The Instrumental Case in the Diachrony of Russian Reflexive Verbs of Emotion: From Cause to Content

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ABSTRACT

Russian experiencer-subject reflexive verbs of emotion vary greatly in the syntactic encoding of their stimuli: poražat'sja ‘be astonished’ takes the dative case, while obižat'sja ‘feel offended’ takes na ‘on’ + the accusative case, etc. Based on data from the Russian National Corpus, we show that, despite synchronic variegation, many reflexive verbs have been undergoing a unidirectional drift during the last three centuries: the instrumental encoding of the stimulus has gradually been giving way to lexically determined patterns. The use of the instrumental was motivated by its semantic profile: it was closely associated with the meaning of cause. This syntactic change echoes changes in the construal of the stimulus, whereby its cause-like components weaken and its content-like components come to the fore. The evidence in favour of this hypothesis includes the semantic differences between the instrumental case and the relevant encoding devices, a gradual decrease in the proportion of stimuli that are inanimate, the development of emotive meanings on the basis of physical meanings in individual verbs and lexicalization by which reflexive verbs become emancipated from their transitive counterparts. Semantic and syntactic scenarios in the development of reflexive verbs are later partially replicated by corresponding periphrastic participial constructions.

KEYWORDS

Russian, diachrony, instrumental case, reflexive verbs, stimulus, verbs of emotion, valency, cause

0. Introduction

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In Russian, some reflexive verbs of emotion synchronically or in recent diachrony display variation in the encoding of the stimulus: the instrumental case (1) is attested alongside another coding device, e.g. the dative case (2).

(1) *So vsego sveta priedut slušat' i *poražat'sja masterstvom *grandioznogo opyta!* (I. S. Šmelev. *Solnce mertvych* (1923))

‘People will come from all over the world in order to listen to and be astonished by the **excellence** of this ambitious experiment’.

(2) *Ešče včera vmeste so Štrufom ona *poražalas' masterstvu i čutkosti bezymjannogo *portretista.* (L. M. Leonov. *Skutarevskij* (1930–1932))

‘It was just yesterday that both Štruf and herself were astonished at the mastery and **sensitivity** of the anonymous painter’.

Semantically, the relevant parts of sentences (1) and (2) are remarkably similar. In both sentences, the verb *poražat'sja* ‘be astonished’ takes the noun *masterstvo* ‘excellence, mastery’ as its object. And yet, the case frames used are different. The use of the instrumental, as in (1), sounds somewhat unusual, although not entirely impossible, to contemporary speakers of Russian. We will show that this is an instance of a wider change-through-variation scenario. Accordingly, the first, empirical, goal of this study is to identify the reflexive verbs of emotion that are or were able to combine with a stimulus in the instrumental case and to examine the diachronic patterns in the syntactic behaviour of these verbs.

Examples like (1)–(2) indicate that, at least under some conditions, the instrumental case was interchangeable with an alternative means of stimulus encoding. This is further illustrated by (3), where the two semantically similar objects of the verb *radovat'sja* ‘be glad’ are encoded differently, viz. by the instrumental and by the dative case:

(3) *Ja chotel by darit' i nadeljat', poka mudrye sredi ljudej ne stanut snova *radovat'sja svoim *nerazumiem, a bednye – svoemu *bogatstvu.* (P. I. Novgorodcev. *Ob oboščenstvennom ideale* (1917–1921))

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2 Here and below we signal aspectual contrasts in Russian by the use of different patterns in English translations: translations of imperfectives, such as *poražat'sja* ‘be astonished’, include ‘be’ or ‘feel’ as a component part, whereas translations of perfectives include ‘get’ or ‘become’. Actual aspectual contrasts in Russian are famously much more complex than these conventional translations may imply. Where English equivalents with ‘be’, ‘feel’, ‘get’ or ‘become’ are unavailable, we mark the aspect as either “pf.” (perfective) or “ipf.” (imperfective).
‘I would like to keep donating and bestowing until the wise learn anew to be glad of their ignorance, and the poor, of their wealth’.

In this paper, we argue that the change in the encoding of the stimulus echoes a gradual semantic change. Thus, our second goal is to find commonalities in what seems to be a bundle of accidental and superficial changes in the syntactic behaviour of several verbs and to propose a cognitive motivation for this syntactic change.

This study is fully based on data from the Russian National Corpus (RNC; www.ruscorpora.ru). All searches were carried out in September 2018. The choice of the RNC as our data source sets a (somewhat arbitrary) historical frame for this study, as this corpus covers texts from the beginning of the 18th century to the present day.

The remainder of this paper is organized as follows. In section 1, we outline the basic notions that are necessary for the analysis of Russian reflexive verbs of emotion. Section 2 contains diachronic quantitative data on the use of the instrumental case and other encoding devices with the verbs under study. In section 3, we put forward the hypothesis that the described change in argument encoding is related to a shift of focus in the interpretation of the stimulus participant and present evidence in support of this hypothesis. We briefly compare reflexive verbs of emotion with participial constructions based on the same verbs in section 4. Section 5 contains a summary and a discussion of our main findings.

1. Russian experiencer-subject reflexive verbs of emotion

By definition, verbs of emotion denote certain types of mental states and reactions on the part of a human (or at least sentient) being. We will refer to this sentient participant as an experiencer. In most cases, verbs of emotion denote a response to a certain external state of affairs or referent, which we will call a stimulus. In (4), ‘Mikhail’s mother’ is the experiencer and ‘the spider’ is the stimulus.

(4) Matuška Michaila […] ispugalas’ pauka. (O. D. Forš. Odety kamnem (1924–1925))
‘Mikhail’s mother got scared of the spider’.

The stimulus is a complex semantic role. Stimuli typically have double representation in the structure of emotive events (Croft 1993; Padučeva 2004, 278; Będkowska-Kopczyk 2014). In (4), for example, a spider appears, which the woman can perceive, and it triggers the emotion of fear on her part. Thus, on the one hand, the stimulus functions as the cause of the emotion. On the other hand, while experiencing the state of fear, the woman has a mental image of the
spider. The representation of the spider in the woman’s cognitive system can be referred to as the content of the emotion. Schematically, the causal chain involved in emotional reactions can be represented as follows: causing event => experiencer => mental content (Croft 1993).

By default, the cause and the content of the emotion are related to each other as an original and its copy. This is why they are normally expressed by a single argument, which we call the stimulus. Still, for some verbs, it has been argued that in the semantics of their stimuli, one of these two components typically prevails over the other. For instance, the verbs radovat'sja ‘be glad’ and ogorčat'sja ‘be upset’ usually combine with stimuli that primarily correspond to an event that causes an emotion (5), while the stimuli of the verbs serdit'sja ‘be angry’ and obižat'sja ‘be offended’ (6) typically correspond to humans who are considered responsible for the event that causes an emotional reaction and thus constitute the content of the emotion (Arutjunova 1976, 153–67; Apresjan 2015).

‘In all likelihood, she was glad that Sevka began to speak’.
(6) No on eščë bol'she obižalsja na tech, kto vovse ne pozvonil emu po telefonu. (Vasilij Grossman. Žizn' i sud'ba (1960))
‘He felt even more offended by those who had not called him on the phone at all’.

