

John Benjamins Publishing Company



This is a contribution from *On Diversity and Complexity of Languages Spoken in Europe and North and Central Asia*.

Edited by Pirkko Suihkonen and Lindsay J. Whaley.

© 2014. John Benjamins Publishing Company

This electronic file may not be altered in any way.

The author(s) of this article is/are permitted to use this PDF file to generate printed copies to be used by way of offprints, for their personal use only.

Permission is granted by the publishers to post this file on a closed server which is accessible to members (students and staff) only of the author's/s' institute, it is not permitted to post this PDF on the open internet.

For any other use of this material prior written permission should be obtained from the publishers or through the Copyright Clearance Center (for USA: www.copyright.com).

Please contact rights@benjamins.nl or consult our website: www.benjamins.com

Tables of Contents, abstracts and guidelines are available at www.benjamins.com

Spatial semantics, case and relator nouns in Evenki

Lenore A. Grenoble
University of Chicago

Evenki, a Northwest Tungusic language, exhibits an extensive system of nominal cases, deictic terms, and relator nouns, used to signal complex spatial relations. The paper describes the use and distribution of the spatial cases which signal stative and dynamic relations, with special attention to their semantics within a framework using fundamental Gestalt concepts such as Figure and Ground, and how they are used in combination with deictics and nouns to signal specific spatial semantics. Possible paths of grammaticalization including case stacking, or Suffixaufnahme, are discussed.

Keywords: spatial cases; case morphology; relator noun; deixis; Suffixaufnahme; grammaticalization

1. Introduction

Case morphology and relator nouns are extensively used in the marking of spatial relations in Evenki, a Tungusic language spoken in Siberia by an estimated 4802 people (All-Russian Census 2010). A close analysis of the use of spatial cases in Evenki provides strong evidence for the development of complex case morphemes from adpositions. Descriptions of Evenki generally claim the existence of 11–15 cases, depending on the dialect. The standard language is based on the Poligus dialect of the Podkamennaya Tunguska subgroup, from the Southern dialect group, now moribund. Because it forms the basis of the standard (or literary) language and as such has been relatively well-studied and is somewhat codified, it usually serves as the point of departure in linguistic descriptions of Evenki. However, the written language is to a large degree an artificial construct which has never achieved usage in everyday conversation: it does not function as a norm which cuts across dialects. The dialect on which it is based is moribund. Moreover, there is widespread and significant dialect variation in other parts of Evenki morphology (e.g. plural morphology, see Grenoble & Whaley 2003), including case morphology and the functions of the cases. For this reason, the

analysis here is based on those dialects where I have done actual fieldwork, eastern dialects spoken in the Amur basin and in the southern part of Sakha (Yakutia) and more western dialects spoken in Tura (the administrative center of the former Evenki Autonomous Okrug, now part of Krasnoyarsk krai).

Evenki nouns are obligatorily inflected for number, possession and case. There is no grammatical gender. The morphological marking of possession is complicated but unrelated to the present discussion; what is relevant here is morpheme order. Possessive suffixes can be divided into three categories; two of these, the personal and reflexive possessive suffixes, follow the case suffix, while the suffix of indirect possession precedes the number and case suffixes. Inalienable possession is signaled by an additional suffix, *-ŋi-*, which follows the case and precedes the personal or reflexive possessive suffixes.

The main paper is divided into three parts. After an overview of the use and distribution of the individual cases (Section 2), I turn to the semantics of space and the use of spatial cases and spatial deixis in Evenki, and address the use of relator nouns, spatial relations and secondary deixis (Section 3), and conclude with an analysis of the diachronic development of spatial cases (Section 4). Work presented here on the semantics of the spatial cases is based largely on my own fieldwork, supplemented by published descriptions only as necessary. The resulting analysis may exclude possible variation in the non-Eastern dialects, but has the advantage of providing a current and accurate description of the language used by a relatively large percentage of Evenki speakers. Previous studies are often out of date and many are based on dialects no longer spoken, or are spoken by very few speakers who exhibit significant influence from Russian contact. In addition, the mismatch between published descriptions and my own field data suggests that there has been change in the use and even the frequency of the cases even in dialects where there is still a vital speaker community. These changes may be part of natural language change, or may be linked to language attrition.

2. Overview of the cases

The standard prescriptive grammar used to teach Evenki to speakers of Russian, Lebedeva et al. (1985), cites thirteen cases in what is referred to as Literary Evenki, the codified norm. Immediate questions arise from this traditional classification because there are a number of problems in identifying the cases. For example, Kilby (1980), following Konstantinova (1964) recognizes only eleven cases (omitting the allative-prolative, comitative, genitive, and vocative from the inventory). As many as fifteen cases can be identified if one includes the vocative and genitive (*-ŋi-*, analyzed here as signaling inalienable possession). Part of the problem in identifying the cases stems from the fact that not all cases are used with equal frequency, and not all cases are used

in all dialects. The case suffixes are subject to the regular rules of vowel harmony and show further morphophonemic alternations, depending upon the final consonant of the stem. The suffix which follows vocalic stems is seen as basic and therefore is treated as the citation form. Allomorphs are provided in brackets; allomorphic distribution is determined by voicing and nasal assimilation. Table 1 provides a maximally complete inventory of Evenki case suffixes, including variant suffixes.

One question that arises in the analysis of case systems and agglutinating languages is whether these morphemes are best analyzed as case markers or adpositions. The existence of the genitive case was claimed by earlier researchers on Tungusic (Vasilevich 1940). It is now commonly held that no genitive case exists in Modern Evenki (Konstantinova 1964; Nedjalkov 1997) and that the presence/absence of the genitive is one of the features distinguishing the Tungusic languages spoken in China from those in Siberia (Atkine 1997).

Table 1. Evenki case suffixes (all dialects)

Nominative	∅
Accusative	-βa/-βə/-βo [-ma/-mə/-mo]
Accusative indefinite	-ja/-jə/-jo [-a/-ə/-o]
Dative	-du [-tu]
Instrumental	-t [-tʃ]
Locative	-la/-lə/-lo
Allative	-tki [-tiki]
Prolative	-li: [-duli:/-tuli:]
Ablative	-duk [-tuk]
Elative	-gi:t [-ki:t], -lak in some dialects
Allative-locative	-kla/-klə/-klo, -gla in some dialects
Allative-prolative	-kli
Comitative	-nun; -jun (also -nan/-nən), -gali:/-gəli:/-goli: in some dialects
{Vocative}	-∅; also loss of stem-final -n
{Genitive}	(-jaj/-jəj/-joj in some dialects)

The suffix *-ji* in Evenki marks inalienable possession (Nedjalkov 1997:145), rather than the more general relations attributed to the genitive case, which marks the relation of a noun to another noun (see Blake 1994 for broad discussion of the notion of case). It is usually excluded from the inventory of cases in Evenki because it does not regularly mark possession, which is rather signaled by the use of personal possessive suffixes. The vocative does not have separate morphological marking in most dialects, and is often not considered to be a true case on theoretical grounds. The status of the

comitative has been disputed (Kilby 1980), because it is argued that it alone of all the cases occurs in combination with other case suffixes, i.e. that it is subject to double case-marking, or *Suffixaufnahme* (Plank 1995). The question of compound case suffixes and *Suffixaufnahme* is considered in greater detail in Section 4.

