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PERIPHERAL FUNCTIONS AND OVERDIFFERENTIATION: THE
RUSSIAN SECOND LOCATIVE¹

1. Introduction

Innovations can spread and eventually pervade a language, they can fail to take hold, or they can remain, without ever affecting a large number of lexical items. Examples of the latter kind are interesting, because they provide us with insights into why a linguistic system does not favour such innovations. The second locative in Russian is such an example. It is well known that it arose as a result of the restructuring of inflectional classes, in particular with the reinterpretation of the original *u*-stem locative singular inflection, together with the parallel development of a stressed inflection in a small number of nouns which now belong to the declension historically associated with the *i*-stems.² However, there are two questions associated with its development and current state. The first, more often posed, question relates to the factors which favoured its development. The second, less often posed, question is why it failed to generalize. Contrary to some assumptions, informants have little problem producing or accepting second locative noun phrases containing an adjective, and it is easy to find examples of such constructions in a variety of texts. So the combinatory possibilities of the second locative are not limited to set phrases of the type preposition-noun, thereby raising the question why the second locative failed to generalize beyond a small subset of nouns.

We show that there are associations between frequency distributions and the use of the second locative, but there are also factors associated with the second locative which are not associated with high frequency alone. On this basis it could

have been expected to generalize to a larger number of nouns and beyond. However, we argue that the failure of the second locative to spread lies in the fact that it could never be realized in adjectival paradigms. The problem is that adjectives, in contrast with nouns, would require two different type signatures, if they were to realize the second locative case: number-case-subcase (nouns); number-case-gender (adjectives) or number-case-subcase (adjectives). Even if adjectival morphology could differentiate the two cases, it would be systematically constrained from doing so. Consequently, the second locative is relevant for case government by the preposition, but, because it can play no role in determining the form of the adjective, this remains the limit of its syntactic relevance.

2. Historical Development of the Second Locative

The historical origin of the Russian second locative is well known. In Old Russian the locative singular of *o*-stem nouns was *-ѣ* and of *u*-stem nouns it was *-y* (Table 1).

Table 1: The singular paradigm of *o*-stems and *u*-stems in Old Russian (Matthews 1960, 104 and 106)

SG	СТОЛЬ (<i>o</i> -stem, masculine)	ЛѢТО (<i>o</i> -stem, neuter)	СЫНЬ (<i>u</i> -stem, masculine)
NOMINATIVE/ ACCUSATIVE	СТОЛЬ	ЛѢТО	СЫНЬ
GENITIVE	СТОЛА	ЛѢТА	СЫНУ
DATIVE	СТОЛУ	ЛѢГУ	СЫНОВИ
INSTRUMENTAL	СТОЛОМЪ	ЛѢТОМЪ	СЫНЪМЪ
LOCATIVE	СТОЛѢ	ЛѢТѢ	СЫНУ

Under the situation depicted in Table 1 there was no second locative case, because the inflectional suffixes *-ѣ* and *-у* were inflectional variants of the locative case with the same syntactic distribution. That is, they were used with the prepositions *при*, *въ*, *на*, *о* and *по*. As nouns which were originally *u*-stems migrated from the *u*-stem inflectional class to the *o*-stem class, the *u*-stem endings were lost in Russian. The end result of these changes is that the nouns which were originally *u*-stems have now adopted the *o*-stem locative singular inflection *-e* (which developed from *-ѣ*). However, as is well known, in a small group of nouns the original *u*-stem inflection *-у* was maintained with a more restricted syntactic distribution: it can only be used with the prepositions *в* and *на*. For the very same nouns the inflection *-e* is still used with the prepositions *при* and *о*. Hence, given that there is a formal distinction in some subset of noun lexemes associated with a

different distribution, we should recognize this as a separate morphosyntactic function (Comrie 1991). This distribution therefore differs from that of the locative singular inflectional allomorphs in Old Russian, and on this basis it can be claimed that, for a small group of nouns, there is a second locative case in modern Russian. We sum up this distribution in Table 2.

