: Kluwer.

- Rutherford, William. 1970. Some observations concerning subordinate clauses in English. *Language* 46. 97–115.
- Sohmiya, Yoshikazu. 1975. Syntax and Semantik der kausalen Konjunktionen, *denn* and *weil*. *Doitsu Bungaku* 42. 108–119.
- Šnittke, Ekaterina L. 2020. K voprosu o soglasovanii vremen v sovremennom russkom jazyke: korpusnoe issledovanie distributivnyx xarakteristik vremennyx form v sentencialnyx aktantax [Towards the problem of sequence of tenses in modern Russian: A corpus study of distributional characteristics of tense forms in complement clauses. *Voprosy jazykoznanija* 3. 26–51.
- Švedova, Natalja Yu (ed.). 1980. *Russkaja grammatika* [Russian Grammar], vol. II. Moscow: Nauka.
- Sweetser, Eve. 1990. *From Etymology to Pragmatics. Metaphorical and Cultural Aspects of Semantic Structure*. Cambridge: Cambridge University Press.
- Uryson, Elena V. 2011. *Opyt opisaniya semantiki sojuzov: lingvisticheskie dannye o dejatel'nosti soznaniya* [An attempt at describing the conjunctions' semantics: linguistic data of consciousness activity]. Moscow: Jazyki Slavjanskih Kul'tur.
- Verstraete, Jean-Christophe. 2005. Two types of coordination in clause combining. *Lingua* 115. 611–626.
- Weiss, Daniel. 1989. Parataxe und Hypotaxe: Versuch einer Skalarisierung. In Wolfgang Girke (ed.), *Slavistische Linguistik 1988*, 287–322. Munich: Sagner.
- Yuasa, Etsuyo & Jerry M. Sadock. 2002. Pseudo-Subordination: A Mismatch Between Syntax and Semantics. *Journal of Linguistics* 38(1). 87–111.
- Zaika, Natalia M. 2019. Polipredikativnye pričinnye konstrukcii v jazykah mira: prostranstvo tipologičeskix vozmožnostej [Polypredicative reason constructions in the world's languages: Typological parameters]. *Voprosy jazykoznanija* 4. 7–32.
- Zaliznjak, Anna A. 1992. *Issledovanija po semantike predikatov vnutrennego sostojanija*. [Studies on the semantics of predicates of the internal state]. Munich: Sagner.
- Zemskaja, Elena A. (ed.). 1978. *Russkaja razgovornaja reč* [Russian colloquial speech]. Moscow: Nauka.