Time as secondary to space: Russian *pod* 'under' and *iz-pod* 'from-under' in temporal constructions

Время как периферия пространства: конструкции с предлогами *под* и *из-под* в русском языке

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Abstract This article analyzes constructions with two Russian prepositions *pod* 'under' and *iz-pod* 'from-under'. It focuses on how temporal meanings are developed from spatial meanings. We relate three temporal constructions with the preposition *pod* to spatial constructions with the same preposition. It is argued that the preposition *iz-pod* is a blend of the two prepositions *iz* 'from' and *pod* 'under'. This argument is supported by symmetry between the spatial uses of both prepositions, and the fact that a temporal construction with the preposition *iz-pod* is directly related to one of the temporal constructions with the preposition *pod*. We show that temporal uses of both *pod* and *iz-pod* develop from peripheral spatial uses. Moreover only directional spatial constructions have parallels in the domain of time. We draw a parallel between the directional movement in space and time which is perceived as being in constant motion.

Аннотация В статье рассматриваются временные конструкции, образованные при помощи предлогов $no\partial$ и $us-no\partial$. В фокусе внимания данной работы находится развитие временных значений этих предлогов из пространственных значений. Мы исследуем связь между пространственными употреблениями $no\partial$ и тремя временными конструк-

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циями с этим предлогом. В статье предлагается анализировать предлог u3- $no\partial$ как бленд предлогов u3 и $no\partial$ и демонстрируется, что пространственные употребления u3- $no\partial$ хорошо соотносятся с пространственными употреблениями $no\partial$, а временные употребления u3- $no\partial$ имеют непосредственное отношение к одной из временных конструкций с предлогом $no\partial$. В работе показано, что временные употребления обоих предлогов развиваются из периферийных непрототипических пространственных употреблений. Мы отмечаем, что во временную сферу переходят исключительно пространственные конструкции со значением движения по направлению к цели. Это наблюдение позволяет нам провести параллель между движением в пространстве и временем, которое воспринимается носителями языка как постоянно движущееся.

1 Introduction

In language, expressions used to denote time are also often used to denote space. Yet, the relationship between these two entities is hardly straightforward. On the one hand the classic work on metaphor by Lakoff and Johnson (1980) states that TIME IS SPACE. On the other hand, typologists using cross-linguistic material point out that not all temporal meanings originate from spatial meanings (cf. Haspelmath 1997). As a result it is important to identify the areas where the mapping between space and time occurs easily. Such zones indicate the cognitive origins of the relationship between temporal and spatial domains.

There are three semantic areas where the relation between time and space is clear and uncomplicated. Haspelmath (1997), analyzing data from fifty-three languages, concludes that markers of these areas are attested in both spatial and temporal uses in many languages. These semantic areas are:

- periods of time viewed as containers: in January, in the moment, in the next phase like in the basket, in the cave;
- points in time viewed as goals of moving objects: to announce on January 25 like to put on the table; towards four o'clock like towards the house;
- time viewed as moving currents or points: years go by like cars go by.

These are basic areas involving a metaphorical relationship between time and space. ¹ The domains of time and space are crucially different from one another, because space is stable, while time is usually perceived as being in motion. Therefore directional space markers are more easily transformed into the domain of time. This means that spatial and temporal uses are not exactly parallel: the temporal use has additional restrictions that come from the domain of time. This observation is in accordance with modern cognitive research as concerns metaphor, which pinpoints that metaphor almost never performs a one-to-one mapping; only some features of the source domain are reflected in the target domain (cf. Lakoff 1987, pp. 380–415).

This paper focuses on spatial and temporal uses of the markers that do not belong to any of the three areas of active and straightforward parallels between spatial and temporal domains mentioned above. We will show that as soon as we step out of these areas of simple

¹One additional area where temporal and spatial uses are frequently related is the zone where distance in space is measured via movement through that space. In saying *a long road* we measure the length of the road using the time that is needed to complete the journey, and in saying *sparse bushes* we measure time that is needed in order to travel from one of the bushes to another. However here we are dealing with a metonymic relationship, because we are using time that is needed to cover the distance to denote space.



and straightforward metaphor, we find that the relationship between the domains of time and space is more complicated. We explore how the temporal uses are related to the spatial uses, what semantic schemas they share and what changes once we go from space to time.

Turning to less studied areas of the TIME IS SPACE metaphor, we not only explore previously uninvestigated domains, but also hope to uncover crucial features of the metaphor. Usually more peripheral uses in a network preserve the more important characteristics, while they may lack less crucial ones. As a result, by studying peripheral elements of the TIME IS SPACE metaphor we can determine what characteristics are more relevant for mapping space to time.

We study several temporal constructions involving the originally spatial prepositions *pod* 'under' and *iz-pod* 'from-under'. The preposition *pod* is used in three different constructions which all have a temporal component:

- the simultaneity construction (son pod šum doždja 'sleep to the patter of rain');
- the temporal boundary construction (zasnul pod utro 'he fell asleep towards morning',
 [emu] pod sorok '[he is] almost forty');
- the prospective construction (pristrojka pod bassejn 'extension for a swimming pool', bočka pod kvas / vino / benzin 'barrel for kvass / wine / gasoline').

The preposition *iz-pod* is used in only one construction with a temporal component:

the retrospective construction (bočka iz-pod kvasa / vina / benzina 'empty kvass / wine / gasoline barrel').

These temporal constructions differ significantly from the prototypical spatial uses of the same prepositions, but at the same time temporal constructions inherit several important features of the spatial constructions.

In this article we first analyze the spatial construction with the preposition pod. We pinpoint the prototypical features and the semantic schema of the preposition pod. We explore how these prototypical features are realized in the central spatial meanings, how they are transformed into peripheral and metaphoric uses and what factors allow such transformations. Secondly, we turn to temporal uses of pod and for each temporal construction with the preposition pod we investigate what features of the source spatial construction with the preposition pod are inherited, and the nature of the temporal component of the construction. We will pay special attention to the additional elements of the temporal constructions and to the possible fillers of slots in both the temporal and the spatial constructions. Thirdly, we study the Russian preposition iz-pod 'from-under', which is related to the preposition pod 'under', since it is composed of two Russian prepositions: iz 'from' and pod 'under'. The preposition iz-pod also participates in both spatial and temporal constructions. We propose that the temporal construction with the preposition iz-pod is not directly related to the spatial constructions with the same preposition. We show that *iz-pod* functions as a blend (in terms of Fauconnier and Turner 2002) of the two prepositions iz and pod and that both spatial and temporal uses of *iz-pod* are related to spatial and temporal uses of *pod* affected by the meaning of the preposition iz.

In this study, the uses of the two prepositions *pod* and *iz-pod* are discussed within the framework of Construction Grammar (Fillmore 1988; Goldberg 1995, 2006; Fried and Boas 2005 among others). All uses of a preposition are analyzed as belonging to several constructions differing in form and meaning. A construction that is unified in terms of form and meaning may be composed of several mini-constructions. A mini-construction specifies "detailed syntactic, semantic, and pragmatic selection restrictions" (Boas 2007, p. 580; see also Boas 2003, pp. 191–259 for details). Uses of a construction belong to several mini-constructions, and each mini-construction represents its own frame (cf. Nemoto 1998). Mini-constructions



Table 1 Prototype of the spatial pod-construction				
Slot of the construction	Trajector (X)	V	pod	Landmark (Y)
Filler of a slot	NP	locative or directional predicate	pod	NP ^{instr/acc}
Example	dokumenty	xranili / položili	pod	časami / časy
Gloss	documents	are stored / are put	under	clock ^{instr/acc}

have systematic semantic restrictions posed on a slot of the construction. For example, among the uses of *pod* we can distinguish the prototypical spatial construction (*položit' dokumenty pod časy* 'put the documents under the clock') and the approximate age construction (*emu pod sorok* 'he is under forty'). Among the uses of the former construction we can find a vehicle mini-construction (*Ostap popal pod lošad'* 'Ostap got hit by a horse'), a mini-construction of protection (*gotovit' ėksperiment pod nabljudeniem glavnogo inženera* 'prepare the experi-

ment under supervision of the head engineer') and a mini-construction of hostile relationship

2 Spatial uses of the preposition pod

2.1 Prototype of the spatial construction with the preposition $no\partial$

(vzjat' podozrevaemogo pod arest 'put the suspect under arrest').

The prototype of the spatial construction with the preposition *pod* is illustrated in Table 1. It contains a predicate that denotes localization (e.g. *byt*' 'be', *naxodit'sja* 'be located', *okazat'sja* 'turn out to be') or position (e.g. *stojat*' 'stand', *ležat*' 'lie', *viset*' 'hang'). This predicate designates a position of a movable X that serves as a trajector in relation to a stationary landmark Y. The landmark Y dominates the trajector X and X is located lower than the lowest surface of Y. There is either contact between the lowest surface of Y and X (e.g. *pni skrylis' pod snegom* 'the stumps are covered under snow') or Y dominates X without direct contact (e.g. *on postavil jaščik pod krovat*' 'he put the box under the bed').