Cross-linguistically, there are two main diathetic types of verbs of emotion: experiencer-subject verbs, such as like in English, and stimulus-subject verbs, such as please. In Russian, the majority of verbs of emotion come in pairs, in which the stimulus-subject verb is transitive, while its experiencer-subject counterpart is an intransitive reflexive verb marked with –sja, as in (7a)–(7b).

(7a) Menja udivil ego priezd.
‘His arrival surprised me’.
(7b) Ja udivililsja ego priezdu.
‘I was surprised by his arrival’.

In this study, we focus exclusively on experiencer-subject verbs marked with -sja. It is well-known that this affix covers a wide range of functions associated with the middle domain, such as the reflexive proper, reciprocal, anticausative, passive, antipassive and others (Janko-
Trinickaja 1962; Knjazev 2007, 259–305). Essentially, emotive reflexives share some properties with both anticausatives, as in (8), and passive *sja*-verbs, as in (9a)\(^3\).

(8) *Okno razbilos’*. (Padučeva 2001, 72)
‘The window broke’.

(9a) *Vozmožno, čto èta ideja uže obsuždalas’ sejsmogami.* (A. D. Sacharov. Gorʹkij, Moskva, dalee vezde (1989))
‘Probably, this idea has been discussed by seismologists before’.

Like passives, emotive reflexives denote roughly the same propositional content as their transitive counterparts and have the same set of semantic participants, viz. an experiencer and a stimulus, as in (7a–b). Padučeva (2001, 72–73) stresses that reflexive emotive (“psychological”) verbs do not differ from their transitive counterparts in terms of numerical valency precisely because their stimulus is both the cause and the content: while *-sja* in these verbs signals the removal of the cause, the content of the emotion cannot be removed in derivation.

Like anticausatives, emotive reflexives do not involve any agent in their semantic structure and can be derived from both perfective and imperfective verbs. In contrast, reflexive passives cannot be derived from perfectives (9b).

(9b) *Èta ideja uże obsudilas’ sejsmogami.*
Intended meaning: ‘This idea got discussed by seismologists’.

There is one more important point of dissimilarity between passives and reflexive experiencer-subject verbs of emotion. In contemporary Russian, overt demoted agents in canonical passives are encoded in the instrumental case, as in (9a)\(^4\). Thus, this case frame is determined by grammatical rules rather than by a specific lexical item.

Reflexive verbs of emotion are very different and much more variegated. Some verbs take objects in the instrumental case, like *voschiščat’sja* ‘admire’ (ipf.) in (10). Other verbs are used

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\(^3\) This double identity is reflected in the analyses that posit a separate derivational class of *sja*-verbs encompassing precisely the emotive verbs (Gerritsen 1990, 58–63; Goto, Saj 2009) or split emotive verbs into two subtypes (with overlapping lexical membership) (Apresjan 1998). The choice between these taxonomic solutions is irrelevant for the present discussion.

\(^4\) In modern Russian, there is some variation in the encoding of demoted subjects when they are not agents; see (Fici Giusti 1994, 198) and especially (Kolomackij 2009). In earlier texts, other encoding patterns were attested with demoted agentive subjects as well. The main rival of the instrumental case in this domain was the preposition *ot* ‘from’ + the genitive case; this pattern was largely ousted by the instrumental case by the end of the 18th century (Mikhaylov 2012, 82–91).
in other patterns, that is, with the dative case, e.g. *radovat'sja* ‘be glad’ in (11); with the genitive case, such as *smuščat'sja* ‘feel confused’ in (12); with *na* + the accusative case, such as *obižat'sja* ‘feel offended’ in (13), and with *o* + the locative case, like *bespokojit'sja* ‘be worried’ in (14).

(10) *Kak ty èto vyderžala — ja toboj voschiščajus'*! (Sms-soobščenija staršich škol’nikov (2004))

‘How did you manage to endure it — I admire you’.


‘He is *glad that* he will soon go to France’.

(12) *Smuščajas’ zanošennoj svoej rubachi, razgovarival s gostjami.* (B. Guber. *Šaraškina kontora* (1924))

‘He was talking to the guests *feeling confused about* his frayed *shirt’.


‘Do not *be offended at me*, I am utterly unhappy myself’.

(14) [….] *oni sovsem ne bespokojatsja o propavšem syne.* (Vil’ Lipatov. *Ešče do vojny* (1971))

‘They are *not* worried at all *about* their missing *son’.

Importantly, the choice of the encoding pattern is associated with individual verbs and is not predictable from any general syntactic rules. Haspelmath (2001, 65–66) reports that such verb-determined idiosyncratic patterns are typical of reflexive experiencer-subject verbs in Romance, Slavic and some Germanic languages, cf. German *sich wundern (über) ‘be amazed (at)*’, *sich interessieren (für) ‘be interested (in)*’, etc. Of course, the choice of case frames is not entirely fortuitous; for example, it can be motivated by spatial metaphors, cf. the discussion of Croatian data in Belaj, Tanacković Faletar 2011. As a group, however, these case frames can be viewed as lexically determined, as opposed to the instrumental encoding of demoted agents, which is determined grammatically.

Although synchronically, the syntactic behaviour of the Russian verbs at issue is very heterogeneous, there is one recurrent pattern in their diachronic development, which will be discussed in the next section.

2. Instrumental marking of the stimulus in recent diachrony

In this section, we analyse the syntactic encoding of the stimulus in constructions with reflexive verbs of emotion in Russian texts from the 18th century to the present day.
We started our analysis with a list of 70 reflexive verbs of emotion that: i) are experiencer-subject; ii) regularly correspond to transitive verbs; iii) occur at least 100 times in the RNC texts created after 1950 (see Ovsjannikova 2019, in print, for the procedure of creating the verb list of verbs of emotion). We then identified those 33 verbs that are encountered with the stimulus in the instrumental case in at least 10 examples from the RNC (verbs that are never or very rarely used with instrumental stimuli, e.g. udivljat'sja ‘be surprised’ that takes dative complements, are irrelevant for our purposes).

These 33 verbs can be divided into three groups based on the diachronic scenarios they follow with respect to stimuli in the instrumental case.

The first group, which is in the focus of this study, includes those emotive reflexives that are attested with stimuli marked by the instrumental case in the earlier texts of RNC but synchronically are typically or exclusively used with stimuli encoded by another means. This group encompassess 16 verbs, such as e.g. poražat'sja ‘be astonished’ (1)–(2), obižat'sja ‘feel offended’, cf. (13) and (15), radovat'sja ‘be glad’, cf. (11) and (16).

(15) Ne obižajsja moimi slovami! (E. P. Rostopčina. Sčastlivaja ženščina (1851))
‘Don’t feel offended by my words’.

(16) Kak ja radovalas’ vami, vidja takie znaki čuvstvitel’nosti vašego serdca! (N. M. Karamzin. Evgenij i Julija (1789))
‘How was I rejoiced by you when I saw those signs of your heart’s sensitivity!’

The 16 verbs of the first groups are shown in Table 1. They are divided into subgroups based on their main lexically determined pattern of stimulus encoding in modern Russian.