Table 2: The distribution of the second locative

	MOST NOUNS	A FEW NOUNS
<i>при, о</i>	Locative	Locative 1
<i>в, на</i>	Locative	Locative 2

If the evidence from texts is indicative, this new distribution, and therefore new function, is not attested before the middle of the seventeenth century (Unbegaun 1935, 105; Черных 1953, 262; Stang 1952, 15; Kiparsky 1967, 36). Thorndahl (1974: 918-9) in his large corpus study could find no evidence of preference among the prepositions *въ, на, при* and *о* for one inflection (*-e/ѣ* or *-y*) over the other, and the last of his texts is dated 1649. However, by the middle of the eighteenth century Lomonosov in his grammar (Ломоносовъ, §184) noted that the change from *-e* to *-y* occurs most with the prepositions *на* and *въ*. My analysis of an anthology of eighteenth century Russian texts (Manning 1951) also indicates that the development of the second locative as a separate function must have been near to complete by then, as no examples could be found of prepositions other than *въ* and *на* taking the ending *-y*. It is also worth noting that while Bulaxovskij (Булаховский 1954, 62) says that the use of the *-y* inflection was more widespread at the beginning of the nineteenth century, he also indicates

that it was restricted to the prepositions *в* and *на*, with its use at that time with the preposition *нпу* noted as ‘rare’, which also fits with the distribution in Table 2. After this brief explanation of the historical context we now turn to the current status of the second locative in modern Russian.

3. The contemporary situation

In this section we examine the factors in the modern language which may support or hinder the use of the second locative.

3.1 The second locative and syntax

If examples of the second locative with *в* and *на* could not occur in contexts with a modifying adjective and were restricted to set collocations, it could be argued that they are just idiosyncrasies which should be listed in the lexicon, and that there is no need to consider the second locative a genuine case distinction. Franks (1995, 43 and 58 fn36), for instance, appears to rule out the use of the second locative in modified NPs, except for set phrases and place names. However, it is not difficult to find examples which contradict this claim. In (1) the noun in the second locative is being modified by the possessive *наш*.

(1)

Были два друга в наш-ем полк-у.

were two friends in our-SG.LOC regiment-SG.LOC2

‘There were two friends in our regiment.’

(Cited in Доконова 1963, 120)

Furthermore, modification of a noun in the second locative can be recursive, allowing for more than one adjective before the noun, as demonstrated by (2), which is taken from the novel ‘Наркота’ by V.P. Dorenko, published in 1996.

(2)

простершись на холодн-ом цементн-ом
 prostrated on cold-SG.LOC.MASC cement-SG.LOC.MASC
пол-у
 floor-SG.LOC2
 ‘prostrated on the cold cement floor’

It is also possible for the preposition and noun to be quite far apart, as indicated by the following example (cited by Доконова 1963, 121 from Pravda of 15/3/61).

(3)

Пребывание Хаммаршельда на как-ом
 tenure.SG.NOM Hammarskjöld.SG.GEN on which-SG.LOC.MASC
бы то ни было пост-у
 PART that never was post-SG.LOC2
абсолютно немыслимо
 absolutely unthinkable

‘Hammarskjöld's tenure of whatever post is absolutely unthinkable.’

In (3) the modifier is separated from the noun in the second locative by intervening material. There are clear examples of preposition and noun in the second locative which are set collocations, but what examples (1)-(3) demonstrate is that it is not possible to view all instances of the second locative in this way. Hence, the second locative has some relevance for syntax.

3.2 The second locative and frequency

Given that, at some level, the second locative has some relevance for syntax, it can be understood as an example of overdifferentiation. That is, it is a grammatical distinction which is made by a small number of lexical items. An extreme example of this is the verb *be* in English, which is the only verb to distinguish first person singular (*am*) from the rest of the verbal paradigm. In comparison with this English example, the second locative fares slightly better in terms of the number of lexical items. Figures compiled from Зализняк (1977) indicate that there are 88 nouns which are supposed to have a compulsory second locative in *-y'*, and there are about 20 nouns of class III (feminine nouns written with a soft sign in the nominative singular) which have a second locative in *-i'*.³ Table 3 gives figures for the number of nouns in Зализняк (1977) which are listed as having a second locative.

