

Case Assignment in Russian Temporal Adverbials: an Image Schematic Approach

Tore Nesset University of Tromsoe

This study offers a thorough analysis of the assignment of case in (certain) Russian temporal adverbials in terms of three image schemas, which I shall refer to as CONTAINER, POINT and MEDIUM. These image schemas, it will be argued, enable us to formulate simple generalizations, some of which have not been explicated in the scholarly literature before. An important contribution in this respect is what I refer to as "the de dicto/de re rule", which captures the impact of phrasal syntax on case assignment in simple semantic terms. Also innovative are the proposed analyses of seasons and plural nouns as involving the MEDIUM image schema.

Although the main goal of this article is to unpack the subtleties of one language, I believe the analysis is of interest for the community of cognitive linguists in general. In particular, I argue that image schemas have certain advantages over distinctive features, which have been instrumental in the development of structuralist and generative theories of case. While distinctive features may represent each relevant property in isolation adequately, they do not offer a natural account of how the properties interact in case assignment. It is argued, however, that the conspiracies of properties are neatly accommodated in an image schematic approach. Image schemas are not only cornerstones in a theory of embodied cognition; they also help the working grammarian to capture descriptive generalizations about individual languages.

Also likely to be of general interest is my discussion of the relationship between time and space. Given that the proposed analysis indicates that temporal adverbials may be understood in terms of spatial image schemas, it lends further support to the standard view of time as a metaphorical extension from space. However, the analysis to be developed also shows that the relevant image schemas are realized by means of different

.

cases in the two domains, thus suggesting some independence on the part of the temporal domain. This paper offers some speculations on the nature of this independence.

This article is structured as follows. In section 1 I identify two relevant parameters, "extendedness" and "boundedness", then in section 2 I argue that these parameters are better accounted for in terms of image schemas than distinctive features. Section 3 explores the relevance of linguistic convention. In section 4 I discuss the apparent problem for the analysis posed by the names of the seasons, before I turn to the impact of grammatical categories and phrasal syntax on case assignment in sections 5 and 6. After a brief discussion of the time-space relationship in section 7, a conclusion is offered in section 8.

Extendedness and Boundedness

If you ask in Russian when something happened, you are likely to receive an answer containing a temporal adverbial including the preposition v 'in/to'. The preposition na 'on' also occurs in constructions of the relevant type, but as observed by Levin (1992: 51), its use is much more restricted in temporal than spatial contexts. In the present paper, therefore, we will mainly be concerned with temporal adverbials with v. The examples in (1) and (2) provide a first illustration.

(1)	V pjatnicu	posle	obeda	prišel	djadja	Mitjaj.					
	in Friday.ACC	after	lunch.GEN	arrived	uncle.NOM	Mitjaj.NOM					
	'On Friday after lunch uncle Mitjaj arrived.' (Rasputin, Uppsala)										

(2)	V 1973	godu	avtomatičeskie	stancii	issledovali
	In 1973.LOC	year.LOC2	automatic.NOM	stations.NOM	explored
	atmosfer	ėtoj	planety		
	atmoshere.ACC	this.GEN	planet.GEN		
	'In 1973 automat	ic stations ex	plored the atmosph	ere of this plane	t.'
	(Izvestija, Uppsa)	la)			



Whereas in English a distinction is made between adverbials with *on* and *in* (discussed by Wierzbicka 1993), in Russian the same preposition is used in both examples. However, the preposition assigns different cases in (1) and (2), the accusative and the so-called second locative case, respectively. The empirical problem to be investigated in the present paper is the conditions for this accusative-second locative variation. It will be argued that it depends on two factors, which will be referred to as "extendedness" and "boundedness".

The noun in the adverbial PP in (1) denotes a time span shorter than the one in (2). Inspection of the examples in (3) suggests that the length of the time span in question is indeed relevant for the assignment of case by v. Nouns denoting relatively short time spans occur in the accusative (cf. (3a-c)), whereas the more extended time spans in (3d-f) are in the (second) locative

(3)	a.	Kogda ėto slučilos'? 'Whe	n did it happen?'
		−V ėtu	sekundu.
		in this.ACC	second.ACC
		'-In this second'	
	b.	−V ėtu	minutu.
		in this.ACC	minute.ACC
		'-In this minute'	
	c.	−V ėtot	den'.
		in this.ACC	day.ACC
		'-On this day'	
	d.	−V ėtom	mesjace.
		in this.LOC	month.LOC
		'-In this month'	
	e.	−V ėtom	godú.
		in this.LOC	year.LOC2
		'-In this year'	
	f.	–V ėtom	stoletii.

in this.LOC century.LOC '-In this century'

Further evidence in favor of an analysis in terms of "extendedness" comes from polysemy. The noun phrase *novyj god* 'new year' may refer to New Year's Day as well as to the whole upcoming year (Vsevolodova and Potapova 1973: 83). From the analysis outlined above we would expect the accusative in the former meaning since we are dealing with a short time span, whereas in the case of the more extended time span of a whole year, we would expect the second locative. As can be seen from (4) and (5), these predictions are indeed borne out.

(4)	Lora	sidela	odna	po	večeram	i	ν	prazdniki,	i			
	Lora.NOM	sat	alone	along	evenings.DAT	and	in	holidays.ACC	and			
	v	Novyj	god.									
	in	new.ACC	year.ACC									
	'Lora was alone in the evenings, both on holidays and on New Year's Day.'											
	(Tokareva, Uppsala)											

(5)	V	novom	godu	proizvodstvo	lekarstvennyx						
	in	new.LOC	year.LOC2	production.NOM	medical.GEN						
	sredstv	dolžno	uveličit'sja	na	6.8 procenta.						
	means.GEN	means.GEN must		on	6.8 % GEN.						
	'Next year, production of medicine must increase by 6.8%.'										
	(Izvestija, Uppsala)										

Evidence of the same type is presented by *stoletie*. In the meaning 'century' it takes the locative as illustrated in (6), while the related meaning 'centenary' in (7) yields the accusative because here *stoletie* denotes the *day* on which a 100th anniversary is celebrated.



(6)	V	XX	stoletii	byl	javnyj	perekos	ν	režisserskij	
	In	20 .LOC	century.LOC	was	clear	bias	in	stage	
	director's.ACC								
	teatr.								
	theater.ACC								
	'In the 20 century theater has been dominated by the stage director.' (<i>Ogonek</i> , Tübingen)								

(7)	V	stoletie	že,	ν	1912	godu	medali				
	in	centenary.ACC	EMPH	in	1912.LOC	year.LOC2	medals.NOM				
	byli otčekaneny		S	drugoj	nadpis'ju.						
	were	imprinted	with	another.INST	inscription.INST						
	'On the centenary, in 1912, the medals had a different inscription.'										
	(Granin, Uppsala)										

Although we shall maintain that "extendedness" is relevant for the assignment of case in temporal adverbials with v 'in/to', it does not constitute a sufficient criterion. The examples in (8) - (10) involve the nouns vremja 'time', epoxa 'epoch' and period 'period'. These nouns may indeed denote time spans as long as those in (3d-f), but nevertheless tend to occur in the accusative.

(8)	[] usilenie	možet	v	naše	vremja	imet'			
	increase.NOM	may	i	our.AC	time.ACC	have			
	katastrofičeskie	posledstvija [].							
	catastrophic.AC	consequences.ACC							
	In our time increase [] may havecatastrophic consequences [].'								
	(Pravda, Uppsala	1)							

(9)	Tak že, kak	v sovsem		druguju	ėpoxu –						
	in the same	in	completely	different.ACC	epoch.ACC						
	posle	5-ogo	marta	1953-ogo	goda						
	after	5 .GEN	March.GEN	1953.GEN	year.GEN						
	'In the same way	it was as if	in a completely	different epoch, i	.e.						
	after the 5 of March 1953.' (Nauka i žizn', Uppsala)										

(10)Vpredšestvujuščij problemy period takoj ne preceding.ACC period.ACC such.GEN problem.GEN In not voznikalo [...]. arose 'In the preceding period, such a problem did not arise.' (Voprosy jazykoznanija, Uppsala)

In order to account for examples of this type, I propose a second parameter, "boundedness". The temporal nouns we have been concerned with in examples (1) - (7) denote time spans of particular, measurable lengths and are *bounded* in the sense that they have clearly defined beginning and end points. Nouns like *vremja*, *èpoxa* and *period*, on the other hand, I shall consider *unbounded* since they lack clearly defined starting points and end points. A noun of particular interest with regard to "boundedness" is $\dot{e}ra$ 'era' which in the phrase $na\check{s}a\ \dot{e}ra$ is used as an equivalent of 'Anno Domini' referring to the Christian era:

(11) Rimskaja imperija raspalas' v našu ėru.

Roman.NOM empire.NOM dissolved in our.ACC era.A

'The Roman empire dissolved in the Christian era.'

In (11), the adverbial PP denotes a time span with a clearly defined starting point (the birth of Christ), but with no end point. Since v governs the accusative case, it seems



that a time span must have both clearly defined starting and end points in order to count as "bounded". One boundary is not enough to yield the (second) locative case.

In the same way as for "extendedness", polysemy offers evidence in favor of an analysis in terms of "boundedness". As can be seen from (12), *vek* takes the locative case in the bounded meaning 'century'. However, in (13), where it means 'age', it takes the accusative case.

(12)	On []	rodilsja	v	1899	godu,	to est'	ešč				
	he	was born	in	1899.LOC	year.LOC2,	i.e.	still				
	v	devjatnadcatom	veke.								
	in	19 LOC	century.LOC								
	'He was born in 1899, i.e. still in the 19 century.' (Granin, Uppsala)										
	He was I	oorn in 1899, i.e. stil	ii in the 19 centi	ury. (Granin,	∪ppsaia)						

(13)	Ja	sčitaju,	čto	v	naš	vek	nado	priložit'	vse,			
	I.NOM	think	that	in	our.ACC	age.ACC	must	add	all.ACC			
	usilija	čtoby	delat'	vešči	serdečnye.							
	efforts.ACC,	in	do	things.ACC	sincere.ACC							
	'I think that in our time we must make the biggest possible effort to do sincere things.'											
	(Vestnik, Tübingen)											

While *period* in its normal meaning illustrated in (10) is unbounded, it may also be used as a division of time in certain types of sporting events (Vsevolodova and Potapova 1973: 97). In this usage the noun is clearly bounded, and we would expect the preposition to govern the locative case. As witnessed by (14), the prediction is borne out, thus lending support to an analysis in terms of "boundedness".

