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Behind the door: how Russian, Kazakh, and Armenian encode spatial relations with double-fronted objects

Abstract

This paper explores how the concept of frontness is linguistically encoded in spatial constructions involving double-fronted objects, such as doors and windows, across three languages: Russian, Kazakh, and Armenian. Our analysis reveals significant cross-linguistic variation in how languages assign and interpret frontness in spatial expressions such as ‘in front of’ and ‘behind.’ Drawing on corpus data, field work with informants, and typological questionnaires, we show that the frontness of double-fronted objects such as doors and windows is not a universal feature, as one might have expected based on their experiential characteristics. Instead, spatial encoding varies across languages and appears to form different typological systems in this regard. Russian treats both doors and windows as fronted objects but only in two constructions – ‘in front of the door’ and ‘behind the window’, both referring to exterior location; Armenian assigns frontness primarily to windows; and Kazakh partially treats windows as fronted, while doors exhibit inconsistent patterns. These findings suggest that the encoding of spatial relations involving double-fronted objects forms a typologically diverse domain.

Key words

Frontness, frames of reference, egocentric, intrinsic, spatial relations, double-fronted objects, Russian, Kazakh, Armenian, deixis, typology

According to the classical definition by Juri Apresjan (1974, 1986), *frontness* is a non-trivial semantic feature that characterizes objects with a single functionally defined side, through which they are typically used. As previously noted by Fillmore (1968), frontness is not merely a geometric property but an experiential and functional one. The inherent front of objects, especially artifacts, is determined by their typical interaction with humans – for example, a house has a clear front where the door is located, while a tree does not.

In languages like English, Russian, and French, frontness is reflected in different interpretations of expressions with spatial prepositions such as ‘in front of’ or ‘behind’. Phrases with fronted nouns and prepositions ‘in front of’ or ‘behind’ are interpreted with an *intrinsic* frame of reference (Levinson 2003, Majid et al., 2004), or a type of spatial coding system where the location of an object is described based on the inherent orientation of another object rather than the observer’s perspective (relative egocentric frame of reference) or fixed environmental landmarks (absolute, or geocentric frame of reference). Thus, phrases like *zelënaja izgorod' pered domom*, *hedge in front of the cottage*, or *la haie devant la maison* all refer to a growth of shrubs next to the front side of the house – i.e., the side where the main entrance door is located. For their understanding, they do not require knowledge about the position of the observer (or about the cardinal directions).

However, when used with non-fronted nouns, spatial prepositions invoke a relative egocentric frame of reference: in order to locate the object which is *pered derevom*, *in front of the tree* or *devant l'arbre* one has to know the position of the speaker-observer. Thus, Marc Chagall’s well-known lithographic poster *Les Amoureux Devant l'Arbre* (‘The lovers in front of the tree’) describes the location of the couple from the viewer’s position: the lovers are between the viewer and the painted tree in the poster.

Since frontness is defined functionally and experientially rather than purely linguistically, one might expect it to display a certain degree of cross-linguistic universality. After all, cultural differences notwithstanding, both humans and many culturally significant objects exhibit fronts that are similarly defined across cultures: the human face, with its eyes and mouth, universally marks the forward-facing side of the body, just as the front of a house is typically where the door, windows, or point of entry is located.

However, even within a single language, denotations of fronted objects do not always behave uniformly in accordance with their asymmetrical nature and intrinsic orientation. For instance, *a bike in front of the building* is likely to be understood as a bike positioned on the entrance side of the building. This interpretation arises for two reasons: when used as a landmark for a relatively small

object, an intrinsic understanding of building is invoked, as the building is probably viewed from a short distance; also, from an encyclopedic perspective, it is more logical to leave bikes near an entrance rather than at the back of a building. However, in the phrase *There was a small white building in front of the huge black one*, a relative, egocentric (speaker-observer) perspective may be invoked. In this case, the exact location of the entrance is irrelevant because the focus is on the cityscape as a whole, and additionally, the distance between the speaker-observer and the two buildings may be too large for the entrance to be visible. So, a building can be treated either as a place where people live or which they enter or holistically, as a non-fronted spatial object. This variation in interpretation suggests that frontness is not an absolute property but a more flexible, context-dependent feature.