3. The semantics of space

Spatial relations are understood here to involve, minimally, a *Figure* and a *Ground* (Talmy 1975, 1991, 2000). Such relations may be static or involve motion; motion relations may also involve *Path*, *Manner*, *Goal* and *Source* of motion. Evenki is a satellite-framed language (Talmy 2000). In contrast to verb-framed languages (such as Romance), Evenki signals manner of motion on the verb, and the path is signaled on the complement, or *satellite*. This typological distinction is useful in understanding the complexity of the system for marking spatial relations in Evenki. It has several morphosyntactic means for marking spatial relations on satellites: spatial cases, deictic terms, and relator nouns. Following Johanson (2012), this list could be expanded to include markerless constructions, but they are not the focus of the present study.

As Talmy (1983:233) notes, the Ground has much in common with the four Fillmorean cases of Locative, Source, Path and Goal, but Fillmore's division does not capture the shared feature that they all function as some reference object for the Figure. However, the use of Evenki cases can be described in terms of component features of a motion event, and these features capture the directionality of Fillmore's (1982) Source, Path and Goal. The cases, in combination with the Ground and with the verbal predicate, constitute locating expressions which specify how the Figure is related to the Ground. I use the term *locating expression* to indicate position relative to the Ground, where motion is involved as well as when motion is not involved. (See also Levinson 2003; Talmy 2000 for similar treatments.)

An additional feature, Location, can be used to represent the difference between motion events and stationary descriptions. In Evenki the dative case, for example, is used to situate a stationary Figure with respect to a Ground; this relation can be described by the feature +Location. These are introduced as metalinguistic terms to describe the nature of the motion event. Additional features are needed to account for all possible motion events signaled by the Evenki spatial cases.

As their names suggest, the features differ: Location has to do with the presence or absence of motion; Goal, Source, Path, Trans have to do with directionality of motion, Specific has to do with whether an exact Goal or Source is involved (as opposed to instances where Goal or Source serving as orientation for a general direction). In certain instances the nature of the Ground is relevant in the interpretation of spatial relations. This is particularly true with the prolicative case, where differences as to whether

the Ground is linear, planar or volumnar are central to the interpretation of locating expressions. Taken together, these features provide a useful framework for analyzing the linguistic encoding of spatial semantics and the use and distribution of spatial cases in Evenki.

3.1 The spatial cases

Spatial cases are defined as the inflected forms of nouns or NPs which are used, without an adposition, to specify the location of an entity, or to mark the argument of a motion verb which specifies goal, source or path of the motion event (Creissels 2009:609–610). Spatial cases may have non-spatial uses, a point which is beyond the scope of the present study. In Evenki, there are morphologically complex spatial case markers which combine morphemes which consist of two morphemes, each of which has an independent use as a spatial case marker, and those which combine a spatial case marker with some other marker. These are discussed in Section 4.

The spatial cases in Evenki are the dative, locative, allative, prolative, ablative, elative, and the allative-locative and allative-prolative in those dialects which use them.¹ Their use as locating expressions can be described in terms of a finite set of features {Location, Goal, Path, Source, Trans, Limit, Specific}.² These provide a useful framework for accounting for the use and distribution of the spatial cases which, in turn, accounts for the combinatory semantics of spatial descriptions. The **dative** case is used to signal the location of an object or entity:

- (1) *omo:lgi-yu:n-mi: bi-čə-Ø-m ə-du:*
 son-COM-REFL live-IPFV-PRS-1SG here-DAT
 ‘I live here with my son.’

The dative is also used for the Goal with position verbs, such as ‘put’, ‘place’ or ‘seat’:

- (2) *suka-βə du:nnə-du: nə:kəl*
 ax-ACC ground-DAT put-IMP.2SG
 ‘Put the ax on the ground’

The fact that the dative can be used for both location and motion in Evenki and other Tungusic, Turkic and Mongolic varieties is seen by Johanson (2012:205–207) to be

1. Use of the allative-locative is attested in the Sym, Nep, and Uchur-Zej dialect groups, and the allative-prolative in the Uchur-Zej (Vasilevich 1948). There is a fair amount of variation in case allomorphy and usage in the dialects which warrants further investigation; a complete study of this variation is beyond the scope of the present paper.

2. My analysis here differs in some details from Kilby (1983) which, from what I can tell, was based entirely on published sources.

a Siberian areal feature, with what he calls the “stative dative” a probable product of Mongolic influence, the result of copying and not genealogical affiliation. Evenki dialects exhibit some variation in this dual marking of stative versus dynamic case usage: the Nep dialect group uses the elative to signal both the place from which an action originated or the place where it occurs (Vasilevich 1948:143), and the Sym dialect group uses the locative case for location, and the allative-locative for those instances where the standard language would use the locative, as in Examples (3)–(7) here. I interpret this variation as remnants of an older pattern, further supporting Johanson’s claim of increasing grammaticalization of these cases.

Both the **locative** and the **allative** cases are used for motion. The locative signals motion directed at a specific Goal, into or onto a Goal:

- (3) *Haβa:-la:-n huru-Ø-m*
 work-LOC-3SG go-AOR-1SG
 ‘I went to his work’

It can also be used to signal the limit or boundary of a motion, represented by the feature +Specified, which includes this notion of extending to a specified point. This function occurs not only with a spatial meaning, as illustrated in (4), but also with a temporal meaning, as in (5):

- (4) *ətirkə:n, tuksa-naya:, hunat-tula:-βi: əmə-t-tə-n*
 old.man run-CVB.SIMUL daughter-LOC-REFL come-A.BREV-AOR-3SG
 ‘The old man ran up to his daughter.’
- (5) *Timani-la: bi: nunan-ma alat-ʃana-β.*
 tomorrow-LOC 1SG 3SG-ACC wait-FUT-1SG
 ‘I will wait for him until tomorrow.’