(14)	[] v	tr et'em	periode	pošla	igra	v	drugie				
	in	third.LOC	period.LOC	went	play.NOM	in	opposite.ACC				
	vorota.										
	goal.ACC										
	'In the third period, the play started moving towards the opposite goal.'										
	(Izvestija, Uppsala)										

To summarize this section, "boundedness" and "extendedness" allow us to formulate the generalization in (15) about the case assignment of v in temporal adverbs of the type explored in this paper.

(15) a. Extended and bounded time spans → second locative
b. Elsewhere → accusative

As we see from (15), the accusative behaves like a default in that it is used whenever the second locative is inapplicable. It is worth mention that situations of this type are well known from the cognitive linguistic literature, cf. e.g. Langacker and Casad's (1991) analysis of locative expressions in Cora and Smith's (1987) analysis of the German dative and accusative. While the German accusative-dative variation in many ways resembles the distribution of the Russian locative-accusative studied in the present article, the two languages evince different defaults. In German – according to Smith – the dative is the default, whereas in Russian, as seen from (15), the accusative is the default case in the temporal expressions under scrutiny (see, however, Janda (This volume) for a characterization of the accusative).

Image Schemas vs. Distinctive Features

In this section we shall compare two ways of capturing the generalization given in (15) above. Ever since Jakobson (1936/1982 and 1957/1982) proposed his groundbreaking analyses of the Russian case system, distinctive features have been the



norm in structuralist and generative approaches (cf. e.g. Chvany 1986, Franks 1995, Sullivan 1998). However, I shall argue that an analysis in terms of image schemas is preferable to an account based on distinctive features, because the CONTAINER image schema provides a natural account of the conspiracy of boundedness and extendedness in case assignment. In addition to CONTAINER, only two image schemas, POINT and MEDIUM, are required in order to accommodate the data presented in the previous section.

If we for the sake of argument assume extendedness and boundedness to be binary features with the values +/-, we may reformulate (15a) as follows:

(16)		[+extended, +bounded]	\rightarrow	Second locative					
Stated	Stated in these terms, (16) represents one out of four logically possible combinations, the								
other	other three of which are given in (17):								
(17)	a.	*[+extended, -bounded]	\rightarrow	second locative					
	b.	*[-extended, +bounded]	\rightarrow	second locative					
	c.	*[-extended, -bounded]	\rightarrow	second locative					

As argued above, (16) gives correct predictions for Russian, while the rules in (17) do not. The rules in (17) are therefore prefixed with asterisks. Now, in terms of distinctive features, rule (16) is a no more natural option than those in (17). They are all equally arbitrary combinations of the possible values for the two features. If we ask why Russian posits rule (16), but none of the alternative rules in (17), the distinctive features are of no help. Even if distinctive features may be useful for purposes of taxonomy in that each feature correspond to one of the relevant properties, they do not provide motivation for the conspiracy of [+extended] and [+bounded] in the assignment of the second locative case. Let us therefore consider an alternative analysis in terms of image schemas and conceptual metaphor. For this purpose, we will leave the temporal domain for a moment, and turn to the closely related domain of space. Further discussion of the time-space relationship will be given in section 7 below.

Comparing examples like (18a) and (18b), Jakobson (1936/1982: 93, see also Worth 1984) observed that whether a sentence concerns location in space or not bears on

the choice of case ending.

(18)	a.	Skol'ko	krasoty	v	lesú.		
		how much	beauty	in	forest.LOC2		
		'How many be	ny beautiful things there are in the forest.'				
	b.	Skol'ko	krasoty	v	lese.		
		how much	beauty	in	forest.loc1		
		'How much be	ich beauty there is in a forest.'				

Jakobson (1936/1982: 93) argued that the second locative ending $-\dot{u}$ is chosen whenever the complement of the preposition is construed as a CONTAINER. In (18a) this is the case, insofar as the sentence is about the concrete things in a forest that people may consider beautiful. In (18b), however, we are not dealing with concrete objects, but rather with a quality of the forest. In this example, ν governs the so-called first locative case.

The image schema of a CONTAINER has been argued to be pivotal in language and cognition (Johnson 1987; Lakoff and Johnson 1999, Lakoff and Nunez 2000, Mandler 1991), and I would like to suggest that it may inform the analysis of the temporal expressions under scrutiny in the present paper also. For present purposes, a CONTAINER may be defined as a "bounded region", although this is simplistic insofar as it does not take into consideration force dynamics, for example. Thus, in order for something to be construed as a CONTAINER it needs clear boundaries and a certain extension. If either of these criteria is absent, we do not have a CONTAINER. If we conceive of the rule as an example of metaphorical location in terms of the CONTAINER image schema, we are in a position to predict that exactly the combination of [+extended] and [+bounded] is likely to yield the second locative case. In other words, the CONTAINER image schema neatly accommodates the conspiracy of extendedness and boundedness in the assignment of the (second) locative case. This generalization is lost if the notion of the CONTAINER image schema, and, more generally, the fundamental role of image schemas in language and cognition, is ignored. I suggest rephrasing the



assignment rule in (16) as (19).

(19)	CONTAINER	\rightarrow	second locative

The discussion of image schemas has focused on the second locative. However, although the accusative is the default case, which does not pose particular problems for the analysis, the image schematic account is not complete until the accusative is related to image schemas too. Accusative PP's like *v ėtu sekundu* 'this (very) second' (cf. (3a) above) I shall analyze in terms of the image schema POINT, which involves boundaries, but no extension. In the temporal domain, this implies construal of simultaneous starting and end points (cf. Smith 1991: 55ff. for discussion with regard to aspect).

The second type of accusative PP discussed in section 1, namely phrases like *v* naše vremja 'in our time', denote situations that are extended, but not bounded. For this type of containment I would like to adopt the term MEDIUM which has been used by Hawkins (1984: 94ff., see also Hawkins 1988). Hawkins observes that boundaries are relevant in (20a), but not in (20b), since in the latter the landmark is a mass noun without natural boundaries.

- (20) a. His feet are in the box.
 - b. His feet are in the air.

Hawkins uses the term BOUNDED MEDIUM about (20a), but I shall reserve CONTAINER, introduced above, for examples of this type. In the spirit of Hawkins we might characterize (20b) as UNBOUNDED MEDIUM, but for simplicity I shall employ the term MEDIUM without modification about containment involving extension, but no boundaries. While Hawkins' main focus is on spatial expressions, the term (UNBOUNDED) MEDIUM is applicable in the temporal domain as well, given that phrases like *v naše vremja* can be described as unbounded, but extended.

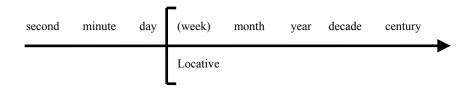
CONTAINER vs. POINT and Motivation vs. Predictability

The analysis proposed in the previous section captures a significant generalization. Furthermore, it is economic in that it involves only three image schemas. In spite of these virtues, however, the analysis will not work unless we explicate which temporal nouns are associated with which image schemas. With this in mind, we shall now explore the distinction between CONTAINER and POINT in further detail, before we turn to the CONTAINER-MEDIUM relationship in the following sections. We shall see that the association of a noun with the CONTAINER and POINT image schemas is partly motivated (in the sense of Lakoff 1987) by the lexical meaning of the noun.

In the discussion of distinctive features above, extendedness was assumed to be a binary feature. This is clearly simplistic. Rather, extendedness – both in space and time – may be considered a cline ranging from zero to infinite. In figure 1 some relevant time spans are arranged on such a cline. As shown in the figure, the week functions as a pivot in the Russian system. For bounded time spans shorter than a week, v governs the accusative case, whereas the locative is assigned to bounded time spans longer than a week. (The word for 'week' itself, nedelja, does not combine with v 'in/to' at all, but takes *na* 'on' with the locative case.) It goes without saying that this is not the only possible or natural place to locate the boundary, although the fact that nedelja 'week' does not combine with v produces a gap in the cline. Thus there is some language internal motivation for aligning the boundary to this gap. Still, however, the precise location of the boundary is largely arbitrary. A priori, it would indeed be possible to construe shorter time spans in terms of the CONTAINER image schema. In other words, the exact location of the boundary in figure 1 is dictated by linguistic convention. In order to select the right image schema and use the correct case on a particular occasion, it is not sufficient to know the lexical meaning of a noun and the rule that the CONTAINER image schema yields the second locative case. In addition, one must be aware of the convention that in Russian, time spans longer than a week are normally construed as CONTAINERS. The assignment of the right case cannot be predicted directly from the lexical meaning of the noun.



Figure 1: Extendedness (actual)



On the other hand, the relationship between lexical meaning and image schema is not arbitrary either. We may illustrate this by looking at the two alternative clines in figures 2 and 3. The analysis advanced above implies that the former is an equally possible and natural scenario as figure 1, since the only difference between the two is the slightly different location of the boundary, which is due to convention anyway. However, the proposed analysis predicts the scenario in figure 3 to be unlikely, where the time spans that are low on extendedness combine with the locative case. This is not a likely situation to occur under the image schema-based analysis because an object must have some minimal extension in order to be construed as a CONTAINER. The upshot of this is that although we are not dealing with complete predictability, we are not dealing with arbitrariness either. Rather, we are somewhere between these two extremes. Thus, in the terminology of Lakoff (1987), the situation can be described as one of partial motivation.