In addition, not every object has a simple intrinsic orientation: some objects can have different intrinsic orientations when moving or being static. For example, the sentences *There was a person in front of the train* and *I saw several familiar faces in front of our train* evoke distinct spatial images. In the phrase *There was a person in front of the train*, the person is positioned dangerously on the tracks, directly in the path of the moving train. In this intrinsic orientation, the front of the train is its moving part, or the train operator's car. In contrast, the interpretation of the sentence *I saw several familiar faces in front of our train* is based on a different intrinsic orientation: people are positioned on the platform, beside the train, near the passenger doors – a space conventionally used for boarding rather than for motion-related orientation. This contrast illustrates how the same spatial phrase can shift in meaning depending on whether the object in question is static or moving, and how even intrinsic orientation can be influenced by the egocentric perspective: in the case of the train, whether the speaker adopts the car operator's viewpoint, or the boarding passengers' viewpoint.

The fact that, even within a single language, interpretations of expressions involving fronted objects and spatial prepositions may vary depending on speaker perspective, as well as on whether the object is static or moving, prominent or backgrounded, suggests that frontness is not a fixed spatial category but a flexible, context-sensitive feature. This flexibility raises the possibility of cross-linguistic variation. Our study compares how Russian, Armenian, and Kazakh encode frontness, focusing on the interplay between intrinsic and egocentric frames of reference, and examines whether cross-linguistic patterns reflect shared embodied experience or language-specific spatial conventions. In particular, we build on the observation made by Apresjan & Raxilina (2020) that certain objects, such as doors and windows, are double-fronted, due to their bidirectional use (people pass through doors and look through windows from both sides), and are treat-

ed differently from single-fronted objects in Russian. This raises the question of whether similar distinctions exist in other languages, a question we address in our paper through cross-linguistic comparison.

1. *Dveri* ‘doors’ and *okna* ‘windows’: intrinsic vs. egocentric orientation of double-fronted objects in Russian

In this paper, we examine two types of orientationally ambivalent objects that serve as transitional points between spaces – doors and windows. Although both are used from both sides – doors for entry and exit, windows for looking in or out – our preliminary research on Russian reveals that their linguistic treatment is not straightforward (Apresjan & Raxilina, 2020). We analyzed doors and windows in Russian, focusing on corpus examples containing the prepositions *pered* ‘in front of’ and *za* ‘behind’ with *dver’* ‘door’ and *okno* ‘window’). Our findings revealed a clear asymmetry in their interpretation.

In most corpus examples, *pered dver’ju* ‘in front of the door’ refers to the exterior space outside the building, as in the following line from Nikolai Gumilev’s poem: *Ja stoju pered dver’ju tvoeju, ne dano mne inogo puti* ‘I stand before your door, no other path is given to me’. Thus, the space *pered dver’ju* is typically associated with the outside, reinforcing the conventionally primary function of the door: to allow entry rather than exit. Although doors are used for both entering and exiting, language reflects a goal bias, favoring entry as the default function. This bias suggests that enclosed spaces are conceptualized more as places that people seek to enter, rather than as places from which they seek to escape. As a result, the front of a door is mostly perceived as facing outward, suggesting an asymmetrical orientation.

However, the expression *za dver’ju* ‘behind the door’ does not suggest the same asymmetry. If *pered dver’ju* typically refers to the outside, one might expect *za dver’ju* to consistently mean inside. While this interpretation is possible, *za dver’ju* can also refer to an external location, making it effectively synonymous with its opposite, *pered dver’ju*. These two readings of *za dver’ju* involve two different perspectives of the speaker: *Ona skrylas’ za dver’ju* ‘She disappeared behind the door’ means that the speaker is outside, observing someone going inside, whereas *Za dver’ju stoyal kakoj-to neznakomec* ‘A stranger was standing behind the door’ means that the speaker is inside, referring to someone outside, on the other side of the door.

Thus, while *pered dver'ju* is interpreted intrinsically (based on the object's inherent orientation), *za dver'ju* is interpreted egocentrically, from the deictic perspective of the speaker – whether inside or outside – referring to the opposite side of the door from their position. So, while in *pered dver'ju* the door behaves as a typical fronted object with an outside front, in the expression *za dver'ju* it behaves as a non-fronted object, relying on the position of the speaker-observer to establish reference. This fluid interpretation makes *door* an exception to traditional frontness rules.