In both examples, the locative is used to indicate that the action continued to the extent of the (spatial or temporal) Goal. The allative case is also used for goal-directed motion and is very close in meaning to the locative case. The difference is that the allative is used to signal motion aimed in the general direction of the Goal, while the locative is used to specify the concrete limits or boundary of an action in space. The contrast is clear in the following minimal pair:

- (6) *Asi: togo-tki murdurə-rə-n*
 woman fire-ALL lean-AOR-3SG
 ‘The woman leaned toward the fire’
- (7) *Asi: togo-la: murdurə-rə-n*
 woman fire-LOC lean-AOR-3SG
 ‘The woman leaned into the fire.’

The allative case in (6) signals the general direction of motion, resulting in the Figure in a position near the fire, but the locative in (7) signals the Goal, with the Figure located directly in the fire, the endpoint of the motion. The difference between the two cases can be captured in terms of two features: the locative case is {+Goal, +Specified}, while the allative is characterized as {−Goal, −Specified}. In some cases the difference in the uses of these two cases is nearly negligible: in pointing in the distance, speakers are equally likely to use the locative (*ta-la:* ‘over there’) or the allative (*tar-tiki* ‘in that direction’) unless there is a concrete Goal in mind.

The **accusative** case is also used for goal-directed motion and is particularly frequent with certain verbs (such as *tukti-* ‘go up’, ‘climb’ or *ilatan-* ‘pass’, ‘go a certain distance’). Some of these (e.g. *tukti-*) are used with either the accusative or the locative:

- (8) *Kə, ə-li: iltə-kəl yaŋ horon-mo:-n ɲənə-kəl*
 here here-PROL pass-IMP.2SG hill top-ACC-3SG go-IMP.2SG
ilan iə:kən-mə iltə-kəl.
 three bend-ACC pass-IMP.2SG

‘Here, pass along here, go to the top of the hill, and pass three bends.’

The accusative is used to signal an attainment of Goal, and thus it is used in a series of actions, as here in (8), where first the Figure/addressee will come to the top of the hill, and then pass three bends in the path. Note that this is not a case of verbal government per se, the verb *ilatən-* occurs in the first clause with a complement in the prolicative case, specifying motion along an area. Similarly, the accusative is used with *ilan iə:kən-mə* ‘three bends’ to signal the total distance that will be covered, seen as a completed action. This feature can be captured as +Finish to indicate arrival at a Goal. The difference is exemplified in the following near minimal pair, taken from the same folktale:

- (9) *Gugda-la urə-lə tukti-kəl*
 tall-LOC mountain-LOC go.up-IMP.2SG
 ‘Go up the tall mountain’
- (10) *Urə-βə tukti-t-tə-n*
 mountain-ACC go.up-A.BREV-AOR-3SG
 ‘She went up the mountain.’

The locative case in (9) specifies Goal, while the accusative (10) focuses on the length of the path, i.e. distance. This is directly related to the use of the accusative to signal duration of time, and the measure of time and space. When used with motion verbs, the accusative measures the distance covered. The semantics are derived from the use of the accusative for measure together with the tense-aspect of the verb, so that in (10) the distance covered is the mountain, the tense-aspect Perfective Present

Perfect, meaning that the Figure has covered the distance, and therefore is located at the Goal, the top of the mountain.

A similar distinction is seen between the **ablative** and the **elative** cases: the ablative signals motion from a specific Source, while the Elative signals motion from the general direction of the Source:³

- (11) *Nuŋan dʒu:-duk-βi adaga-ra-n*
 3SG house-ABL-REFL CROSS-AOR-3SG
 ‘S/he went away from her/his house.’

The ablative is used much more frequently than the elative in that it is used, in general, when the Source is given (linguistically or contextually) and so an exact point of departure is identifiable. In certain circumstances the elative is more likely. For example, in response to the question *Where are you coming from?*, the response *targit* ‘from there_{ELA}’ is preferred; the ablative form (*tarduk* ‘from there_{ABL}’) is possible only if a concrete location is mentioned. There is thus a general correspondence between the locative and the ablative, on the one hand, and the allative and the elative, on the other. The locative signals motion directed to a specific Goal, and the ablative signals motion from a specific Source. In contrast, the allative is used to indicate motion aimed in the general direction of a Goal, and the elative for motion coming from the general direction of a Source. This difference can be captured by the feature \pm Specified, so that the locative can be categorized as (+Goal, +Specified) and the allative as (+Goal, –Specified); the ablative is thus (+Source, +Specified) and the elative (+Source, –Specified). (See also Table 2 for the distribution of these features.)

The **prolative** case is traditionally described (e.g. Konstantinova 1964:53–54) as being used in a number of ways which at first appear to be minimally related: for signaling (1) the place or object along which motion occurs; (2) the entity which is in direct contact of a motion event; (3) the object through which motion passes; (4) the interior space in which a dynamic event takes place; (5) all or part of the surface of an object involved in an action. In sum, the prolative is seen as signaling motion along, through, inside, on, and in direct contact of some entity. However, these five apparently distinct meanings can be unified and explained in terms of a single feature (Path). It is the nature of the Ground (whether it is Linear, Planar or Volumnar) which is crucial in determining the interpretation of the prolative case. Thus the various meanings cited by Konstantinova are directly derivable from a combination of feature specification of the Ground and the prolative complement. We will consider each one

3. I have maintained the accepted terminology for these two cases, although the terms are misleading. This is a point made by Nedjalkov (1997:151), with reference to Lebedeva et al. (1985:44), which cites them as translated from the Latin case names.

in turn. First, motion along a Path is perhaps the clearest and core use of the prolativ; it can be characterized as +Path. A typical example is given in (12):

- (12) *Hokto-li aβdʒə-hin-Ø-əm*
 path-PROL descend-INCEP-AOR-1SG
 ‘I started to go down along the path’

The Ground in (12) is +Linear; a locating expression which is {+Linear Ground, +Path} will be interpreted as signaling a Figure which moves (or is situated) along a linear route. When the Ground is -Linear, +Planar, the motion is interpreted as occurring around on the surface of the Ground, as in (13):

- (13) *Nuŋan agi-li girku-kta-dʒa-ra-n.*
 3SG taiga-PROL walk-ITER-IPFV-PRS-3SG
 ‘S/he walks around the taiga.’