Table 3: Nouns with a second locative (based on Зализняк 1977)

	OBLIGATORY	OPTIONAL	TOTAL
Decl.I (< masc <i>o</i> -stem)	88	30	118
Decl. III (< fem <i>i</i> -stem)	20	6	26

It is also worthwhile considering whether nouns with a second locative occur among the most frequent items. We extracted the 2000 most frequent noun lexemes from the pilot version of the Russian Standard Corpus (Сичинава 2002; Sharoff 2004), and found that they account for 82% of all noun tokens (131,939 out of a total 160,761 noun tokens). This same set of the 2000 most frequent nouns accounts for 93% of all occurrences of the second locative in the corpus

(416 out of a total of 447 occurrences). This figure might suggest that it is the high frequency of items with a second locative which helps maintain its existence. However, the dative singular can be seen in a similar way, as the 2000 most frequent nouns account for 90% of all occurrences of the dative singular in the corpus (7984 out of a total of 8885 occurrences).

There is a difference between nouns with a second locative and those without when we consider their frequency profiles in terms of locative contexts. By locative contexts, we mean those syntactic contexts in which either a first locative or a second locative could be used. Analysis of a dataset consisting of nouns which occur at least five times in the Uppsala corpus (Лёвшин 1993; Maier 1994) showed that nouns with a second locative occur significantly more frequently in such contexts, in both the singular and the plural. For the singular this is indicated in Figure 1.

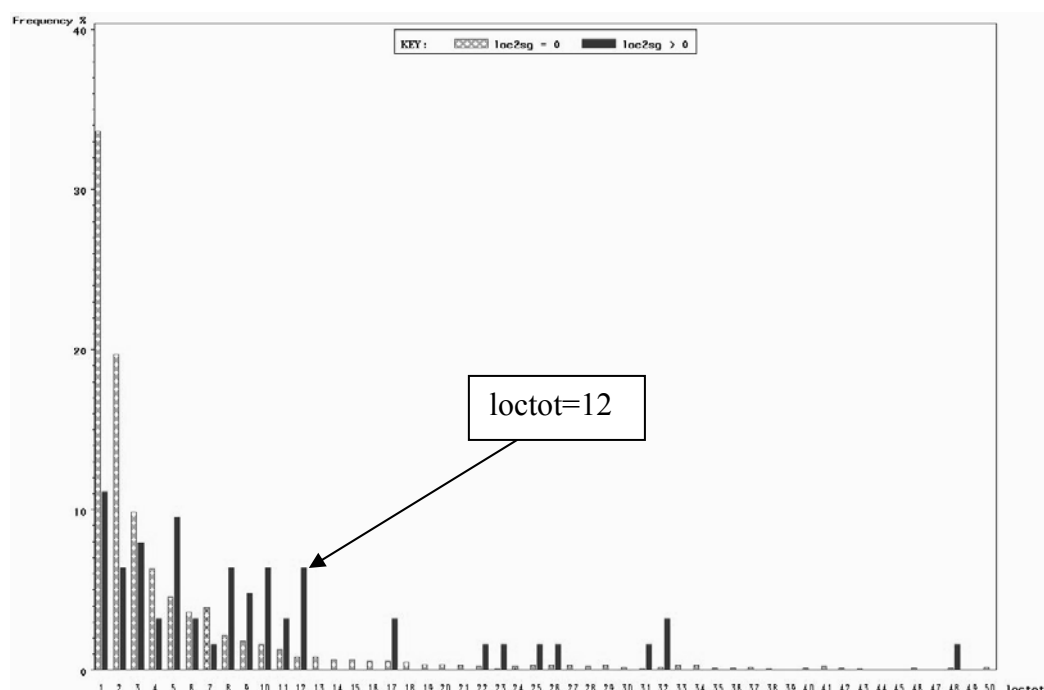


Figure 1: Histogram showing the percentage of lexemes without Loc2 (light) and with Loc2 (dark) which occur one or more times in a locative context.

