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Semantic Continuity in a Cross-Linguistic Perspective: Evidence from Slavic Verbs of Pulling and Pushing

Semantična kontinuiteta v medjezikovni perspektivi: primeri iz slovanskih glagolov za potiskanje in vlečenje
V prispevku so predstavljeni nekateri rezultati medjezikovne raziskave glagolov vlečenja in potiskanja v devetih slovanskih jezikih. Ti podatki postavljajo pod vprašaj tradicionalno predstavo pomenskega polja kot jasnega razreda leksikalnih enot. Zaradi semantičnega sosedstva se polja lahko prekrivajo, tako da lahko v različnih jezikih isti dogodek opisujejo glagoli, ki bi bili po tradicionalnem pristopu uvrščeni v različna semantična polja. Kršitev medpoljnih mej dokazujejo tako sinhroni kot diahroni podatki.
Ključne besede: leksikalna tipologija, glagoli povzročenega gibanja, okvirni pristop, pomensko polje

This article presents some results of cross-linguistic research on verbs of pushing and pulling in nine Slavic languages. These data call into question the traditional notion of the semantic field as a clear-cut class of lexical units. It is shown that, due to semantic adjacency, fields may overlap, so that in different languages the same event may be described by verbs that would be assigned to different semantic fields in the traditional approach. The violation of inter-field boundaries is evidenced by both synchronic and diachronic data.
Keywords: lexical typology, verbs of caused motion, frame approach, semantic field

1 Introduction

Lexical typology is a rapidly growing field of linguistics, whose tasks include among others the search for cognitively universal meanings and attested patterns of their lexicalization. Research on lexicon widely employs the notion of a semantic field, which has been coined by J. Trier (1931). This theory assumes that vocabulary consists of semantic fields – closed non-overlapping sets of lexemes with clearly defined boundaries. It means that every word of the language belongs to one particular field: for instance, "verbs of motion", "kinship terms", etc.

Violation of field boundaries may be tolerated; such a violation is referred to as a metaphorical shift. This means that the lexeme begins to be used not in its prototypical contexts, but changes its meaning and acts as an element of another class. The orientational metaphor LESS IS DOWN, described by Lakoff and Johnson, is

a classic example of crossing field boundaries (cf. Lakoff – Johnson 1980). Thus, if some parameter (weight, size, speed, etc.) acts as a subject of a falling verb, then this verb shifts from the semantic field of motion to that of decreasing quantity, cf. *the cup fell from the table* vs. *house prices fell by 0.5% from June*.

However, it appears that the violation of boundaries can be caused not only by metaphorical changes. Comparison of different languages' data reveals that the same extralinguistic event in different systems is described by lexemes, which, in the traditional approach, would be assigned to different semantic fields. This is because the structure of an event often consists of several subevents, and each of them can be profiled through language-specific lexicalization patterns. Thus, the event of falling to the ground includes at least two stages: first, a downward motion, and second, the collision of the moving figure with the surface. Accordingly, it is up to each language to choose which of the stages would be foregrounded in the event lexicalization. Some languages refer to the event of falling to the ground by a verb of motion (cf. Russian *upast'* or Slovenian *pasti* 'to fall'); whereas some languages prefer a verb of impact in such contexts (cf. Shughni *ðêdow* 'to hit'), see Rakhilina – Nekushoeva 2020.

Thus, it turns out that the same situation can be conceptualized as part of different semantic fields. This demonstrates the lack of clearly defined boundaries; instead, the adjacent fields overlap each other, erasing the inter-field boundaries. However, where exactly such overlapping may occur, i.e., which fields are adjacent to each other, has not yet been subject to systematic investigation. Note that adjacency, or contiguity, is a widely discussed issue in semantic analysis, but it is considered as a basis for metonymy, which takes place within one semantic field and not across its boundaries. Research on inter-field adjacency is a clear desideratum for semantic theory. A typological approach has proven to be an effective tool for this task. Indeed, recent works have revealed many instances of cross-linguistic variation on the boundaries of semantic fields, see Rakhilina et al. 2020 for further cases in the domain of falling, and Reznikova – Ryzhova 2020 for a discussion of body postures and positions.