Similar Grounds can be substituted here with the same interpretation. It might be argued that the difference between (12) and (13) is one of ±Goal, that the motion in (12) should be characterized as +Goal, and therefore progresses along a Path toward the Goal, while the motion in (13) is -Goal, and so interpreted as taking place over a general surface area. However, this analysis fails to account for the ambiguity of examples like (14), where the motion event is ambiguous and can be interpreted as either uni-directional or aimless:

- (14) *ŋa:lə-li-β ekun-mal tutu-stə-n*
 hand-PROL-1SG something crawl-AOR-3SG
 ‘Something crawled along my hand.’ (Konstantinova 1964: 53)

What is crucial here is that the motion is moving along a Path over a Ground which is +Planar. Similarly, we must also account for a difference in interpretation in (15), where the children are seen as swimming in the lake, what Konstantinova calls “interior”; this can be more simply accounted for by reference to the dimensions of the Ground:

- (15) *kuŋa:ka-r tara: amut-tuli: o:kir-da: əlbəskə:t-tʃə-rə-Ø*
 child-PL that lake-PROL always swim-IPFV-PRS-3PL
 ‘The children always swim in that lake.’ (Konstantinova 1964: 53)

In (15) the Ground is +Volumnar; the difference between (13) and (15) is then dependent upon the Ground. Motion within an enclosed space, or into an enclosed interior, will be specified by a relator noun (Section 3.3), just as motion along the perimeter of a doorway, or a hole, etc., as opposed to motion through that open space, could also be specified by the use of a relator noun.

The same is true for the use of the prolativ for the space through which a motion passes, such as ‘through a door’, ‘through a hole’, as well as the meaning of ‘motion with

change of position in the interior of a space.' In both cases, the motion can be seen as +Path; the nature of the path, as linear or non-linear, or progressing through a hole or within a space, is dependent upon the nature of the Ground.

Finally, there are two cases which do not have widespread usage: the allative-locative and the allative-prolative. Even in the dialects where they are found, they occur only rarely. The allative-locative signals the general direction of an action:

- (16) *Oron togo-klo togo-ʃo-ro-n*
 reindeer fire-ALL.LOC lie-A.STAT-PRS-3SG
 'The reindeer is lying across from the fire' (Bulatova 1987: 31)

The allative-prolative is used for motion along a surface or in a direction.

- (17) *Oro-r urə-kli i:ltən-ʃə:-l*
 reindeer-PL mountain-ALL.PROL pass-PTCP.ANT-PL
 'The reindeer passed along the mountain' (Bulatova 1987: 31)

Nedjalkov points to the use of the allative-prolative to specify motion along an edge:

- (18) *Oron bira-kli huktə-rə-n*
 reindeer river-ALL.PROL run-AOR-3SG
 'The reindeer ran along the bank of the river' (Nedjalkov 1997: 171)

In sum, the nature of the Ground is relevant to determining the interpretation of spatial configurations as signaled by different cases in Evenki. The interplay between case, Ground and Path is summarized in Table 2:

Table 2. Distribution of case features

Ground	Case	Path	Semantics
+point	Locative	+Goal, Specific	TO
+volumnar	Allative	+Goal, –Specific	TOWARD
	Locative-Allative [‡]	+Goal	
		+Goal, +Limit	UP TO
	Ablative	+Source, –Specific	FROM
	Elative	+Source, Specific	AWAY FROM
+volumnar	Prolative	+Path	THROUGH
	Prolative	+Path	IN
+linear	Prolative	+Path	ALONG
	Accusative	+Trans	THROUGH
	Prolative-Locative [‡]	+Path	ALONG EDGE
+planar	Prolative	–Path	AROUND, OVER

3.2 Spatial deixis

Primary spatial deixis in Evenki is signaled with the use of deictic pronouns and with deictic motion verbs. The role of the cases in specifying spatial relations is exemplified in their use with the deictic pronouns. Evenki make a \pm proximal distinction in spatial deixis, and there are two pronominal stems: *ər* +proximal ‘this’ and *tar* -proximal (or distal) ‘that’. Like other nominals, they take the plural suffix *-l* and also combine with possessive suffixes, including the suffix of alienable possession *-ŋi:*, as in *ərŋi:β* ‘this my’ or *tarŋi:β* ‘that my’, as well as suffixes of comparison *ərgəŋin* ‘like this’ and *targaŋin* ‘such, like that’. The -proximal deictic pronouns are used anaphorically in discourse to track previously introduced referents; this is a common feature of the Tungusic languages.

These deictic stems are used in combination with the spatial cases to create \pm spatial deictics; the stem final *-l* is lost in the dative, locative, prolative and elative cases. For example, when *ər* and *tar* are combined with the dative case (+Location), the result is the forms *ədu:* {+proximal, +Location} or ‘here’, and *ta:du:* {-proximal, +Location} or ‘there’. These deictics are lexicalized forms (or nearly lexicalized), and are best translated into English with spatial adverbs. In particular, the dative forms are widely used. They are summarized in Table 3:

Table 3. Primary spatial deixis

	PROXIMAL		DISTAL	
NOM	<i>ər</i>	‘this’	<i>tar</i>	‘that’
DAT	<i>ə-du:</i>	‘here’	<i>ta:-du:</i>	‘there’
LOC	<i>ə-lə:</i>	‘hither’	<i>ta:-la:</i>	‘thither’, ‘to there’
ALL	<i>ər-tyki</i>	‘here (motion to)’	<i>tar-tyki</i>	‘there’, ‘in that direction’
PROL	<i>ə-li</i>	‘along here’	<i>ta:-li:</i>	‘along there’
ELA	<i>ər-git</i>	‘from here’	<i>tar-git</i>	‘from there’
ABL	<i>ə-duk</i>	‘from here’	<i>ta:-duk</i>	‘from there’

A number of the -proximal deictics are lexicalized and can take on different grammatical functions: the ablative is now most frequently used as a sequential conjunction *ta:duk* ‘then’; the dative can be reinterpreted as a temporal conjunction *ta:du:* ‘at that time, then’. One non-spatial example is provided by the instrumental *tarit* which can be used in the meaning ‘therefore’. In each of these cases the semantic shift is clear; it is interesting that it is the -proximal deictics only which are used this way. There is one example of a combined deictic, the ablative forms *əduk-ta:duk* are lexicalized in the meaning ‘here and there’, ‘everywhere’, as in *əduk-ta:duk hanŋu:ktarŋnaβ* ‘I was asking everywhere’, but otherwise only the -proximal deictics are used this way. In general,

however, the -proximal deictics are used with much greater frequency, both in these lexicalized meanings and in the straightforward spatial meanings.

3.3 Spatial relations and relator nouns

In addition to the spatial cases, Evenki uses a complex system of relator nouns to signal detailed spatial information. They constitute a complex system of secondary spatial deictics. The term relator noun (Starosta 1985; De Lancey 1997) captures the fact that the noun is the head which signals a spatial relation relative to the noun which encodes this relation. They have also been called *postpositions*, *relational nouns*, or *spatial nominals* (Levinson 2003). Labeling them postpositions is misleading because, first, the term postposition (or adposition in general) is conventionally used to refer to uninflected function words which form relations with noun phrases. Although this is a theoretically fraught issue, it can be argued that in a language with strong agglutination like Evenki, there are no adpositions, only clitic suffixes. More importantly, relator nouns are distinct from adpositions in that they are, both morphologically and syntactically, nouns. Relator nouns are widespread in Micronesian languages, Vietnamese, Thai, Chinese, Tibetan, Japanese and Munda languages (such as Sora). In Evenki, they function morphosyntactically as nouns and take case, number and possessive suffixes.