In Figure 1 lexemes without a second locative which occur at least once in locative contexts (the light bars) all bunch toward the left of the histogram, the greatest proportion of them occurring only once in such contexts. This group drops quickly. In contrast, lexemes with a second locative (the dark bars) stay on a plateau up to $loctot=12$ (see Figure 1). This is highly significant (Mann-Whitney U test: $p < 0.0001$). In the plural (where there is no second locative form, of course) a similar effect is found, with nouns which have a second locative in the singular still being more likely to occur in locative contexts. Again, the Mann-Whitney U test produces $p < 0.0001$ indicating that the shift in distribution is statistically significant. Hence, there is some evidence to suggest that formal differentiation of the second locative occurs where lexemes tend to occur more often than is typical with prepositions which require a locative case (first or second).

3.3 Properties of nouns with a second locative

There are a number of properties which are often associated with nouns which have a second locative. As we shall see, the properties related to form are typically associated with high frequency. On the other hand, it is reasonable to assume that the semantic property associated with the second locative is not connected with high frequency.

The first property is connected with the number of syllables in the stem.

PROPERTY ONE

A noun may have a second locative, if it has a monosyllabic stem.

This property includes nouns with metathesis or fleeting vowels, which from a morphological perspective often behave as though they are functionally monosyllabic. For instance, such nouns may belong to stress patterns which otherwise occur only with monosyllabic nouns. There are exceptions to this property, for instance the noun *аэропорт*. Of the nouns listed in Зализняк (1977) as having a second locative only 10 are polysyllabic, if we exclude metathesis and fleeting vowels. Furthermore, the exceptions are either stump formations (such as *артполк*), or formed using the complex suffix *пол(у)-*, or diminutives.

The next property associated with items which have a second locative concerns the last element of the stem.

PROPERTY TWO

Declension I nouns with a second locative end in functionally hard consonants.

It is possible for the stem of a declension I noun with a second locative to end in /j/, but as A.A. Reformat'skij (Реформатский 1975, 85) pointed out, within any paradigm, the phoneme /j/ behaves like a hard consonant. For example, this is why nouns such as *зепой* have a genitive plural in *-ев*. Property two is noted by Ilola and Mustajoki (1989, 42), who state that, “Mascuines which have a prepositional case ending *-у* (*-ю*) may end in any consonant except an obstruent palatal.” There do appear to be counterexamples to property two: the collocations *во хмелю* ‘drunk’ (Зализняк 1977, 588) and *на корню*, which typically has an adverbial function meaning, loosely, ‘completely’ or ‘entirely’.⁴

Another, less strong, association is to be found between stress patterns and the second locative.

PROPERTY THREE

- a) For declension I the second locative is often associated with stress pattern c.
- b) For declension III the second locative is often associated with stress pattern e.

Stress pattern c involves stem stress in the singular, with the exception of the second locative, and ending stress in the plural. An example of this is the noun *сад*. Stress pattern e is the same as stress pattern c, except that the ending stress in the plural is overridden in the nominative plural (and accusative plural of inanimate nouns). An example of this is the noun *тень*. Of the nouns listed in Зализняк (1977) with a second locative, 64% of declension I nouns have stress pattern c, and 77% of declension III nouns have stress pattern e.

The other property associated with the second locative contrasts with the others in that it is a semantic property and it is exceptionless.

PROPERTY FOUR

Nouns with a second locative are all inanimate.

This generalization must be a result of the specialization of the second locative as it developed from the original *u*-stem ending (i.e. the development of the distribution in Table 2), because there had been examples of *u*-stem nouns which were animate (for example, *сын*), and earlier in Novgorod-Pskov dialects, for example, the *u*-stem inflection for the locative (and genitive) had actually spread further to some *o*-stems, including to animates (Крысько 1998, 84). At this earlier period, of course, we assume that the distribution in Table 2 had not

developed, and the animate example with the *u*-stem ending in Крыськько (1998, 84) occurs with the preposition *нпу*, in fact. According to Grannes, forms in $-y$ (the *u*-stem inflection) were used with animates in the seventeenth century (see Граннес (1974/1998, 145) and references there). It bears reiteration that the existence of the second locative is dependent on a difference in the distribution of the inflection as in Table 2, and that whether the ending $-y$ is used with animates or not is a logically separate issue. But it does appear that the development of the new distribution, and therefore a second locative case, occurs at about the same time as the restriction of the $-y$ inflection to inanimates.