This paper aims at detecting the cases of such adjacency for the domains of pulling and pushing. For this purpose, we use the data from several Slavic languages. This material raises another important theoretical question. Normally, in cross-linguistic studies typologists strive not to include languages from the same group into the sample. It is believed to introduce distortion into the research results because the common patterns found in such data might be due to their origin from a common source, and not to their typological frequency. However, this sample limitation appears to be far less relevant in lexical studies, since this part of language systems seems to change more rapidly than grammar (see Rakhilina – Reznikova 2016). Synchronic examination proves that related languages can have rich lexical diversity (see, e.g., Majid – Bowerman 2007 on verbs of cutting and breaking in English, German, Dutch and Swedish; Kashkin 2013 on adjectives of surface texture in ten Uralic languages). This data shows that a semantic field in

related languages is not always covered by cognates, i.e. cognates may drift apart into different fields that, however, often turn out to be adjacent to each other. Since we are interested just in cases of such adjacency, related languages provide a fertile ground for our study.

The rest of the paper is organized as follows. Section 2 outlines the methodological framework that will be employed in our research, and elaborates on our data sources. In Section 3, we discuss lexical contiguity found for the domains of pulling and pushing. We consider both phenomena observed on a synchronic level (when a lexeme shows polysemy between pulling or pushing and a meaning from an adjacent field) and those revealed in a diachronic perspective (when, as a result of semantic evolution, a verb that used to refer to pushing or pulling has become part of another field). Section 4 sums up the main findings illustrated throughout the paper.

2 Method and materials

We will show lexical divergences on the material of two semantic domains expressing the causation of motion, viz. 'pushing' and 'pulling'. We examined these zones previously in a wider typological perspective, see Saveleva 2017. This study is focused on more specific material, namely nine Slavic languages: Russian, Ukrainian, Bulgarian, Slovenian, Serbian, Croatian, Macedonian, Polish and Slovak.The methodology we employ in this research is a frame-based approach, which is advocated by the members of the Moscow Lexical Typological Group (MLexT, see Rakhilina – Reznikova 2016). This approach has already been applied to the study of many lexical domains (cf. verbs of AQUAMOTION in Maisak – Rakhilina 2007, predicates of pain in Britsyn et al. 2009; Reznikova et al. 2012, verbs of rotation in Kruglyakova 2010, verbs of falling in Rakhilina et al. 2020, etc.) and has proven to be efficient and informative in the issues of comparing the lexicon of different languages.

MLexT approach is based on the idea that meanings cannot be considered separately from the context. Proceeding from the contexts of words that belong to a semantic domain under study, we identify frames, i.e. situations that are typical for the given domain. These frames form the basis of the questionnaire, which is required for data elicitation from native speakers. The questionnaire consists of sentences with gaps instead of the verbs we are interested in: e.g., *The dentist _____ both teeth out*. Native speakers are asked to fill in these gaps with the appropriate verbs from the semantic field under study. If we had difficulty interpreting the information received, we had the opportunity to clarify the data by engaging in direct dialogue with the speakers.

To verify speakers' judgements, we consulted dictionaries and available corpus data of the respective languages. In this work, we mainly relied on the Russian National Corpus (RNC) and corpora of Slavic languages on the Sketch Engine platform. For the list of dictionaries, see electronic resources in References.

3 SEMANTICS AND TYPOLOGY

We take the following meaning[1] as the dominant for this zone: 'X, using force, moves Y away/closer, with his hands', where X is an agent (animate subject), Y is a patient (animate or inanimate object). Prototypically Y is a heavy object that is moved horizontally on the surface.

The situation in which a subject causes an object to move includes at least three stages:

- initial stage – the object is at a source point;
- middle stage – the object is being moved;
- final stage – the object is at a goal point.

The most crucial for both fields is the second stage, which determines whether the predicates belong to the field of causal motion, so the verbs of pulling and pushing profile the middle stage. Meanwhile, the initial and final stages may bring these situations closer to other semantic classes, and thus contribute to the continuity of lexical fields.