On the other hand, *okno* 'window' demonstrates the opposite patterns of interpretation, reflecting its distinct function – not as a point of entry but as a means of viewing the outside. As a result, *pered oknom* 'in front of the window' can refer to either an interior or exterior location, depending on the position of the speaker-observer. It is thus interpreted egocentrically: *Ona sidela pered oknom* 'She was sitting in front of the window' refers to the location inside, with the speaker inside the room, further away from the window. In the sentence *Pered oknom roslo derevo* 'A tree was growing in front of the window', the location is outside, with the speaker either outside and the tree positioned between them and the window, or inside, right beside the window, where the tree blocks their view. By contrast, *za oknom* 'behind the window' is uniformly interpreted in reference to the location outside, indicating an intrinsic frame of reference: *Za oknom rosli derev'ja* 'Behind the window, trees were growing'. However, *za oknom* is unlikely to be used if the speaker is not inside; instead, alternative constructions would typically be used to convey the same idea – e.g., *pod oknom* 'under the window'. If the speaker is looking into the window from the street and sees someone inside, this would be expressed using *v okne* 'in the window'.

This contrast between egocentric interpretation for *pered oknom* and *za dver'ju* and intrinsic interpretation for *za oknom* and *pered dver'ju* reflects the functional asymmetry between doors and windows in linguistic encoding of the Russian language. This pattern suggests a potential point of cross-linguistic variation as different languages may assign frontness and spatial relations to double-fronted objects like doors and windows in distinct ways. In this paper, we consider the data from two genetically distinct languages – Kazakh and Armenian – to explore this variation.

Our data for Kazakh and Armenian comes from a combination of corpus materials and native speaker consultations. For Kazakh, we used the Turkic Web Corpus available on Sketch Engine and supplemented it with judgments from nearly forty informants, thanks to a linguistics class taught to Kazakh-speaking students by one of the authors at Nazarbayev University (Astana) during the period in which this paper was being written. For Armenian, we relied on the Eastern

Armenian National Corpus (EANC) and elicited judgments from a single, highly qualified native speaker. While the resources available for Kazakh and Armenian were not equal in scope, we consider the resulting datasets to be as comparable as possible under the circumstances.

To collect data from informants, we used a typological questionnaire containing Russian phrases that illustrate the various usages and interpretations discussed above, as well as some others (the full questionnaire is in the Appendix). We then conducted interviews with native speakers of Kazakh and Armenian who are bilingual in Russian to analyze their responses.

The questionnaire was based on several parameters, such as interior vs. exterior position of the object, interior vs. exterior position of the speaker-observer, intrinsic vs. egocentric frame of reference, static vs. dynamic predicate, where each parameter represented a potential point of cross-linguistic variation. The questionnaire is presented in the Appendix together with the most frequent Kazakh and Armenian phrases used to translate each context.

In presenting our data, we provide morpheme-by-morpheme glosses only for the relevant portions of each sentence, particularly in longer corpus examples. This allows us to focus on the constructions under study without overloading the reader with unrelated material.

2. *Dveri* ‘doors’ and *okna* ‘windows’: double-fronted objects in Kazakh¹

In Kazakh, the spatial relations under discussion are encoded in two ways: through the case marking of the noun denoting the Landmark (e.g., ‘door’ and ‘window’) and through postpositions, which derive from various orientational nouns meaning ‘front,’ ‘side,’ ‘near,’ ‘back,’ ‘outside,’ ‘other side,’ ‘bottom,’ and ‘base.’ Static and dynamic predicates are distinguished by the locative vs. ablative case of the orientational noun, or the nouns ‘window’ or ‘door.’ The choice of orientational nouns and their forms is not uniform across speakers. Below, we present the most representative contexts from the corpus and the questionnaire along with their glossed translations into Kazakh, including frequency distribu-

¹ We thank the students of *Language and Communication* class, Spring 2025 at Nazarbayev University for their participation in the questionnaire, and Ular Yestay, a Linguistics major student at the same university, for glossing the linguistic examples in Kazakh.

tions where applicable. Most contexts have responses from 39 informants, while some include data from 40 informants. Overall, Kazakh exhibits a different pattern from Russian. In Russian, the phrases ‘in front of the door’ and ‘behind the window’ follow an intrinsic frame of reference, typically referring to exterior locations. However, in Kazakh, the intrinsic “exterior” reading occurs in ‘behind the door’ and ‘behind the window’ constructions, while ‘in front of the door’ and ‘in front of the window’ can refer to either interior or exterior locations, depending on the position of the speaker and pragmatic factors. As a result, Kazakh relies on an egocentric frame of reference or pragmatic factors for the interpretation of these spatial relations.