Properties one, two and three are form-based properties, while property four is semantic. There is an additional consideration about how these two sets of properties contrast, and that is based on frequency. It is well known that there is an association between the length of the word and frequency: short items are more frequent (Zipf 1935, 20-48). Property one is therefore probably associated with high frequency. Property three is also associated with high frequency, as Mustajoki (1981) has shown that mobile stress in Russian is related to frequency. The status of properties two and four is different. Having a stem which ends in a hard (or functionally hard) stem is not a property which is restricted to high frequency items. Similarly, being inanimate is not a property which is only associated with high frequency.

We have seen that there are two form-based properties associated with a large number of nouns which have a second locative and which have a clear association with high frequency: monosyllabicity and stress pattern. In contrast, there are two other properties associated with nouns with a second locative which are not associated with high frequency: a (functionally) hard final element of the

stem and inanimacy. If a population of speakers acquiring Russian infers that being monosyllabic and having a particular (less common) stress pattern are key properties associated with nouns which have a second locative, then we might expect the number of lexical items with a second locative to remain limited, because these properties are associated with high frequency items (where there is a limited number of lexemes which occur a large number of times). In contrast, if the properties two and four are inferred to be key, then one might expect the second locative to generalize beyond lexical items that have the kind of frequency profile for locative contexts as in Figure 1.

The second locative is typically portrayed as declining in popularity from one generation to the next. For instance, in Крысин (1974, 177) it is stated that there is a tendency for speaker's age to influence the use of the second locative form - *y'*, with younger generations using it less. It should be noted, however, that the youngest age group shows an increase in usage over the one immediately preceding it, although this does not reach the levels of the oldest group. In a survey of 53 native speakers Mavroulidou (2001, 75-6) found a similar trend, which, while it involved a decline from older to younger speakers, again did not involve a monotonic decrease of usage from one generation to the next, because the youngest age group had a higher percentage of usage than the group above it. From this it appears that the conflicting associations with frequency of the properties we have identified are reflected in the fact that a core group of lexical items maintain a separate second locative form. While there are factors which maintain this group, we need to consider why it is that the second locative cannot generalize as a case.

3.4 The second locative as a sub-case

V.A. Plungian analyzes the Russian second locative as an example of localization marking involving intense contact: “Таким образом, общие свойства русских конструкций со вторым предложным падежом во всех типах контекстов оказываются достаточно единообразными: они описывают ситуации плотного, интенсивного контакта, при котором либо позиция, или функция объекта оказываются жестко детерминированы, либо его свобода перемещения ограничена, либо его природа частично или полностью изменена” (Плунгян 2002, 251). Plungian equates this with localization markers found in the Dagestani languages. Localization markers are added to the local case markers in these languages. Of course, the second locative in Russian differs from this strategy in that the form is limited to a small number of lexical items and in that the marking involves cumulative exponence. We believe that, in equating the second locative with such marking, the key insight is that the second locative is a specialization of the prepositional or locative case. In a system where one treats the values of case as atomic, this means that the second locative is not opposed to the first locative (or prepositional) but is instead a specialization and, as such, is not in direct paradigmatic opposition with the other cases. Under such a view, the best term for it may be “sub-case”. This would make it akin to sub-genders (Vaillant 1958; Corbett 1991, 161-168), such as animacy, which in the singular in Russian further specifies gender.

Being further specializations of case distinctions, rather than equal in status, sub-cases will affect a minimal proportion of the nominal paradigm.

MINIMAL PROPORTION

Sub-cases are limited to a minimal proportion of the nominal paradigm.