The landmark Y can appear in both the instrumental and the accusative case. In the first case the construction describes location and in the second case Y is a goal of directional movement. In this construction, both cases express meanings typical for them. One of the uses of the instrumental case is marking location for peripheral spatial prepositions (*za domom* instr 'behind the house', *pered domom* instr 'in front of the house', *nad domom* 'above the house', *pod domom* 'under the house'). The accusative case is typically used as a marker of the goal of directional movement with Russian prepositions (*položit' dokumenty na stol* acc 'put the documents on the table', *v stol* c'in the table', *pod stol* c'under the table', etc.), except for *nad* 'above' which uses the instrumental case in contexts of directional movement (see *povesit' nad krovat' ju* instr 'hang above the bed').

The form and structure of Y play an important role in the prototypical situation. Y tends to be a stationary object that has a functional lower surface. This condition explains why small objects and liquid objects are not allowed in the construction (see Plungjan and Raxilina 2000). Small objects cannot serve as a landmark in the *pod*-construction for two reasons: firstly, these objects are usually seen as movable, which conflicts with the stationary requirement and secondly, these objects do not have a relevant lower surface, e.g. uses like *pod gvozdem* 'under a nail' cannot refer to an object located between a nail and a surface into which the nail is hammered. Liquid or bulk materials that do not form layers are also easily movable, do not have a permanent form, and therefore lack a lower surface required for the



pod-construction, see ??dno kotelka pod poxlebkoj² 'the bottom of the pot under the soup', ??poverxnost' stola pod pylju 'the surface of the table under the dust', cf. poverxnost' stola pod sloem pyli 'the surface of the table under the layer of dust' which is grammatically correct because the amorphous dust is turned into a layer of dust which has a recognizable form and a lower surface.

Thus, in the prototype of the *pod*-construction Y has a relevant lower surface that is always higher than the upper surface of X, so that Y dominates X. X and Y need not be in contact. The idea of dominance is important for all uses of *pod* and can be seen as an internal schema for this preposition. The idea of physical dominance develops into an idea of functional dominance for more peripheral uses of *pod*.

We now turn to less prototypical uses of the *pod*-construction, which can appear in three situations: when Y is unfolded, concave, or reduced. In each case, Y has a characteristic form as a layer, dome, or vertical object.

Layers

X and Y, if they are in contact with each other, can have different orientations in space, so long as X is under Y. For example, the configuration of X and Y can easily be rotated from the horizontal orientation to slanted or vertical. This primarily applies to layers of clothes (*sviter pod šuboj* 'sweater under a fur coat'), but can also include other kinds of layers (*gazeta pod obojami* 'newspaper under wallpaper', *freski pod štukaturkoj* 'frescos under plaster'), which could also include substances (*podo l'dom* 'under ice' which can be used in the context of vertical window glass).

Domes

In these contexts Y is a concave horizontal surface in the form of a dome. X is located under in the highest point of the dome. For example, we can describe gymnasts (but not the audience) under the circus dome ($pod\ kupolom\ cirka$ 'under the top [cupola] of a circus tent') or hair inside a hat ($volosy\ pod\ šapkoj$). It is important to note that sometimes box-shaped spaces can be conceptualized as domes, cf. $vzmyt'\ pod\ potolok$ 'fly up to the ceiling'. Thus, this type of context is characterized by a deviation from the prototypical picture: the boundary relevant for $no\partial$ is the limit of vertical movement (see $vzletet'\ pod\ kupol\ cirka$ 'fly up to the top of a circus tent', $parit'\ pod\ kupolom\ cirka$ 'hover under the top of a circus tent'). The presence of a boundary that limits movement unites the class of domes with the class of vertical objects.

Vertical objects

For vertical objects (walls and columns) their lower surface supports the object, so nothing can be placed under a vertical object. As a result the lower surface of such objects cannot be functional from the point of view of the prefix *pod*. So the construction with *pod* uses the space near a vertical object instead. The *pod*-construction with vertical objects describes the nearby vicinity at the lower end of the object. The vertical object serves as a boundary for horizontal movement similar to how domes serve as a boundary to vertical movement. Examples such as *pod stenami goroda* 'at the walls of the city', *pod goroj* 'at the foot of the hill', *pod kolonnami Bol'šogo teatra* 'at the columns of the Bolshoi theater', *pod dver'ju* 'at the door' denote being 'close'. We can also find names of cities in the same mini-construction. This transfer occurs due to a historically grounded metonymy between the 'walls of city fortifications' and 'city', see *žil pod Moskvoj* 'lived near Moscow', *boj pod Minskom* 'battle near Minsk', *zamok pod Parižem* 'the castle near Paris'.

²Double question marks in this paper mark non-natural uses and are assigned on the basis of native speaker judgments.



Some parts of the body form idiomatic constructions with the preposition pod. Some of them have the prototypical meaning of pod, but mostly these constructions shift in meaning. This shift occurs because parts of the body are strongly related to the owner of the body who is interpreted as the landmark object Y and naturally this object Y is vertically oriented. Thus, regardless of the structure of the given body part, the resulting pod-construction always is based on the idea of functional proximity, i.e. being nearby for easy handling, as in the expressions pod rukoj / pod rukami (lit. 'under the hand / hands'), pod nogami (lit. 'under the feet'), pod bokom (lit. 'under the side of the body'), pod nosom (lit. 'under the nose'), pod uxom (lit. 'under the ear'), which all mean 'near'. These expressions have minor differences motivated by the functions of various body parts, e.g. pod uxom (lit. 'under ear') is primarily used with sounds, as in žužžat' pod uxom 'hum right in one's ear'. The list of body parts that can metonymically represent the whole person is limited and is exhausted by the expressions given above. Other parts of the body produce prototypical pod-constructions, where pod refers to a location below the lower surface, as in pod pjatkoj 'under the heel' (and also its metaphoric variant pod pjatoj 'under one's thumb'), pod jazykom 'under the tongue', pod ušami 'under the ears', pod podborodkom 'under the chin', pod kolenkoj 'under the knee'.

2.2 Peripheral spatial uses: focus on functionality

Let us consider contexts where the function of Y or sometimes the functions of both X and Y bring about a change in how the *pod*-construction is used. We will show how the spatial semantics of *pod* is transformed. These kinds of contexts can be divided into three classes:

- 1. mini-constructions involving substances or objects falling from above;
- 2. mini-constructions involving instruments;
- 3. mini-constructions involving vehicles.

The first class of contexts involves substances that are located above as expected for elements participating in a pod-construction. In this case the substance falls from above. This includes forms of water like $do\check{z}d'$ 'rain', $du\check{s}$ 'shower', struja 'stream', metonymically water itself (voda) and frozen water in the form of snow (sneg).³ Similarly we see kran 'tap', where a tap metonymically replaces the water, and all kinds of artifacts that can fly towards a person, specifically strely 'arrows', puli 'bullets', struja 'bombs' and struja 'fire'.

The second class contains instruments functioning as Y, they are movable and they are always interpreted functionally: *ėto proizvedenie rodilos' pod perom izvestnogo pisatelja | rezcom skul'ptora* 'this product was born under a famous writer's pen / a sculptor's chisel'. See also: *pod nožom* 'under the knife' (see (1)⁴), *pod toporom* 'under the axe', *pod knutom* 'under the whip', *pod mečom* 'under sword', *pod kuvaldoj* 'under the sledgehammer', *pod lopatoj* 'under the spade', *pod pistoletom* 'under a pistol', and also with metonymic shift *pod dulom* 'at gunpoint' (lit. 'under a muzzle') or *pod pricelom* 'in the crosshairs' (lit. 'under crosshairs') (most examples of this mini-construction belong to the literary style).

- Odno delo, kogda bol'noj umiraet v reanimacii, i sovsem drugoe, kogda u tebja pod nožom.
 - 'One thing when a patient dies in intensive care, and quite another when you have him *under your knife*.' (V. Valeeva. *Skoraja pomošč*'. 2002)

⁴This study is a result of analysis of the data culled from the Russian National Corpus (www.ruscorpora.ru) and all examples cited in the paper unless stated otherwise are from this corpus.



³Only in reference to precipitation falling from the sky can static uses like *pod vodoj* ^{instr} 'under water' and *pod snegom* ^{instr} 'under snow' receive a prototypical interpretation 'under a layer of water or snow'.

The third class forms a mini-construction which we call the 'vehicle mini-construction', because the landmark Y in this construction usually refers to various types of vehicles: cars, trains, bicycles, etc. Historically the first context of this kind is *pod kopytami*^{instr} 'under the hooves'. Originally it was used to describe functional space near the object, similar to *pod rukami* (lit. 'under the hands') discussed above. The vehicle mini-construction has a directional correlate with the accusative case: *pod kopyta*^{acc} 'under the hooves'. It is used to describe falling or getting under a horse's hooves. Contexts like *pod kopyta*^{acc} 'under the hooves' are extended to *pod kolesa* 'under the wheels', *pod telegu* 'under the cart', *pod karetu* 'under the carriage', *pod mašinu* 'under the car', etc.