Pulling or pushing can be interpreted as some other type of action if the source or the final position of the object is cognitively salient. Staying in a container can serve as an illustrative example here. If the container is a source point of motion, then the object can be 'pulled' out of it. If it is a goal point, the object can be 'pushed' into it. As compared to standard ways of putting objects into or taking them out of a container, pushing and pulling imply a specific type of causation. Its peculiarity is determined by the properties of the container or the object, viz. the space is tight or the object is heavy so that the subject has to put effort into action. Yet, the specific manner may be less prominent in some contexts, and the verb meaning shifts towards a general idea of placement or removal. Such shifts may go unnoticed if one stays within the data of one language, but they can be easily revealed in a cross-linguistic perspective. Indeed, in our data there are several contexts in which one language still uses a verb of pushing or pulling, whereas other languages switch over to a verb from the placement, extraction, or even opening domain. Let us illustrate these effects in turn for pulling and pushing zones.

3.1 Containers as the source point of motion

The peculiarity of prototypical pulling and pushing events (viz. the motion of the subject along with the motion of the object) stipulates the very manner of motion to be the focal point of the corresponding verbs. Beyond that, as any directional motion, pulling and pushing imply a source and a goal, but these components are usually not expressed in the sentence, cf. **1** featuring the Slovak verb *ťahať* 'to pull'. It is clear that children pull their sleds from one place to another, that is, they

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1   This study deals only with physical meanings of the verbs of pushing and pulling, that is, their metaphoric use is outside the scope of this paper.

have the starting and the final point of the route, however, this idea is not in the focus of the statement.

[1] *Všade naokolo veľa snehu, deti vybehujú z blokov a za sebou **ťahajú sánky**.*
'There is a lot of snow all around, the children run out of the blocks and **pull the sledge behind them**.' (Sketch Engine)

Yet, we do find contexts where the source and/or the goal points are overtly realized. Due to the well-known effect of goal-bias (see Stefanowitsch – Rohde 2004), the verbs in our sample show a preference for encoding the endpoint over the starting point, cf. the use of the Slovenian verb *vleči* 'to pull' in **2**, where the goal is expressed by the prepositional phrase *v areno* 'into the arena'. Still, the source can also be overtly specified, e.g., if the subject intends to move the object away from some reference point, as shown in example **3** with the Russian predicate *tjanut'* 'to pull'. Moreover, both starting and final points may be expressed in one sentence, see example **4** from Slovenian.

[2] *Naša volovska vprega je **vlekla plug v areno**.*
'Our bullock cart **pulled the plow into the arena**.' (Sketch Engine)
[3] *No on ne poceloval, a, podojdja, ešče nastojčivee i neterpelivee **tjanul** menja **ot okna**.*
'But rather than kissing me, he came up and **pulled** me away **from the window** even more insistently and impatiently.' (RNC)
[4] *Rjav mršav konj **vleče** voz **od Fobškega Kala proti Puštalam**.*
'A brown skinny horse **pulls** a cart **from Fobški Kal towards Puštale**.' (Sketch Engine)

By itself, the expression of a source or a goal like in **2–4** does not trigger the re-interpretation of a caused-motion event as an action of some other type, i.e., these sentences retain the idea that the subject is moving a heavy object using his or her hands. Yet, if a starting or a final point is functionally relevant, viz. if it represents a container, then the semantics of verbs in question may shift.

In the case of pulling, the container usually serves as a source (cf. *pull a rabbit out of a hat*), since pulling implies the object moving towards the subject, which happens when an object is being taken out of a container (not put into it). Interestingly, this action differs from the prototypical pulling in that subject is not moving along with the object.

Nevertheless, Slavic verbs of pulling are widely encountered in such contexts. Note that this usage is commonly (but not necessarily) correlated with a derivation: as a rule, a prefix is attached to the verb, conveying the idea of moving outward (e.g., Sr *iz-*, Ru *vy-*), cf. the term "loose colexification" in François 2008.

Though Slavic verbs of pulling are similar in that they can cover situations of object extraction, they differ as to how far they penetrate into this adjacent domain. Let us consider the consecutive stages of this semantic evolution.