Starosta suggests that what he calls relator nouns are divided into two groups, those which fulfill semantic functions and those which fulfill grammatical functions. An example of a semantic function is provided by Sora, with use of the noun *sərraj* ‘sound’ with the verb *əmdəj* ‘hear’, which permits only nouns marked +audible as direct objects. Thus to say ‘He heard the insect’, one says what is literally ‘He heard the sound of the insect’ (*anin bodbod asərraj əmdəjle*) since the word for insect is marked -audible (Starosta 1985: 113). An example from a strictly grammatical function comes from Mandarin: the verb *tzay* ‘be located at’ requires nominal complements from the location class. Relator nouns are members of this class (i.e. are marked +location) while other nouns are not, so that to say ‘She is at the house’ one uses the relator noun *lii.tou* ‘inside’, as in *Ta tzay famgtz lii.tou* ‘She is at the house’s inside’ (Starosta 1985: 114–115; transcription following Starosta). In Mandarin these relator nouns serve both a syntactic and a semantic function: they permit -location nouns in syntactic slots where they would otherwise not be allowed, and they add spatial components of meaning: here the meaning ‘interior’ is specified.

Evenki relator nouns differ in that they are not syntactically required; instead, they serve a semantic function in adding spatial meaning. They can be seen as providing greater semantic specificity than the use of simple spatial cases, following Johanson (2012) in his study of Turkic. For example, both (19) without a relator noun, with the complement in the dative case, and (20) with a relator noun in the dative case are possible:

- (19) *Asi: ɕʷu:-du: bi-ʃə-Ø.*
 woman house-DAT be-PST-3SG
 ‘The woman was at the house.’
- (20) *Asi: ɕʷu: do:-du:-n bi-ʃə-Ø.*
 woman house inside-DAT-3SG be-PST-3SG
 ‘The woman was inside the house.’

In (20) the relator noun *do:* specifies the meaning ‘interior’; the woman is said to be located inside the house as opposed to simply at the house (19), without reference to specific location. The majority of Evenki relator nouns signal spatial relations.⁴ They are formed from nouns which signal a locator or direction relative to some object (another noun); the relator noun takes a case suffix which specifies the nature of the spatial relation (location, motion to, away, etc.) and a possessive suffix. For example, the noun *amar* ‘back’ frequently functions as a relator noun:

- (21) a. Location, singular:
ɕʷu: amar-du:-n
 house back-DAT-3SG
 ‘behind the house’ (*lit.* ‘at the back of the house’)
- (21) b. Location, plural:
ɕʷu:-l amar-du:-tin
 house-PL back-DAT-3PL
 ‘behind the houses’
- (21) c. Motion to, singular:
ɕʷu: amar-la:-n
 house back-LOC-3SG
 ‘behind the house’ (*lit.* ‘to the back of the house’)
- (21) d. Motion along, singular:
ɕʷu: amar-duli-n
 house back-PROL-3SG
 ‘along the back of the house’

In addition, the suffix *-gidV:* can be used to specify the location even more precisely, as in *ɕʷu: amar-gida:-du:-n* ‘right behind the house’. This suffix literally translates as ‘space’ or ‘side’, as seen more clearly in *ɕʷəgin* ‘left’ and *ɕʷəgin-ŋidə:* ‘leftside’. A large number of nouns can function as relator nouns in Evenki; the most frequently used are

4. A few relator nouns signal other relations. For example, the relator noun *ɕʷa:rin* means ‘for, for the sake of’. It inflects only for number and does not take case inflections, as in *aja ɕʷa:rin* ‘for goodness’ sake; *ŋunartin ɕʷa:ritin* ‘for their sake’.

Table 4. Relator nouns

Position		Position	
behind	<i>amar</i>	in front of	<i>čjulə</i>
(further) behind	<i>ʃa:gi:(da:)</i>		
inside	<i>do:</i>	outside	<i>tuli</i>
up, top	<i>ojo</i>	down, bottom	<i>hərgi</i>
over, above	<i>ugi</i>	lower part	<i>hərgidə:</i>
proximity	<i>daga</i>	distance	<i>goro</i>
left side	<i>čəginjida:</i>	right side	<i>anņida:</i>
side	<i>oldon</i>	opposite	<i>bargi(da:)</i>
upstream	<i>solo:ki:</i>	downstream	<i>əjə:ki:</i>

given in Table 4. In some cases the suffix *-gidV:* is used so frequently with the relator noun as to constitute a lexicalized form; these cases are indicated with parentheses.

Given the number of spatial nouns which function as relator nouns, and the possibilities of combining them with different cases to specify the exact nature of the motion or location, a very detailed spatial semantics emerges. Not all relator nouns combine with all cases, due to semantic restrictions, yet there still is quite a range of possibilities. (Kilby 1983: 58 defines these as postpositions and asserts that they appear to occur only in the dative case. While the dative is statistically the most frequent with relator nouns, it is not the only possibility.) The combination of relator nouns and cases produces a very specific spatial semantics. Consider, for example, the case of the noun *čju:* ‘house’. This noun is not normally used in the prolativ case, which would signal motion along the house itself. Instead, the relator noun *daga* is used to specify the space near the house:

- (22) *Bi: čju:-βa iltan-ʃa-β*
 1SG house-ACC walk.past-PST-1SG
 ‘I walked past the house’
- (23) **Bi: čju:-li iltan-ʃa-β*
 1SG house-PROL walk.past-PST-1SG
 ‘I walked along (on) the house’
- (24) *Bi: čju: daga-li-n iltan-ʃa-β*
 1SG house near-PROL-3SG walk.past-PST-1SG
 ‘I walked along past the house’
- (25) *amut daga-la:-n*
 lake close-LOC-3SG
 ‘closer to the lake’

- (26) *ura ojo-du:-n*
 mountain top-DAT-3SG
 ‘at the top of the mountain’
- (27) *kunaka:-r bira bargida:-du:-n əβi:-dʒə-rə-ø*
 child-PL river opposite-DAT-3SG play-IPFV-PRS-3PL
 ‘The children are playing on the other side of the river.’

Relator nouns are an integral part of the expression of spatial relations in Evenki. They are used to specify part of the Ground in relation to which the Figure is located or as a reference point for motion; they are used for both stationary and moving Figures.