All three cases discussed above can be seen as following the same pattern. In all three cases Y is transformed from a static landmark object into an actively (and aggressively) performing agent, while X functions as the patient. The idea of dominance characteristic to the preposition *pod* is also transformed: Y dominates X converts into Y actively affects X. In the first case Y becomes a substance falling from above, in the second case Y is an instrument used to affect X, and in the third case Y is a vehicle that runs over X.

2.3 Abstract nouns and abstract localization

This section explores uses of abstract nouns with the preposition *pod*. It discuses how such contexts are related to prototypical spatial uses. Abstract nouns are found in two different mini-constructions which can be referred to as 'protection' and 'hostile relationship'. The meaning of 'protection' realizes a static metaphor, while the meaning of 'hostile relationship' realizes a dynamic metaphor. The mini-construction of 'protection' originates from spatial uses where a coating Y covers X as in *trava pod snegom* 'instr' 'grass under snow'. The spatial frame of covering is modified metaphorically into the frame of protection. This development starts from such concrete nouns as *krylo* 'wing' and *kryša* 'roof', see (2) and (3).

- (2) Prussija, sobstvenno govorja, vozrosla pod krylom Rossii [...].
 'Prussia, indeed, has grown under the wing of Russia...'
 (N. Ja. Danilevskij, Rossija i Evropa. 1869)
- (3) I ves' ėtot bespredel tvoritsja pod kryšej našego zavoda. 'And all this chaos is going on under the roof of our factory.' (N. Volkov. Vzgljad na situaciju. Vostočno-Sibirskaja pravda (Irkutsk). 1998.07.11)

The mini-construction of hostile relationship originates from the peripheral uses of *pod*, which focus on functionality. In the mini-construction of hostile relationship Y is moving towards X, similar to falling objects, instruments, and vehicles that affect the trajector coming in contact with it. Both the mini-construction of protection and the mini-construction of hostile relationship are compatible with the instrumental and accusative cases, meaning that both locative and directional interpretation are possible for both mini-constructions:

Locative variant (with instrumental case):
 <u>Protection</u>: pod krylom 'under the wing', pod zaščitoj 'under the protection', pod nadzorom 'under surveillance', pod pokrovitel'stvom 'under protection', pod prikrytiem 'under cover'.

Hostile relationship: pod vlijaniem 'under the influence / domination of', pod vozdejstviem 'under influence', pod zapretom 'under the ban', pod načalom 'under supervision', pod podozreniem 'under suspicion', pod stat'ej 'within (the ambit of) Act', pod tribunalom '(be tried) by a military tribunal', pod obstrelom 'under gunfire', pod udarami 'under the beatings'.



• Directional variant (with accusative case):

<u>Protection</u>: *vozvratit'sja pod vlast' monarxa* 'return under the power of a sovereign', *vzjat' pod zaščitu* 'take under protection', *vzjat' pod kontrol*' 'take under control', *vyslat' pod nadzor* 'send under supervision', *vzjat' pod opeku* 'take under guardianship', *vzjat' pod pokrovitel'stvo* 'take under protection'.

Hostile Relationship: sažat' pod arest 'place under arrest', popast' pod vlijanie 'end up under the influence / domination of', popast' pod zapret 'end up under the ban', popast' pod obstrel 'end up under fire', popast' pod sokraščenie 'be dismissed on landmarks of redundancy', stavit' pod udar 'threaten'.

If we look at the verbs that participate in the mini-constructions of protection and hostile relationship, we realize that prototypically these verbs have locative semantics. Verbs that can be used in the directional variant of the mini-construction (with accusative case) form a closed class. For example, the directional pod mini-construction with Y nabljudenie 'supervison' is attested in the RNC only with the predicates brat' 'take', vzjat' 'take', popast' 'get', stavit' 'put', otdat' 'send', sdat' 'turn in', posadit' 'put', and prinjat' 'get'. Y arest 'arrest' in addition to those predicates is also found with otpravit' 'send', vesti 'lead', taščit' 'pull', gonjat' 'drive away', zaključit' 'lock', sažat' 'put', idti 'go', pojti 'go', javit'sja 'arrive', and stupat' 'go'. A similar list of verbs that can appear in the verbal slot of the locative mini-construction is less limited, but also contains primarily verbs that denote a localization of the subject or causation of localization of the subject. For example, the locative pod mini-construction with Y nabljudenie 'supervision' is most frequently found with the verbs naxodit'sja 'be located', byť 'be', deržať 'hold', žiť 'live', xraniť 'keep'. For Y aresť 'arresť this list contains byť 'be', deržat' 'hold', soderžat' 'keep', naxodit'sja 'be located', prosidet' 'spend time', provesti 'spend time', prebyvat' 'stay', ostavat'sja 'remain', okazat'sja 'find oneself'. We can see that all these predicates involve locative semantics. Vospitan pod nabljudeniem 'brought up under supervision' can be read as 'brought up being under supervision', umer pod arestom 'died under arrest' can be seen as 'died being under arrest'.

Summing up, abstract nouns are used with the preposition *pod* in two mini-constructions. One denotes the situation of protection, while the other describes the situation of a hostile relationship. Both mini-constructions have a locative variant with the instrumental case, as well as a directional variant with the accusative case. Predicates used with abstract nouns form a limited class. All these verbs have locative semantics. Thus we are dealing with a kind of abstract space where the subject (or object) is located. This abstract space, frequently created by social order or norms, can be used in order to protect the subject there or in order to subject the entity to hostile activity or circumstances. The locative element contained by these verbs relates the predicates used in the mini-constructions of protection and hostile relationship to the spatial constructions. The only difference is that in the case of spatial *pod* constructions the landmark dominates the trajector in physical space, while in the case of metaphoric *pod* constructions the landmark is an abstract noun and it affects the trajector by being in the state of dominance and control, which functions as an abstract localization.

3 Temporal uses of the preposition pod

As mentioned above, there are three temporal constructions with the preposition *pod*: the simultaneity construction (4), the temporal boundary construction (5) and the prospective construction (6).



- (4) Xobbity usnuli pod mjagkie zvuki ego pesni [...].⁵
 'The hobbits fell asleep to the sound of the soft singing of Bregalad [...].'

 (J. R. R. Tolkien. The lord of the rings: the two towers. 1954)
- (5) Ja často zabluždajus' po povodu sobstvennogo vozrasta, kažus' sebe mužčinoj v rajone soroka, a segodnja vstretilsja s učenikami, uznal, čto mnogim pod 60, i prosto obaldel.

'I am often mistaken about my own age, I feel like a man in my forties, but today I met with my students and learned that many of them are *almost 60* and was blown away.'

(M. Rostropovič. Ėto osoboe oščuščenie, kogda ni k komu ne prinadležiš'. *Izvestija*. 2001.08.06)

(6) Okazyvaetsja, v krasnom pojase "medvedjam" počti povsemestno ne dajut pomeščenija pod ofisy [...].

'It turns out that in the red zone, "Bears" almost everywhere are not given rooms for offices.'

(A. Kolesničenko. Partii: Medvežij privet "krasnym" gubernatoram.

*Argumenty i fakty. 2003.06.11)

The first construction marks the simultaneity of two events (in example (4) the events are sleeping and singing). The second construction denotes an event that will soon follow the current event (in sentence (5) this is the age of sixty which the students will soon reach). The third construction expresses the purposeful use of a space or a container (in example (6) these are rooms that will be used for offices).

It is important to note that all temporal constructions have only the accusative variant and do not have the instrumental variant, as opposed to spatial constructions, which allow both cases. Thus, temporal constructions can be related only to directional spatial constructions as in $položit' pod časy^{acc}$ 'put under the clock' or $posadit' pod arest^{acc}$ 'put under arrest'. This asymmetry (discussed in more detail in the conclusion) is an example of the difference between the uses of the preposition pod in the spatial and temporal domains, see also Makarova and Nesset (this volume), who discuss differences in case government in time and space with the Russian preposition v.

3.1 The simultaneity construction

The simultaneity construction is closest to the prototypical spatial constructions among all temporal constructions. One important distinction is that this construction also uses a verb. As opposed to the prototypical spatial construction where the verb usually denotes location, in the simultaneity construction the verb does not have this requirement. The verb in this construction is mainly imperfective and expresses a continuing situation. Almost all verbs can be used in this construction except those that describe situations that cannot be observed. These verbs include emotional, epistemic and abstract predicates (see *?*on nadejalsja / polagal pod *sum morja* 'he hoped / assumed to the sound of the sea').

The simultaneity construction is only possible when Y is a type of sound, which can appear only in the accusative case: *pod muzyku* 'to the music' (and with metonymic shift *pod magnitofon* 'to the tape recorder', *pod plenku* 'to the tape', *pod fonogrammu* or differently

⁵The Russian translations of the English originals in (4) and (13) have been taken from the RNC parallel corpus.