Figure 2: Extendedness (possible)

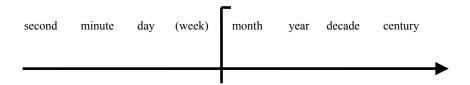
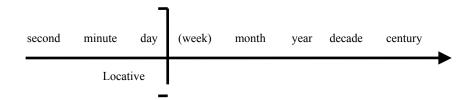
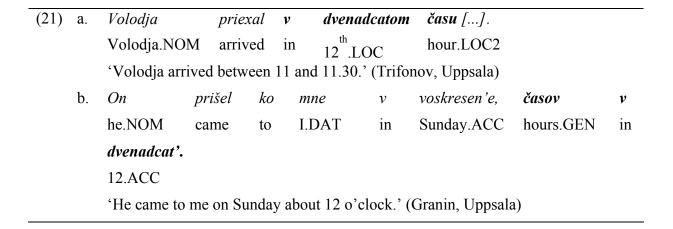


Figure 3: Extendedness (unlikely)



Although I believe figure 1 provides a good overview of the actual situation, one systematic deviation deserves mention. In (21a) *čas* is in the second locative case as opposed to (21b), which evinces the expected accusative.



The difference in meaning between (21a) and (21b) is illustrative. In the former, we are dealing with an event taking place within a period with clearly defined starting and end points. Although this is at variance with the generalization that time spans shorter



than a week take the accusative case, it is arguably in harmony with the overall spirit of the image schematic analysis proposed above. Since a situation is located inside a time span of a clearly defined duration, the time span in question involves both boundedness and a certain extension. It therefore lends itself to construal as a CONTAINER.

In (21b), on the other hand, $\check{c}as$ does not denote such a time span, but rather refers to the point in time when it is twelve o'clock. Thus, here the POINT image schema is relevant. (For more on POINT construal with regard to v + the accusative, see Sullivan 1998: 173 et passim and Janda (This volume). See also Haspelmath 1997: 108ff.). It is interesting to note that construal as POINT seems to be the rule for time spans shorter than a week. Consider, for instance, the sentences in (22).

(22)	a.	I	v	ėtu	sekundu	ja	v	nen	ı	uvidel
		and	in	that.ACC	second.ACC	I.NOM	in	he.I	LOC	saw
		to,		čego	ran'še ne	zamečal []	! .			
		that.AC	CC	which.GEN	earlier	not	noticed			
		'And in	this	second I saw	in him somethir	ng I had not no	ticed before	ore.'		
		(Tendrj	akov	, Uppsala)						
	b.	Onisim	ov	v	ėtu	minutu	vnov'	еті	ı	
		Onisim	ov.N	OM in	this.ACC	minute.ACC	again	he.I	DAT	
		pokaza	lsja	izmuče	ennym.					
		seemed	Į.	very ti	red					
		'In this	minu	ıte, Onisimov	again seemed v	ery tired to hir	n. (Bek, l	Jppsa	la)	
	c.	V	ėtot	:	moment	on	ne du	maet	ni	
		In	this	.ACC 1	moment.ACC	he.NOM	not thi	nks	neith	er
		0	nen	ıcax, ni o		predstojaščen	m		boe.	
		about	Ger	mans.LOC n	or about	forthcoming.	LOC		fight.	LOC '
		At this	mom	ent, he neithe	er thinks about th	e Germans, no	or about t	he figl	hting to	o come.
		(Baklar	iov, I	Uppsala)						

The three boldfaced temporal adverbials in (22) are used synonymously. Thus, in (22a) and (22b) *sekunda* 'second' and *minuta* 'minute' do not refer to time spans of certain lengths, but rather to points in time. If you want to refer to something happening inside

short time spans like minute and second, you would have to employ the preposition *na* 'on' with the locative case, as in (23). This construction is used when the time span in question is "seen to be basic in calculating time within a definite cycle, for example, in a sporting event" (Levin 1992: 54 who refers to Vsevolodova and Potapova 1973).

(23)	Sčet	byl	otkryt	na	pervoj	že	minute
	Score.NOM	was	opened	on	first.LOC	EMPH	minute.LOC
	pervogo	perioda.					
	first.GEN	period.GEN					
	'A goal was	scored in the v	ery first m	inute of	the first per	riod.'	
	(Vsevolodov	a and Potapova	a 1973: 87)			

I started this section by pointing out that the image schematic analysis advocated in the present study does not work unless it is made explicit which temporal nouns are associated with which image schemas. We are now in a position to state the following informal rule:

(24)	X > week	\rightarrow	CONTAINER	(second locative)			
	X < week	\rightarrow	POINT	(accusative)			
	Special case:						
	čas 'hour'	\rightarrow	CONTAINER	when denoting a bounded period			
	(cf. (21b) above)						
	(X represents a temporal noun and \rightarrow indicates conventional construal.)						

This rule captures the conventionalized construals for the temporal nouns governed by v 'in/to' discussed in this section. The nouns we have explored vary according to the parameter of extendedness, but they are all bounded. In the following sections our focus will shift to boundedness in that we shall consider the distinction between CONTAINER and MEDIUM in some detail.



MEDIUM vs. CONTAINER: The Seasons

An apparent problem for the image schematic analysis advocated in this paper is posed by the names of the seasons: vesna 'spring', leto 'summer', osen' 'autumn' and zima 'winter'. Given that they represent relatively long time spans, one might expect them to be in the locative when governed by v 'in/to', as pointed out by Sullivan (1998: 172). However, while the use of the locative is neither reported in the literature, nor attested in the electronic corpora, the names of the seasons are frequently found in the accusative. Example (25) illustrates this.

(25)	Stranno,	no	ty	v	ėto	leto	ne	ljubil
	strange	but	you.NOM	in	this.ACC	summer.ACC	not	loved
	igrat'	obyknove	ennymi		igruškami [].			
	play	ordinary	.INST		toys.INST			
	'It's stran	ge, but tha	at summer yo	u we	ren't fond of play	ing with ordinar	y toys	s [].'
	(Kazakov	, Uppsala))					

However, this problem can be solved if it can be shown that the seasons are not construed as CONTAINER, but rather as MEDIUM. In what follows, we shall pursue this hypothesis. Bear in mind that whereas the CONTAINER image schema correlates with the locative, construal as MEDIUM yields the accusative.

A distinction made in anthropology between cyclic on the one hand and linear, calendric conceptions of time on the other provides a good starting point for discussion. As observed by Keesing (1994: 13), the cycles of the sun and the moon as well as menstrual cycling provide templates for human thinking of time as evolving in cycles, i.e. going back to the beginning again, as it were, when the cycle is completed (Keesing 1994: 13). The conception of time as involving a linear path may, according to Keesing (ibid.), be grounded in the sequence of birth, maturation, aging and death.

While the notions of month, year, decade etc., with which we have been concerned earlier in the paper, pertain to the linear, calendric conception of time, the names of the

seasons stand out as the most likely candidates for cyclic construal. Representing arbitrary points in time, the primary function of calendric notions is to order events sequentially. Cyclic notions, on the other hand, tend to refer to inherent properties of the time spans in question in terms of e.g. temperature. As Geertz aptly observes, cyclic notions "don't tell you what time it is; they tell you what *kind* of time it is". This applies to the seasons. They provide characterizations of time spans in terms of weather conditions etc. Rather than being arbitrary chunks of time used for the purposes of measuring and ordering events sequentially, the seasons focus on qualities. They highlight what *kind* of time we are dealing with (cf. Haspelmath 1997: 26f. who refers to the seasons and the divisions of the day as "qualitative periods"). Now, this resembles MEDIUM construal, which – as it will be recalled from section 2 – involves extendedness, but no boundaries. Instead of focusing on the boundaries of the landmark, MEDIUM tends to emphasize what we may call the functional interaction between the trajector and the qualities of the landmark. Examples like *the hang glider in the air* and *the meat in the soup* illustrate this.

The hang glider needs the air in order to keep flying, and the meat and the soup interact in terms of taste and the experience of eating.

The relationship between cyclicity and MEDIUM, I think, lends some plausibility to my hypothesis that the seasons involve construal as MEDIUM, and hence combine with the accusative case. However, we must ask whether it can be corroborated further by more concrete linguistic evidence from Russian. I would like to explore two pieces of evidence. First, Russian posits a construction in which the instrumental case denotes the setting of an action (cf. Janda 1993: 164ff., Wierzbicka 1980: 95ff.). Compare sentences (26a) and (26b).



(26) a.	Oni	šli	čerez	les.			
	they.NOM	were walking	through	forest.ACC			
	'They were walking through the forest.'						
b.	Oni šli		lesom.				
	they.NOM were walking forest.INST						
	'They were walking through the forest.'						

It is difficult to highlight the subtle semantic difference between (26a) and (26b) in the English glosses. However, whereas the prepositional phrase in (26a) identifies the route of the movement, the instrumental in (26b) to some extent focuses on the medium of the movement, i.e. tells you what *kind* of place the walking took place in (Wierzbicka 1980: 95ff., Janda 1993: 166ff.; a somewhat different interpretation is given in Raxilina 2000: 77). In other words, the setting construction seems to involve the MEDIUM image schema. If this is correct, the hypothesis that seasons involve MEDIUM construal would lead us to expect the seasons to occur in the setting construction. The occurrence of calendric notions, on the other hand, would not be expected. As can be seen from (27), this prediction is confirmed by the attested facts.

(27)	Zimoj/*fevralem	on	xodit	na	lyžax.
	winter.INST/February.INST	he.NOM	goes	on	skis.LOC
	'In winter/*in February he go	oes skiing.'			

A potential counterexample where the name of the month March does appear in the instrumental is cited by Janda (1993: 169):

(28)	Tem	martom –	metel'nym,	oznobistym –				
	That.INST	March.INST	snow-stormy.INST	freezing-cold.INST				
	tešča		pomerla.					
	mother-in-law.NOM	r-in-law.NOM died						
	'During that March of snowstorms and shievering cold mother-in law died.'							

However, in this example the temporal adverbial involves an elaborate characterization of the qualities of the time span in question. Instead of introducing an arbitrary chunk of time for the purposes of time measurment, the adverbial tells us what kind of time we are dealing with. In this way, it lends itself to MEDIUM construal. Rather than presenting adverse evidence, examples like (28) in fact lend support to an analysis of the instrumental as involving the MEDIUM image schema.