<table>
<thead>
<tr>
<th>Modern lexical pattern</th>
<th>Verbs</th>
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<tbody>
<tr>
<td>dative</td>
<td>ogorčat'sja ‘be upset’, ogorčit'sja ‘get upset’, poražat'sja ‘be astonished’, porazit'sja ‘get astonished’, radovat'sja ‘be glad’, užasat'sja ‘be horrified’</td>
</tr>
<tr>
<td>genitive</td>
<td>smuščat'sja ‘feel confused’, smuit'sja ‘get confused’, stesnjat'sja ‘be embarrassed’, stydit'sja ‘feel ashamed’</td>
</tr>
<tr>
<td>na ‘on’ + accusative</td>
<td>obižat'sja ‘feel offended’, obidet'sja ‘get offended’</td>
</tr>
<tr>
<td>o ‘about’ + locative or za</td>
<td>bespokoit'sja ‘be worried’, volnovat'sja ‘be worried’, trevožit'sja ‘feel anxious’</td>
</tr>
<tr>
<td>v ‘in’ + locative</td>
<td>razočarovat'sja ‘get disappointed’</td>
</tr>
</tbody>
</table>

Table 1. Verbs attested with stimuli in the instrumental case
For many of these verbs, the ability to co-occur with the stimulus in the instrumental case in the 18–19th centuries was noted in Bulachovskij 1954, 348–49; Dubrovina 2002, 124–28; Maier 2007, 140–41; and Mikhaylov 2012, 129–31, 181–82. Still, to our knowledge, no systematic investigation of the variation in the encoding of the stimulus of these verbs has yet been undertaken.

Our first goal was to determine the relative frequency of the two types of syntactic patterns, viz. the instrumental pattern vs. the lexically determined pattern(s), in texts from various periods for each of these verbs.

We carried out the following technical procedures. We divided the timespan covered by the RNC into four conventionally defined periods (1701–1850, 1851–1920, 1921–1990 and 1991–2016) and used subcorpora delimited by these dates. We used two types of corpus queries depending on the frequency of a verb in a subcorpus.

If there were fewer than 300 occurrences of a verb in a given subcorpus, all of them were manually annotated to assess the frequency of the rival means of stimulus encoding. For example, in texts created between 1851 and 1920, there are 194 occurrences of the verb *poražat'sja* ‘be astonished’ in the emotive meaning. Of these, in 106 the stimulus is marked by the instrumental case, and in 14, by the dative case. These figures are represented in Table 2 in Roman type.

If a verb yielded more than 300 hits we used combined queries to find examples with either of the two coding devices at a distance of not more than three words before or after the verb. We downloaded and shuffled the hits and annotated them manually until we had the total of 200 uses with either pattern (in some cases this procedure resulted in fewer than 200 “correct” uses). For instance, the data on the use of the verb *poražat'sja* ‘be astonished’ in the texts created between 1921 and 1990 are based on a query containing any form of this verb combined with any form in the instrumental or in the dative case. In Table 2, the data obtained by the second type of procedure are given in italics. For all verbs, regardless of the type of procedure, only verb usage in an emotive meaning and with animate experiencers was taken into account.

Using these procedures, we calculated the percentage of verb usage that displayed the instrumental pattern for the verbs under study in the four periods. These percentages are shown in the columns marked with “%(I)” in Table 2. They are counted based on totals that include the alternative, lexically determined pattern, while uses without any stimulus at all or with other marginal coding frames are disregarded. Table 2 contains quantitative data only for those verbs that had at least 5 uses with the stimulus in the instrumental case in the texts created before
1850; two verbs from the first group failed to pass this filter, viz. *užasat'sja* ‘be horrified’ and *razočarovat'sja* ‘get disappointed’.

<table>
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<tbody>
<tr>
<td>obižat'sja ‘feel offended’</td>
<td>%</td>
<td>97%</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>obidet'sja ‘get offended’</td>
<td>%</td>
<td>100%</td>
<td>26</td>
<td>0</td>
</tr>
<tr>
<td>poražat'sja ‘be astonished’</td>
<td>%</td>
<td>100%</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>poražit'sja ‘get astonished’</td>
<td>%</td>
<td>100%</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>smuščat'sja ‘feel confused’</td>
<td>%</td>
<td>97%</td>
<td>35</td>
<td>1</td>
</tr>
<tr>
<td>smutit'sja ‘get confused’</td>
<td>%</td>
<td>100%</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>ogorčat'sja ‘be upset’</td>
<td>%</td>
<td>100%</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td>ogorčit'sja ‘get upset’</td>
<td>%</td>
<td>100%</td>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td>volnovat'sja ‘be worried’</td>
<td>%</td>
<td>91%</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>stejnjet'sja ‘be embarrassed’</td>
<td>%</td>
<td>88%</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>trevožit'sja ‘feel anxious’</td>
<td>%</td>
<td>69%</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>bespokoi't'sja ‘be worried’</td>
<td>%</td>
<td>12%</td>
<td>22</td>
<td>156</td>
</tr>
<tr>
<td>radovat'sja ‘be glad’</td>
<td>%</td>
<td>8%</td>
<td>15</td>
<td>185</td>
</tr>
<tr>
<td>stydi't'sja ‘feel ashamed’</td>
<td>%</td>
<td>7%</td>
<td>13</td>
<td>174</td>
</tr>
</tbody>
</table>

Table 2. Frequency of the instrumental (I) vs. lexically determined (L) marking

The data in Table 2 clearly indicate that the frequency of the instrumental pattern is monotonously (unidirectionally) decreasing for all the verbs under consideration (with the insignificant exceptions of the verbs *smutit'sja* ‘get confused’ and *stydit'sja* ‘feel ashamed’ in the final period). This means that the drift of these verbs away from the instrumental pattern began before the middle of the 19th century and that, for some of them, it is still under way.

At the same time, the trajectories of the verbs portrayed in Table 2 vary widely. For example, *obižat'sja* ‘feel offended’ underwent the most radical and speedy shift in its valency behaviour: the instrumental was the predominant (or even the only) possibility in the 18th century but has been almost fully ousted since that time. *Smuščat'sja* ‘feel confused’ develops similarly but much more slowly: the instrumental pattern is still comparable in frequency to the alternative
genitive pattern. In contrast, for *radovatʹsja* ‘be glad’ the instrumental was a rare possibility in the earliest period observed and has completely gone out of use since then.

Thus, the verbs in Table 2 are losing the same instrumental pattern with some differences in the time and rate of this shift, but the patterns that are gaining ground instead vary from verb to verb. Before inspecting the variation of these rival forms in more detail, we will briefly discuss two other groups of verbs that are attested with the stimuli in the instrumental case in the texts from the RNC.

The second group comprises 4 reflexive verbs of emotions that are mainly used without any overt stimulus in contemporary texts but are encountered with stimuli in the instrumental case in older texts: *veselitʹsja* (17) ‘have fun, rejoice’ (ipf.) (see Mikhaylov 2012, 189–191 for 18th century examples with the instrumental case), *pečalitʹsja* ‘be sad’, *uspokoitʹsja* ‘calm down’ (pf.) (18), *rastrogatʹsja* ‘get moved’.