4. Conclusion: Spatial relations and grammaticalization

There is strong evidence that some modern Evenki case morphemes developed from a combination of morphemes, i.e. that diachronically these were complex spatial cases.⁵ As seen in Table 1, many of the case morphemes are monosyllabic, but the allomorphs of certain morphemes following consonant stems are bisyllabic. Specifically, this is seen in the allative (*-tki/-tiki*), locative (*-lV/-dulV*), prolative (*-li:/-duli:*). These allomorphs look to be bimorphemic. The longer locative form sometimes occurs after vowel stems in the Uchur dialect and the allative in the same dialect has several different forms (*-tki:* for vowel stems and the allomorphs *-tik*, *-ti:kə: ki:* or *-tika:ki:* after consonant stems; Romanova & Myreeva 1964:22–23). Similarly, the Ajano-Maj dialects have a number of allomorphs for this allative suffix after consonant stems, not only *-tiki:* but also *-tka:ki:*, *-tika:ki:*, *-tikəj*, and *-tikə:kəj* (Romanova & Myreeva 1964:89). The Uchur-Zej group shows two allomorphs for the allative-locative suffix, *-kla:* and *-ka:kla:* (Vasilevich 1948:265); the affix *-ka:-* is also found in several suffixes known to have emphatic value, such as *-ka:kun*, added to nominal stems to specify the meaning; or *-ka:kut*, added to verbal stems to emphasize the action (Vasilevich 1958:758–759).

Several other morphemes appear to have been bimorphemic historically, in proto-Tungusic: Benzing (1955:79) names the allative-locative (*-klV:* < **-ki.lV:*), the prolative-locative (*-kli:* < **-ki.li:*), and the ablative (*-duk* < **-du + -ki*), and the delative case, now extinct in Evenki (†*-la:k* < **-la:ki*) and used as an allomorph for the elative in some dialects; see also Cincius (1948:524) for an argument that only four case morphemes (accusative, dative, locative and allative) can be analyzed as proto-Tungusic. Benzing (1955:83) specifically traces the proto-Tungusic ablative to the combination

5. I omit from the present discussion the use of the accusative-indefinite, which can be combined with possessive markers for what has been called the designative case (Kittilä & Malchukov 2009:555–556) because its use is not spatial.

of the dative morpheme plus a particle **-ki* and further notes that the Negidal ablative (*-dukkoj* ~ *-dukki*) appears to have been formed with the addition of the reflexive (*-wi*, plural *-woj*; his transcription).

This same morpheme **-ki* appears in combination with the locative to create the delative (**-la:* + *-ki*, Evenki *-IV:k*), attested in the Pribaikal and Erbogachen dialect groups (Vasilevich 1948:188) It also occurs in certain frozen forms in the Erbogachen group, apparently in free variation with the elative *-gi:t* (realized as *-yit*, per Vasilevich) in the following three words only:

- (28) *tuli-lək* *tuli-yit* ‘from outside’
ta-lak *tarit* ‘from there’
do:-la:k *do:-yit* ‘from the inside’ (Vasilevich 1948:188)

This same suffix *-IV:k* is cited by Vasilevich (1948:120) as a variant of the allative case in the Podkamenno-Tunguska dialect group, as in *tulələk* ‘from the street’; *do:la:k* ‘from inside’ (Vasilevich 1958:766) In this combination, it follows the locative suffix, but precedes it in the formation of the allative-locative (**-ki* + *-la:* > *-kla:*) and precedes the prolative suffix in the allative-prolative (**-ki* + *-li:* > *-kli:*).

Further evidence that these suffixes are in fact complex is that they can be separated, in particular the allative. This is seen in (29), a recording from spontaneous speech where the allative (*-tki:*) is separated by the emphatic particle *-ko:-*, as an infix here):

- (29) Iengra, 1998.05.NAN, speaker born 1948
Mufju:-m *ɲa:n*, *əɾə:* *zveroferma-t<ko:>ki:* *ɲənə-Ø-m.*
 return-PST-1SG again this animal.farm-ALL<EMPH>ALL go-PST-1SG
 ‘I came back again, and went past this animal farm.’

Note that this sentence would be grammatical without the emphatic particle (*zveroferma-tki:* ‘animal.farm-ALL’). The allative suffix is interrupted by the form *-ka:-* in (30), recorded in the same village but from a different speaker:

- (30) Iengra, 1998.05.KAE, speaker born 1930
əβənki:-l-βə *əhi-l* *gada*, *Alda:n-ti<ka:>ki:* *guni-βki-l*
 Evenk-PL-ACC NEG-PL take Aldan-ALL<EMPH>ALL say-PTCP.HABT-PL
 ‘They don’t accept Evenks in Aldan, they say’

Both *-ko:-* and *-ka:-* are glossed here as infixes but it is not at all certain that that is the correct interpretation. These are the only examples in my corpus of an infix in a suffix. Evenki dialects exhibit significant variation in the allomorphs of this particular case suffix (Section 4); Vasilevich (1948:265) gives the form *-tika:ki:* for the Uchur-Zej dialect group. The analysis of *-ko:-* in (29) as an emphatic infix is more secure.

The picture is somewhat further complicated by the use of what are now lexicalized adverbial forms. The ablative case (*-duk*) is argued to have a secondary suffix *-ki:*, now used in certain adverbial forms (Vasilevich 1958: 761):

- (31) *solo-* ‘to travel up (a river)’ *soloki:* ‘upstream’
eje:- ‘flow’ *eje:ki:* ‘downstream’
ajan ‘roundabout path’ *ajaki:* ‘in the direction off of the road’

Vasilevich (1958:789) defines the ablative suffix *-ski:* as used specifically with spatial nouns:

- (32) *tulin* ‘space outside’ *tuluski:* ‘out, away’
ama ‘back(side)’ *amaski:* ‘backward’

In the Ajano-Maj dialects Romanova and Myreeva (1964:90) note that these forms have not only spatial but also temporal meanings. In addition to the above, they include *ḍjulaski:* ‘forward’, ‘ahead’ and ‘in the future’; and *ʃa:ski:* ‘further’, ‘forward’ and ‘in the future’, ‘subsequently’. This suggests two ablative case forms, *-duk* and a specialized suffix *-ki:/-ski:*, used only in certain frozen adverbial forms. Note that both these words with both temporal and spatial meanings are cited in Vasilevich (1948), without reference to specific dialects; she also notes the variant *ʃa:ʃikla:* in the Sym dialect, a form using the allative-locative case suffix; this is one of the few dialects attested as using this suffix.