A second source of evidence suggesting a link between seasons and MEDIUM comes from constructions involving time measurement and sequential organization of events. Since sequentiality is a property of the linear, calendric time conception, one would expect calendric notions to occur in such constructions. Furthermore, the prediction would be that the seasons are incompatible with or, at least, less acceptable in such constructions, given that their primary function is to characterize rather than measure time (Haspelmath 1997: 27). These predictions are in accordance with the facts, insofar as the phrase *dva goda nazad* 'two years ago' in (29a) is perfectly acceptable, whereas the corresponding phrase with *vremja goda* 'season' in (29b) is reported by informants to be strikingly odd.



(29)	a.	On	priexal	dva	goda	nazad.	
		he.NOM	arrived	two.ACC	year.GEN	ago	
		'He arrived	d two years	ago.'			
	b.	??On	priexal	dva	vremeni	goda	nazad.
		he.NOM	arrived	two.ACC	season.GEN	year.GEN	ago
		'He arrived	d two seasor	ns ago.'			

My informants also found the noun *sezon* in the general meaning 'season' unacceptable in sentences like (29). Notice, however, that in the worlds of theater and fashion, for instance, *sezon* is used as a unit of time measurement on a par with *mesjac* 'month' and *god* 'year', i.e. as a calendric notion. If my analysis is correct, therefore, one would expect *dva sezona nazad* 'two seasons ago' to be felicitous in examples of this kind. An informant produced the sentence in (30), where this prediction is borne out.

(30)	Takoe	plat'e	nosili	dva	sezona	nazad.
	such. ACC	dress. ACC	carried	two. ACC	sezona. GEN	ago
	'That kind o	of dress was wor	n two seas	ons ago.'		

To summarize, we have seen that there is evidence for analyzing the seasons as involving construal as MEDIUM. If this analysis is accepted, it is no longer a mystery why the seasons combine with the accusative case in the kind of temporal adverbials under scrutiny in the present paper. Instead of posing problems for the proposed analysis, the seasons turn out to provide additional evidence in support of it.

Before we leave the seasons, it may be instructive to contrast their behavior with that of phases in life, e.g. *detstvo* 'childhood', *junost'* 'adolescence', *molodost'* 'youth', and *starost'* 'old age'. As mentioned above, the phases in life pertain to the linear, calendric time conception – in fact, as pointed out by Keesing, they may represent the experiential

grounding for the calendric conception of time. Although they resemble seasons in that neither is of any particular, measurable length, boundaries are in fact salient in the meaning of phases in life. When we proceed from youth to adulthood in our lives, we cross a boundary. Whereas we do not know exactly how long our youth will last and when it will end, we may be quite sure that it *will* end. Otherwise old people would not complain that their youth is gone. In view of this, phases in life are not only extended, but also bounded time spans. The analysis explored in the present paper therefore predicts construal as CONTAINER and hence the assignment of the locative. As the relevant examples consistently involve the locative, this prediction is verified by the data. Example (31) is illustrative.

(31) V molodosti ja uvlekalsja spiritizmom [...].

in youth.loc I.acc was interested in spiritism.INST

'In my youth I was interested in spiritism [...].

(Ganina, Uppsala)

MEDIUM vs. CONTAINER 2: Pluralization

So far it has tacitly been assumed that the lexical meaning of a noun is the basis for the assignment of case by v 'in/to'. In what follows, however, we shall see that a grammatical category, the plural, also affects the construal of a noun as a certain image schema, and hence bears on the assignment of case. However, rather than posing problems for an image schematic approach, the pluralization effects to be explored in this section offer additional support to it.

Langacker (1991: 77ff.) has argued that plural forms are mass nouns. Thus, when a count noun is pluralized, it is transformed into an unbounded mass. While the singular *god* 'year' is bounded and therefore takes the second locative, the corresponding plural form *gody* 'years' is not bounded. It does not denote a time span of any definite length, and its starting and end points are not clearly defined. In view of this, plural forms do not lend themselves to CONTAINER construal. Rather, we are dealing with the MEDIUM



image schema. The image schema based analysis advocated in the present study therefore predicts the accusative in examples with nouns in the plural. This is by and large confirmed by the data in table 1, which shows a large majority of the accusative in the plural. The table concerns the three nouns for extended and bounded time spans that are attested in the plural in the Uppsala and Tübingen electronic corpora. As an illustration of the use of the accusative in the plural, consider (32) and (33).

(32)	Bessonov	ne	raz	ispytal []	sostojanie	bessilija	v	pervye
	B.NOM	not	time	experienced	state	exhaustion	in	first.ACC
	mesjacy	41-ogo		goda [].				
	months.ACC	41.GE	N	year.GEN				
	'Bessonov more than once felt exhausted in the first months of '41.'							
	(Bondarev, U	ppsala)						

(33)	[] ne	vstrečalos'	ети	v	ėti	gody	devuški
	not	met	he.DAT	in	these.ACC	years.ACC	girl.GEN
	'[] in these years, he didn't meet a girl [].' (Ju. Gončarov, Uppsala)						

Table 1. Statistics from electronic corpora.

-	Accusative pl:	Locative pl:
Mesjac 'month'	7	0
God 'year'	239	77
Vek 'century'	0	7
Total:	246	84

While in general the statistics in table 1 support an analysis where plural forms are treated as unbounded, the data for *vek* 'century' are problematic. The locative is found in all examples in the corpora. Sentence (34) is representative:

(34)	Oborudovanie		и	nas	to	že,	čto	bylo	
	Equipme	ent.NOM	by	we.GEN	that.NOM	EMPH	which.NOM	was	
	v XVIII-X		IX	vekax.					
	in 18 -19 th LOC		centuries.LOC						
	'The equipment we have is the same as in the 18 -19 centuries.' (<i>Nadne</i> , Tübingen)								

The adverbial PP in this example denotes a time span of 200 years, which is no less bounded than one century. Despite the plural, therefore, we are dealing with a bounded time span, and the locative is expected. Four of the seven examples from the electronic corpora are of this type. Two examples involve the semi-fixed expression *v vekax* 'in eternity, forever', while for the seventh and last example the context is insufficient to establish whether the time span in question is bounded or not. Furthermore, although the electronic corpora do not include examples with the accusative plural, informants accept sentences like (35).

(35	V	XX	veke	ne	byl	vojny	v	Švecii,	а
	i	20 LOC	century.LOC	not	was	war.GE	i	Sweden.LOC	bu
	v	predyduščie	veka	ona	pere	žila			
	i	preceding.AC	centuries.AC	she.NO	wen	t			
	neskol'ko		vojn.						
	several		wars.GEN						

'In the 20^{th} century there was no war in Sweden, but in the preceding centuries it experienced several wars.'

Since in (35) the PP with *vek* in the plural denotes an unspecified number of centuries, we are dealing with an unbounded time span for which the accusative is expected. In sum,



although the data material is very limited, *vek* does not seem at variance with the image schema-based approach advanced in the present study.

While the statistics for *god* 'year' show a tendency for the plural to correlate with the accusative, the 77 examples with the locative call for comment. These examples are of three types illustrated in (36) through (38).

(36)	V 1994-1995		godax	Administracija	prezidenta		
	in	1994-1995	years.LOC	administration.NOM	president.GEN		
	remontirovala		zdanie	Gosudarstvennoj	dumy.		
	repaired		building.ACC	state.GEN	duma.GEN		
	'In 1994-1995 the president administration repaired the building of the State						
	(Ogonek, Tübi	ingen)					

(37)	Neobxodimo	učityvat',	chto	vse []	nadejalis'	na
	Necessary	take into account	that everybo	dy	was hoping	on
	to, čto	skoro udastsja	stabilizirova	ut'	ėkonomiku:	
	that that	soon will succeed	stabilize		economy.ACC,	
	esli ne v	1994, tak v 95-om	ili 96-om		godax.	
	if not in	1994 thenin	95 th .LOC.SO	Gor 96 th .	LOC.SGyears.LOC.Pl	L
	'It is necessar	ry to take into accoun	t that everybo	ody [] wa	s hoping that one wou	ıld soo

^{&#}x27;It is necessary to take into account that everybody [...] was hoping that one would soon manage to stabilize the economy – if not in 1994, then in '95 or '96.'

(Argumenty i Fakty Vladivostok, Tübingen)

(Argumenty i Fakty Vidatvostok, Tuotingen)

(38)	Otstavnoj	polkovnik	A.P. Kedrov	postroil	svoj	dom []			
	retired.NOM	colonel.NOM	APK.NOM	built	his.ACC	house.ACC			
	v	tridcatyx	godax.						
	in 30 LOC years.LOC								
	'Retired colonel A.P. Kedrov built his house [] in the thirties.'(Kaverin, Uppsala)								

Example (36) is of the same type as (34) above. Although it involves the plural, the time

span in question is nevertheless bounded. Therefore, sentences of this type are not at variance with the image schematic approach advocated in this paper. Examples like (37) contain two conjoined phrases in the locative singular (cf. the singular forms of the ordinal numerals). The noun *godax* is in the plural because it refers to both ordinal numerals at the same time. The construction is semantically equivalent to the more cumbersome *v 95-om godu ili v 96-om* godu 'in '95 or '96' where the noun is repeated. In this expanded version, the noun is in the singular. Since we are dealing with two conjoined phrases in the singular, the occurrence of the locative is not in conflict with the analysis pursued in this study.

Of the 77 examples with god 'year' in the locative plural, 56 are of the same type as (38) in that they involve decades. In Russian the counterpart to the English construction in the sixties consists of the preposition v 'in/to' and an ordinal numeral followed by the plural form of god 'year'. In the decade construction, the preposition may assign the locative case as in (38), but the accusative is also attested, as shown in (39).