‘In front of’, regardless of the kind of double-fronted object – door or window – or whether the referenced object (Trajector) is interior or exterior, receives an almost uniform translation with the genitive of ‘door’ / ‘window’ followed by the postposition *aldynda* ‘front-3.POSS-LOC’. In (1), the natural reading is with the exterior position of the Trajector (he):

(1)

<i>Ol</i>	<i>esik-tiń</i>	<i>ald-y-nda</i>	<i>tur-yp</i>	<i>qońyrau</i>	<i>şal-dy</i>
3SG	door-GEN	front-3.POSS-LOC	stand-CVB	bell	ring-PST.3
‘He/she stood in front of the door and rang the bell’					

In all 39 responses, ‘in front of’ was translated by *aldynda* ‘front-3.POSS-LOC’.

In (2), the natural reading is with the interior position of the Trajector (dog); the translation of ‘in front of the door’ by all 39 respondents is equivalent to (1): with the ‘door’ in the genitive, followed by the preposition *aldynda*:

(2)

<i>It</i>	<i>esik-tiń</i>	<i>ald-y-nda</i>	<i>kilem-de</i>	<i>żat-ty</i>
dog	door-GEN	front-3.POSS-LOC	carpet-LOC	lie-PST.3
‘The dog lay on the rug in front of the door’				

We find the same postposition *aldynda* in the translation of contexts referring to exterior and interior locations relative to the windows, again, by all informants. Context (3) refers to the lilac bushes growing *outside*, while context (4) refers to a ficus plant growing *inside*. In both, ‘in front of the window’ is translated as *terezeniń aldynda* ‘window-GEN front-3.POSS-LOC’:

(3)

<i>Tereze-niń</i>	<i>ald-y-nda</i>	<i>börtergül</i>	<i>ös-ti</i>
window-GEN	front-3.POSS-LOC	lilac	grow-PST.3
'Lilacs grew in front of the window'			

(4)

<i>Tereze-niń</i>	<i>ald-y-nda</i>	<i>fikus</i>	<i>tur-dy</i>
window-GEN	front-3.POSS-LOC	figus	stand-PST.3
'A large ficus stood in front of the window'			

Thus, 'in front of' in Kazakh is consistently encoded by *aldynda*, regardless of the location of the Trajector, which is determined by pragmatics. We infer spatial orientation based on contextual knowledge – bells are typically located outside, dogs usually lie on rugs indoors, lilacs grow outside, and ficuses are indoor plants. This suggests that doors and windows do not function as inherently fronted objects when used with the postposition *aldynda* 'in front of'.

Yet the natural corpus data from the Turkic Web Kazakh corpus suggests certain tendencies in the interpretation of both 'in front of the window' and 'in front of the door'. Among the 51 examples of *tereze aldynda* 'window front-3. POSS-LOC', only one quarter yielded pragmatically natural exterior interpretations, such as (5), while the majority referred to inside locations, such as (6), suggesting that the property of frontness may be scalar, with the privileged facade of the window facing inside:

(5)

<i>Tereze</i>	<i>ald-y-nda</i>	<i>qus</i>	<i>Úshyp</i>	<i>ótse</i>
window	front-3.POSS-LOC	bird	fly-CVB	pass-COND
'If a bird flies past in front of the window'				

(6)

<i>Tereze</i>	<i>ald-y-nda</i>	<i>jazu</i>	<i>stoly</i>
window	front-3.POSS-LOC	writing	Desk
'A writing desk in front of the window'			

The translations of the Russian phrase *za dver'ju* 'behind the door' further demonstrate the scalar nature of frontness. In the context *Vxodit' poka nel'zja. Postojte za dver'ju* 'Entering is not allowed yet. Please wait behind the door', where the pragmatically natural reading is 'outside the door', 18 informants used the construction *esiktiń aldynda* 'in front of the door', suggesting that for some speakers,

this expression functions similarly to its Russian counterpart, referring intrinsically to an outside location. So, one may suggest that *esiktiń aldynda* also possesses a certain degree of frontness, with the privileged facade of the door facing outside. Interestingly, five informants described the exterior location as *esiktiń artynda* ('door-GEN back-3.POSS-LOC'), or 'at the back of the door', which likewise suggests an intrinsic frame of reference, but with the privileged facade facing inwards.