Given a two-valued number system, the proportion of the nominal paradigm which a case will account for will depend on the number of case values available. The smaller the number of values, the greater the proportion. We take minimal proportion here to refer to the smallest possible proportion. This would be a case being limited to one number sub-paradigm. That means that, for Russian, only the second genitive and second locative fit this definition. It should be borne in mind that the number of lexical items which realize a second locative is irrelevant for this criterion. It could be true that all nouns had a separate second locative form, but the second locative would still remain a sub-case, because its appearance is limited to one number value.

Another potential characteristic of sub-cases is that they are “non-autonomous” cases (Зализняк 1973/2002, 636-40; Mel’čuk 1986, 66; Blake 1994, 23-5). For the same set of lexemes a non-autonomous case will share a form with another case function. In other words, there will be case syncretism. If one took into account only the affixal morphology it would appear that the second locative is non-autonomous (as is true for the second genitive), looking similar to the dative singular. However, in declension III the second locative is always differentiated from the genitive, dative and first locative in terms of stress, and in declension I those nouns with a second locative which have stress pattern c (the majority) will also make a contrast between the dative singular (stem stressed) and the second locative form (ending stressed). But the second locative and second genitive are the only cases in the singular for which it is prosody which

allows us to establish a unique inflection.⁵ Hence, sub-cases may typically be non-autonomous.

NON-AUTONOMY

Sub-cases are typically non-autonomous in their realization.

The second locative fares less well in terms of non-autonomy than the second genitive. When it comes to adjectival inflection, however, the second locative does follow this criterion, because there is no independent form for the second locative in adjectival morphology. Yet as examples (1)-(3) demonstrate, it is perfectly possible to use a first locative form of the adjective with a noun in the second locative.⁶ So the second locative does not obey the “complete marking requirement” (Moravcsik 1995, 474) that a case be marked on each constituent of the NP, which the standard Russian cases obey. Although, for example, on adjectives and other agreement targets the feminine singular dative and first locative are always syncretic, the dative and first locative are distinguished when there is masculine or neuter agreement. In contrast, there is no unique second locative form on adjectives for any gender. This suggests that the second locative, although syntactically relevant, has a qualitatively different status than the other cases. Because of this property of the second locative it is possible to analyze it as a further specialization of the first locative, rather than a fully fledged case which is in paradigmatic opposition to the first locative. As we have seen, the second locative is relevant for syntax, as it is possible for it to occur with a modifying adjective, but it is the fact that it is a further specialization which stops the second

locative from becoming more generally applicable, and, we argue, it can therefore only remain on the margins of the Russian case system.

3.5 Paradigm conflict and the second locative

We have argued that the second locative is a sub-case, and as such is not in direct paradigmatic opposition with the other cases, but is instead a further specialization of the first locative. In this section we see what consequences this has for the analysis of the second locative. We shall express the analysis using the Network Morphology framework (Corbett and Fraser 1993; Brown 1998), referring only to those concepts which are key for our understanding of the second locative.

A core concept within Network Morphology is that of default inheritance. This is illustrated in Figure 2.

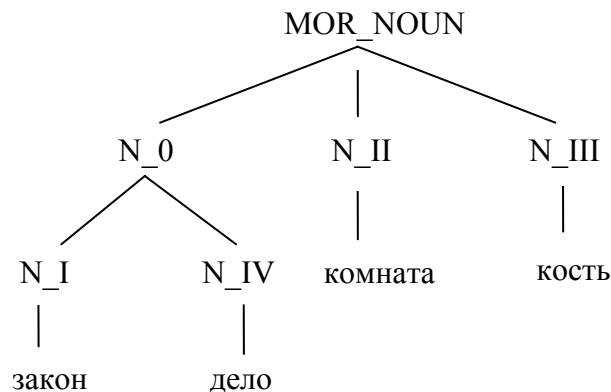


Figure 2: Inheritance structure for Russian nouns

Figure 2 is an inheritance hierarchy for Russian nouns. The hierarchy contains nodes which are given conventional labels, such as MOR_NOUN, N_O, N_I, N_II, N_III and N_IV. It is possible to use any arbitrary label for these, such as