(39)	V	pjatidesjatye	gody	veli	sebja	inače,	čem
	in	50 ACC	years.ACC	behaved	self.ACC	differently	than
	v	tridcatye	ili	dvadcatye.			
	in	30 ACC	or	20 ACC			
	'In the fifties people behaved differently than in the thirties or twenties.'						
	(Gra	nin, Uppsala)					

Despite the plural, a decade has a fixed length, and hence clearly defined starting points and end points. It is therefore not only extended, but also bounded, which would motivate the locative. In other words, the occurrence of the locative in the decade construction does not demand further explanation. What is problematic is the occurrence of the accusative. One may speculate that it is related to the general tendency for the plural to correlate with the accusative, which as witnessed by the statistics in table 1, is very strong



for *god* 'year'. On this approach, the vacillation occurs as a result of the conflicting pressures of the plural on the one hand and extendedness/boundedness on the other.

In section 3 the role of linguistic convention was explored at some length. The decade construction offers another example since it is not the meaning of the plural category as such, but rather its conventionalized affinity to the accusative that is invoked. Further evidence for the relevance of convention comes from a comparison with *vek* 'century', treated above. While in the decade construction the accusative is compatible with bounded time spans, I am not aware of parallel examples for *vek*. Thus, the accusative seems to have a stronger position in the decade construction. It seems difficult to ascribe this difference to anything but linguistic convention.

It has been suggested that the choice between the accusative and locative in the decade construction is rule governed:

(40) "With decades, the accusative is preferred for processes extending over a period The prepositional is preferred for an event occurring at a point within a decade (Wade 1992: 453)

This hypothesis ties in neatly with the container-based analysis explored in the present paper. Metaphorically speaking, an "event occurring at a point" constitutes a compact object which is, as it were, more easily placed in a container than processes extending over a period. In order to put the hypothesis to test, I elicited all examples of activities and states in the the Uppsala and Tuebingen corpora, all of which involve imperfective viewpoint aspect. Since these situation types are extended in time, and the imperfective aspect does not impose starting and end points on them, the hypothesis in (40) would lead us to expect the accusative case to dominate. This prediction is borne out; 30 of 39 examples, i.e. 77%, display the accusative case. Admittedly, we are dealing with a statistical tendency rather than full predictability. Nevertheless, the tendencies lend support to the hypothesis in (40), and – indirectly – to the image schematic approach pursued in the present study. Example (41) illustrates the use of the accusative, while one of the problematic examples with the locative is given in (42).

(41)	V	semidesjatye	gody	kazalos',	čto	sovetskij
	in	70 ACC	years.ACC	seemed	that Sov	iet.NOM
	teatr	v polnom		porjadke.		
	theater.NOM	in	full.LOC	order.LOC	order.LOC	
	'In the seventies Soviet theater seemed in a fully healthy condition.'					
	(Ogonek, Tübi	ngen)				

(42)	V	dvadcatyx	i	častično	v	tridcatyx	godax []		
	in	20 .LOC	and	partly	in	30 LOC	years.LOC		
	suščestvovali		takže	russko-pol'	russko-pol'sko-evrejskojazyčnye				
	existe	d	also	Russian-Polish-Hebrew language.NOM					
	školy.								
	schoo	ls.NOM							
	'In th	e twenties and p	artly in the	e thirties, []	there als	so existed Rus	sian-Polish-		
	langu	age schools.'							
	(Izves	tija, Uppsala)							

As a further test of the hypothesis in (40), I elicited all examples involving single bounded events (accomplishments and achievements) in the perfective viewpoint aspect. Here we would expect the locative to dominate, since we are dealing with events "occurring at a point within a decade". Again, this prediction is in agreement with the facts, insofar as 23 of 28 examples (82%) involve the locative. The use of the locative is illustrated in (43) (see also (38) above), while under (44) the reader may inspect one of the examples with the accusative.



A third group of examples of relevance for the hypothesis in (40) is of the following type:

(46)	V	tridcatye	gody	prošlogo	veka	on	
	in	30 .ACC	,		century.GEN	he.NOM	
	razoslal	mnogim			magnitometry [].		
	distributed	many.DAT	explorers.DA	T	magnetometers.ACC		
	'In the thirt	ies of the last c	entury, he distr	ibuted magn	netometers to m	any	
	explorers [].' (Znanie-sila, Uppsala)						

On the most likely readings, these examples involve situations consisting of multiple subevents. However, due to the perfective morphological aspect, the subevents are summarized, as it were, and construed as single, completed events for the purposes of the narrative. Since examples like (45) and (46) in a sense involve a conflict between the underlying situation type and the viewpoint aspect (the imperfective-perfective distinction), they might serve as indicators for the relative weight of these properties. The fact that 7 out of 11 examples display the accusative suggest that situation type carries more weight than viewpoint aspect. Needless to say, however, the material is much too small to support definite conclusions.

Inceptive and inchoative situation types illustrated in (47) and (48) are difficult to relate to a dichotomy between situations occurring at a point and situations extending over time.

(47)	Sputnikovye	nabljudenija	tam	načali	provodit'	tol'ko
	Sputnik.ACC	observations.ACC	there	began	carry out	first
	v	semidesjatyx	godax			
	in	70 .LOC	years.LOC			
	'Observations of satellites started there first in the sixties.'					
	(Znanie-sila, U	(ppsala)				

(48)	Naša	laboratorija	načala	rabotat's	ceolitami
	our.NOM	aboratory. NOM	began	work with	zeolites. INST
	ešče	v	60-е	gody.	
	still	in	60 ACC	years.ACC	
	'Our laborate	ory started working			s.'
	(Nauka i žizn	', Uppsala)			

Admittedly, inceptive and inchoative situations involve a change which may be said to occur at a point in time, but this event gives rise to a state or activity which extend over



time. The fact that 10 out of 14 examples from the electronic corpora involve the accusative may suggest that with regard to the decade construction, inceptive and inchoative situations tend to be construed as extended over time. Once again, however, the data material is not large enough to support strong conclusions.

To summarize section 5, we have seen that pluralization in general correlates with unboundedness and thus favors the accusative. The main exception is the decade construction, where both the accusative and the locative are attested. While a detailed investigation of the case variation in the decade construction has not been possible within the scope of the present study, some statistical evidence has been advanced in support of the image schematic approach explored in the present paper.

MEDIUM vs. CONTAINER 3: The De Dicto/De Re Rule

Whereas in the previous section we explored the impact of a grammatical category, the plural, on the assignment of case, we now turn to the effect of phrasal syntax. We shall see that in certain syntactic environments, nouns which usually take the locative combine with the accusative. However, I shall argue that the effects are essentially semantic in nature, and advance what I shall refer to as the "De dicto/de re rule". To the best of my knowledge, this generalization has not been made explicit in the literature. It does, however, lend support to the image schematic approach adopted in the present study.

When nouns like *god* 'year' and *mesjac* 'month', which usually require the (second) locative case, are preceded by a modifier in agreement with the head noun, both the accusative and the locative are attested. The examples in

(49) adapted from Vsevolodova and Potapova (1973: 82) illustrate this:

(49) a.	Ėto	proizošlo	v	trudnom	dlja	nas
	this.NOM	happened	in	difficult.LOC	for	we.GEN
	poslevoennoi	m	godu.			
	post-war.LOC		year.LOC			

	'This happened in the for us difficult post-war year.'										
b.	Ėto proizošlo v trudnyj dlja nas										
	this.NOM	happened	in	difficult.ACC	for	we.GEN					
	poslevoennyj		god.								
	post-war.ACC year.ACC										
	'This happened in	n the for us di	fficult post-v	war year.'							

However, there are limits to the variation. As observed by Vsevolodova and Potapova (1973: 82), modifiers like *prošlyj* 'last' and *buduščij* 'next' require the (second) locative:

(50)	V	prošlom	godu	ja	byl	v	sanatorii.
	In	last.LOC	year.LOC2	I.NOM	was	in	sanatorium.LOC
	ʻLa	st year I was in					

There also seem to be cases where only the accusative is acceptable, although this apparently has not been discussed explicitly in the literature. In sentence (51), for instance, the accusative could hardly be replaced by the second locative.

(51)	\overline{A}	vot	"Kulički"	ėto	ostrovki,	gde	možno	kosit'	liš'
	An	dhere	K.NOM	it	islets.NOM	where	possible	mow	only
	v	suxoj	god,	v	mokryj –	neprola	neprolaznaja		
	in	dry.ACC	year.ACC	in	wet.ACC	impassa	able.NOM	swamp	.NOM
	'And here are K.; they are islets, where it is possible to mow only in a dry year, in								
	a w	et year they	are an impa	ssable	swamp.' (Nag	gibin, Up	psala)		

I would like to suggest that these data can be explained in terms of the well-known distinction between *de dicto* and *de re* readings (attributive and referential readings). A *de dicto* reading involves the ascription of properties, while a *de re* reading picks out a referent. I propose that the difference between property assignment and referent selection



bears on the accusative/locative alternation in Russian. A *de dicto* reading, in which the year in question is assigned certain properties, yields the accusative. A *de re* reading, on the other hand, where the modifier merely helps the addressee to establish which year is being referred to, yields the (second) locative. Informally, we may state this de dicto/de re rule as follows:

(52) De dicto (assignment of properties)	\rightarrow	accusative
De re (selection of referent)	\rightarrow	second locative

The *de dicto/de re* rule explains the accusative in (51). This sentence is not about locating a situation in time. It does not pick out a year in which a situation took place. Instead, it describes the circumstances that are favorable for the situation in question. Since no particular year is referred to in (51), a *de re* reading is unlikely, which accounts for the unlikelihood of the (second) locative in this example. In examples like (50), on the other hand, the modifier does not contribute a description of the qualities of the relevant year, it only serves to identify which year is referred to. In other words, here a *de dicto* interpretation seems unlikely. Therefore, the (second) locative is expected here.

In many cases, however, both readings are possible. For instance, although the modifiers in the adverbial PP in (49) provide an elaborate description of the year, it is still clear that the year 1946 is being referred to. The possibility of both *de dicto* and *de re* readings explains the vacillation between the accusative and the locative cases. In other words, the *de dicto/de re* rule accounts not only for the examples where only one case is acceptable, but also for the examples where both the accusative and the locative are attested.