Table 2 Dille	rences in restrictions between the spatial consti	uction and the simultaneity construction
Construction	Spatial construction <i>položit' pod steklo</i> 'put under the glass'	Simultaneity construction <i>usnut' pod šum doždja</i> 'fall asleep to the patter of rain'
V	The verb can be either transitive or intransitive, it describes localization in space as an endpoint of an event	The verb is usually intransitive, it denotes a situation that can be perceived through hearing (and sometimes vision)
Y	Y can be either concrete or abstract	Y is an abstract noun signaling sound

Table 2 Differences in restrictions between the spatial construction and the simultaneity construction

pod faneru 'to the phonogram' (colloquial)), pod applodismenty 'to the applause', pod groxot kanonady 'to the noise of shelling', pod marš 'to the march', pod svist 'to the whistling', pod vizg devic 'to the girls' screaming', pod xoxot tolpy 'to the crowd's laughter', pod šum koles 'to the noise of the wheels', pod žužžan'e veretena 'to the humming of the spindle', pod penie petuxov 'to the rooster's crowing', pod laj ovčarok 'to the sheep-dogs' bark', pod pričitan'e bab 'to the women's lamentation', pod zvon kolokolov 'to the bells ringing', pod zvon posudy 'to the clinking of dishes', pod zvon rjumok 'to the clinking of glasses', etc.

As a result the surface structure of the simultaneity construction is similar to the directional variant of the spatial construction: *položit' pod steklo* 'put under the glass', *popast' pod dožd'* 'get caught in the rain' and *pomestit' pod arest* 'put under arrest' is similar to *usnut' pod šum doždja* 'fall asleep to the patter of rain'.

However, restrictions on the slots of the constructions are different, as illustrated in Table 2.

Due to its nature, sound is a perfect background situation that affects all participants present in a setting. It seems that this characteristic of sound allows deverbal nouns of sound to appear in the construction with the preposition *pod*. Sound can be viewed as a secondary situation that dominates the main situation in the way that a large surface dominates an object. Thus, the idea of *pod* 'under' structures two different situations: one functions as a figure and the other as a ground and therefore the situation of an accompanying sound can be described using the preposition *pod*. This acoustic landmark can be passive if it coexists with the main event or active if it is structuring or affecting the main event. The first case can be exemplified in (7), where the sound is covering the noises of the main event, while the second can be illustrated by (8), where the sound of music provides a rhythm for dancing.

- (7) Ne znaju čto lučše: kazn' javnaja ili kazn' v tajnikax, v podvalax, *kazn' pod zvuk motorov*, čtoby zaglušit' vystrely ...
 - 'I do not know what's better: an open execution or execution in the basements, the execution to the sound of engines to drown out the shots...'
 - (S. P. Mel'gunov. "Krasnyj terror" v Rossii. 1924)
- (8) [...] na central'noj ploščadi Ankary 10 tysjač fanatov *pustilis' v pljas pod muzyku Tarkana*.
 - 'On the central square of Ankara 10,000 fans began to dance to the music of Tarkan.' (G. Stepanov. Dva infarkta i 14 ukradennyx brasletov. Izvestija. 2002.06.19)

Thus, in structuring the main event or just co-existing with the main event, the acoustic land-mark dominates the situation and therefore can be described as being 'above' the situation.

3.2 The temporal boundary constructions

The temporal boundary constructions are closely related to the spatial constructions with a non-standard structure of Y—situations of domes and vertical objects. In the first case there



is a horizontal, and in the second, a vertical boundary which prevents or limits movement. In temporal contexts certain temporal points can be seen as boundaries in time. This section discusses two temporal constructions: the approximate age construction (e.g. *emu pod sorok* 'he is almost forty') and the proximate future construction (e.g. *on zasnul tol'ko pod utro* 'he fell asleep only towards morning').

The approximate age construction is part of a large group of approximate constructions that use different kinds of parameters. Any parameter can be approximated using pod: on pod dva metra rostom 'he is almost two meters high', on prošel peškom pod sotnju kilometrov 'he walked almost 100 kilometers', skorost' pod 200 kilometrov v čas 'speed of almost 200 kilometers per hour', ves pod 100 pudov 'weight of almost 100 poods', 6 naprjaženie pod 200 vol't 'voltage of almost 200 volts', ob"em fajla pod dvadcat' megabajt 'file size up to twenty megabytes'. Most characteristics of the approximate age construction are shared with the standard parameter construction. Firstly, the parametric number needs to serve as a boundary, so it is usually a large round number. Neither non-round numbers, nor small numbers can serve as parameters in the approximate construction: "skorost' pod 221 kilometr v čas 'speed of almost 221 kilometers per hour', ?? emu pod pjat'desjat tri goda 'he is almost fifty-three'. Secondly, since the approximate construction is related to the directional construction with pod and uses the directional accusative case, this construction describes not just any number around Y, but only numbers that are close to, but less than Y. Here Y serves as a maximum boundary of the imaginary direction towards it. The numbers in close proximity to Y, that exceed Y are described using another construction with the preposition za 'behind': skorost' za 200 kilometrov v čas 'speed over 200 kilometers per hour', vozrast za devjanosto 'age over ninety'.

Yet, there are two characteristics specific to the approximate age construction that are not shared by other constructions of approximation. Firstly, constructions of approximation all contain an explicit marker of an approximated parameter, i.e. there are words like *skorost*' 'speed', *moščnost*' 'capacity', *ob"em* 'volume', *srok* 'period'. Without such markers, constructions of approximation are not possible, see: "on rabotal na odnom meste pod tridcat' let 'he worked at the same place almost thirty years', "razogrelsja pod 200 gradusov 'warmed up to almost 200 degrees'. Age, in contrast to all these parameters, is almost never explicitly expressed as a parameter: "on byl vozrastom pod sem'desjat let 'he was almost seventy in age'. Secondly, in the approximate age construction even the units of measurement—years—are often omitted (*emu pod tridcat' | sorok | devjanosto* 'he is almost thirty / forty / ninety'), while for the other parameters the units of measurement are almost always present.

The person in the approximate age construction is marked with the dative case, which is an extension of the standard age construction, where the subject is in the dative case, as in *Seve*^{dat} *pjat' let* 'Seva is five years old'. Among all ages possible in the approximate age construction, the minimal possible age is twenty, however since any age in the approximate age construction needs to be viewed as mature, there are rather few examples like (9).

(9) Iz vsej sem'i Rodion Potapyč ljubil tol'ko mladšuju doč' Fedos'ju, kotoroj uže bylo pod dvadcat', čto po-balčugovski sčitalos' uže devič'ej starost'ju: kak stuknet dvadcat' godkov, tak i perestarok.

'Of all the family Rodion Potapych only loved Fedosia the youngest daughter, who was *almost twenty*, which in Balchug was considered as old age for a girl: as soon as you turn twenty you are over age.'

(D. N. Mamin-Sibirjak. *Zoloto*. 1892)



⁶A unit of mass previously used in Russia, it is approximately 16.4 kg.

Table 3 Distribution of age in the approximate age construction									
Age	20	30	40	50	60	70	80	90	100
Number of examples in the RNC	3	48	88	51	30	13	4	5	4

 Table 4 Distribution of nouns for different times of the day in the proximate future construction

Times of the day	pod utro	pod den'	pod večer	pod noč'
	'morning'	'day'	'evening'	'night'
Number of examples in the RNC	1244	8	1505	17

Table 3 presents the distribution of ages in the approximate age construction found in the RNC using the pattern *let pod Y*—lit. 'years under Y'—where Y stands for a number (written as a number or in words). We see that the majority of examples use the age forty, followed by fifty and thirty. This use shows that the approximate age construction is linked to a pragmatic situation for which age is seen as critical. Usually such pragmatic situations involve marriage, having children, a job, and health problems which in Russian culture are mainly associated with the age of forty. At the age of forty, one is expected to have a spouse, children and a job, and if someone is *pod sorok* 'almost forty' and does not have something from this expected list this might be seen as unusual and worth discussing.

The proximate future construction is used with time adverbials such as *utro* 'morning', *večer* 'evening', nouns and noun phrases referring to points in time such as *konec* 'end', *starost*' 'old age' and nouns that are metonymically related to such time points, for example *zanaves* 'curtain' that is dropped at the end of a play.

Similar to the approximate age construction, the proximate future construction refers to a time period immediately preceding a given point in time: *pod utro* (lit. 'under morning') means 'close to morning', *pod Roždestvo* (lit. 'under Christmas') means 'on Christmas eve'. The proximate future construction refers to the period that is close to Y, but not Y. Thus, Y serves as a boundary point that is not crossed. This is why Y cannot be just any point in time, but only a boundary point: *utro* 'morning' is a boundary between night and day, *večer* 'evening' is a boundary between day and night. Day (*den*') and night (*noč*') themselves cannot be seen as boundaries and therefore cannot be used in the proximate future construction: "*pod den*', "*pod noč*'. Cf. Table 4 for the numbers of examples for different times of the day found in the proximate future construction (as attested in the RNC).