(17) *Ty vmeste so mnoju veselil’sja nekogda žizniju, prirodoju, čelovečestvom; teperʹ skorbi so mnoju ili utešʹ menja!* (N. M. Karamzin. Melodor k Filaletu (1795))

‘You and I were once so **rejoiced by life, by nature, by humankind**; now mourn with me or console me!’

(18) *Snačala on očenʹ o tom goreval, no potom uspokoilsja mysliju, čto ona, verojatno, zanjata važnymi delami po svoemu zvaniju.* (Antonij Pogoreľskij. Černaja kurica (1829))

‘At first he was grieving about it, but he eventually **got calmed down by the thought** that she was probably occupied by important things related to her position’.

Finally, the third group contains 13 verbs that are used with the stimulus in the instrumental case both in earlier and in contemporary texts, e.g. *voschiščatʹsja* ‘admire’ (ipf.), *interesovatʹsja* ‘be interested’, *vozmuščatʹsja* ‘resent’ (ipf.) and *vdochnovljatʹsja* ‘be inspired’⁵. Although some oscillations are observed for some of these verbs, the use of the instrumental is dominant in all periods, cf. the use of the verb *voschiščatʹsja* ‘admire’ (ipf.) in a contemporary (10) and in an older text (19).


‘We were incessantly **admiring the views** that we could see on both banks of the river’.

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⁵ This list could be enlarged by reflexive verbs of emotion that do not have transitive (stimulus-subject) counterparts, such as *naslaždatʹsja* ‘enjoy’ (ipf.) and *vostorgatʹsja* ‘admire’ (ipf.).
Thus, over the last three centuries, many reflexive verbs of emotion in Russian underwent a gradual drift from the instrumental to a lexically determined encoding of the stimulus. There are also verbs that lost the ability to be combined with a stimulus marked by the instrumental case without gaining another means of stimulus encoding. For different verbs, this shift presumably begins at different moments in time and proceeds at various rates, but it is unidirectional in that the instrumental encoding of the stimulus for all these verbs becomes less frequent over time. For the last of the three groups discussed above, the instrumental case remains the major means of stimulus encoding during the entire period covered by the RNC. Importantly, to our knowledge, the opposite shift, i.e. the emergence of the instrumental pattern instead of another pattern of stimulus encoding, is not attested for any of the Russian reflexive verbs of emotion, at least during the last three centuries.

3. Hypothesis: from cause to content-like stimulus

3.1. The semantic basis of the shift from the instrumental to other means of stimulus encoding

As discussed in section 1, the role of the stimulus is semantically complex, as it embraces both the cause and the content of an emotion. Often, these two components of an emotive event correspond to the same participant, and it is impossible to tease them apart. In other cases, either the cause or the content component of the stimulus can be more pronounced, depending on the verb and the choice of encoding strategy (Croft 1993; Klein, Kutscher 2002).

We argue that the semantic nature of the drift away from the instrumental marking of the stimulus lies in the distinction between more cause-like and more content-like stimuli. We hypothesise that the instrumental encoding is associated with those stimuli that are primarily construed as causes of emotive events, while the lexical devices highlight the content component of the stimuli. The gradual loss of the instrumental marking reflects a strengthening of the content-like semantic properties of stimuli.

We further argue that for most verbs, this change in stimulus encoding can be connected to the emergence of individual emotive anticausative reflexives and their emancipation from their transitive counterparts. In the course of this process, these verbs are attracted to available valency classes based on semantic similarity and shift to the idiosyncratic means of stimulus encoding typical of these classes.

In the following subsections (3.2–3.6), we present evidence in support of these claims.

3.2. Semantics of encoding devices
Although all the cases and prepositions employed to encode the stimulus are polysemous, some of them are more associated with the participants that trigger an event, whereas others are more likely to encode the participants that are the endpoints of an event (see Będkowska-Kopczyk 2014, 210 for similar observations on Slovene data).

In this respect, the instrumental case clearly pertains to the expression of initial segments in causal chains. One of the major functions of the instrumental case, both diachronically and in modern Russian, is the encoding of the semantic role of instrument and other roles adjacent to it (such as intermediary, method, etc.); see Mikhaylov 2012, 141ff. for a diachronic account and Zolotova 2006, 232–235 for a synchronic one. Another major function of the instrumental case historically was to encode the semantic role of cause (see Mikhaylov 2012, 181–192 and references therein). This function was still productive in the 18th century. It was largely associated with the verbs denoting ailments and death (stradat’ ‘suffer’, pogibnut’ ‘perish’, past’ ‘fall’, etc.), see (Mikhaylov 2012, 185) and examples in Bulachovskij 1954, 335–336. Mikhaylov (2012, 188–189) also observes that the instrumental case was used to encode the stimulus of emotional states and reactions, primarily negative ones (examples include the verbs skučat’ ‘be bored’, ogorčit'sja ‘get upset’, bespokoit'sja ‘be worried’), see also Dubrovina 2002, 125. These contexts are also treated by Mikhaylov as manifestations of a causal meaning. Thus, the use of the instrumental case in the causal meaning is well-attested in 18th-century texts and can account for its wide employment as a stimulus encoding device.

The lexical devices that take over (see Table 1 in section 2) are semantically variegated, but most of them are basically used to mark the participants toward which the event is directed rather than those by which it is triggered. Two of these devices, the dative case and the preposition na + accusative, are associated with the general meaning of goal. The dative case is the major way of encoding the Addressee of speech verbs and the Recipient of transfer verbs. The preposition na + accusative is used to mark the goal of motion.

The main function of the preposition o + locative is to encode content in clauses with verbs of emotion and thought. Thus, the use of the o + locative pattern with verbs of emotion is primarily motivated by content-like properties of the stimulus. Similar observations are applicable to the marginal v + locative pattern.

(20) Čerez dvoe sutoj ja načal bespokoit'sja ob Aleksandre, ne slučilos' li s nim kakogo-nibud' nesčast'ja. (V. I. Al'banov. Dnevnik (1914))
‘After two days, I started to worry about Aleksandr lest some disaster might have befallen him’. 
The two remaining devices, the preposition *za* + accusative (21) and the genitive case (22), do not fit so easily within the proposed distinction.

(21) *Verojatno, i vy, Vladimir Nikolaevič, podčas tak že trevožites' za svoich blizkich.* (K. M. Stanjukovič. *Vokrug sveta na Koršune* (1895))

‘It is likely, Vladimir Nikolaevič, that you too sometimes worry for your beloved ones’.

(22) *I on uže načinaet stydit'sja svoego uvlečenija, stydit'sja orfografičeskich ošibok v ee pis'mach.* (A. A. Grigor'ev. *Ofelija* (1846))

‘And he is already beginning to be ashamed of his mistress, to be ashamed of grammatical mistakes in her letters’.