The acceptability of the accusative in examples like (49) and (51) may at first glance seem to threaten the image schema-based analysis proposed in the present paper. Given that *god* 'year' is an extended and bounded time span, we might expect the (second) locative in such examples. However, the *de dicto/de re* rule allows us to reconcile the data with the image schema-based analysis. A CONTAINER is essentially something to place a referent in (cf. e.g. Mandler 1991: 421 for discussion of evidence

suggesting that a container's ability to support objects is part of the understanding of containment as early as by 5.5 months' age). Thus the CONTAINER image schema is intimately connected to *de re* readings. However, since in a *de dicto* reading we are interested in qualities rather than the location of a referent, the CONTAINER image schema is not relevant here, and there is therefore no motivation for the locative. Instead, we would expect the default case, namely the accusative. Furthermore, as boundaries are not in focus in *de dicto* readings, we may be dealing with MEDIUM construal, which motivates the accusative. In other words, the occurrence of the accusative in *de dicto* readings is not at variance with an analysis in terms of CONTAINER and MEDIUM. What at first glance appears to be adverse evidence, upon closer inspection turns out to reinforce the image schema-based analysis advocated in this paper.

So far we have been concerned with modifiers in full agreement with the head noun. Sentences with non-agreeing adjuncts evince less variation. Indeed, Vsevolodova and Potapova (1973: 82) assume a rule roughly equivalent to the following:

(53) A temporal noun in combination with a non-agreeing adjunct is always assigned the accusative case by v 'in/to'.

Examples (54) through (56) provide illustration.

(54)	Lesnoj	ostrovok	byl	prirezan k	ugod'jam	"Leninskogo		
	wooded.NOM	islet.NOM	was	usurped	forbenefits.DAT	Lenin's.GEN		
	kolosa"	v god	organizacii		kolxoza.			
	ear of corn.GEN	in year.ACC	organizatio	on.GEN	collective farm.GE	EN		
	'A wooded islet was usurped for the benefit of "Lenin's ear of corn"							
	in the year the collective farm was organized.' (Kočnev, Uppsala)							



(55)	V	pervyj	mesjac	svoego	direktorstva	prinimal
	in	first.ACC	month.ACC	his.GEN	directorship.GEN	hired
	ee	na	rabotu	kak	"molodogo specialista".	
	she.ACC	on	work.ACC	as	young.ACC speciali	st.ACC
	'In his first month as a director, he hired her as a "young specialist".'					
	(Ogonek, Ti	übingen)				

(56)	A	ja	pojavilsja	v	60-m,	v god,	kogda
	And	I.NOM	appeared	in	60th.LOC,	in	when
	otec	byl	rukopoložen	v	svjaščenniki.		
	father.NOM	was	ordained	in	priest.ACC		
	'And I appea	red in '60,	in the year my	fathe	r was ordained a	priest.'	
	(Ogonek, Tül	oingen)					

Examples (54) and (55) involve genitive NPs adjoined to *god* 'year' and *mesjac* 'month', respectively. Example (56) with an adjoined temporal clause is of particular interest because it contains an adverbial in the (second) locative immediately followed by one in the accusative. The former adverbial picks out 1960 as the year referred to, whereas the latter provides a description of the year in question. This clearly illustrates the division of labor between the accusative and locative cases in adverbials of the relevant type. In other words, I would like to suggest that the accusative in adverbials containing nonagreeing adjuncts is essentially motivated in the same way as in adverbials with modifiers in full agreement with the head noun. The adjunct provides a characterization of the time span in question and in this way pushes location in time – and therefore the CONTAINER image schema – into the background.

Although the syntactic rule in (53) may be useful as a mnemonic, I do not think an approach purely in terms of syntactic structure is fully adequate. Two arguments support a semantic account along the lines I have suggested above. First, a purely syntactic account gives no explanation for *why* certain adjuncts yield the accusative case. The

image schema-based alternative, on the other hand, relates the fact to (the irrelevance of) the CONTAINER image schema. Second, an informant pro duced the following sentence:

(57)	V	pervom	godu	ėtogo	stoletija	izbrali.
	In	first.LOC	year.LOC2	this.GEN	century.GEN	elected
	prezidentom		Buša			
	president.INST		Bush.ACC			
	'In the f	irst year of this cer	tury, Bush was elec	ted president.'		

Here, the second locative of *god* is used in spite of the genitive adjunct. However, in this example the adjunct does not involve a characterization. Rather, in the terminology of Talmy (1983/2000: 203ff.), *stoletie* 'century' provides a secondary reference object, which serves to localize the primary reference object, *god* 'year', which in turn localizes the event. Importantly, *god* and *stoletie* are in a part-whole relation in which the more extensive time span can be analysed as representing a CONTAINER in which the smaller CONTAINER of *god* is placed. Since the CONTAINER image schema is clearly relevant, a semantic analysis is able to explain the occurrence of the second locative despite the presence of an adjunct in the genitive case. However, one would have a hard time explaining this in purely syntactic terms since the syntactic environment, on the face of it at least, is the same in (57) and (54).

The Time-Space Relationship: Implications for Further Research

So far we have been concerned with the preposition v 'in/to' in temporal expressions. In what follows, I offer a brief comparison with its use in the spatial domain. We shall see that the image schematic approach adopted in the present study enables us to explicate some interesting differences. Despite the clear conceptual relationships between the two domains, the differences arguably suggest some independence on the part of the temporal domain. While the data are much too limited to support definite conclusions, the discussion yields implications for future research.

It has often been observed that temporal expressions are often based on spatial



expressions (cf. Haspelmath 1997: 17ff. for discussion with references). In cognitive linguistics, the relationship between space and time is commonly analyzed in terms of metaphorical extensions from the source domain of space to the target domain of time. Indeed, Lakoff and Johnson (1999: 139) claim that "[m]ost of our understanding of time is a metaphorical version of our understanding of motion in space". The analysis of temporal adverbials in Russian presented in this paper is in harmony with such a view. As we have seen, crucial for a proper understanding of the constructions under scrutiny, are the spatial image schemas CONTAINER, POINT and MEDIUM, which I assume are engaged in metaphorical mappings from space to time. Importantly, the mappings observe the Invariance Hypothesis (Lakoff 1990, 1993; Turner 1990, 1993; Brugman 1990). The image schema-structure of the spatial domain is preserved in the temporal domain in that interiors of containers are mapped onto interiors, exteriors onto exteriors etc.

However, some evidence suggesting a more independent role of time with regard to space has also been adduced in cognitive linguistics. On the basis of psycholinguistic experiments, Rice (1996: 159, see also Rice et al. 1999) concludes that the English prepositions *in, on* and *at* evince prototypical meanings that are spatial in nature, but adds that her results "also indicate that temporal senses are just as salient, and moreover seem to be equally concrete and completely independent semantically". Thus, although Rice is cautious in her interpretation of the findings, she proposes a model comprising both spatial and temporal prototypes that are independent of each other (Rice 1996: 160f.). An evaluation of the evidence presented in Rice (1996) and Rice et al. (1999) is beyond the scope of the present study, but it is interesting to note that Heine et al. (1991: 252ff.) report on similar findings for German prepositions.

Although, as mentioned, the Russian data investigated in the present paper suggest a close connection between the time and space domains at one level, there is another level, at which my data are more in harmony with the findings of Rice and her collaborators. In temporal expressions, we have seen that the second locative is restricted to the CONTAINER image schema. In the spatial domain, however, the second locative has a wider area of application. Not only is it compatible with CONTAINER as shown in (58), it is also used with MEDIUM, as can be seen from (59) and (60).

(58)	Požaluj,	ne	strašno	i	umeret',	ne	strašno	i	v
	apparently,	not	scary	also	die	not	scary	also	in
	grobu	ležat' [].							
	coffin.LOC2	lie							
	'Apparently, it	isn't scary to	die, nor to	lie in a	a coffin []	.'			
	(Solouxin, Up)	psala)							

(59)	Uže	vskryty	kinžalom	banki	rybnyx	konservov,
	Already	opened	dagger.INST	boxes.NOM	fish.GEN	canned.goods.GEN
	okreščennyx baptized.GEN		"fric	v	sobstvennom	soku".
			Kraut.NOM	in	own.LOC	juice.LOC2
	'Already	opened with	a dagger were son	ne cans of fish	that had been ba	ptized
	"Kraut in	his own juic	e".'			
	(Vorob'ev	, Uppsala)				

(60)	Ves'	v	lipkom	potu []	Serafim	vse
	All.NOM	in	sticky.LOC	sweat.LOC2	Serafim.NOM	all.ACC
	utro		gonjalsja	za	korovami	
	morning.ACC		followed	after	cows.INST	
	'All covered	by sticky	sweat [], Serafin	n was running aft	er the cows all mo	rning.'
	(Gladyšev, U	Jppsala)				

In neither (59) nor (60) is boundedness relevant. The landmarks in these examples are mass nouns with no inherent boundaries. What is highlighted is that the trajector is surrounded by juice in (59) and covered by sweat in (60).

The third image schema discussed in the present paper, POINT, also is encoded differently in temporal and spatial expressions. As we have seen, the accusative is used about situations occurring at a point in time. In corresponding examples in the spatial domain, however, the locative is used:



(61)	Tri	linii	peresekajutsja	v	odnoj	točke.
	Three.NOM	line.GEN	cross	in	one.LOC	point.LOC
	'Three lines cross in one point.'					

Notice, that it is hard, if at all possible, to find relevant examples with words that distinguish morphologically between the first and second locative cases. However, since the accusative is impossible in example (61), it is sufficient to show that the POINT image schema is associated with different cases in time and space.

The locative examples in (58) through (61) concern static situations. Whenever motion or directionality in space is relevant, the accusative is used, as illustrated in (62).

(62)	On	vošel	v	dom.
	he.NOM	entered	in	house.ACC
'He went int		the house.'		