The Russian verb *tjanut'* 'to pull' and its derivative *vytjanut'* 'to pull out' correspond to rather early stage in this development, since they still retain the idea of force that the subject should exert in order to cause the object to move. If applied

to containers, the force may not only be needed due to handling a heavy object, cf. **5**, but also because of a narrow container, cf. **6**:

[5] *Ženščina v platke* [...] ***tjanet vedro*** *iz kolodca.*
'The woman in a scarf [...] is **pulling the bucket** from the well.' (RNC)

[6] *Kordovin* ***vytjanul platok*** *iz karmana, netoroplivo proter im stekla.*
'Cordovin **pulled a handkerchief** from his pocket and slowly wiped the glass with it.'(RNC)

The idea of applying force is what brings these situations closer to the prototypical pulling and differs them from general verbs of extraction. The next step in the semantic evolution is represented by verbs, in which the meaning of efforts is bleached, so that a verb of pulling can be used as a close synonym for a verb of extraction. The Russian *(vy)tjanut'* has not reached this stage, but it is characteristic of another Russian verb *vytaščit'* 'to drag out'.

The verb *vytaščit'* is derived from *taščit'* 'to drag', which, for some situations of prototypical pulling, can be used interchangeably with *tjanut'*. If applied to a situation involving a container, *taščit'*, just as *tjanut'*, retains the idea of efforts, cf. *iz bolota taščit' begemota* 'to pull a hippopotamus out of a swamp'. By contrast, its derivative *vytaščit'* can describe extraction that is not associated with force exertion. Cf. *vytaščit' odeždu iz škafa* 'get clothes out of the closet', which does not imply that the closet is packed to capacity, as *taščit'*, *tjanut'* or *vytjanut'* in a similar context would do. Note that *vytaščit'* here could be replaced by a general verb of extraction (*dostat'* or *vynut'*) with little difference in meaning: *devuška vytaščila / dostala noutbuk iz portfelja* 'the girl pulled out / took out a laptop from a briefcase' (cf. also the general verb of taking *vzeti*, which would be used in such contexts in Slovenian).

A similar development can be observed for the Slovak verb *vyt'ahat'*. Like the Russian *vytaščit'*, it can be used in situations where no force is applied to take out an object, see **7**. Moreover, it is appropriate in contexts, which would be infelicitous with *vytaščit'*, see **8**; cf. also a corresponding use of the Bulgarian *dărpam* 'to pull' in **9**.

[7] *Ten neváhal,* ***vytiahol z vrecka*** *elegantného saka kľúče od Ferrari* [...]*.*
'He didn't hesitate, **pulled** the Ferrari keys **from** his elegant jacket **pocket** [...]' (Sketch Engine)

[8] *Strčil kľúč do zámku a* ***vytiahol šuplík****.*
'He put the key into the lock and **pulled out a drawer**.' (Sketch Engine)

[9] *Orce* ***drăpna čekmedžeto na masata****, izvadi njakolko rakieni čaški.*
'Ortse **pulled the table drawer out** and took out some brandy glasses.' (Sketch Engine)

The situation which is described in **8–9** is interesting in how differently it is expressed in the analyzed sample of languages. In Russian, pulling out a drawer cannot be referred to with any verb from the pulling zone, i.e., *vytaščit'* is less advanced than the Slovak *vyt'ahat'* or the Bulgarian *dărpam* in the process of semantic evolution towards the extraction domain. Instead, the verb *vydvigat'* 'move out' is used to convey this meaning, cf. *vydvinut' jaščik* lit. 'to move out

the drawer'. *Vydvigat'* is derived from the general verb of caused motion *dvigat'* 'move', which, unlike pulling and pushing, does not specify the direction of motion with regard to the causer. Serbian also does not allow the use of pulling verbs in such contexts, but it resorts to a verb from another semantic domain, cf. *otvoriti* 'to open' (*otvoriti fioku* 'to open the drawer').

This cross-linguistic variation in the choice of a verb is motivated by specific properties of the situation of pulling out a drawer. Standing in between several semantic domains, it resembles each of them in some respect, but differs from their prototypical representatives. First, it can be interpreted as pulling, because the subject causes the object to move towards him- or herself. Yet, as in other cases of non-prototypical pulling, the subject does not move along with the object. Second, the situation can be regarded as extraction, since a drawer can be conceptualized as an object being extracted from a container, which is a table. However, prototypically, the subject manipulates the extracted object, and in this case, the object remains partially fixed, and is actually needed as a place where other things are stored. Third, due to this function, a drawer itself can be viewed as a container. If it is pulled out then the subject gets access to its contents, and this is exactly what happens in a situation of opening. Yet, prototypical opening presupposes a door, or a lid, or another type of covering which has to be removed, and this element is absent in case of a drawer. Thus, the situation with a drawer can be interpreted in several different ways, and this fact triggers cross-linguistic variation in the lexicalization of this frame.