Outside the domain of emotion, the preposition *za* + accusative is used to encode both cause- and goal-like participants (Zolotova 2006, 182–84). With emotive verbs, this combination is said to encode the “content and cause of an emotional state” (Zolotova 2006, 183). The use of the genitive with the verbs *stydit'sja* ‘feel ashamed’, *smuščat'sja* ‘feel confused’ etc., is usually regarded as an instance of the “ablative” meaning of this case also attested with the verbs *izbegat* ‘avoid’ and *storonit'sja* ‘eschew’. The use in the “ablative” meaning, however, lost its productivity by the 18th century, and with many verbs that have spatial meanings, the genitive case was replaced by the preposition *ot* + genitive (see Krys'ko 2006, 239–41 for the distribution in the 17th century and Bulachovskij 1954, 341–42 on the variation in the 19th century).

Thus, among these stimulus-encoding devices, the instrumental case is the only one that is clearly associated with the meaning of cause, whereas the lexical devices replacing it are heterogeneous. Some of them tend to encode participants with the roles of goal or content, whereas others cannot be readily characterized in terms of this distinction.

3.3. Animacy of the stimulus

One of the most tangible properties of a stimulus is its animacy. Animacy is also a property that easily lends itself to a (probabilistic) interpretation in terms of the distinction between cause and content. Inanimate stimuli typically correspond to the state of affairs that caused a particular emotion, as in (23), where the content of the emotion can only be recovered from the wider context. Animate stimuli usually correspond to the participant who is viewed as responsible by the experiencer and constitutes the mental content of the emotion (24).
(23) Chagi-Jusèf pošel zaplatit' prežnej chozjajke za sutki i vzjat' vešči moi, no ona žestoko obidelas' našim postupkom, vybežala na ulicu i stala ssoritsja [...] s novoju chozjajkoju...

(A. A. Rafalovič. Putešestvie po Nižnemu Egiptu i vnutrennim oblastjam Del'ty (1850))

‘Chagi-Jusèf went to pay our former hostess for one night and to pick up my luggage, but she got deeply offended by what we did, ran out into the street and started to quarrel with our new hostess’.

(24) Sam že net-net da vspomnit pro èto i obižaetsja na svoego otca. (Vasilij Šukšin. Iz detskich let Ivana Popova (1960–1971))

‘He himself recalls it from time to time and feels offended by his father’.

Most stimulus-encoding devices can be used for both animate and inanimate stimuli. However, the ratio of animate vs. inanimate stimuli encoded by specific devices can be interpreted as an observable corollary of the not-so-easily observable semantic contrasts between respective devices.

To compare the stimuli encoded by the instrumental case to those marked by lexical devices in terms of animacy, we used data for the period from 1851 to 1920, as the texts of this period show the most balanced competition (see Table 2 above). We also chose eight verbs that met the following criteria: the proportion of the instrumental is higher than 0.1, and the absolute number of examples with each of the competing encoding patterns is at least 10. The number of animate and inanimate stimuli attested for each encoding device for a given verb is presented in Table 3.

<table>
<thead>
<tr>
<th>Instrumental</th>
<th>Lexical</th>
<th>Ratio of anim</th>
</tr>
</thead>
<tbody>
<tr>
<td>obižat'sja ‘feel offended’</td>
<td>obidet'sja ‘get offended’</td>
<td>obižaetsja na svoego otca</td>
</tr>
<tr>
<td>anim</td>
<td>inan</td>
<td>anim</td>
</tr>
<tr>
<td>4</td>
<td>85</td>
<td>69</td>
</tr>
<tr>
<td>0</td>
<td>97</td>
<td>58</td>
</tr>
<tr>
<td>poražat'sja ‘be astonished’</td>
<td>smuščat'sja ‘feel confused’</td>
<td>smuščat'sja ‘get confused’</td>
</tr>
<tr>
<td>anim</td>
<td>inan</td>
<td>anim</td>
</tr>
<tr>
<td>0</td>
<td>106</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>189</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>64</td>
<td>2</td>
</tr>
<tr>
<td>volnovat'sja ‘be worried’</td>
<td>trovožit'sja ‘be worried’</td>
<td>volnovat'sja ‘be worried’</td>
</tr>
<tr>
<td>anim</td>
<td>inan</td>
<td>anim</td>
</tr>
<tr>
<td>0</td>
<td>92</td>
<td>2</td>
</tr>
<tr>
<td>za+Acc</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>
Table 3. Animacy of stimuli encoded by the instrumental case as opposed to lexical devices in texts created between 1851 and 1920

Table 3 shows that the instrumental case is predominantly used to encode inanimate stimuli\(^6\). With the majority of verbs, animate stimuli in the instrumental case have not been attested. If they are attested, their ratio is much lower than among the examples in which lexical devices are employed, cf. the distributions for the verbs *obižat’*sja ‘feel offended’, *stesnjat’*sja ‘feel confused’ (25) and *trevožit’*sja ‘feel anxious’.

\(25\) – Delajte vse, čto vam vzduamaetsja, niskol’ko ne stesnjajas’ vami, tak že kak i my ne budem stesnjat’*sja* vami. […]. (L. N. Tolstoj. Junost’ (1857))

‘Do whatever you please, don’t feel confused by us, and we likewise will not feel confused by you’.

These results suggest that stimuli encoded by the instrumental case are more likely to be construed as causes of emotional states or reactions than the stimuli encoded by the lexical devices. This conclusion is based on the assumption that causes usually correspond to situations, which are inanimate, whereas the semantic role of content is more likely to be performed by animate participants.

3.4. Eventive vs. non-eventive inanimate stimuli

Inanimate stimuli are heterogeneous both formally and semantically. Formally, they range from anaphoric pronouns, such as *èto* ‘this’, to noun phrases and to complement clauses introduced by the case-marked pronominal element *to* ‘that’, as in (26).

\(26\) […] – sprosila Karo, ne dogadavšajasja ujti prežde, a teper’ ponjavšaja, čto ee vežlivym obrazom vyprovaživajut otsjuda, i obidevšis’ tem, čto polučila prikazanie ne neposredstvenno ot velikoj knjažny. (E. P. Karnovič. Pridvorne kruževo (1884))

‘[…] asked Karo, who was not clever enough to leave before and who now realized that she was being politely driven out and felt offended by (the fact) that it was not the grand princess herself who gave her the order’.

---

\(^6\) The same link between the non-instrumental encoding of the stimulus and its animacy for the verb *стыдиться* ‘feel ashamed’ is reported in Ferm 2005, 320–321; see also Maier 2007, 141.
Semantically, inanimate stimuli can be subdivided into what we refer to as eventive and non-eventive stimuli. Eventive stimuli correspond to dynamic events that can be situated on a timeline and which precede the emotion. This is the case in (26), where the protagonist receives orders in what she considers to be the wrong way. Receiving orders is a dynamic event whose time span is much shorter that the ensuing emotional state of the protagonist. Eventive stimuli like the one in (26) are more easily construed as the cause rather than as the content of the emotion.

We understand non-eventive stimuli to be those states of affairs which cannot be situated on a timeline at all, those which temporally overlap with the emotional state, or those which belong to the experiencer’s relative future. This is the case in (27), where the stimulus is expressed by a clause with a durative aspectual value: in the protagonist’s world, his interlocutor has a lasting unfavourable judgment about him. This non-eventive stimulus can be construed as both the cause and the content of the emotional reaction.