However, if *den'* and *noč'* are transformed from periods of time into boundaries, they can be used in the proximate future construction: *pod Den' Pobedy* 'close to Victory Day', *v noč' pod Roždestvo* 'on the night before Christmas'. All examples of *pod den'* and *pod noč'* in Table 4 are of this kind.

The proximate future construction has a preference for boundaries that mark the endpoints of time periods. As a result it allows such fillers as *starost*' 'old age'—the boundary between life and death and the endpoint of life, *konec* 'end', *zanaves* 'curtain' and *zakat* 'decline'—all marking endpoints of relevant periods. By contrast, the boundaries that mark starting points of time periods are not allowed in the construction: "pod molodost' 'close to youth', "pod junost' 'close to juvenility', "pod načalo 'close to the beginning', "pod start 'close to the start'.

Table 5 contains a number of examples of the proximate future construction with different seasons. The table shows us that the yearly cycle is not fully symmetrical (cf. also Haspel-



Season	pod osen'	pod zimu	pod vesnu	pod leto
	'fall'	'winter'	'spring'	'summer'
Number of examples in the RNC	57	36	13	0

Table 5 Distribution of seasons in the proximate future construction

math 1997, pp. 110–114). We see that *osen*' 'fall' is seen as a boundary between the ripe season of summer (*leto*) and the cold season of winter (*zima*). 'Summer' never appears in the construction of the proximate future in the RNC, 'spring' appears scarcely, mainly in texts focusing on the agricultural cycle.

'Winter' occurs in the proximate future construction when it is seen as boundary, the end of nature's life cycle as in (10) or when *zima* 'winter' is used as metonymic replacement for *sneg* 'snow' (11).

- (10) Tak čto ž *pod zimu*, kak listy, // Drožiš', o serdce, ty ...

 'So, *close to the winter*, like foliage, // You shiver, oh heart...'

 (I. F. Annenskij. "*Razvivšis*', *volos poredel*...". 1880–1909)
- (11) Na proščan'e Čigrašov perekapyval Tat'jane Gustavovne ogorod *pod zimu* i s neskol'kimi bankami domašnix solenij otbyval vosvojasi—do sledujuščego sentjabrja.

'At parting with Tatyana Gustavovna, Chigrashov dug the garden *for winter* and with several jars of pickles went back home—until next September.'

(S. Gandlevskij. NRZB. Znamja. 2002)

Thus, the approximate age construction and the proximate future construction both use boundary points in time for Y. In both cases these boundaries mark the endpoints of time periods. In the contexts where the constructions with *pod* are used these boundaries are close, but cannot be reached. In the approximate age construction, age is significant for a given cultural situation. Most often this is the age of forty, which in Russian culture is seen as an important age for childbirth, marriage, finding a profession and so on. In the proximate future construction Y is a noun referring to a time boundary, for example morning is seen as a boundary between day and night, old age is seen as a boundary between life and death, or fall is seen as boundary between the active agricultural season and passive winter time.

3.3 The prospective construction

Prospectivity or intended use by itself cannot be characterized as a truly temporal meaning. It is less related to the temporal zone than the meanings of simultaneity or of temporal boundary. However prospectivity contains the idea of future in it, because X will have the intended properties in the future. The aggregate of these intended features is summarized in Y, which is marked with the accusative case.

In this construction *X pod Y* refers to a space X where someone intends to place Y. For example, *pristrojka pod bassejn* (lit. 'extension under swimming pool') means 'extension intended for a swimming pool', *grjadka pod ogurcy* (lit. 'patch under cucumbers') means 'patch intended for cucumbers'. This meaning is not directly related to the idea of dominance of the prototypical spatial construction, from which the simultaneity construction originates (*pod šum* 'to the noise'). The prospective construction is also not related to the mini-constructions with non-standard Y, from which the temporal boundary constructions are extended. It seems



that the closest link to the prospective construction is the construction where the preposition *pod* is doubled with its prefixal correlate, the prefix *pod*-. This double construction is found in two mini-constructions: a mini-construction of imitation, as in *poddelat' pod starinu* 'antiquate' (lit. 'fake under antique') and a mini-construction of spatial purpose as in *podstavit' doščečku pod gorjačee* 'put a trivet under the hot entree'.

These contexts use the prefix *pod*- and the preposition *pod* simultaneously. In the miniconstruction of imitation the prefix *pod*- expresses the meaning 'adjust, change of the object according to its intended purpose' (see Plungjan 2001; Endresen et al. 2012). The verb *podgotovit*' 'prepare' can serve as a good illustrative example of such use. In the double construction the preposition *pod* marks Y as not only the goal, but also as a dominant element in the change. Here, the idea of dominance is in agreement with the schema of the preposition *pod*. Y becomes a template for X in the change, X is transformed in order to become more similar to Y, cf. such uses as *podstraivat'sja pod nastroenie* 'be tuned to someone's mood' (lit. 'be tuned under mood').

This mini-construction also has uses without the prefix *pod*-, but with similar syntax and semantics: *pet' pod Vysockogo* 'sing like Vysotsky', *kosit' pod psixa* (colloquial) 'simulate a loony'. The mini-construction of imitation *X V pod Y* can be transformed into a construction of the form *X pod Y* with a deverbal noun with the prefix *pod-*: *grubaja poddelka pod Puškina* 'bad imitation of Puškin'. This variant also allows contexts without the prefix *pod-*: *pokrytie pod mramor* 'coating in imitation of marble' (lit. 'coating under marble'), *borodka pod Lenina* 'Lenin-style beard' (lit. 'beard under Lenin').

The transformation from *X V pod Y* into *X pod Y* is likewise possible for the spatial purpose mini-construction. The spatial purpose mini-construction uses deverbal nouns with the prefix *pod*-, see *podstavka pod gorjačee* 'trivet for a hot entree', *podkladka pod prostynju* 'lining for a bedsheet', *podložka pod plenku* 'coating for a film', *podstežka pod šubu* 'undercoat for a fur coat', *podstilka pod spinu* 'bedding to put under the back'. Here, one object X is intended to be under another object Y. The X is a mobile trajector, while the Y is a stable landmark. X does not function independently, it functions only when paired with the object Y. The secondary status of X is additionally expressed by the prefix *pod*- that together with a verb of position forms a deverbal noun denoting a supporting object. The noun that fills the Y slot is marked with the accusative case, hence the spatial purpose mini-construction involves the semantics of directionality. Here directionality is used to mark the intended purpose of the object.

The contexts like *pristrojka pod bassejn* 'extension for a swimming pool', *grjadka pod ogurcy* 'patch for cucumbers' have similar internal structure, even though they do not contain the prefix *pod-*. The important difference is that the relationship between X and Y is less predictable than in the case of the trivet for a hot entree. X and Y in this case are independent. X will be used for Y only in this particular situation. The intended purpose of X is not yet realized and will only be realized in future. Now the extension is not used as a pool, the patch is not a place where the cucumbers grow. Thus, the idea of prospectivity which in the mini-construction of spatial purpose was introduced by the prefix *pod-* expanded to the whole construction and became adopted in the prospective construction, where the prefix *pod-* is not used. In addition, X in the prospective construction can often be interpreted as a space that in the future will be located under Y, which connects this uses with the spatial construction with the preposition *pod*.

The mini-construction of prospective container deserves additional attention. This construction returns prospective constructions to the spatial domain. In this mini-construction X and Y refer to a container and its contents. The members of this pair are not independent, because the container Y is intended for the contained X. As a result the functional and spatial



characteristics are united as one. At the same time such contexts also have a prospective component: when we use constructions such as *kadka pod kapustu* 'tub for cabbage' or *bočka pod benzin* 'drum for gasoline' we speak about an empty container (e.g. tub or barrel) in which the content (e.g. cabbage or gasoline) will be contained in the future.

A separate issue is the mini-construction with the noun *zalog* 'pledge', where *zaem pod zalog* 'loan against a pledge' is described using the preposition *pod*. We believe that in such contexts the pledge dominates the whole transaction and the idea of dominance characteristic for the preposition *pod* allows use of this preposition with the word *zalog*.

Summing up this section, three groups of temporal constructions with the prepostion *pod* were analyzed: the simultaneity construction (*son pod šum doždja* 'sleep to the patter of rain'), two temporal boundary constructions (*on zasnul pod utro* 'he fell asleep toward morning', and *emu pod sorok* 'he is almost forty') and the prospective construction (*pristrojka pod bassejn* 'extension for a swimming pool'). The simultaneity construction is only used with sounds that accompany the main event as backgrund noise. The temporal boundary constructions are used to describe approximate age and a point in time that is approached. The prospective construction is used to describe the intended or future purpose of an object. The temporal uses of the preposition *pod*, though related to the spatial uses, cannot be seen as derived by one simple metaphoric mechanism. On the contrary, in each case a different metaphor and a different way of getting from space to time is used. Let us now turn to the second preposition investigated in this article, *iz-pod* 'from-under', and see how its temporal uses are related to its spatial uses.