Benzing (1955:87) notes that the diminutive **-ka:n* can be used in combination with case morphemes and generally precedes them (see also Vasilevich 1958: 759). The first set of examples he provides involve specifically this suffix *-ski:* with these same spatial forms (where *-ka:* < *-ka:n*):

- (33) *əjə:-s-ka:-ki:* ‘downstream’
amas-ka:-ki: ‘backward’

Benzing translates the added meaning of *-ka:* (< *-ka:n*) as ‘something’ (G *etwas*). Here it appears as an infix, as it does several of his examples it appears as an infix with the allative:

- | | | |
|---|---------------|---|
| (34) <i>urə-l-ti-kə:-ki:</i>
mountain-PL-ALL-DIMIN-ALL
‘somewhat toward the mountains
there’ | <i>versus</i> | <i>urə-l-tiki:</i>
mountain-PL-ALL
‘toward the mountains there’ |
| <i>buga-t-ka:-ki:-ʃi:</i>
land-PL-ALL-DIMIN-ALL-REFL
‘a little bit toward one’s own land’ | <i>versus</i> | <i>buga-tki:-ʃi:</i>
land-PL-ALL-REFL
‘toward one’s own land’ |

Whether this is in fact a form of the diminutive and different from the emphatic particle in (29) and (30) remains an open question.

This phenomenon would appear to be somewhat different from *Suffixaufnahme* (Plank 1995), or case stacking, which is found when “a single word is inflected for more than one case feature reflecting its relations to successively higher syntactic constituents” (Sadler & Nordlinger 2006: 460). The clearest instance of *Suffixaufnahme* in Evenki is with the comitative suffix *-ŋun* (variant *-nun*) that can be combined with other case suffixes:

- (35) *bu ifə-rə-β ki:ran-ma munnuka:n-nun-mə*
 1PL see-AOR-1PL eagle-ACC rabbit-COM-ACC
 (Kilby 1983: 46; Plank 1995: 84–85)
 ‘We saw an eagle with a rabbit.’

Some dialects use the suffixes *-ti* and *-taj* as an instrumental case suffix and a comitative; they can be combined with other case suffixes as well:

- (36) *ŋinaki-ŋi-l-βa bəjə-l-βə ifə-Ø-m.*
 dog-INST-PL-ACC man-PL-ACC see-AOR-1SG
 (Plank 1995: 85, citing Nedjalkov 1994)
 ‘I saw men with dogs.’

My corpus does not show any such examples, but there are also no examples of the argument marked with the comitative conjoined with any NP not in subject position, as in (35) and (36). Rather, all examples in my corpus are of the type seen in (37), where it is conjoined with an argument in direct object position:

- (37) *bi: əkin-nu:n-mi: bi-ŋə:β*
 1SG older.sister-COM-REFL be-PST-1SG
 ‘I was with my older sister’

One commonly held theory of relator nouns is that they provide the source for case suffixes. For example, Starosta (1985: 111) cites Gordon Fairbanks’ analysis from a course they co-taught in 1974 which derives Sinhalese dative *-t* and locative *-ge* from genitive nouns modifying locative forms of the Sanskrit *artha* ‘aim’, ‘wealth’ (> dative *-t*) and *gr̥ha* ‘house, place, town’ (> genitive *-ge*). Similarly, Evenki relator nouns themselves take case and possessive suffixes and so function like nouns. They differ in that they do not pluralize. This suggests that they are on the grammaticalization cline of development from full nouns to a case suffix. This cline has been represented by Lehmann (1985: 304); see also Heine, Claudi & Hünnemeyer (1991) and Hopper & Traugott 1993: 106–107) as follows:

relator	secondary	primary	agglutinative	fusional
noun>	adposition>	adposition>	case affix>	case affix>

One argument in favor is that the non-spatial relator noun *ɕa:rin* ‘for, for the sake of’ is not inflected for case; it is inflected for possession and person, as in *aja ɕa:rin*

‘for goodness’ sake; *nuḡartin č̣arritin* ‘for their sake’, but stands outside of the regular nominal system in not taking case inflections. This relator noun is attested in Manchu, Solon, Nanai, Udege (Cincius 1975:253). This is similar to the process seen in English relator nouns, such as *top* in the construction *on top of NP*. Here *top* has lost some properties of nouns: it does not take an article and cannot pluralize, as seen in *on top of all the houses* but not **on tops of all the houses* (see De Lancey 1997:56).

Even so, the argument is not applicable for Evenki, which shows no use of adpositions and has a well-developed case system. In other words, Evenki has a full-fledged system of both relator nouns and case markers, but no adpositions. Even if Evenki relator nouns are analyzed at the early stages of transition to case, it is difficult to imagine further development, given that the current case system is moving toward a decreased, not an increased, number of cases. (For some discussion of language attrition and the loss of case morphology in Evenki, see Grenoble 2011, 2013.)

Instead, relator nouns need to be analyzed within the larger context of linguistic devices which combine to indicate spatial relations. They are as stable as any part of the language is today. Historically many of the Evenki spatial cases were complex morphemes; the allative is perhaps not fully fused in the modern language as it permits the possible use of infixation. (A more cautious analysis would point to the significant allomorphic variation across dialects for this particular suffix.) Whether the historical development of these suffixes comes from a process of true *Suffixaufnahme*, where a single nominal carries two different case-markings that signal differing syntactic relations vis-à-vis different heads, is questionable. Rather it seems more likely that morphemes were added to specify spatial relations. The elaborate system of marking such spatial relations on Evenki nominal involves a complex set of spatial cases, primary deictics and relator nouns; these are used in combination to make fine-grained spatial distinctions.

Abbreviations

Glosses follow Leipzig Glossing Conventions, with the following additions: A.BREV = subspect (or Aktionsart) for quickness, shortness of duration, A.STAT = stative subspect, AOR = aorist (for the suffix *-rV* in Evenki, whose temporal reference is disputed; here I analyze this suffix in combination with the imperfective aspect as signaling a present tense and without it, an aorist), ANT = anteriority, DIMIN = diminutive, ELA = elative, EMPH = emphatic, HABT = habitual, INCEP = inceptive, ITER = iterative, PROL = prolative, SIMUL = simultaneity.