The preference for the exterior localization referenced by 'in front of the door' examples was strongly supported by the available corpus data. We analyzed 40 examples from the Turkic Web Kazakh corpus to match the number of our informants: 20 included the genitive construction *esiktiń aldynda* 'door-GEN front-3.POSS-LOC' and 20 featured the less formal nominative form *esik aldynda* 'door-NOM front-3.POSS-LOC'. Of these 40 examples, 30 unambiguously referred to exterior locations, while only one example clearly referred to an interior setting. Most examples spoke of cars, buildings, cows, trees, or other clearly outdoor objects located in front of the door, as in the following examples:

(7)

<i>Siir-lar-ı</i>	<i>esik</i>	<i>ald-y-nda</i>	<i>tur</i>
cow-PL-POSS.3	door	front-3.POSS-LOC	stand.PRS.3
'Their cows are standing in front of the door'			

(8)

<i>Esik-tiń</i>	<i>ald-y-nda</i>	"GAZ-21" Volga	<i>tur</i>
door-GEN	front-3.POSS-LOC	"GAZ-21" Volga	stand.PRS.3
'In front of the door stands a GAZ-21 Volga'			

14 informants used the construction *esiktiń syrtynda* 'door-GEN outside-3.POSS-LOC' with the postposition *syrtynda* which means 'outside', thus preferring to mark the exterior location in a non-ambiguous way:

(9)

<i>Kir-u-ge</i>	<i>äli</i>	<i>bol-ma-y-dy</i>	<i>esik-tiń</i>	<i>syrty-y-nda</i>	<i>küt-iñiz</i>
enter-INF-DAT	yet	be-NEG-NMLZ-ACC	door-GEN	outside-3.POSS-LOC	wait-IMP.2PL
'Entering is not allowed yet. Please wait behind the door'					

Only a minority of the speakers adopted an egocentric frame of reference: three informants described the location as *esiktiń arǵy jaǵynda*, or 'on the other side of the door' (door-GEN other.side-3.POSS-LOC) suggesting that the speaker is positioned inside, while the Trajector is outside.

In contexts (10) and (11), we can see that the Russian phrase *za oknom* ‘behind the window’ is consistently interpreted by Kazakh speakers as referring to outside locations, regardless of pragmatics. Even in situations where their world knowledge suggests an inside location for the Trajector, their translations indicate an outside interpretation. Thus, these combinations are interpreted with an intrinsic frame of reference, and windows exhibit characteristics of fronted objects, in the same way as in Russian. In (10), the natural interpretation of the location is exterior, and the majority of the speakers unambiguously mark it as ‘outside’ in their translations of the Russian original *za oknom* ‘behind the window’:

(10)

<i>Ol</i>	<i>tereze-niń</i>	<i>syrt-y-nda</i>	<i>butaq-ta-ǵy</i>	<i>torǵay-dy</i>	<i>kór-di</i>
3SG	window-GEN	outside-3.POSS-LOC	branch-LOC-REL	sparrow-ACC	see-PST.3
‘He/she saw a sparrow on a branch outside the window’					

In (11), the natural interpretation of the location is interior, yet the majority of the speakers also used ‘outside’ in their translations of the Russian *za oknom* ‘behind the window’ despite the pragmatic indications to the interior location of the Trajector:

(11)

<i>Ol</i>	<i>tereze-niń</i>	<i>syrt-y-nda</i>	<i>tigip</i>	<i>otyrgan</i>	<i>qyz-dy</i>	<i>kór-di</i>
3SG	window-GEN	outside-3.POSS-LOC	sew-CVB	PROG-PTCP	girl-ACC	see-PST.3
‘Outside the window he/she saw a girl sewing’						

A rare variant of the translation, featuring the literal rendering ‘*behind the window*’ – *tereze-niń art-y-nda* (*window-GEN back-3.POSS-LOC*) – did not occur at all in the natural data, thus corroborating our informant judgments. The most natural corpus examples for exterior spatial contexts used either *terezeniń syrt-ynda* or the more colloquial *tereze syrtynda* (with nominative *window*), but these, too, were relatively infrequent: we identified only a handful of instances in the Turkic Web Kazakh corpus.