The dynamicity in this example is captured if we assume the landmark, *dom* 'house', to be connected to the image schema of PATH in addition to that of CONTAINER (cf. Israeli's contribution to this volume, as well as Bergen and Chang 2000 who offer a similar analysis of a parallel example from English). If PATH is removed, the accusative is no longer appropriate. In other words, in space the accusative signals PATH. In my analysis of temporal expressions, on the other hand, the PATH schema has not been included, as I fail to see any more dynamicity in accusative expressions like *v naše vremja* 'in our time' than in, say, *v ėtom godu* 'in this year' with the second locative. In the temporal domain, the accusative rather behaves like a default, which is used whenever the second locative is inappropriate, i.e. when no CONTAINER is involved (see, however, Janda (This volume) for a different interpretation).

The discussion of examples (58) through (62) reveals differences between the spatial and temporal domains, thus suggesting some independence on the part of the temporal domain. The system constituted by the temporal adverbials under scrutiny in the present paper appears to be more than a mere copy of the corresponding system of spatial expressions. The question now arises as to whether and how this situation is reconcilable

with the view of time as metaphorically linked to a spatial source domain. The answer has already been alluded to above. There is no conflict, because the evidence suggesting an independent temporal domain pertains to a different level than the evidence favoring a close connection between time and space in terms of conceptual metaphor. In a nutshell, the situation can be summarized as follows. The temporal domain evinces an essentially spatial conceptual inventory, namely the image schemas CONTAINER, POINT and MEDIUM. However, whereas the meanings (image schemas) are the same in both domains, the meaning-form relationship is encoded differently in the two domains. The image schemas are marked by means of different cases in time and space. In this way, the temporal domain displays independence from the spatial domain.

The fact that spatial concepts are invoked in talking and reasoning about time is likely to be a universal. As pointed out by Lakoff and Johnson (1999: 166), it is hardly possible to conceptualize time without spatial concepts. However, what constraints (if any) hold for the meaning-form relation? A priori, one would not expect to encounter a language with the same image schemas marked by completely different cases in the spatial and temporal domains. By way of illustration, consider again one property of the system explored in the present study. As we have seen earlier in this section, the second locative has a more restricted area of application in the temporal domain in that it is compatible with MEDIUM and possibly also POINT in space, but not in time. Thus, in the temporal domain the prototypical locational case is confined to the probably most prototypical kind of location, namely the CONTAINER image schema. A possible interpretation is that the second locative is less tolerant, as it were, towards nonprototypical location in time, which may be considered a non-prototypical domain for location. But is this a coincidence or a systematic feature of the grammar of Russian? In order to settle the issue, more evidence is required. First, detailed analyses of case assignment in temporal and spatial expressions in other languages might shed light on the problem. Secondly, a diachronic analysis of how the discrepancies between case marking in the two domains arise would be useful. However, these implications are beyond the scope of the present study and are left open for future research.



Conclusion

In this study I have provided a thorough analysis of the distribution of the accusative and the (second) locative cases in Russian temporal adverbials with v 'in/to', drawing on hitherto unanalyzed data from two electronic corpora. By way of conclusion, let us review the main contributions of the paper. First, I have identified two pivotal parameters, "extendedness" and "boundedness", and argued that their interaction may be adequately accounted for in terms of the image schemas CONTAINER, POINT and MEDIUM. Secondly, the image schema-based approach neatly accommodates the apparently problematic behavior of the seasons. Thirdly, the proposed analysis not only takes the lexical semantics of the temporal nouns in question into account, it also takes care of the impact of a morphological category, the plural, and phrasal syntax on the assignment of case. Important in this connection is the "de dicto/de re rule" introduced in section 6; it shows that a simple generalization can be formulated in semantic terms for what has traditionally been treated purely in terms of syntactic structure. Finally, the image schematic approach has enabled us to capture the relationship between time and space in precise terms. In sum, the present study contributes to the study of Russian case by bringing together a fairly wide range of data in a unified analysis in terms of only three image schemas. The distribution of the image schemas is summarized in table 2 (some special cases discussed in the text are not incorporated in the table).

Table 2. The distribution of the image schemas.

Image schema:	na: Case: Construction:		Cf. section:
CONTAINER	Loc.	Bounded time spans longer than week	1, 2 and 3
POINT	Acc.	Bounded time spans shorter than week	1, 2 and 3
MEDIUM Acc. Unl		Unbounded time spans:	
		 vremja, period, òpoxa 	1, 2 and 3
		• the seasons	4
		• time spans in the plural	5
		• time spans with modifiers (de dicto)	6

Despite this study's focus on Russian data only, there are at least two reasons why

the proposed analysis should be of general interest for cognitive linguists. In section 2, I compared image schemas and distinctive features. Even if distinctive features may adequately represent the contribution of each single parameter, image schemas in addition enable us to accommodate the conspiracies of boundedness and extendedness in case assignment. Thus, the proposed analysis illustrates how image schemas allow us to capture descriptive generalizations about individual languages. In this way, the present study offers an empirical argument for one of the fundamental notions in cognitive linguistics and, more generally, in a theory of embodied cognition.

A second point of general interest is the discussion of the space-time interface in section 7. We have seen that whereas the temporal domain imports its conceptual inventory from space, the meaning-form relation is encoded slightly differently. The image schemas are associated with different cases in the two domains, thus suggesting some independence of the temporal domain. Whether this situation has parallels in other languages and what the limits of the independence are, are questions that are likely to interest cognitive linguists in general.

While the present paper explores a relatively small topic in terms of image schemas, it has natural extensions in at least three directions. First, it would be interesting to apply image schemas to a broader range of temporal expressions. Secondly, a comparative analysis of the systems in several Slavic languages might tell us more about the structure of the temporal domain and its relevance to spatial image schemas. A third natural extension is to explore the diachronic development that has created the system described in the present study. In view of this, the present paper is to be considered a first step on a road toward a fuller understanding of the issues in question. In spite of its limited scope, however, the present investigation has demonstrated the value of an image schematic approach, which has facilitated an account of the complexities of Russian temporal adverbials in terms of a small set of simple generalizations.

The present study draws on data from two electronic corpora, the Uppsala Corpus and the Tübingen Interview Corpus, both available on the internet (http://www.sfb441.uni-



tuebingen.de/b1.korpora.html). See also Lönngren (ed.) (1993). I indicate the source from which an example is excerpted in parentheses. In addition to a reference to the relevant corpus, I give the name of the journal in italics for non-fiction texts, and the author of fiction texts (not italicized). Examples with no reference are checked by informants. In all examples, the adverbial relevant for the discussion is given in boldface.

I assume that Russian has two locative cases, which as demonstrated by Jakobson (1936/1982) differ in both meaning and form. I shall refer to them as the "first" and the "second locative". The second locative is only marked on a limited set of nouns (cf. Plungjan 2002 for a recent analysis); elsewhere the locative cases are subject to syncretism. When discussing examples involving syncretism, I shall employ the phrase "(second) locative" with the numeral in parentheses. In morphemic glosses, LOC1 represents the first locative case, LOC2 the second, while LOC is used for syncretism.

An exception is the fixed expression *v skorom vremeni* 'before long, shortly', where *vremja* 'time' occurs in the locative.

While nouns like *vremja*, *ėpoxa* and *period* are unbounded, it is possible to impose boundaries on the time spans in question, e.g. by adding prepositional phrases as in *v period s 12 po 15 sentjabrja* 'in the period from September 12 to 15' (I am grateful to Katia Rakhilina (p.c.) for drawing my attention to this example). It is interesting to notice that the accusative is maintained in *period* here. The case assignment is based, as it were, on the lexical meaning of the noun, not on the whole phrase. While the lexical basis for case assignment seems to be a general rule for the constructions investigated in the present study, we shall explore some exceptions in sections 5 and 6 of the paper.

Vsevolodova and Potapova (1973:97) report that *period* tends to occur in the (second) locative when used in geology, biology and medicine: *v melovom periode* 'in the cretaceous period', *v ėmbrional'nom periode* 'at the embryonic stage' and *v posleoperacionnom periode* 'in the post-operation period'. The use of *period* in science involves greater precision than in everyday usage, so in view of the analysis presented in

this paper it is possible that the acceptability of the locative in scientific contexts reflects construal as a bounded time span.

⁶ For more on the CONTAINER image schema with regard to the accusative-locative alternation in Russian, see Israeli (This volume). Image schemas are also discussed in Mitkovska's contribution to this volume.

Further support for the distinction comes from languages which employ different cases in examples like (20a) and (20b), e.g. the Daghestanian language Tseh (Maria Polinsky p.c.). For an in-depth analysis of the case system in this language, see Comrie and Polinsky (1998).

It is difficult to find any synchronic motivation for why *nedelja* combines with *na* + the locative. In Contemporary Standard Russian, *na* is used in a number of expressions pertaining to holidays and leisure time: *na dosuge* 'in the leisure time', *na prazdniki* 'in the holidays', *na kanikulax* 'in the holidays' etc. A similar rule existed in Old Russian (Borkovskij and Kuznecov 1965:473). According to Vasmer (1955), the original meaning of *nedelja* was 'Sunday, holiday' (cf. *ne* 'not' and *delo* 'activity'), so it is possible that the use of *na* with *nedelja* is historically related to its use with holidays and leisure time. For more on the etymology and historical development of *nedelja*, see Flier (1984, 1985). It is interesting to notice that the use of special adpositions in temporal adverbials involving holidays or leisure time appear to be widespread across languages (Haspelmath 1997:115).

Note in passing that nouns denoting short time spans like *minuta* and *sekunda* may occur in the locative after v in constructions of the following type where the CONTAINER image schema is clearly relevant:



V minute 60 sekund.

In minute.LOC 60.NOM seconds.GEN

'In a minute there are 60 seconds.'

However, since in sentences of this type the PP is not a temporal adverbial in that it does not specify when something happens, such sentences are beyond the scope of the present study.

One informant finds examples of this type archaic; she would prefer v 'in/to' + the accusative. Since the electronic corpora do not contain any examples with *minuta* or *sekunda* in the locative after na, this construction is probably somewhat marginal in contemporary Russian, thus indicating the strength of the tendency for a short time span to be construed as a POINT.