(27) Zametiv, čto Vikent’ev […] obidelsja tem, čto v nem predpolagajut nedostatok takta, […] Tat’jana Markovna perešla v družeskij ton, […] (I. A. Gončarov. Obryv (1869))
‘Having noticed that Vikent’ev got offended by being viewed as someone who lacked enough tact, Tatjana Markovna took on a friendly tone’.

The distinction between eventive and non-eventive stimuli is more easily visible in contexts where this argument is expressed by a full-fledged clause headed by a finite verb, as in (26) and (27). However, it can be applied to other syntactic types of stimuli as well. In (28), for example, the stimulus is expressed by the nominalization isčeznovenie ‘disappearance’, which is clearly eventive, i.e. refers to a specific punctual event located in the experiencer’s relative past.

‘And do not you feel anxious about this disappearance, Count?’

The basic distinction between events and non-events can also be drawn for inanimate stimuli that are not verb nominalizations, even though this distinction is not always clear-cut. Nouns such as žest ‘gesture’, as in (29), šutka ‘joke’, etc., can be classified as eventive. Nouns referring to habits, properties, attitudes and other lasting entities, such as smysl ‘meaning’ in (30), can be viewed as non-eventive.
(29) No ljudi u pomosta po-prežnemu buševali, niskol'ko ne smuščajas' žestom sud'i. (Aleksandr Men'. Syn Čelovečeskij (1969))

‘But the people near the scaffold continued to rage without being embarrassed by the judge’s gesture’.

(30) Ona otvečala spokojno, niskol'ko ne smuščajas' smysla svoich slov: […] (Konstantin Lysenko. Sto let spустja // «Ogonek». № 9 (3319), 1991)

‘She responded calmly without being embarrassed by the meaning of her words’.

In many cases, the lexical meaning of an inanimate stimulus is not sufficient for determining whether it is eventive or non-eventive, and a wider context should be taken into account. This is the case with inanimate noun phrases that metonymically refer to a certain state of affairs, as in (31), where the noun slova ‘words’ corresponds to a dynamic event, viz. the experiencer’s being spoken to by his bride, which happened prior to the emotional reaction.


‘Mokej Danilyč did not say a word in reply. He got embarrassed by his ex-bride’s words’.

There is no straightforward correspondence between the eventive or non-eventive nature of a stimulus and its encoding. In (26) and (27), for example, the instrumental case is used for different types of stimuli. However, we wanted to check whether there is a statistical correlation between the two parameters. To that end, we used randomized samples of examples with the instrumental and lexical encoding frames for the same eight verbs that were discussed in section 3.3. Again, two of the verbs had two lexical coding frames each. For each of the 18 verb + coding frame combinations, we manually annotated examples until we had 100 examples with inanimate stimuli that could be annotated as either eventive or non-eventive (problematic examples were disregarded). The results are shown in Table 4. For some verb + coding frame combinations, we failed to obtain 100 examples and calculated the percentages based on the samples we had at our disposal; these counts are shown in italics.

<table>
<thead>
<tr>
<th></th>
<th>Instrumental</th>
<th>Lexical</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>event</td>
<td>non-event</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>N %</td>
</tr>
<tr>
<td>obižat'sja ‘feel offended’</td>
<td>71</td>
<td>15 17%</td>
</tr>
<tr>
<td>obidet'sja ‘get offended’</td>
<td>88</td>
<td>12 12%</td>
</tr>
</tbody>
</table>
Table 4. The ratio of non-eventive stimuli to all inanimate stimuli: the instrumental case as opposed to lexical devices (all periods)

<table>
<thead>
<tr>
<th>Verb</th>
<th>Stimuli</th>
<th>Eventive</th>
<th>Instrumental</th>
<th>Acc. Case</th>
<th>Data</th>
<th>Eventive %</th>
<th>Instrumental Case %</th>
</tr>
</thead>
<tbody>
<tr>
<td>poražat'sjja ‘be astonished’</td>
<td>14</td>
<td>86</td>
<td>86%</td>
<td>Dat</td>
<td>9</td>
<td>91%</td>
<td>91%</td>
</tr>
<tr>
<td>smuščat'sjja ‘feel confused’</td>
<td>59</td>
<td>41</td>
<td>41%</td>
<td>Gen</td>
<td>20</td>
<td>37%</td>
<td>65%</td>
</tr>
<tr>
<td>smužit'sjja ‘get confused’</td>
<td>72</td>
<td>28</td>
<td>28%</td>
<td>Gen</td>
<td>18</td>
<td>17%</td>
<td>49%</td>
</tr>
<tr>
<td>stesnjat'sjja ‘feel confused’</td>
<td>11</td>
<td>89</td>
<td>89%</td>
<td>Gen</td>
<td>6</td>
<td>94%</td>
<td>49%</td>
</tr>
<tr>
<td>volnovat'sjja ‘be worried’</td>
<td>21</td>
<td>79</td>
<td>79%</td>
<td>o+Loc</td>
<td>2</td>
<td>46%</td>
<td>96%</td>
</tr>
<tr>
<td>trevožit'sjja ‘be worried’</td>
<td>43</td>
<td>25</td>
<td>37%</td>
<td>o+Loc</td>
<td>4</td>
<td>35%</td>
<td>90%</td>
</tr>
</tbody>
</table>

The data in Table 4 indicate that there is a recurrent pattern which is observed for all the eight verbs: the choice of the instrumental case frame is associated with eventive stimuli, whereas the choice of a lexical case frame correlates with non-eventive stimuli. This finding shows once again that the instrumental encoding is statistically related to the construal of the stimulus as a cause.

In this subsection, we did not make any attempt to directly consider a diachronic dimension due to a scarcity of data. However, the generalization we reached obliquely supports our main diachronic hypothesis: the drift from the instrumental to lexical case frames involves not merely a change in encoding but also the strengthening of content-like components of the stimulus.

3.5. Physical meanings

In a number of studies, it has been shown that emotive meanings and experiential meanings in general often develop from more concrete, physical meanings (Haskelmath 2001, 79; Klein, Kutscher 2002). For some of the above-mentioned reflexive verbs, the emotive meaning is found along with a more physical meaning, and the spread of emotive uses can be traced in the texts of the RNC. The most transparent connection between physical and emotive meaning is observed for the verbs poražat'sjja ‘be stricken’ and ‘be astonished’ (32)–(33), volnovat'sjja ‘ripple’ and ‘be worried’, stesnjat'sjja ‘be constrained’ and ‘be embarrassed’ (34)–(35).

(32) […] rebenok ne smeet noč'ju vyjti odin iz pokoev i, budući napolnen i napugan takimi strashnymi idejami, inogda i apoplektičeskim udarom poražaetsja […]. (D. S. Aničkov. Rassuždenie iz natural'noj bogoslovii o načale i proisšestvii natural'nogo bogopočitanija (1769))
‘… the child dares not leave his chamber at night and, inflated and frightened by these dreadful ideas, often gets stricken by an apoplectic fit’.

(33) Tako učaščijsja, pristupiv k neizvestnomu jazyku, poražaetsja raznymi zvukami. (A. N. Radiščev. Putešestvie iz Peterburga v Moskvu (1779–1790))

Similarly, a learner, when he begins to study an unknown language, is often stricken by the new variety of sounds’.