4 Spatial and temporal uses of the preposition iz-pod

The preposition iz-pod 'from-under' is found in two different meanings. One can be viewed as a spatial meaning (see (12)) and the other can be referred to as a temporal meaning (see (13)).

- (12) Čtob ne usnuť kak-nibuď nečajanno, on to i delo dostaval iz-pod stola butylku i pil iz gorlyška i posle každogo glotka krutil golovoj i govoril gromko [...]. 'To save himself from accidentally falling asleep, he kept taking a bottle from under the table and drinking out of it, and after every swallow he turned his head and said aloud.' (A. P. Čexov. Sapožnik i nečistaja sila. 1888)
- (13) Potom on vzjal sveču, berežno zažeg ee, vernulsja i vstavil v *butylku iz-pod viski*. 'He took one of the candles, lit it carefully, came back and stuck it in the neck of *the whiskey bottle*.' (G. K. Chesterton. *The innocence of Father Brown*. 1911)

The first submeaning can be described as 'the trajector X moves from underneath the landmark Y'. In example (12) the bottle serves as a trajector and moves from underneath the table which functions as a landmark. The second submeaning can be expressed as 'the container X that previously contained the content Y'. In example (13) the bottle is a container that previously contained whiskey, which in this situation is the content. It is important for the temporal use that the content is no longer contained in the container, and the container is used for something else; for example in (13) the bottle is used as a candle holder. We can say that these uses include reference to time. There is a 'before' state when the content, e.g. whiskey, is contained inside and a 'now' state, when the content is used to characterize the type of the container, e.g. the bottle. Several languages use similar constructions, cf. the English prefix *ex*- which refers to a former state: *ex*-husband, *ex*-wife, *ex*-president, *ex*-member. The spatial and temporal uses can be characterized as two different constructions, a spatial



Table 6 The features contrasting spatial and retrospective iz-pod constructions			
Spatial construction (spatial uses)	Retrospective construction (temporal uses)		
Explicit verb denoting movement	No verb		
X and Y are both physically present in the situation	X is present in the situation, while Y was present in the situation previously		
Y is an object in space and it serves as a landmark for movement	Y is a type of content and it serves as a mental reference point for the container		

construction and a retrospective construction, and their features are significantly different. These differences are summarized in Table 6.

While the spatial use always contains a verb, the temporal use almost never has one, with the exception of copula verbs of being (e.g. byt' 'be') or appearing (e.g. okazat'sja 'turn out'). In spatial uses both X and Y are physically present in the situation and iz-pod describes their localization in space. In temporal uses only X is present in the situation, while Y was present before. In spatial uses Y is the landmark, yet in temporal uses Y is a type of content of a container and it marks the type or the size of the container. This is well illustrated by example (14) where the retrospective construction is used to approximate the size of the bottle's neck.

- (14) —U nas ruki bol'šie,—so vzdoxom otvetil Oleg,—dlja mužčin našego razmera nužna emkosť pobol'še, k primeru iz-pod šampanskogo!
 - "We have big hands", Oleg said with a sigh, "for men of our size there needs to be a larger bottle, for example, from champagne!"'
 - (D. Doncova. Mikstura ot kosoglazija. 2003)

Even though the retrospective construction is frequently used with the original content of the container, it does not always mark the original content. If a non-original previous content is relevant for the situation, it can be marked with the retrospective construction, as in (15). In this example a plastic bottle that perhaps once contained soda was filled again with gasoline in order to start a fire. The original content was soda; nevertheless, since in the current situation the second content is more important, the bottle is referred to as butylka iz-pod benzina 'bottle that previously contained gasoline' (lit. 'bottle from-under gasoline').

- (15) V častnosti, za versiju o podžoge govorit najdennaja nepodaleku ot pepelišča plastikovaja butylka iz-pod benzina.⁷
 - 'In particular, a plastic bottle that previously contained gasoline found near the site of fire is evidence that points towards arson.'

The retrospective construction with the preposition iz-pod contrasts with the construction with the preposition ot, typically used in Russian for marking a part separated from a whole (see nožka ot stula 'a leg from a chair'). The preposition ot can be used for storing the same object in a container. For example, if we have eaten some cake from the box and intend to reuse the same box we can employ the construction with the preposition ot as in sentence (16). Iz-pod would not be possible in such context, see (17).

⁷http://marx64.ru/blog/chp/20.html (3 July 2013).



- (16) Počti gotovo: skleivaem, ukrašaem poverxnost' kusočka torta specijami, businami, bantikami, lentočkami i t.d., upakovyvaem v korobku ot torta.⁸ 'Almost done: let's glue it, decorate the surface of a piece of cake with spices, beads, bows, ribbons, etc., and pack it in a cake box.'
- (17) ^{??}Upakovyvaem kusoček v *korobku iz-pod torta*. 'We pack the cake into *a cake box*.'

The preposition *iz-pod* can be used in such contexts only if we store a new object in the container, for example if a chicken is found inside the empty cake box as in (18).

(18) On vručil Juriku *korobku iz-pod torta*. V nej sidel cyplenok. 'He handed *a cake box* to Yurik. In it sat a chicken.'

(T. Petrosjan. Mama, bud' mamoj! Tramvaj. 1990)

Lists of the most frequent fillers (lexical variables that are attested in a constructional slot in the RNC) are different for spatial and retrospective constructions. While in the spatial construction in the X slot we see parts of the body (ruka 'hand', noga 'leg', golova 'head', glaza 'eyes' or the related to it vzgljad 'look') or the whole body (čelovek 'man'), in the retrospective construction we see only different kinds of containers: butylka 'bottle', korobka 'box', banka 'jar', jaščik 'wooden box', bočka 'barrel / drum', mešok 'bag', žestjanka 'tin', banočka 'small jar', flakon 'perfume bottle' and so on. If we turn to the Y slot of the spatial construction we again see parts of the body (noga 'leg', ruka 'hand', nos 'nose') and different kinds of covers (zemlja 'landmark', odejalo 'blanket', sneg 'snow'). As opposed to that in the retrospective construction we see exclusively the contents of containers, mostly liquids (pivo 'beer', šampanskoe 'champagne', konservy 'preserves', moloko 'milk', vodka 'vodka', vino 'wine', voda 'water', duxi 'perfume'), though we also see non-liquid contents of containers such as šljapa 'hat' or kseroks 'Xerox machine'.

The frequent fillers of the slots of temporal and spatial constructions do not intersect: the two constructions have completely different semantics. The retrospective construction has high percentages of occurrences for the X slot. The containers mentioned above collectively account for 73 % of all uses of the temporal construction. By contrast, fillers of the X slot of the spatial construction mentioned above cover only 28 % of all uses of the construction. As a result the retrospective construction is best predicted by the X slot marking the container. By contrast, the spatial construction is best predicted by the Y slot marking the landmark. The retrospective construction with the preposition iz-pod presents a puzzle for the TIME IS SPACE metaphor because the retrospective construction seems to be unrelated to the large network produced by the spatial contexts of the same preposition. If we suppose that the retrospective construction is directly related to the spatial construction, then we have to assume that the phrase butylka iz-pod vina 'empty wine bottle' is, on some level, structured parallely to the phrase dostat' butylku iz-pod stola 'take the bottle from underneath the table', that is, we have to imagine that the bottle is moving from underneath the wine, while the wine stays frozen in its place. This picture does not seem natural. In this article we argue that all constructions with the preposition *iz-pod* are directly related to the constructions with the preposition *pod*. The spatial *iz-pod* constructions can be seen as motivated by the spatial *pod* constructions. The metaphoric developments of spatial *iz-pod* are related to the metaphoric developments

⁹This particular filler appears among frequent fillers of the temporal construction because of a political scandal involving a bribe given in a box from a Xerox machine. The scandal was covered in the press and therefore *korobka iz-pod kseroksa* 'Xerox machine box' has many hits in the RNC.



⁸http://sites.google.com/site/gorodskaya/upakovka/tort-upakovki (6 May 2013).

of spatial *pod*. And last but not least the temporal *iz-pod* construction is directly related to the prospective construction. In the Sect. 5 we will discuss how contexts available for the preposition *iz-pod* can be viewed as extensions of the constructions with the preposition *pod*.

5 The preposition *iz-pod* as a blend of the prepositions *iz* and *pod*

The preposition *iz-pod* formally consists of two elements, *iz* and *pod*. We argue that, from the point of view of semantics it is also a blend of two meanings. The first part is the preposition *iz* which means 'from a container', as in *vynut*' *iz korobki*^{gen} 'take out of the box'. Note that preposition *iz* is used with the genitive case, which is the typical case for a source in Russian, compare *ot doma*^{gen} 'from the house', *so stupenek*^{gen} 'down from the stairs', etc. When combined with the preposition *pod*, the preposition *iz* interprets the space under the trajector as a container and *iz-pod* marks getting out of this imaginary container. It is interesting to note that the preposition *iz-pod* is also used with the genitive case marking the source of directional movement.