(12)

<i>Tereze</i>	<i>syrt-ynda</i>	<i>qys</i>
window	outside-3.POSS-LOC	winter
‘Outside the window is winter’		

Thus, in the case of ‘behind the window’, the interpretation aligns in both languages: in Russian and Kazakh, this phrase refers to an outside location, suggesting that the privileged front of the window is inside – consistent with its function of providing a view outward. However, the interpretation of ‘behind the door’ differs. In Russian, the location of the Trajector is largely determined by the position of the speaker, who is on the opposite side of the Trajector, thereby invoking an egocentric frame of reference. In contrast, Kazakh mostly interprets ‘behind the door’ intrinsically, meaning ‘outside’ and indicating that, as with the window, the privileged front of the door is understood to be inside the house.

3. *Dveri* ‘doors’ and *okna* ‘windows’: double-fronted objects in Armenian

In modern standard Eastern Armenian, there are two main ways to express the meaning of ‘in front of X’: the postpositions *dimac’* and *araj’*, both of which govern the genitive case of the noun (there is also a more formal variant of the latter, *arjev*, with the difference between the two being purely stylistic).

The postposition *dimac’* ‘in front of; opposite’ is etymologically related to the noun *demk’* ‘face’ and to some extent retains this connection in its semantics: one of its privileged contexts of use is to indicate the face-to-face positioning of two objects, i.e., with their front sides facing each other. In this sense, it can be said that the feature of frontness is directly embedded in the Armenian grammatical system. According to our consultant Victoria Khurshudyan, the contexts typical for *dimac’* largely overlap with those in which the French prepositional phrase *en face de* is used (which also contains a word meaning ‘face’).

As for the postpositions *araj’/arjev* ‘in front of; ahead; forward’, they are etymologically related to words meaning ‘front’ and ‘first’; *araj’* is also used as a spatial adverb ‘ahead’. In its modern semantics, this pair of postpositions often profile not so much frontness but rather the relative distance between an object and an observer. It seems that the topological characteristics of the object are not as important for the use of these postpositions as its position relative to the observer. Thus, in a context like ‘There was a bottle of wine on the table in front of him’, the most natural choice would be *araj’*, since a bottle is not a topologically oriented object:

(13)

<i>Arjēv-i</i>	<i>seḡan-in</i>	<i>mi</i>	<i>Šiš</i>	<i>gini</i>	<i>ka-r</i>
in.front-3P	table-DAT	IND	bottle	wine	exist-3SG.PST
‘There was a bottle of wine on the table in front of him’					

Accordingly, if someone is referred to as *im araj nstac* ‘sitting before me’, it is more likely that this expression describes seats standing one behind the other (like in a bus) – while a person who is *im dimac' nstac* is supposed to be sitting across from me (and thus facing me).

Unlike *dimac'*, *araj* has developed a secondary temporal meaning ‘before (in time); earlier’, which is in line with its “relational” semantics: thus, *injnic' araj* (with the ablative ending!) will mean ‘prior to me’ (cf. genitive-based *im araj* ‘before me / in front of me’). The following example is also significant: here, *araj* is privileged because the observer (coinciding with the speaker) is immobile, while the trajector is moving in the speaker’s field of vision (and thus its topological orientation is irrelevant).

(14)

<i>Anc'-ir</i>	<i>im</i>	<i>araj</i>	<i>or</i>	<i>es</i>	<i>u</i>	<i>barekam-ner-s</i>	<i>noric'</i>
pass-IMP.2SG	1SG.GEN	before	that	I.NOM	and	friend-PL-1P	again
<i>tesne-nk'</i>	<i>k'o</i>	<i>geḡec'kut'yun-ə</i>					
see-SUB.1PL.	2SG.GEN	beauty-DEF					

‘Pass **before me** so that my friends and I may see your beauty again’ [Step’an Zoryan]

Due to its broader meaning, *araj* can often appear in the same contexts as *dimac'*, while the reverse is less likely to be true.