Another example of this kind, which also stands at the overlap of pulling and extraction, is the situation of a tooth being pulled out (e.g., by a dentist). Again, it can be categorized as pulling, as the subject tries to move the object towards him- or herself. Indeed, in a broader typological study (see Saveleva 2017) we came across several languages that use a verb of pulling for this action, cf. English *pull out a tooth*, or its German counterpart *einen Zahn rausziehen* lit. 'a tooth out-pull', where *rausziehen* is a prefixed derivative from the basic verb of pulling *ziehen*. Yet, Slavic languages seem to almost completely lack this pattern of lexicalization. In our sample a similar use was only found in the Slovak dictionary data, cf. *ťahať zub* lit. 'pull a tooth' (https://slovnik.aktuality.sk/) and also approved by native speakers, albeit with a prefixed form of the verb (*vytiahnuť zub* 'pull out a tooth'). Nevertheless, corpus research has shown that another verb, viz. *vytrhnúť*, is more frequent for this meaning.

Generally, *vytrhnúť* describes an abrupt, violent action aimed at the separation of a fixed object from the place where it is located. It is applied, for instance, to soft growing objects (grass, hair) or sheets of paper, cf. *vytrhať burinu* 'tear out weeds', *vytrhnúť vlasy* 'tear out one's hair', *vytrhnúť list z písanky* 'tear a sheet out of a copybook'. The use of this verb for teeth can easily be accounted for, since teeth are fixed in the gums, and it is the fixed position that makes them similar to other objects of *vytrhnúť*. The idea of tearing is also involved in the description

of pulling out teeth in several other Slavic languages, cf. Russian *vyrvat'*, Polish *wyrwać,* and Slovenian *izpuliti*:

[10] Russian
  *– A mne segodnya **vyrvali zub.** – Bolit?*
  'I had a tooth pulled out today. – Does it hurt?' (RNC)
[11] Polish
  *Wielokrotnie chcemy za osobiste pieniądze zbadać wzrok, zrobić prześwietlenie, **wyrwać zęba.***
  'Many times, we want to have our eyes checked, x-rays taken, **a tooth pulled out** for our personal money.' (Sketch Engine)
[12] Slovenian
  *Kdaj je treba **izpuliti** modrostne **zobe?***
  'When it is necessary **to pull out** wisdom **teeth**?' (Sketch Engine)

Finally, pulling out teeth can be described with a verb of extraction. In this case, a tooth is conceptualized as an object, and a gum as a container for it. This strategy is encountered in Bulgarian, Macedonian and Serbian and is implemented by the verbs with the root *vad-* (Bg *izvadja*, Mk *izvadi*, Sr *izvaditi*)*.* In their basic meaning, these verbs express taking any kind of objects out of a container, cf. Bg *izvadja masloto ot xladilnika* 'take the butter out of the fridge'.

In sum, we found three types of lexicalization for the situation of pulling out teeth. Each of them focuses on a certain aspect in the situation:

(1) the fixed position of teeth at the source point of motion (this aspect is profiled by verbs of tearing, i.e., teeth are conceptualized as a natural growing entity),
(2) the position of teeth inside gums (verbs of taking out, i.e., teeth are conceptualized as a loose object in a container),
(3) the motion of teeth towards the subject (verbs of pulling).

Thus, we have demonstrated with several examples that the same situation can be regularly described by verbs belonging to different semantic fields. These options, first, trigger variation, which can be observed both languages internally (cf. Ru *vytaščit'* 'to drag out' vs. *dostat'* / *vynut'* 'to take out') and in a cross-linguistic perspective (cf. Sk *vyťahat'* 'to pull out' vs. Sr *otvoriti* 'to open'). Second, they cause semantic shifts – in our case, verbs of pulling mainly take on the meaning of extraction from a container. As we saw above, this process can be divided into several stages based on the contexts a given verb can be used in.