There is parallelism between prototypical uses of pod and iz-pod. Contexts like dokumenty ležat pod časami 'the documents are under the clock' can easily be transformed into dostat' dokumenty iz-pod časov 'take the documents from underneath the clock'. As we remember from Sect. 2.2 there are three possible directions where uses of the preposition pod can move from the prototypical contexts. These are contexts that involve layers, domes and vertical objects. All three can be transformed into contexts with iz-pod. From layers such as nadet' sviter pod šubu 'wear a sweater under a fur coat' we can get to sviter torčit izpod šuby 'a sweater sticks out of a fur coat'. For contexts including domes like žonglirovat' pod kupolom cirka 'juggle under the circus tent' we can find contexts like spustit'sja iz-pod kupola cirka 'get down from the circus tent'; smaller domes like a hat as in ubrat' volosy pod šapku 'put hair under the hat' also have parallels as in volosy torčat iz-pod šapki 'hair sticks out of the hat'. Vertical objects present an interesting case for iz-pod. We recall that vertical objects do not have a lower surface relevant for both pod and iz-pod. As a result, pod uses the area near the vertical object as a landmark. When we turn to iz-pod we find that this preposition distinguishes two types of vertical objects. The objects that are comparable to the size of a human cannot be used with iz-pod. For example, we can refer to the space near a door saying stojat' pod dver'ju 'stand near the door (lit. stand under door)', but leaving the same space cannot be referred to by using iz-pod: ??ubežat' iz-pod dveri 'run from near the door'. However, as soon as the objects of interest become larger than human in size, the space near them becomes large enough to be construed as a container for iz, and the use of iz-pod becomes possible, see parallels žil pod Moskvoj 'lived near Moscow' and priexal iz-pod Moskvy 'arrived from near Moscow', and contexts stojal pod stenami goroda 'stood by the walls of the city' and vozvratilsja iz-pod sten goroda 'returned from near the walls of the city' realized in (19). Here a space near a trajector (near Moscow or near walls) can be seen as the relevant space for the preposition *iz-pod*.

(19) [...] Axilles znaet, čto ne vorotitsja iz-pod sten Troi.'Achilles knows that he will not come back from the walls of Troy.'(V. V. Veresaev. Apollon i Dionis. 1914)

However, it is not true that *iz-pod* is possible only in contexts where *pod* is possible. There are several types of contexts that allow spatial *iz-pod*, but they cannot be easily transformed into contexts with *pod*. All such contexts can be described as getting from underneath without



being underneath. For example contexts like *smotret' iz-pod ruki | kozyr'ka | platka '*look from under the hand / visor / shawl' can be seen as a combination of uses like *byt' pod rukoj | kozyr'kom | platkom '*be under a hand / visor / shawl' with seeing. There is a conventional metaphor that represents seeing as touching the object seen (Lakoff and Johnson 1980; Lakoff 1987). Thus, seeing can be compared with a directional movement that originates under the covering of a hand, visor or shawl, while it is not possible to say that looking was positioned under a hand, visor or shawl. Hence the use of *iz-pod* is possible, while the use of *pod* is not grammatical.

A similar explanation is available for a very frequent context among the uses of *iz-pod*: *voda iz-pod krana* 'water from the tap' and less frequent contexts like *moloko iz-pod ko-rovy* 'milk from the cow', *jajca iz-pod kuricy* 'eggs from the hen', which do not have *pod-*correlates: "voda pod kranom, "moloko pod korovoj, "jajca pod kuricej. Here it can be argued that water appears from underneath the tap and that milk appears from underneath the cow, and therefore the situations fit the schema of *iz-pod*. However water is not originally under the tap and milk is not originally under the cow, so these situations cannot be described with the preposition *pod*. Note that uses like *voda iz-pod krana* 'water from the tap' and *moloko iz-pod korovy* 'milk from the cow' contain a trace of temporal meaning 'right from the tap / cow' and also refer to the quality of water or milk respectively, which makes them similar to the contexts like *butylka iz-pod benzina* 'empty bottle from gasoline'.

Metaphorical spatial constructions with the preposition pod also have analogues among the uses of iz-pod. As discussed in Sect. 2.3, the preposition pod participates in two metaphorical shifts: one can be described as a shift to the conceptual context of protection and another as a shift to the conceptual context of hostile relationship. Both contexts can be seen as putting a subject in an area of domination: in the first case this is done in order to protect, while in the second, in order to attack. Both contexts are found among the uses of the preposition iz-pod. Of course, since the preposition iz-pod marks directional movement from underneath, in situations of protection or hostile relationship it marks leaving the area of domination. From being under protection or surveillance (pod zaščitoj 'under protection', pod nadzorom 'under surveillance') we can go to leaving this state (vyjti iz-pod zaščity 'go from under protection', sbežat' iz-pod nadzora 'go from under surveillance'). Similarly from being under arrest or influence (pod arestom 'under arrest', pod vlijaniem 'under influence') we can move towards freedom and being free of influence (osvobodit' iz-pod aresta 'release from under arrest', vyjti iz-pod vlijanija 'go from under the influence'). Iz-pod also participates in contexts associated with heavy gunfire: parallel to coming under fire (popast' pod ogon' 'come under gunfire'), it is also possible to get away from gunfire (vynesti iz-pod ognja 'get from under gunfire'). In all metaphorical shifts the area of domination is conceptualized as a container from which the movement marked with the preposition *iz-pod* is performed.

From the temporal constructions available for the preposition *pod*, the preposition *iz-pod* chooses only one. The simultaneity construction and the constructions of temporal boundary lack correlates with the preposition *iz-pod*. While it is possible to use the phrase *son pod šum doždja* 'a sleep to the patter of rain', the phrase '?' son *iz-pod šuma* is impossible. We can use *zasnul pod utro* '[he] fell asleep towards morning' and *emu pod sorok* 'he is almost forty', but not '?' *iz-pod utra*, '?' *iz-pod soroka*. Both types of contexts lack an element important for the schema of the preposition *iz-pod*: nothing in these constructions can be interpreted as a container. In the case of the simultaneity construction, one of the events is present throughout the whole period of interest, so it cannot be construed as a container. For example, the noise is present throughout the whole situation of sleeping, and dominates the whole situation of sleeping. As a result it is not possible to get 'from underneath' the noise while sleeping so *iz-pod* is not possible in such contexts. In the case of the temporal boundary



constructions, we are dealing with a temporal analogue for the mini-construction of vertical objects ("ubežat' iz-pod dveri), which as we remember does not have a variant with iz-pod. Thus, the impossibility of iz-pod in similar temporal contexts is only expected.

Let us now turn to the prospective construction with the preposition *pod*, which is directly related to the retrospective construction with the preposition *iz-pod*. We recall that the prospective construction refers to an object (e.g. extension, patch) that is intended for a specific use: *pristrojka pod bassejn* 'extension for a swimming pool', *grjadka pod ogurcy* 'patch for cucumbers'. When X and Y are a container and its contents, the whole construction describes a container intended to contain the contents: *bočka pod kvas / vino / benzin* 'barrel for kvass / wine / gasoline'. Parallel to that the retrospective construction with the preposition *iz-pod* can refer to the container that was previously used to contain the contents: *bočka iz-pod kvasa / vina / benzina* 'empty kvass / wine / gasoline barrel' (the parallelism between the uses of *pod* and *iz-pod* with containers is also noted in Birkenmaier 1978).

Both prospective and retrospective constructions describe directional movement on the time scale. The prospective construction with *pod* describes directional movement towards this state and the retrospective construction with *iz-pod* denotes directional movement away from this state. As a result, temporal uses of *pod* and *iz-pod* are similar to the directional uses of *pod* and *iz-pod*, especially in the context of vehicles. In a sense the prospective and retrospective constructions model, in the timeline, the situation of directional movement towards and away from the landmark with the relevant lower surface. Thus, *bočka pod benzin* 'drum for gasoline' and *bočka iz-pod benzina* 'empty gasoline drum' function on a time scale similar to how getting under the wheels (*prygnut' pod kolesa* 'jump under the wheels') and from under the wheels (*bryzgi leteli iz-pod koles* 'splashes went from under the wheels') function in space.

If the prospective and retrospective constructions behave parallelly, this raises a question of why bočka pod benzin 'drum for gasoline' is not as frequent as bočka iz-pod benzina 'empty gasoline drum'. Bočka pod benzin 'drum for gasoline' instantiates an occasional colloquial construction, while bočka iz-pod benzina 'empty gasoline drum' is widespread and the most neutral way of referring to a type of a container via its previous contents. The answer to that question lies in a pragmatic difference between the situations described by the two constructions. To use a prospective construction we need to be planning to fill a container with a content. In order to use a retrospective construction we need a container that previously contained something. The difference is that most substances in our life come already packaged in containers. We rarely trouble ourselves with finding a bottle for our champagne. However once we have used the original content we are free to reuse the container for something else. And the previous content is very helpful in defining the shape and type of a container, therefore the retrospective construction describing an empty champagne bottle is needed much more frequently than the prospective construction describing a bottle intended for champagne.