On the other hand, in contexts like ‘standing/sitting in front of a window’, *dimac'* can be expected, especially when referring to the interior side of the window facing the observer.

Taking the context of the **doors**, it can be said that standing / lying in front of the door privileges *dimac'*, especially when the trajector is close to the door and facing it. A typical corpus example is as follows:

(15)

Azat taracut'yunnerə zbaḡec'num ein p'ok'rik banjaranoc'nerə, haverə k'ujuj ēin anum dṛneri dimac', mi šun hač'um ēr, oroš tneri tanik'neri vra cux ēr barjanum.
 ‘The free spaces were occupied by small vegetable gardens, **chickens clucked in front of the doors**, a dog barked, and smoke rose from the roofs of some houses.’

<i>haver-ə</i>	<i>k'ujjuj</i>	<i>ēin</i>	<i>an-um</i>	<i>dř-ner-i</i>	<i>dimac'</i>
hen-PL.DEF	clucking	AUX.3PL.PST	make-CNV.IMPF	door-PL-GEN	in.front

Interestingly, corpus examples with *ařaj* mostly provide a different configuration, when the door is not a point one is facing, but rather a point at some trajectory (passed or to be passed), cf.:

(16)

Gyuđi tnerum mekik-mekik kvarven čragnerə, zarmac'ac, k'nat'at'ax mardik knay-en lusamutneric', durs kgan dřeneri ařaj imanal, t'e inč' ē patahel.

'One by one, the lights will be turned on in the village houses, surprised, sleepy people will look out the windows, **come out to the doors** (lit. 'come out before the doors') to find out what has happened.'

<i>durs</i>	<i>k-ga-n</i>	<i>dř-ner-i</i>	<i>ařaj</i>
outside	FUT-go-3PL	door-PL-GEN	Before

(17)

Trdata dřen ařaj nran dimavorec' hazarapet Gnunin mi k'ani palatakannerov ev ařajnordec' t'agugu harkabažinə.

'Before the Trdat Gate (= 'before he entered the gate'), he was met by the commander Gnuni with several courtiers who led the queen's tax collection.'

<i>dř-an</i>	<i>ařaj</i>
door-GEN	before

In our questionnaire (many thanks to Victoria Khurshudyan for consultations), the sentences 1-4 may have both *ařaj* and *dimac'*; *dimac'* seems particularly appropriate in the context (3), because the package is supposed to be left just opposite the door and close to it:

(18)

<i>P'ostatar-ə</i>	<i>canroc'-ə</i>	<i>dř-an</i>	<i>dimac'</i>
postman-DEF	package-DEF	door-GEN	in.front

'The mail carrier left the package in front of the door'

On the contrary, in the sentences (5–6) the most natural choice would be the spatial postposition *mot* with the general meaning 'at; near; next to', and only in the sentence (7) the postposition *hetevum* is used, referred to the location 'behind'.

The linguistic behaviour of Armenian **windows** is slightly more homogeneous. As said before, sitting in front of the window (inside the room) requires *dimac'*, while the situations with an outside observer can be characterized with *araj* (if it is about lilacs growing outside in front of the window) or just *mot* (if it is about a person staying outside).

Interestingly, the transitive situations of looking through the window are uniformly coded with the help of another means, namely, the ablative case (requiring no postpositions). Thus, seeing **through the window** is rendered by the form *patuhanic'* window. ABL.

4. Conclusion

The analysis of the data from the examined languages demonstrates that the frontness of double-fronted objects such as doors and windows is not a universal feature. Instead, their behavior varies across languages and appears to form different typological systems in this regard. Different systems may treat both doors and windows as fronted or only one of these objects. In Russian, both doors and windows are fronted though this is manifested only in half of the constructions – ‘in front of the door’ and ‘behind the window’. In Armenian, only the window is fronted. In Kazakh, the situation is more similar to Armenian: only the window is a fully fronted object, when occurring in the construction corresponding to the Russian *za oknom*. However, the door is also somewhat fronted, yet inconsistently: quite a few speakers in some contexts treat ‘in front of the door’ as referring intrinsically to the exterior location, while a small minority of the speakers treat ‘at the back of the door’ in the same fashion.

