Remarks on the Lative

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Abstract

According to the literature, the lative is a relatively rare case, found in certain Uralic and Caucasian languages. In this paper I shall look in detail at the lative in these languages and its function. I will show that the name 'lative' is applied in two senses, one of which is actually close to that of the allative used in grammars of other languages. This merits a reevaluation of the terminology employed in grammatical descriptions of the Uralic and Caucasian languages.

§1. Introduction. This paper is devoted to the study of the lative. This is a relatively rare case, and an official definition is hard to find. Even so, I have found the name in many books, especially on Uralic languages. Thus, it may be of value to answer the following questions:

- what exactly is the definition of the lative?

- how is the lative distinct from similar cases?

- which languages do or do not have a lative?

It will turn out that the lative is used in two senses; the first of these uses is relatively difficult to understand and requires some complex analysis of the structure

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of local cases. The second, however, is quite similar to what in grammars of other language families is called the allative.

The present paper also looks at a few of the languages in the above quotation to see what properties the lative of these languages actually have and whether and in what sense it deserves that label.

§2. Setting the Scene. Case is by origin a morphological category. Nouns and other words are said to have cases primarily because they have a certain morpheme added to them. However, case not only marks words in some way; case marking also affects the syntactic and semantic category of a constituent. As will emerge below, the effects of case marking on these three levels are different and partly independent of each other. For example, semantic cases (also known as deep cases) are different because they exclusively reflect the meaning of the constituent; it has always been clear that deep case is different from morphological cases. But it is very often less clear in what ways syntactic case is different from morphological case.

One argument to show that the two must really be distinct is from coordination (and similar constructions such as Right Node Raising). For example, it is possible to coordinate two case marked DPs with different cases as well as a case marked DP with a PP. (Here DEF means "definite", INESS "inessive" and SUPER "superessive".)

(1)
Jég	volt	a	szék.en	és	a	doboz.ban.
ice	was	DEF	seat-SUPER	and	DEF	box-INESS

'There was ice on the seat and in the box.'

(2)
Jég	volt	a	szék.en	és	az	asztal	alatt.
ice	was	DEF	seat-SUPER	and	DEF	table	under

'There was ice on the seat and under the table.'

I assume that two constituents can be coordinated only if they have the same syntactic category and the same *syntactic* case. In (1) the conjuncts have different morphological case, namely superessive and inessive, while under the assumption just made their syntactic case must be the same. Hence, syntactic case need not be the same as morphological case. Similarly, in (2) the morphological category of the conjuncts is different, and yet they can be coordinated. Therefore, we conclude that (i) the syntactic category and the morphological category of a constituent can be distinct, and (ii) the syntactic case and the morphological case of a constituent can also be distinct.

Thus, syntactic case is different from morphological case. This of course raises the question what exactly is syntactic case. Intuitively, one thinks of the syntactic case as being the morphological case; if that is so, they are simply identical. So that is not a viable hypothesis. One way out of the dilemma is the idea that even when we see a morphological case the corresponding syntactic case may be different. Kracht (2003) advocates the view that the morphological case may simply be absent in syntax (or, if you like, 'invisible'). The presence or absence in syntax is coupled with the presence or absence of its default case meaning. I shall give an example.

In Hungarian there is an accusative of temporal duration.

(3)
Volt.am	Budapest.en	egy	het.et
was-I	Budapest-INESS	one	week-ACC

'I was in Budapest for one week.'

Morphologically this is the same accusative as the accusative of direct objects. However, in this construction it has a specific meaning; and this meaning is absent for objects.

(4)
Egy	órá.t	vár.t.am	Péter.t
one	hour-ACC	wait-PAST-1sg	Peter-ACC

'I waited one hour for Peter.'

In this sentence /Pétert/ is the direct object of /vártam/. Its meaning is 'Peter' and not 'during Peter'. Similarly, the phrase /egy órát/ is *not* the direct object, it means 'for an hour' and not 'the hour'.

What I am advocating is that both forms are morphologically identical, they are both accusative as morphological case. But this case shows in syntax only on the direct object, and when it does it has no meaning of its own. When it is absent, however, it has a specific meaning, which we often equate with the meaning of the case as such (clearly this is so with the semantic cases, whence their name). Thus, one and the same morphological case can be present or absent in syntax. Such accusatives lack all characteristics of direct objects or complements, for example. This is reminiscent of the interpretability of features in the Minimalist Program. The main difference is that I do not consider features as interpretable or not; rather, in my view, every feature can be used in one or the other way. Second, in analogy of the accusative case, which is a morpheme, we can simply equate features with morphemes. This is what has effectively been proposed in Kracht (2003).