the number 42, but the labels are chosen to give an indication of the kind of information stored at the nodes. For MOR_NOUN this is default information about the morphology of nouns. N_I to N_IV contain information which would traditionally be associated with noun declensions. Underneath the nodes N_I, N_II, N_III and N_IV are example lexical items. The nodes are locations for information about the paradigms of the nouns which inherit from the classes described by the nodes. For instance, a noun connected to N_I will inherit all the information required to generate the full paradigm for every case and number combination. There is no need, however, to be entertained by the controversies surrounding the number of inflectional classes for Russian, because this is merely an artefact of where one looks in the hierarchy. The node N_O generalizes the information shared by N_I and N_IV (and so looking top down Russian has three classes, but looking bottom up it has four). It is possible to override information. For example, the information in (4), which we represent using the lexical knowledge representation language DATR (Evans and Gazdar 1996), is located at the MOR_NOUN node in the hierarchy in Figure 2.

(4) <mor sg prep> == “<stem>” _e

The information in (4) is overridden by the node N_III (where the prepositional ending is *-u*). Here we have used the attribute `prep`, labelling the ordinary locative case as prepositional. We will treat the second locative as an instance of path extension. We can illustrate path extension by making reference to the information in (4). The left-hand side in (4) is enclosed in angle brackets. This is the path <mor sg prep> (standing for the morphology of the prepositional

singular). The path <mor sg prep> is an extension of three other paths, as illustrated in (5).

- (5) <>
 <mor>
 <mor sg>
 <mor sg prep>

The first path in (5) is the empty path, of which all other paths are extensions. Then there is a path for morphology. This is then extended by a path for the morphology of singular number. The prepositional case then extends this. As we have argued, the prepositional case is opposed to the other cases paradigmatically. The ordering of the features is important, because it is possible to infer the form for a particular specification on the basis of the most specific path of which it is an extension. We treat the second locative as an extension of the path <mor sg prep> which takes the form <mor sg prep loc>.

In adjectival paths, case and gender are ordered after number, and case is ordered before gender. This is because gender distinctions are lost in the plural in Russian, suggesting that gender in Russian undergoes neutralization in plural contexts. The loss of distinction between masculine and neuter in the oblique cases of adjectives suggests that gender is ordered after case.⁷ This means that the two paths associated with the first locative (prepositional) case for Russian are (6a) for the masculine and neuter and (6b) for the feminine forms.

- (6) a. <mor sg prep>
 b. <mor sg prep fem>

In other words, Russian adjectives have a maximal morphological signature number-case-gender. The signature is also variable, because for the oblique cases there is no need to specify masculine or neuter, as these are syncretic (i.e. realized by the same form). In the example paths in (6a) and (6b) we have specific number, case and gender values involved: singular, prepositional, feminine. These belong to the features number, case and gender respectively. From looking elsewhere in the morphological system of Russian we know that it is possible for the morphological signature within a particular word class to vary significantly. For instance, if we contrast the present and past tenses of Russian, the morphological signatures differ in a very important respect.

- (7) a. <mor non-past sg first>
 b. <mor past sg masc>

In (7a) and (7b) the type signatures for the verb differ: tense-number-person in (7a) opposed to tense-number-gender in (7b). As is well known, this contrast in signatures exists for all verbs in Russian. The split is between the non-past and the past tense. However, once we are dealing with the past there is no choice between person or gender. Equally, in Polish where the additional clitic morphology of person is added to the gender marked past tense, it is not possible to circumvent the requirement to mark gender. In other words, we might posit the following constraint on the structure of the paradigm:

(8) Morphological Signature Constraint (Version 1)

Given a specific value of a particular feature F , morphology does not exhibit a choice of realizing either values of feature X , or values of feature Y .