With spatial constructions we have seen that some uses of *iz-pod* cannot be traced directly to uses of *pod*. All such cases could be described as coming from underneath without being underneath. Similarly there are attested temporal uses of *iz-pod* that cannot be directly traced to temporal uses of *pod*. In all such cases the reason for the *iz-pod | pod* asymmetry lies in the pragmatics of the situation. What can be described as a retrospective container for a content may not be the kind of thing people normally look for. Firstly, non-standard containers like thread spools (*katuški iz-pod nitok*) are not found in the prospective construction. This is because with such fillers we do not usually look for a container, e.g. it is unusual to look for a spool for our thread. Secondly, some liquids like marinade from meat are found in the retrospective construction (*marinad iz-pod mjasa* 'marinade which was on a piece of meat')



and are not frequent in the prospective construction. However, occasionally such contexts can be found, see (20). In these rare uses X is intended to accompany Y, similar to how in the simultaneity construction a sound accompanies a main event (*pet' pod gitaru* 'sing to a guitar').

(20) Luk, sol' i perec ... vot i ves' marinad pod mjaso?¹⁰
'Onion, salt and pepper... that's the marinade for meat?'

Thirdly, the retrospective construction can occasionally mark a part-whole relationship as in *probka iz-pod šampanskogo* 'a champagne cork', *verevki iz-pod posylki* 'strings from the parcel' (such examples are rare and rather marginal). Yet again, neither corks nor strings are the parts that will be marked as specifically intended to be used with this bottle or this parcel. Thus, in some cases the retrospective construction is possible, while the prospective construction is not, because it seems reasonable to refer to an object using the retrospective situation in which the object participated, but it is strange to describe the same object as intended for a prospective situation.

Summing up the section on the spatial and temporal uses of the preposition *iz-pod*, we conclude that *iz-pod* functions as a blend of *iz* 'from the container' and *pod* 'under'. Spatial uses of *iz-pod* can be seen as projections of the spatial uses of *pod*. In spatial uses *iz* interprets the space under the trajector as a container and marks exiting this container with *iz-pod*. Temporal uses of *iz-pod* can be seen as projections of temporal uses of *pod*, where *pod* marks the intended container for a content. In temporal uses *iz-pod* reverses the prospective *pod* and refers to the next temporal stage when the content is no longer contained.

6 Conclusion

This study has investigated corpus data documenting spatial and temporal uses of two prepositions *pod* 'under' and *iz-pod* 'from-under'. We have analyzed the spatial uses of each preposition as one construction that spreads into a network of related mini-constructions, where each mini-construction has its own syntactic, semantic, and collocational restrictions. We have shown that temporal constructions differ from the original spatial constructions. Temporal constructions are related to the prototypes of the prepositions, but not directly. The temporal constructions inherit some features relevant for particular uses of the spatial miniconstructions through several steps within the network of mini-constructions.

The central idea of the spatial construction with the preposition *pod* is dominance of the lower surface of Y over X. This picture is similar to how a background sound accompanies another more salient situation. As a result, nouns that denote sound are frequently found in the simultaneity construction. However being in the background also means being simultaneous, which allows the construction to switch from space to time. We see that temporal meaning is secondary; it appears because the construction refers to situations where sound is involved.

A similar development can be seen in the case of the temporal boundary constructions. When spatial *pod* is used with horizontal and vertical objects, these objects are seen as spatial boundaries that limit real or imaginary movement. Thus, for spatial contexts the idea of a boundary is secondary. However, it is the idea of a boundary that motivates the use of nouns with strong boundary semantics, which are not prototypical for the spatial *pod*-construction.



¹⁰http://otvet.mail.ru/question/30260289 (6 May 2013).

And nouns with boundary semantics often have temporal semantics, which results in a temporal meaning for the whole construction. Thus, we see that the temporal boundary constructions are developed via the idea of a spatial boundary, which is extended from the uses of spatial *pod* with horizontal and vertical objects.

The prospective consruction with the preposition pod is related to contexts that include nominalizations derived from verbs such as podstavka 'trivet' (derived from pod- and stav-'put') or podložka 'coating' (derived from pod- and $lo\check{z}$ - 'put'). These deverbal nouns are used in the construction with double pod—prefix and preposition—and represent specific artifacts of a closed class intended to be located under something, which, of course, involves the intended purpose of such objects. This mini-construction expands its compatibility beyond the limits of the original boundaries of objects that support other objects. An idea of predestination, which is secondary to the semantics of pod, becomes central for the prospective construction. It structures the objects in a pair X pod Y, and gives their relationship a temporal component: first X, then Y.

The retrospective construction with the preposition *iz-pod* is directly related to the prospective construction with the preposition *pod* and especially to the mini-construction of prospective container (*bočka pod benzin* 'drum for gasoline'). The situation that is intended in the construction of the prospective container—the drum is filled with gasoline—is used as a reference point on a timeline and the blend *iz-pod* marks that container via the former content (*bočka iz-pod benzina* 'empty gasoline drum'). Thus, the retrospective construction with *iz-pod* takes a mini-construction of prospective container, and based on it, develops the retrospective construction.

We see that in all the constructions under study temporal uses appear in the network of all meanings after passing through several stages of extension from the original spatial construction. Moreover, the temporal construction usually highlights a parameter that was secondary to the original construction and makes it the focus of the temporal construction. The simultaneity construction focuses on the meaning of dominance, which is secondary to the prototypical construction. The temporal boundary constructions focus on the idea of a boundary, which is secondary to contexts with horizontal and vertical objects. The prospective construction stresses the idea of purpose, which is secondary in contexts of spatial purpose and the retrospective construction chooses contexts describing a container and its contents among the uses of the prospective construction and develops it into the construction that describes a container via a previously used contents.

Thus, temporal constructions originate from different sources among the network of the spatial uses. However, all temporal constructions in this study share several properties. Firstly, the temporal constructions with the preposition *pod* are only possible with the accusative case, and not the instrumental case, while the spatial construction may be used in two variants: directional with the accusative case and locative with the instrumental case. The retrospective construction with the preposition *iz-pod* is used with the genitive case, which is also associated with directional movement, but, whereas the accusative case marks movement towards the landmark, the genitive case marks movement away from it. Thus, there is a parallelism between directional spatial contexts and temporal contexts, ¹¹ and they are parallel because speakers often conceptualize time as movement along a timeline.

¹¹Other Russian constructions used to describe the temporal domain use the locative case, which in the spatial domain describes being in a location, not the goal of a directional movement, cf. the construction with the preposition v studied in Makarova and Nesset (this volume). It might be the case that a preference for the extension of directional constructions into the domain of time is specific for the peripheral elements of the TIME IS SPACE metaphor, however the data in this study are insufficient for exploring this hypothesis.



The second similarity concerns the use of the verb in the constructions. While spatial constructions with both *pod* and *iz-pod* require use of a verb, temporal constructions are less strict about this requirement. The two temporal constructions with the preposition *pod*, the simultaneity construction and the temporal boundary construction, allow various verbs (*on spal pod šum doždja* 'he slept to the patter of rain', *oni rasstalis' pod utro* 'they parted early in the morning'). However, both constructions are also possible as noun phrases (*son pod šum doždja* 'sleep to the patter of rain', *rasstavanie pod utro* 'parting in the early morning'). The prospective construction and the retrospective construction are only possible as noun phrases (*grjadki pod ogurcy* 'patches for cucumbers', *butylka iz-pod šampanskogo* 'empty bottle of champagne'). The spatial construction can be used as a noun phrase in the locative variant (*tazik pod vannoj* 'a bowl under the tub', *pesni pod oknami* 'songs below the windows'), but not in the directional variant. Directional noun phrases can only be interpreted as examples of the prospective construction (*tazik pod vannuju* 'a bowl intended to be under the tub').

We believe that these two features—exclusive use of the accusative case and optionality of the verb are related to each other and both are results of the structure of the temporal land-scape. It is only natural that the temporal constructions are parallel to the directional spatial constructions. Temporal constructions function in the domain of time, which is perceived by speakers as always moving. This makes them similar to the directional constructions where a subject moves toward a goal. In addition temporal constructions, unlike spatial ones, do not need a motion verb to denote movement, because the movement is already inherent in the notion of time. Since we see time as always moving, we do not need to mark movement using a verb. Time is more similar to movement in space than to being located in space, because time is perceived by speakers as dynamic.

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¹²Copula verbs are, however, permitted as in *grjadki byli pod ogurcy* 'the patches were for cucumbers', *butylka okazalas' iz-pod šampanskogo* 'the bottle was from champagne', etc.



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