The next (and the last) logical step in this development would be a complete loss of pulling semantics, so that extraction of an object evolves into the verb's basic meaning. A case in point is also encountered in our data. In all the South Slavic languages of our sample (except for Slovenian) we came across verbs that go back to the Proto-Slavic **vaditi* (an enlonged grade of **voditi*). Originally, this root meant causal motion (see Collection of etymological dictionaries of Slavic languages, http://etymolog.ruslang.ru/, cf. its Russian cognate *vodit'* 'to lead'), and now it is mainly used in the meaning of 'extraction', cf. examples above and **13** from Croatian:

[13] *Ostavimo da se hladi i tek nakon hlađenja **vadimo iz kalupa**.*
'Leave to cool and only after cooling **remove from the baking dish**.' (Sketch Engine)

So far, we have considered only the cases when pulling verbs expand to cover the situations of an adjacent domain, viz. object extraction. However, a diachronic perspective reveals that the opposite process is also possible: the semantics of pulling can be developed by predicates from other semantic fields. This is the case with the Bulgarian verb *dărpam* that was mentioned above.

This verb goes back to the Proto-Slavic **dъrpati*, which, in its turn, is related to **dъrati* 'to tear' (see Collection of etymological dictionaries of Slavic languages, http://etymolog.ruslang.ru/). Thus, initially the root referred to physical impact. Its change towards the domain of caused motion is determined by the adjacency of the two meanings. Prototypically, in order to tear an object, one has to pull on it with a quick vigorous movement. This very type of pulling is synchronically the core meaning of *dărpam*, cf. **14**:

[14] *Njakoj me **drăpva** za **răkava**.*
'Someone **pulls** me by my **sleeve**.' (L. Stojanov, X, 164)

Again, the change between the domains, i.e., the violation of inter-field boundaries is motivated by the possibility to focus on different aspects of the situation – its result (tearing) or the action that brings it about (pulling).

3.2 Containers as the goal point of motion

While pulling implies the object moving towards the subject, pushing assumes the opposite direction of motion. Therefore, the container here is not the initial, but the final point of displacement, and the target of a semantic shift is thus the domain of putting. In other respects, the development goes along the same lines. First, the action differs from the prototype of pushing in that the subject remains on the same spot and does not move along with the object. Second, the features of the prototype object are modified: it can be not only a heavy object, but a variety of different entities (money, clothing, etc., for more details, see Sherstyuk – Reznikova 2021). Yet, the initial idea of effort that the subject has to make in order to bring the object in motion is still preserved. This effort, however, may be required due to the properties of the container: if there is not enough space in it or the inlet is smaller than the object, then the force must be applied to stuff the object into it.

Slavic verbs of 'pushing' regularly expand their meanings to cover situations of placement into a container. In Russian, for example, there are two lexemes that are subject to this meaning shift: *tolkat'* and *pixat'*. Both of them describe causative motion (cf. *tolkat' pered soboj teležku* 'push the cart in front of oneself', *pixat' sestru k vyxodu* 'push the sister towards the exit'), and both can refer to putting things into a container, though *tolkat'* usually gets the prefix *za-* in such contexts (cf. *zatalkivat' odezhdu v škaf* 'push clothes into the closet', *pixat' konfety v karman*

'stuff candies into one's pocket'). The closest synonym for *pixat'* and *tolkat'* in the latter examples would be the verb *sovat'*, which is actually a dedicated lexeme for putting into a container (for details, see Rakhilina 2015) and this synonymy serves as further evidence for semantic continuity across the domains boundaries.

A similar shift is characteristic of the Ukrainian verbs *štovxaty* and *pxaty*, cf. *pxaty* in **15** where it refers to a prototypical situation of pushing, and in **16** where it describes placement into a container.

[15] ***Pxaty** bryčku bulo tjažko.*
'It was difficult to **push** the carriage.' (Sketch Engine)

[16] *Ne bahato znajdet'sja ljudej, jakiv pusti pljashky, obhortky budut' **pxaty** nazad sobi **u kyšenju čy sumku**.*
'There are not many people who will **shove** empty bottles and wrappers back **into their pocket or bag**.' (Sketch Engine)

Shifting into the field of placing, the Ukrainian lexemes seem to "penetrate" it even deeper than their Russian counterparts. Thus, *štovxaty*, as opposed to the Russian verbs, is applicable to 'putting one's hands in one's pockets' (*štovxati ruki v kyšeni*), and *pxaty* can be extended to contexts where the idea of a tight container and hence of effort needed from the subject is erased (*pxaty ruki v vodu* lit. 'push one's hands into the water').