Closely related to the seasons are the divisions of the day: *utro* 'morning', *den*' 'day', *večer* 'evening' and *noč*' 'night'. However, as these time spans are shorter than a week, they would be in the accusative anyway. The only exception I am aware of concerns *noč* 'in examples of the following type:

[On] vspominalvidennoeim izdaleka izverženie Ključevskoj -krasnye,

he.NOM recalled seen he.INST from a distance eruption.ACC K.ACC red. ACC zigzagi oboznačivšie v noči konus sklona [...].

zigzag lines.ACC marking.ACC in night.LOC2 cone-shape.ACC hill.ACC '[He] recalled K's eruption which he had seen from a distance – the red zigzag lines that had marked the cone-shaped hill in the night' (Ganina, Uppsala)

In examples of this sort, focus is on the darkness of the night rather than on time as such (cf. Rubinstein 2001:4f.). Given that darkness extends in space, the examples in question are compatible with the CONTAINER image schema, and not true counterexamples to the generalization that cyclic temporality yields the accusative case.

Recall from section 1 that *vek* also may mean 'age'. I have not included examples of this type in the table, since I have analyzed the relevant meaning as unbounded. Thus, they yield the accusative regardless of whether the noun is in the singular or the plural.

In addition, the electronic corpora contain one example with the semi-adverbialized expression *v godax* 'advanced in years'.

In the same way as Smith (1991) I draw a distinction between situation aspect (Vendlerian situation types) and viewpoint aspect (the imperfective-perfective contrast).

I distinguish between inchoative and inceptive situation types in that the former denotes the coming about of a state, while the latter involves the beginning of an action (cf. Smith 1991:35 for discussion). The notions of "inchoative" and "inceptive" relate to "BECOMING-BEING-UNBECOMING nexus" discussed in detail in Clancy (This volume).

For the purposes of the present study, I shall employ the terms *de dicto/de re* although *attributive/referential* may appear more transparent to the general reader. *Attributive* is potentially confusing in the present context because it is sometimes used as a general term for the syntactic function of adjectives and nouns when they occur as modifiers of the head of a noun phrase. This is exactly the kind of construction we are concerned with in section 6 of this paper.

Vsevolodova and Potapova (1973:82) only consider *god*, but in view of examples like (55) I have formulated the rule so as to cover temporal nouns in general.



For more on goal-dorectedness in spatial contexts in Russian, see Raxilina's detailed study of verbs of motion in this study.

References

Bergen, Benjamin K. and Chang, Nancy C. 2000. "Spatial Schematicity of Prepositions in Neural Grammar", paper presented at The Fifth International Conference on Conceptual Structure, Discourse and Language, May 11-14, University of California at Santa Barbara, http://www.icsi.berkeley.edu/NTL/publications.html.

Borkovskij, Viktor I. and Kuznecov, Petr S. 1965. *Istoričeskaja grammatika russkogo jazyka*. Moscow: Nauka.

Brugman, Claudia. 1990. "What is the Invariance Hypothesis?", *Cognitive Linguistics* 2: 257-266.

Chvany, Catherine V. 1986. "Jakobson's Fourth and Fifth Dimensions". In *Case in Slavic*, R.D. Brecht and J.S. Levine (eds), 107-129. Columbus, OH: Slavica.

Comrie, Bernard and Polinsky, Maria. 1998. "The Great Daghestanian Case Hoax". In *Case, Typology and Grammar*, A. Siewierska and J.J. Song (eds), 95-114. Amsterdam and Philadelphia: John Benjamins.

Flier, Michael S. 1984. "Sunday in Medieval Russian Culture: *nedelja* versus *voskresenie*". In *Medieval Russian Culture*, H. Birnbaum and M.S. Flier (eds), 105-149. Berkeley, Los Angeles and London: University of California Press.

Flier, Michael S. 1985. "The Non-Christian Provenience of Slavic *nedělja*", *International Journal of Slavic Linguistics and Poetics* 31-32: 151-165.

Franks, Steven. 1995. *Parameters of Slavic Morphosyntax*. Oxford: Oxford University Press.

Geertz, Clifford. 1966. *Person, Time, and Conduct in Bali*. New Haven: Yale University Cultural Report Series no. 14.

Haspelmath, Martin. 1997. From Space to Time. Temporal Adverbials in the World's Languages. Munich and Newcastle: Lincom Europa.

Hawkins, Bruce W. 1984. *The Semantics of English Spatial Prepositions*. University of California at San Diego: Unpublished Doctoral Dissertation.

Hawkins, Bruce W. 1988. "The Natural Category MEDIUM: An Alternative to Selection Restrictions and Similar Constructs". In *Topics in Cognitive Linguistics*, B. Rudzka-Ostyn (ed.), 231-270. Amsterdam and Philadelphia: John Benjamins.

Heine, Bernd, Claudi, Ulrike and Hünnemeyer, Friederike. 1991. *Grammaticalization. A Conceptual Framework*. Chicago and London: The University of Chicago Press.

Jakobson, Roman O. 1936/1982. "Contribution to the General Theory of Case: General Meanings of the Russian Cases", in *Russian and Slavic Grammar. Studies 1931-1981*, 59-103. Berlin, New York and Amsterdam: Mouton.

Jakobson, Roman O. 1957/1982. "Morphological Observations on Slavic Declension



(The Structure of Russian Case Forms)", in *Russian and Slavic Grammar*. *Studies* 1931-1981, 105-133. Berlin, New York and Amsterdam: Mouton.

Janda, Laura A. 1993. A Geography of Case Semantics. Berlin and New York: Mouton.

Johnson, Mark. 1987. *The Body in the Mind*. Chicago and London: The University of Chicago Press.

Keesing, Roger M. 1994. "Radical cultural difference: Anthropology's myth?". In *Language Contact and Language Conflict*, M. Pütz (ed.), 3-24. Amsterdam and Philadelphia: John Benjamins.

Lakoff, George. 1987. *Women, Fire, and Dangerous Things*. Chicago: The University of Chicago Press.

Lakoff, George. 1990. "The Invariance Hypothesis: Is Abstract Reason Based on Image-Schemas?", *Cognitive Linguistics* 1: 39-74.

Lakoff, George. 1993. "The Contemporary Theory of Metaphor". In *Metaphor and Thought*, A. Ortony (ed.), 202-251. Cambridge: Cambridge University Press.

Lakoff, George and Johnson, Mark. 1999. *Philosophy in the Flesh*. New York: Basic Books.

Lakoff, George and Nunez, Rafael E. 2000. Where Mathematics Comes From, New York: Basic Books.

Langacker, Ronald W. 1987. *Foundations of Cognitive Grammar*, vol. 1. Stanford: Stanford University Press.

Langacker, Ronald W. 1991. *Foundations of Cognitive Grammar*, vol. 2. Stanford: Stanford University Press.

Langacker, Ronald W. and Casad, Eugene H. 1991. "Inside and outside in Cora". In Concept, Image, and Symbol, R.W. Langacker, 33-57. Berlin and New York: Mouton de Gruyter.

Levin, Maurice. 1992. "Time Prepositions in Russian: The Prepositions V and NA", Russian Language Journal XLVI (153-155), 51-56.

Lönngren, Lennart (ed.). 1993. *Častotnyj slovar' sovremennogo russkogo jazyka*. Uppsala: Acta Universitatis Upsaliensis, Studia Slavica Upsaliensia

32.

Mandler, Jean M. 1991. "Prelinguistic Primitives", BLS 17, 414-425.

Plungjan, Vladimir A. 2002. "K semantike russkogo lokativa ('vtorogo predložnogo' padeža)", *Semiotika i informatika* 38.

Raxilina, Ekaterina V. 2000. Kognitivnyj analiz predmetnyx imen: semantika i sočetaemost'. Moscow: Russkie slovari.

Rice, Sally. 1996. "Prepositional Prototypes". In *The Construal of Space in Language and Thought*, M. Pütz and R. Dirven (eds.), 135-165. Berlin and New York: Mouton.



Rice, Sally, Sandra, Dominiek and Vanrespaille, Mia. 1999. "Prepositional Semantics and the Fragile Link between Space and Time". In *Cultural, Psychological and Typological Issues in Cognitive Linguistics*, M.K. Hiraga, C.Sinha and S.Wilcox (eds.), 107-128. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Rubinstein, George A. 2001. "Asimmetrija sintaksičeskix svojstv russkix nazvanij častej sutok". *Glossos* 1, 1-18.

Smith, Carlota S. 1991. *The Parameter of Aspect*. Dordrecht, Boston and London: Kluwer.

Smith, Michael B. 1987. *The Semantics of Dative and Accusative in German: An Investigation in Cognitive Grammar*. University of California at San Diego: Unpublished Doctoral Dissertation.

Sullivan, William J. 1998. Space and Time in Russian. Munich: Lincom Europa.

Talmy, Leonard. 1983/2000. "How Language Structures Space". In *Toward a Cognitive Semantics* vol. 1, 177-255, Cambridge, Massachusetts and London, England: The MIT Press.

Turner, Mark. 1990. "Aspects of the Invariance Hypothesis". *Cognitive Linguistics* 2, 247-255.

Turner, Mark. 1993. "An Image-Schematic Constraint on Metaphor". In Conceptualizations and Mental Processing in Language, R.A. Geiger and B. Rudzka-Ostyn (eds.), 291-306. Berlin and New York: Mouton de Gruyter.

Vasmer, Max. 1955. *Russisches etymologisches Wörterbuch*, zweiter Band. Heidelberg: Carl Winter Universitätsverlag.

Vsevolodova, Majja V. and Potapova, Galina B. 1973. *Sposoby vremennyx otnošenij*. Moscow: Izdatel'stvo Moskovskogo Universiteta.

Wade, Terence. 1992. A Comprehensive Grammar of Russian. Oxford: Basil Blackwell.

Wierzbicka, Anna. 1980. *The Case for Surface Case*. Ann Arbor: Karoma
Publishers. Wierzbicka, Anna. 1993. "Why do we say IN April, ON Thursday, AT ten o'clock? In search of an explanation", *Studies in Language* 17 (2), 437-454. Worth,
Dean S. 1984. "Russian Gen², Loc² Revisited". In *Signs of Friendship*,
J.J. van Baak (ed.), 295-306. Amsterdam: Rodopi.