As it stands (8) is too strong a constraint. For example, if we consider (7a) and (7b) the presence of the value sg does not prevent the choice of person in (7a) in contrast to gender in (7b). Of course, we know that this choice is dependent on tense. Instead, we redefine the Morphological Signature Constraint based on the notions of path and extension in (4) and (5):

(9) Morphological Signature Constraint (Version 2)

If values V_a and V_b belong to different features, then they cannot be extensions of the same (sub-)paths.

In (7a) and (7b) the values *first* and *masc* belong to different features, but they are not extensions of the same (sub-)paths. In contrast, when we consider adjectives, the barrier to the increased syntactic relevance of the second locative becomes clear. Given the two different paths for the prepositional case of adjectives in (6a) and (6b) the addition of the feature value loc would violate (9), because the value loc is a sub-case feature which shares the same (sub-)path with the value in (6b) fem , which is a gender feature. This means that adjectival morphology cannot innovate a separate realization for the second locative, because this would create a conflicting morphological signature.

4. Conclusion

The Russian second locative represents something of a conundrum. It is an innovation which never made great inroads into the language. However, it is associated with some factors which are not limited by frequency. We have seen that it can freely occur in modified noun phrases, thereby indicating that it is not restricted to ossified set phrases. Its association with inanimacy is not a corollary of high frequency, and this naturally leads to the question why it did fail to spread beyond a limited number of nouns which frequently occur in locative contexts. The answer to this is that, although it may occur in modified noun phrases, the basic design of the adjectival paradigm restricts its development there. The consequences of this are that the rules of syntax do not need to ensure that the value associated with the second locative be propagated within the noun phrase. Hence it remains restricted to rules concerning case government by the prepositions *в* and *на*. The fate of the second locative provides an interesting contrast with that other example of a sub-feature within Slavonic in general, and Russian in particular, namely the sub-gender of animacy, which fared so much better.

NOTES

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² Following convention the terms ‘*u*-stem’, ‘*i*-stem’ and ‘*o*-stem’ for the historical inflectional types are given using the Latin letter in italics. In contrast, the actual inflections are given using Cyrillic. Crucially, when the inflection –y is given (in Cyrillic), this corresponds to the phonological representation /u/. While we cannot be sure about earlier stages of the language, when this inflection is discussed in relation to the contemporary language it can safely be assumed that it is always stressed.

³ Work with informants indicates that intuitions differ regarding the two instances of class IV nouns which are supposed to have a second locative. These are *забытье* and its derivative *полузабытье*. We therefore leave these out of consideration.

⁴ I thank Tore Nessel and an anonymous referee for bringing these to my attention.

⁵ In contrast, the nominative and accusative singular have a unique inflection for class II (a-stem nouns), and the genitive, dative, locative and instrumental singular have unique inflections for classes I and IV (o-stem nouns).

⁶ There does appear to be a difference between the second locative and the second genitive in terms of their behaviour with regard to adjectival modification. In Панов (1968, 190) Graudina,

who wrote the relevant section, discusses the use of adjectives in combination with a second genitive. In a survey people from four different age groups were asked, among other things, to give the appropriate ending for the forms of the lexeme *чай* in three different contexts. Two of these contexts were essentially contrasted by the presence or absence of a modifying adjective before a noun which one would expect to be in the genitive. The relevant sentences are given in (a)-(b).

- a. *Мы* *выпили две* *чашки ча...*
 we drank two cups tea..
- b. *Я* *выпил стакан крепк-ого* *ча...*
 I drank glass strong-SG.GEN tea...

A total of 4015 people were questioned. Respondents were divided according to age group. There were five age groups, indicated in the table (Панов 1968, 189-190) by the period in which they were born (1870-1909, 1910-1919, 1920-1929, 1930-1939, 1940-1949). For each age group there was less of a preference for the *-y* ending in (b) than in (a). The difference is significant (Панов 1968, 192).

⁷Underspecification alone is insufficient to account for all syncretisms in Russian. For instance, Baerman et al (2005, 35) argue that, using underspecification alone, it is not possible to account for the syncretism of dative, genitive and locative in feminine adjectives together with masculine and neuter syncretism.

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