Thus, both the Russian and the Ukrainian verbs undergo a semantic shift towards the domain of putting into a container, with the Ukrainian *štovxaty* and *pxaty* being further away from the initial meaning of pushing than their Russian counterparts. A next possible stage in this development would be the complete loss of the initial meaning, i.e., the verb would no longer be used for moving heavy objects in front of oneself, but refer only to placing into a container. This very stage is represented by the Bulgarian verb *păxvam*, which is a cognate of the Russian *pixat'* and the Ukrainian *pxaty*. Unlike its East Slavic counterparts, the Bulgarian lexeme cannot describe prototypical events of pushing objects, its use in concrete physical contexts being restricted to the situations with a container as a goal of motion:

[17] *Raztărkvax prăstite i dlanite si, **păxax răce v džobovete na baltona**, no studăt kato če pronikvaše i prez šajaka i ščipeše bolezneno.*
'I rubbed my fingers and palms and **put my hands into my coat pockets**, but the cold seemed to seep through my clothes and sting painfully.' (G. Karaslavov, Izbr. săč. VIII, 221)

We have seen that the data of closely related languages allow us to determine the consecutive stages of a semantic shift from the domain of pushing to the adjacent domain of putting into a container. As already stated, this shift is based on the idea of moving an object away from oneself. The idea is a core part of pushing semantics, but pushing is not unique in expressing it. There are other situation types that involve this motion. The domain of hitting with an instrument is a case in point. Indeed, verbs of this semantic class assume that the subject is moving the

instrument towards the object. Interestingly, though this meaning is not central for hitting, it still can be the source for a shift to putting domain.

The Bulgarian verb *muškam* can illustrate the point. It originally means 'to strike, stab, stick with something sharp', cf. *muškam s nož* 'to stab with a knife', *me muška văv vrata* 'he stabs me in the neck'. Note that the place of contact is coded by a noun group with the preposition *v* (*văv*), i.e., this participant is characterized by the same marking as a container being the target of motion. Perhaps it is this circumstance that contributes to the reinterpretation of the construction. It is essential that such a rethinking – in full accordance with the key tenets of the Construction Grammar (see Goldberg 1995) – also provokes a change in the formal features of the structure as a whole. The "container" construction usually does not express an instrumental participant, and the direct object changes from a person, who is exposed to aggressive impact, to an inanimate object that is placed into a container.

[18] *Toj vednaga pregledal zapisite ot kameri i vidjal kak mladoto momče* **muška v džoba** *si nakitite.*
'He immediately looked at the camera footage and saw the young boy **shoving** jewelry **in** his **pocket.**' (Sketch Engine)

A similar shift occurs in the Russian verb *tykat'* (*tykat' okurok v cvetočnuju vazu* 'to poke a cigarette butt into a flower vase') and its Ukrainian cognate *tikati* (*tikati meni v ruku sribnogo karbovancja* 'to shove a silver ruble into my hand'). Though the Russian examples seem to be outdated (similar contexts in the RNC date back to the 19th century), they still prove the cross-linguistic recurrence of this pattern of semantic change.

Additional evidence for this pattern could be retrieved from semantic relations between the meanings of cognates (cf. the treatment of cognates as one of the possible realizations of semantic shifts in Zalizniak et al. 2012). We have already mentioned the Russian verb *sovat'*, which pertains to the domain of putting into a container. Its Slovenian cognate *suniti* expresses the idea of aggressive impact on an object, as in *suniti koga s kolenom v trebuh* 'hit someone with one's knee in the stomach', cf. also about stabbing with a sharp object:

[19] *V tem me nekdo zgrabi za vrat, vrže me na tla in me* **sune** *z ostrim nožem, da zdajci omedlim.*
'In this, someone grabs me by the neck, throws me to the ground and **stabs** me with a sharp knife to make me faint for a moment.' (Sketch Engine)

Thus, the cognate words *sovat'* and *suniti* demonstrate the same semantic relation as the different meanings of the polysemous verbs *muškam* and *tykat'*, and provide us with further evidence of semantic adjacency between hitting and putting into a container.