It has turned out that many cases, in particular local cases, warrant a bi- or even trimorphemic analysis. The elative case, for example, is a combination of

Table 1: The morphological accusative

Accusative of duration	Accusative of Objects
Has meaning	Has no meaning
Is not visible in syntax	Is visible in syntax

Table 2: Correspondences of the Elative

Syntactic Case	Meaning
$\langle L;M \rangle$	out of the iron
$\langle L \rangle$	in the iron
$\langle \rangle$	the iron

a morpheme L with meaning 'in' and a morpheme M with meaning 'from'. If it turns out that we can use morphemes either as interpretable or as uninterpretable features, we end up with the theory in Kracht (2003), which postulates that syntactic cases are simply sequences of morphemes. Now, given that on the surface the elative is the combination L+M, it may happen that one of them or both are invisible in syntax. The combination of an NP, say /rauta/ 'iron', with the morpheme L /s/, can thus either mean 'in the iron', and then have empty syntactic case; or it means 'iron' and has case L. When we add the M /ta/, we again have two choices. It can mean 'out of/from' and then be syntactically empty, or mean nothing and then add itself to the case sequence. From a semantic point of view, only three possibilities are well-formed. The fourth possibility, the case $\langle M \rangle$ is excluded on semantic grounds; this follows from the type logical analysis of Section 10 below. I summarize the choices for the morphological elative /rautasta/ as follows. I shall present a more detailed account below in Section 10. This accounts for restricted paradigms. The location denoting pronouns inflect only for directionality (/hol/ 'where' – /hova/ 'whereto' – /honnan/ 'from where'). This is because of their categorial status as LPs (see below and also Kracht (2003)).

It is important that features are more than bound morphemes. This allows for a treatment of selection which ignores the distinction between morphological cases and Ps. This allows to say that English has a dative which is expressed by /to/+DP, or a superessive expressed by /on/+DP. Whether or not English has such cases depends in this theory merely on whether there is a head that selects for them. That English has a superessive is documented by the fact that the verb

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/depend/ selects /on/+DP. This will have consequences for the notion of a lative, as we shall see below.

In practice, case names are largely based on semantic criteria, independently of the question whether that case may also be structural. The genitive is the case of the possessor, dative the case of the goal, and the instrumental the case of the instrument. The usefulness of these labels is obviously limited. One reason is that case meanings can almost never be completely transferred to another language. Also, one language may express a given concept by one case where another introduces finer distinctions. In Finnish the dative and the allative have the same form. In Hungarian the allative is different from the dative. In Nakh-Dagestanian languages, the dative is expressed differently depending on the exact meaning and the verb (Daniel et al. (2007)). In Tsez, for example, we need to distinguish temporary transfer from permanent transfer (Comrie and Polinsky (1998), Polinsky (2005), see also below).

Thus, to simplify the matter, we assume that there are a number of of basic cases functions, or deep cases, that get partitioned into various surface cases, and this partitioning can vary from language to language. Recall also from above that the label 'case' is also applied to Ps and other morphemes free or bound. It is clear that this picture is simplistic, but it will be sufficient for the present purposes.

However, I shall draw attention to the fact that not all discrepancies provide evidence that the idea of a list of deep cases is flawed. For example, the morphological essive in Finnish is used in different constructions than the essive in Hungarian. This does not necessarily mean that its meaning is different, that is, that the deep case "essive" is different in these languages. For example, it is a fact that the essive in Finnish is mandatory for adjectives in predicative constructions.

(5)
Matti oli sairana. (Finnish)
Matti was sick-ESS
'Matti was sick.'

(6)
Matti beteg volt. (Hungarian)
Matti sick was
'Matti was sick.'

Yet this does not mean that it expresses a different meaning. We can simply say that in the construction *N is A* the adjective requires essive case in Finnish and no case in Hungarian. (Similarly, the case that appears on adjectives in Finnish inside a DP must be ignored for meaning purposes. The only relevant instance is the one appearing on the head noun.) There is a general rule of semantic analysis whereby

an element contributes no meaning to a construction when its appearance is predictable from the context. Thus, whatever the meaning of the essive in Finnish, in this construction it is not present anyway. In this way, a contrast in distribution need not conflict with an identical meaning.

§3. Syntax Semantics Interaction.   The following summarizes what has been said so far.

① *Morphological case* (*M-case*) is a particular sequence of morphemes that can be affixed in the given order to a single noun and yield one word.

② *Semantic* or *deep case* (*D-case*) is the meaning denoted by some morphological or syntactic case. The relation between deep cases and surface (= morphological) cases can be many-to-many.

③ *Syntactic case* (*S-case*) is a sequence of morphemes that is selected by some head.