Thus, we see cross-linguistic variation in the treatment of double-fronted objects along different axes of the spatial system: (1) which objects are conceptualized as fronted – doors, windows or both; (2) which facade is perceived as privileged – the one facing inwards or outwards; (3) in which constructions frontness is manifested – the constructions with ‘in front of’ or ‘behind’. The system of double-fronted objects can also be complicated by additional parameters. For example, in Armenian, the orientation of the Trajector relative to the double-fronted object plays a role: facing it (*dimac'*) or with one’s back to it (*araj*). Overall, our study demonstrates the high complexity of the frontness systems in double-fronted objects and serves as a preliminary, pilot investigation paving the way for a broader typological study, which may reveal additional parameters of this phenomenon.

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6. Appendix (questionnaire)

Door, 'in front of'

Outside location, static context

(1) *On stojal pered dver'ju i zvonil – nikto ne otkryval.*

'He stood in front of the door and rang the bell – no one opened it'

Kazakh: *есіктің алдында* 'in front of'

Armenian: *dʀan aʀaĵ* 'before'

Inside location, static context

(2) *Sobaka ležala na kovrike pered dver'ju.*

'The dog lay on the rug in front of the door'

Kazakh: *есіктің алдында* 'in front of'

Armenian: *dʀan dimac'* 'in front of'; *dʀan aʀaĵ* 'before' is also possible

Outside location, dynamic context(3) *Počtal'on ostavil posylku pered dver'ju.*

‘The mail carrier left the package in front of the door’

Kazakh: *есіктің алдында* ‘in front of’**Armenian:** *dʳan dimac'* ‘in front of’**Inside location, static context**(4) *Ja stojal pered dver'ju i ne rešalsja ujtj.*

‘I stood in front of the door and hesitated to leave’

Kazakh: *есіктің алдында* ‘in front of’**Armenian:** *dʳan aʳaĵ* ‘before’**Door, ‘behind’****Outside location, static context**(5) *Vxodit' poka nel'zja. Postojte za dver'ju.*

‘Entering is not allowed yet. Please wait behind the door’

Kazakh: *есіктің алдында* ‘in front of’**Armenian:** *dʳan mot* ‘at, nearby’**Location in the space between the open door and the wall, static context**(6) *Gde u vas venik? Na kuxne za dver'ju.*

‘Where is your broom? In the kitchen behind the door’

Kazakh: *есіктің артында* ‘behind the door’**Armenian:** *dʳan hetevum* ‘in the space behind’**Window, ‘in front of’****Inside location, dynamic context**(7) *Ja sela pered oknom s knižkoj.*

‘I sat in front of the window with a book’

Kazakh: *терезенің алдында* ‘in front of the window’**Armenian:** *patuhani dimac'* ‘in front of’**Outside location, static context**(8) *Pered/pod oknom rosła siren'.*

‘Lilacs grew in front of/under the window’

Kazakh: *терезенің алдында* ‘in front of the window’**Armenian:** *patuhani aʳaĵ* ‘before’

Inside location, static context

(9) *Pered oknom stojal bol'soj fikus.*

'A large ficus stood in front of the window.'

Kazakh: *терезенің алдында* 'in front of the window'

Armenian: *patuhani dimac'* 'in front of'

Window, 'behind'

Outside location, static context

(10) *Za oknom šel dožd.*

'It was raining behind the window'

Kazakh: *Терезенің сыртында* 'behind the window'

Armenian: *drsum* 'outside' (the noun is not specified)

Outside location, static context

(11) *On uvidel za oknom / v okne vorob'ja na vetke.*

'He saw a sparrow on a branch outside/through the window'

Kazakh: *Терезенің сыртында* 'behind the window'

Armenian: *patuhanic'* 'window.ABL'

Inside location, static context

(12) *Za oknom / v okne on uvidel devočku, kotoraja šila.*

'Outside/through the window, he saw a girl sewing'

Kazakh: *Терезенің сыртында* 'behind the window', *terezeden* 'from the window'

Armenian: *patuhanic'* 'window.ABL'