(34) […] pomjanutija časticy, kogda libo větrom, libo po drugoj pričině stěsnjajutsja, proizvodjat ogonʹ i tresk, na podobie ognestrēľnago porochu; čto nazyvaetsja molnieju i gromom. (A. M. Razumov (perevod traktata V. Kraťa s nemeckogo). Rukovodstvo k Matematičeskoj i Fizičeskoj Geografii (1764))

‘… the aforementioned particles, when compressed by the wind or by some other means, produce fire and crackle like gunpowder, and this is known as lightning and thunder’.

(35) Kozlenev, […] ne stesnjas' tem, čto sidel v lože, stučal rukami i nogami. (A. F. Pisemskij. Tysjača duš (1858))

‘Kozlenev was not embarrassed by (the fact) that he was in the loge and was knocking with his hands and feet’.

In (32) and (34), the verbs poražat'sja and stesnjat'sja are most naturally analysed as passives, and the instrumental case in these examples is used to encode participants with the semantic role of instrument or cause. When these verbs are metaphorically extended to the domain of emotions, the abstract interaction between the experiencer and the stimulus is modelled upon these interactions in the physical domain. Thus, at the early stages of these developments, the stimulus is likely to be identified with the cause-like participant and no content-like semantic components are traceable. It is noteworthy that in the earliest of the periods considered in this study (the 18th century), all these verbs are predominantly used with the instrumental encoding of the stimulus (see Table 2 above).

On their way from physical to emotive uses, many verbs are frequently found in contexts where they combine with body parts and “mental parts” as subjects and denote manifestations of emotions (36)–(37).

(36) No serdce Ioannovo ne uspokoilos', bolee i bolee kipelo gnevom, volnovalos' podozrenijami. (N. M. Karamzin. Istorija gosudarstva Rossijskogo: Tom 9 (1816–1820))

‘But Ioann’s heart had not calmed down, it was boiling with rage, it was worried by suspicions’.
I potomu, kogdab duch tvoj stal smuščatʹsja ich neobyknovennostiju: priznaj svoju nemošćʹ, i poklonisʹ Vsemoguščemu [...]. (archiepiskop Platon (Levšin). Slovo na novyj 1777 god (1777))

‘And therefore, whenever your spirit gets embarrassed by their extravagance, acknowledge your frailty and venerate the almighty God’.

‘And now she is waiting, she is puzzled and she is worried by painful speculations and misgivings’.

The participants of this semantic type are not stimuli in the strictest sense, as they are not states of affairs or referents to which the experiencer reacts. Rather, they are mental objects that can be perceived as existing independently of the consciousness of the experiencer and acting upon it as external forces or instruments.

Similar changes are also observed for some verbs that are consistently used with stimuli marked by the instrumental case. In (39), for example, the use of the verb voschiščatʹsja ‘admire’ (ipf.) with the noun duša ‘soul’ as the subject and the noun mečta ‘dream’ as the instrumental object is compatible both with its emotive meaning ‘admire’ and its original physical meaning ‘be taken up, elevated’. Even though the case frame of this verb remains stable, the types of objects it combines with have changed, and examples like (39) would sound obsolete for speakers of modern Russian.
Sidnej i Silli, ili blagodejanie i blagodarnost’ [perevod povesti F.-T. Bakuljara s francuzskogo] (1769))
‘I read in them that somewhere in the world there are wise heroes, benevolent hearts, zealous friends – in short, there are human beings, and my soul **got elevated by** this delightful dream’.

These facts suggest that the instrumental encoding of the stimulus in the early texts of the RNC is linked at least for some verbs to a relatively recent semantic development from physical to emotive meanings and could be inherited from uses that belonged to the physical domain.

**3.6. Lexicalization**

As we have seen, for some verbs the emotive meaning has recently emerged on the basis of concrete physical meanings. For an even wider range of verbs, individual semantic changes in emotive meaning can be viewed as instances of lexicalization and specialization.

Crucially, one of the common features of these individual changes is that the “early” emotive uses typically involve external causation, whereas the meanings that the verbs acquire later on are associated with internal causation. This shift from externally- to internally-caused emotions is reflected in a corresponding shift in the type of stimuli and in changing stimulus encoding devices. For instance, in earlier texts, the verb *smuščatʼsja* ‘feel confused’ typically denotes the attitude of an experiencer towards an external obstacle that can impede the execution of an action and is encoded by the instrumental case (40). In modern texts, this verb usually denotes a feeling that is grounded in self-awareness, and the stimulus encoded by the genitive case corresponds either to something possessed by the experiencer (41) or to a person who makes the experiencer feel self-aware.

(40) **Ne smuščajtesʼ nesčastiem i ne oslabevajte duchom na puti k dobru, pomnja slova apostola Pavla...** (F. V. Bulgarin. Ivan Ivanovič Vyžigin (1829))
‘Do not get embarrassed by misfortune and do not lose your spirit on the way to good, but remember the Apostle Paul’s words’.

(41) **Smuščajasʼ svoich lochmotʼev, svoich ubogich žilišč, fotografu pozirujut živye, konkretnye ljudi.** (Vasilij Peskov, Boris Strelʼnikov. Zemlja za okeanom (1977))
Real, individual people pose for the photographer, feeling **confused about** their ragged **clothes, about** their miserable **houses**’.
The semantic development of the verb *trevožit'sja* led from the meaning ‘be stirred, be disturbed’ with an external cause in the instrumental case\(^7\) (42) to the meaning ‘feel anxious, worry (about a future event)’, which is internally caused and often implies empathy (43).

(42) *Ešče ditja, on trevožitsja neponjatnymi, tjažkimi dumami;* […] (I. I. Lažečnikov. Basurman (1838))

‘Still a child, he was worried by incomprehensible, painful thoughts’.

(43) *No ešče bolʹše on trevožilsja o svoej literaturnoj sudʹbe, osobenno o posmertnom izdanii stichov.* (R. Ja. Rajt-Kovaleva. Robert Berns (1959))

‘But he is all the more worried about his literary career, especially about posthumous editions of his verse’.

The semantic changes that individual verbs undergo are different, which is expected in the process of lexicalization. Still, the common feature is a shift of focus from an interaction with an external cause that exists independently of the experiencer to a reaction which originates in and is mediated by the consciousness of the experiencer.

### 4. Passive participles and the instrumental encoding of the stimulus

In this section, we analyze constructions with past tense passive participles marked by the suffixes –*n*/–*t* , cf. *otkrytʼ* ‘to open’ — *otkrytyj* ‘opened, open (adj.)’. These participles can be used attributively or as a component of analytic passive forms, but in both cases agentive “demoted” A-arguments, if expressed, are encoded by the instrumental case, as in (44).


‘The bridge was formally inaugurated by the French president Jacques Chirac on December 14, 2005’.

However, participles with the suffixes –*n*/–*t* that are derived from verbs of emotion can display some variation in the encoding of the stimulus: it can be encoded not only by the instrumental case (45) but also by a lexically specific device (46). Importantly, wherever the lexical device is available, it matches the encoding frame of the corresponding reflexive verb, cf. the use of

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\(^7\) Cf. the uses with mental objects, such as *myslʼ* ‘thought’, and *opasenie* ‘misgiving’, discussed in 4.2.
na + accusative for the participle *obižen* ‘offended’ in (46) and the same possibility for *obidet’ja* ‘get offended’.