References

- All-Russian Census. (<http://www.gks.ru>) (14 May 2012).
- Atkine, Viktor. 1997. The Evenki language from the Yenisei to Sakhalin. In *Northern Minority Languages: Problems of Survival* [Senri Ethnological Studies 44], H. Shoji & J. Janhunen (eds), 109–121.
- Benzing, Johannes. 1955. *Die tungusischen Sprachen. Versuch einer vergleichenden Grammatik*. Wiesbaden: Akademie der Wissenschaften und der Literatur.
- Blake, Barry. 1994. *Case*. Cambridge: CUP.
- Bulatova, Nadezhda Ja. 1987. *Govory èvenkov Amurskoj oblasti* (Dialects of the Evenki of the Amur Region). Leningrad: Nauka.
- Cincius, Vera I. 1948. *Problemy sravnitel'noj grammatiki tunguso-mančzhurskix jazykov* (Problems of a Comparative Grammar of the Tungus-Manchu Languages). Moscow: Nauka.
- Cincius, Vera I. 1975. *Sravnitel'nyj slovar' tunguso-mančzhurskix jazykov: Materialy k ètimologičeskomu slovarju* (Comparative Dictionary of the Tungus-Manchu Languages: Materials for an Etymological Dictionary) 1. Leningrad: Nauka.
- Creissels, Denis. 2009. Spatial cases. In *The Oxford Handbook of Case*, Andrej Malchukov & Andrew Spencer (eds), 609–625. Oxford: OUP.
- De Lancey, Scott. 1997. Grammaticalization and the gradience of categories. Relator nouns and postpositions in Tibetan and Burmese. In *Essays on Language Function and Language Type*, Joan Bybee, John Haiman & Sandra A. Thompson (eds), 51–69. Amsterdam: John Benjamins.
- Fillmore, Charles J. 1982. Towards a descriptive framework of spatial deixis. In *Speech, Place and Action: Studies in Deixis and Related Topics*, Robert J. Jarvella & Wolfgang Klein (eds), 31–59. Chichester: John Wiley.
- Grenoble, Lenore. A. 2011. Switch or shift: Code-mixing, contact-induced change and attrition. In *Instrumentarium of Linguistics: Sociolinguistic Approaches to Non-standard Russian* [Slavica Helsingiensia 40], Arto Mustajoki, Ekaterina Protassova & Nikolai Vakhtin (eds), 147–161. Helsinki.
- Grenoble, Lenore. A. 2013. The syntax and pragmatics of Tungusic revisited. In *Language Typology and Historical Contingency* [Typological Studies in Language 104], Balthasar Bickel, Lenore A., Grenoble, David A. Peterson, & Alan Timberlake (eds), 357–382. Amsterdam: John Benjamins. DOI: 10.1075/tsl.104.16gre
- Grenoble, Lenore A. & Whaley, Lindsay J. 2003. The case for dialect continua in Tungusic: Plural morphology. In *Current Trends in Caucasian, East European, and Inner Asian Linguistics: Papers in Honor of Howard Aronson* [Current Issues in Linguistic Theory 246], Dee Ann Holisky & Kevin Tuite (eds), 97–122. Amsterdam: John Benjamins. DOI: 10.1075/cilt.246.10gre
- Heine, Bernd, Claudi, Ulrike & Hünemeyer, Friederike. 1991. *Grammaticalization: A Conceptual Framework*. Chicago IL: University of Chicago Press.
- Hopper, Paul & Traugott, Elizabeth Closs. 1993. *Grammaticalization*. Cambridge: CUP.
- Johanson, Lars. 2012. Pyramids of spatial relators in Northeastern Turkic and its neighbors. In *Argument Structure and Grammatical Relations: A Cross-linguistic Typology* [Studies in Language Companion Series 126], Pirkko Suihkonen, Bernard Comrie & Valery Solovyev, (eds), 191–210. Amsterdam: John Benjamins. DOI: 10.1075/slcs.126.09joh

- Kilby, David. 1980. Universal and particular properties of the Evenki case system. *International Review of Slavic Linguistics* 5: 45–74.
- Kittilä, Seppo & Malchukov, Andrej. 2009. Varieties of accusative. In *The Oxford Handbook of Case*, Andrej Malchukov & Andrew Spencer (eds), 547–561. Oxford: OUP.
- Konstantinova, Ol'ga A. 1964. *Evenkijskii jazyk*. Moscow: Nauka.
- Lebedeva, Elena P., Konstantinova, Ol'ga A. & Monaxova, Iraida V. 1985. *Evenkijskij jazyk*. Leningrad: Prosveshchenie.
- Lehmann, Christian. 1985. Grammaticalization: Synchronic variation and diachronic change. *Lingua e Stile* 20: 303–318.
- Levinson, Stephen C. 2003. *Space in Language and Cognition. Explorations in Cognitive Diversity*. Cambridge: CUP. DOI: 10.1017/CBO9780511613609
- Nedjalkov, Igor. 1997. *Evenki*. London: Routledge.
- Nedjalkov, Igor. 1994. Syntactic types of Evenki NPs. In *The Noun Phrase Sketch Book*, Frans Plank (ed.). EURO TYP Working Papers VII/22: 1–4.
- Plank, Frans. 1995. (Re-)Introducing Suffixaufnahme. In *Double Case. Agreement by Suffixaufnahme*, Frans Plank (ed.) 3–109. Oxford: OUP.
- Romanova, Agnija V. & Myreeva, Anna N. 1964. *Očerki uchurskogo, majskogo i tottinskogo gorovorov* (Essays on the Uchur, Maj and Tottin dialects). Moscow: Nauka.
- Sadler, Louisa & Rachel Nordlinger. 2006. Case stacking in realizational morphology. *Linguistics* 44/3: 459–487.
- Starosta, Stan. 1985. Relator nouns as a source of case inflection. In *For Gordon Fairbanks, Veneeta Z. Acson & Richard L. Leed* (eds), 111–133. Honolulu HI: University Press of Hawaii.
- Talmy, Leonard. 1975. Semantics and syntax of motion. In *Syntax and Semantics*, Vol. 4, John Kimball (ed.), 181–238. New York NY: Academic Press.
- Talmy, Leonard. 1983. How language structures space. In *Spatial orientation: Theory, research and application*, Herbert L. Pick, Jr. & Linda P. Acredolo (eds), 225–282. New York: Plenum Press.
- Talmy, Leonard. 1991. Path to realization: A typology of event conflation. *Proceedings of the Seventeenth Annual Meeting of the Berkeley Linguistics Society: General Session and Parasession on The Grammar of Event Structure*, 480–519.
- Talmy, Leonard. 2000. *Toward a Cognitive Semantics*, Vol. 2: *Typology and Process in Concept Structuring*. Cambridge MA: The MIT Press.
- Vasilevich, Glafira M. 1940. *Očerki grammatiki èvenkiiskogo (tungusskogo) jazyka* (Essays on the Grammar of the Evenki (Tungus) Language). Leningrad: Uchpedgiz.
- Vasilevich, Glafira M. 1948. *Očerki dialektov èvenkiiskogo (tungusskogo) jazyka* (Essays on the Dialects of the Evenki (Tungus) Language). Leningrad: Uchpedgiz.
- Vasilevich, Glafira M. 1958. *Èvenkijsko-russkij slovar'* (Evenki-Russian Dictionary). Moscow: Gos. izdatel'stvo inostrannyx i nacional'nyx slovarnej.