4 Conclusion

The data described in this work shows the complexity of the semantic fields of pushing and pulling. The situations covered by the verbs of this zone may not just refer to moving an object, but also include many additional meanings, which determines the overlap between the analyzed fields and several others. In particular, verbs of pulling may presuppose the extraction of an object from a container; and those of pushing – the placement into a container. Strictly speaking, the meanings of extraction or placement refer to other semantic fields, therefore, the development of these meanings in verbs with prototypical semantics of 'pulling' and 'pushing' indicates a violation of the boundaries between the fields. It is crucial that we are not talking about a metaphorical shift, rather, we are dealing here with a fundamental fuzziness of the inter-field boundaries.

We observed such a violation of boundaries, first, on synchronic material. Verbs of pulling and pushing may develop secondary meanings from adjacent domains, and a typological perspective reveals that a verb may be found at different stages of this development. Second, diachronic data also testifies to the vagueness of the boundaries between the fields. Moreover, it follows contiguity patterns similar to those found synchronically, namely, verbs of extraction from a container may etymologically go back to a verb of caused motion.

The analysis of Slavic verbs denoting a caused motion of objects clearly shows that semantic fields do not exist independently of each other; they intersect and overlap each other. A typological approach to lexical research is an effective way to detect such intersections.

Electronic resources

Collection of Etymological Dictionaries of Slavic Languages, http://etymolog.ruslang.ru/.
Collection of Explanatory Dictionaries of Serbian, http://raskovnik.org/.
Explanatory Dictionary of Bulgarian, https://rechnik.chitanka.info/.
Explanatory Dictionary of Croatian, https://rjecnik.hr/.
Explanatory Dictionary of Polish, https://wsjp.pl/.
Fran: Dictionaries of the Fran Ramovš Institute of the Slovenian Language ZRC SAZU, https://www.fran.si/.
Glosbe – A Multilingual Online Dictionary, https://ru.glosbe.com/.
Lexicographic Web Portal: Online Dictionaries of Russian, https://lexicography.online/.
MOVA – Ukrainian Text Corpus, http://www.mova.info/corpus.aspx.
Russian National Corpus, https://ruscorpora.ru/new/.
Sketch Engine – Text Corpus Query System for All, https://www.sketchengine.eu/.
Slovak etymological dictionary, https://slovnik.aktuality.sk/.
Small Academic Dictionary (MAS), http://febweb.ru/feb/mas/mas-abc/default.asp.

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Pᴏᴠᴢᴇᴛᴇᴋ

Semantična kontinuiteta v medjezikovni perspektivi: primeri iz slovanskih glagolov za potiskanje in vlečenje

V leksikoloških raziskavah je pogosto v rabi termin pomenskega polja, ki ga je vpeljal Jost Trier.

Pomenska polja so po klasični opredelitvi zaprte in neprekrivne množice leksemov, kot so glagoli premikanja, izrazi za sorodstvena razmerja ipd. Toda tipološke raziskave kažejo, da meje med pomenskimi polji v posameznih jezikih ne sovpadajo. Tovrstna razhajanja so posebej očitna v sorodnih jezikih, kjer med sorodnimi leksemi prihaja do pomenskih razhajanj.

Prispevek obravnava podobne pojave, podobnosti in razhajanja v pomenskem polju glagolov vlečenja in potiskanja v devetih slovanskih jezikih. Opozorjeno je na primere, kjer se na obrobju omenjenih pomenskih polj pojavljajo situacije, ubesedene z glagoli iz različnih pomenskih polj, npr. pri opisu situacije 'izpuliti zob' se v posameznih jezikih uporabljajo glagoli 'vleči', 'puliti' in 'jemati ven'.

Z razvojnega stališča se med posameznimi polji kažejo povezave, ko posamezni glagoli zaradi izgube prvotnega pomena in pomenskega premika lahko prehajajo iz enega polja v drugo. Takšni pomenski premiki pričajo o pomenski kontinuiteti besedišča in kažejo na odsotnost strogih mej med posameznimi polji.

Ob tem se tovrstne pomenske spremembe ne vpisujejo v tradicionalno klasifikacijo pomenskih premikov: po eni strani izhajajo iz pomenske bližine, kar je sicer značilno za metonimijo, po drugi pa se njihov izhodiščni in končni pomen ne nanašata na isto polje, kar je značilno za klasično metonimijo, in spadata v različna pomenska področja..