(45) *Kakie razgovory i stichi mogli menja interesovat’ sejčas, kogda ja byla obižena takim dorogim, takim edinstvennym dlja menja čelovekom!* (N. F. Rjabova. Kievskie vstreči (1940))

‘Could any conversations or poems be of any interest to me now that I was offended by this man, who was so dear and so special for me!’


‘But it has to be taken into account that she was seriously offended by Katja’.

The factors that determine the choice of the encoding device in this context are to be explored elsewhere. Here, we will briefly address the diachronic aspect of this variation, comparing the encoding of the stimulus in clauses with reflexive verbs and in those with the corresponding past passive participles. The relevant data are given in Table 5. For the reflexives, we use the data for the imperfective verbs given in Table 2 (the percentage of instrumental case usage for their perfective counterparts is close to or lower than that for imperfectives). For the participles, we consider only contexts with the predicative (“short”) forms (in Table 5 they are represented by masculine singular forms), both with and without the auxiliary verb *byt’* ‘be’. When collecting data for participles, we used the same procedures as those described in section 2 for reflexive verbs.

| Table 5. The percentage of instrumental encoding of the stimulus in constructions with past passive participles (P) and the corresponding imperfective reflexive verbs (R) |

Table 5 shows that almost no examples of participial constructions with the stimulus encoded by a lexical device are found in the texts of the first period even though some of the
corresponding reflexive verbs already exhibit variation in their stimulus encoding. Where variation is found for the participial construction in later texts, the proportion of instrumental encoding for a participle is always higher than that for the corresponding reflexive verb. Thus, in all the analyzed pairs, the lexical encoding of the stimulus in participial constructions arises later and spreads more slowly than in corresponding constructions with reflexive verbs. This finding suggests that when the emotive reflexive verbs are well under way in their shift toward the lexically determined means of stimulus encoding, the corresponding participles are likely to be engaged in the same shift and can be reinterpreted as participial correlates of those reflexives rather than regular passive forms of transitive verbs, cf. Knjazev 2007, 525.

5. Summary and discussion

The main empirical finding of this study is that during the last three centuries, a number of semantically diverse emotive reflexives in Russian have been undergoing a change in their stimulus encoding: the instrumental case gives way to various other means of participant encoding. The shift from the instrumental case to the other devices is not a unitary process but a recurrent scenario of change; different verbs enter this scenario at different moments and advance with different rates.

We argued that this is not merely a change in the encoding of arguments and that there is a semantic motivation behind this shift. In particular, the instrumental marking is associated with stimuli that are construed as the cause of an emotion, whereas the devices that take over highlight to a greater or lesser extent the content-like properties of the stimulus. In support of this hypothesis, we presented evidence concerning the semantics of encoding devices, the semantics of participants and the meaning of the verb.

We started out with the general observation that the instrumental case is associated in modern Russian and especially diachronically with semantic roles that pertain to the initial component of a causal chain, i.e. cause, instrument, etc.. It is not surprising that the more tangible role of cause is a source for modeling the more complex and abstract role of stimulus. By contrast, some of the encoding devices that spread diachronically are associated with the roles of goal and content, which can be viewed as endpoints of causal chains.

We have also shown that the instrumental encoding is statistically associated with inanimate rather than animate stimuli and that among inanimate stimuli, it is associated with eventive rather than non-eventive participants. These generalizations are consistent with our expectation that inanimate participants, especially those that correspond to events, are more likely to be viewed as causes of an emotional reaction or state, while the participants that correspond to
referents, inanimate or especially animate, can more naturally correspond to the content of an emotion.

The semantic development of the verbs parallels changes in participant encoding. Some of the verbs under study can describe both a physical interaction and an interaction in the emotive domain, e.g. *poražat'sja* ‘be stricken’ and ‘be astonished’, *volnovat'sja* ‘ripple’ and ‘be worried’. The path of metaphorical extension from physical to emotive uses is well-documented in the early texts of the RNC. For a wider range of verbs, there is evidence of the specialization of the emotive meaning and a semantic shift from externally caused reactions to internally caused emotional states.

We are now in a position to propose a model of diachronic change that would unify the evidence presented above. In the 18th century, the instrumental case covered a range of meanings in the domain of cause; in particular, it was used to denote the cause or force acting upon and affecting the sole animate participant, as in, e.g., the events denoted by the verbs *pogibnut* ‘perish’, *bolet* ‘be ill’ and *stradat* ‘suffer’ (Mikhaylov 2012). Reflexive verbs of emotion can be also viewed as denoting events with affected animate participants, i.e. the experiencer. Accordingly, the instrumental case partially spreads into contexts with well-established emotive reflexives, such as *radovat'sja* ‘be glad’ and *stydit'sja* ‘feel ashamed’, where it marginally competes with the older lexical means of stimulus encoding, cf. Mikhaylov 2012, 129–131. The instrumental case with causal meaning is also employed as the major strategy with emotive reflexives that emerge around that time, sometimes directly originating from physical meanings, cf. the discussion of the verbs *volnovat'sja* ‘be worried’ and *poražat'sja* ‘be astonished’ in 4.5. Later, these reflexive verbs of emotion become lexicalized and undergo semantic specification. Their semantic profile shifts from the causal component, which generally belongs to external reality, toward the mental state and content component, that is, to components that belong to the experiencer’s mental world. Many of these verbs tend to be attracted by semantically close emotive reflexives that are already well-established as anticausatives. This attraction results in an analogical shift from the more semantically general instrumental encoding of the stimulus to a more semantically specific means of encoding associated with a particular type of emotion.

A common feature in the semantic and syntactic development of individual reflexive verbs of emotion is their gradual emancipation from the corresponding transitives. In particular, whereas the use of the instrumental case at earlier historical stages is syntactically and semantically predictable for the whole group of verbs, newer encoding devices are verb-specific; that is, they cannot be predicted based on the properties of transitive constructions
with causative verbs of emotion such as *bespokoiť* ‘worry’, *obižat* ‘offend’, *poražat* ‘astonish’ etc.8

The scenario of emancipation from transitive counterparts, which we observe for many reflexive verbs of emotion, is further replicated by some participial constructions based on the same lexical stems. Whereas in the earliest period covered by the RNC, short participles such as *obižen* ‘offended’ or *obradiovan* ‘gladdened’ are syntactically very regular and parallel the passives of verbs with concrete physical meanings, in later periods, some of them replicate the developments we observed in reflexives. Thus, the shift from cause to content is a recurrent scenario in the development of Russian verbs of emotion.

References


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8 In this respect, the development of reflexive verbs of emotion can be seen as part of a broader process of the development of reflexive verbs. For example, some perfective reflexive verbs were used as regular passives in texts of the 18th or 19th centuries; in more recent periods, this pattern has been almost entirely lost, and the relevant reflexive verbs have only retained more idiosyncratic anticausative uses (Padučeva 2001: 74; Dobrovol’skij 2001: 174; Gradinarova 2017: 10–20).