Thus, the syntactic cases are largely derivative of the morphological cases; in settling whether or not a language has a lative we shall not have to discuss the syntactic case system, though. The definition uses mainly morphological and semantic facts. Notice that both morphological and syntactic cases are identical in type: they are sequences of morphemes. While syntactic cases are quite easy to define, it is somewhat tricky to define exactly which sequences of morphemes constitute an M-case. The definition above serves the purpose well enough for our paper.

   Kracht (2003) has also analyzed the interaction between syntax and semantics. I argued that cases are signs consisting of a morphology, a meaning component (the D-case), and a syntactic category, part of which is a case attribute. The value of this attribute is an S-case. When a case morpheme is added, there are two choices:

① Its morpheme is added in the morphology, and to the S-case sequence. The semantics does not change.

② Its morpheme is added in the morphology, and its meaning in the semantics. The syntax remains the same.

Elements come out of the lexicon with an empty case sequence. However, they may themselves select for elements with a nonempty case (we shall deal with

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selection below); and this requirement is written into the lexicon. Since the semantics is typed, it is typical that once we add a morpheme as a syntactic case, other morphemes stacked on top will have to be added as a syntactic case. For the resulting meaning is the same, and typically is not of the required type for the next higher head. Thus, abstractly, if a noun receives in total 3 morphemes, say c, ℓ and m, then the resultant syntactic case for the same surface case may be either of the four options: $\langle\rangle$ (the empty sequence), $\langle m\rangle$, $\langle \ell, m\rangle$, and $\langle c, \ell, m\rangle$. The concomitant meanings are different in all these cases. This complexity is the reason for the apparent flexibility with which local expressions can be used.

§4. Organization of the paper. The point of this paper is twofold. One is to look in detail at the meaning of the lative and see whether there is a unified definition characterizing its use. Another is to see whether certain languages do have such a case. This is a nontrivial matter, for case names have already been assigned at some point and are now firmly associated with a case morpheme. However, since the baptism was done by different people for different languages there is bound to be inconsistency. One source of this inconsistency is that people used different naming schemes; another actually has to do with historical affiliation, to indicate an affinity with a similar case in a related language despite the fact that their meanings and functions are distinct.

The structure of this paper is as follows. I start with a survey of some case systems (§§ 6 – 9) and then turn to an analysis of locative cases (§§ 10 – 13). Then I discuss possible definitions of the lative in §§ 14. Finally, I take a closer look at Finnish, Mari and Tsez (§§ 15 – 18).

§5. The Lative. The lative is a lesser known case, so most textbooks (like Blake (1994)) do not mention it at all. Part of the reason is however not so much that other languages do not have a case that fits the description. It is also due to the fact that what in one language is called a lative is called something else in another language, sometimes because there simply are different understandings and uses of the case names.

Here is a definition from Wikipedia:

> Lative is a case which indicates motion to a location. It corresponds to the English prepositions 'to' and 'into'. The lative case belongs to the group of the general local cases together with the locative and separative case.

The lative case is typical of the Uralic languages and it was one of the Proto-Uralic cases. It still exists in many Uralic languages, e.g. Finnish, Erzya, Moksha, and Meadow Mari.

It is also found in the Northeast Caucasian languages, such as Tsez, Bezhta and Khwarshi.

(`http://en.wikipedia.org/wiki/Lative_case`)

Let us note the following facts about this definition.

⇨ The lative is a *case* in the traditional sense, that is, it is associated with a distinct morphological ending (in other words, an M-case).

⇨ The definition of the lative is *semantic*, so it is prima facie a *D-case*.

⇨ The lative denotes some *motion*, more precisely motion *in direction of* the location named by the location.

If the lative was purely semantically defined we expect many more languages to have a lative; but this does not seem to be the case. Of course, there is always the possibility that the case name is not used in other languages even though it would be appropriate. Yet, as we shall see below, the evidence within the Uralic languages shows that this cannot explain why so many of them do not have a lative. My own suggestion is that the lative is a case whose spatial meaning is maximally general, that is, is not differentiated. Thus, the lative does not further specify the exact location that forms the goal of motion. Typically, it can therefore mean either 'into', 'onto' or 'to'.

I present four languages in detail below: Hungarian, which has no lative according to the sources available to me, Finnish, which has remnants of a lative, and Mari and Tsez, both of which are said to have a lative. We shall then see how much of the claims really is supported by the facts.

§6. Hungarian. Hungarian has no less than nine local cases, shown in Table 3. It also has some predicative cases, the essive /házként/ 'as a house'; and the transformative /házzá/ '(changing) into a house'. As I remarked earlier, Hungarian is said to have no lative. This is because although it does have cases denoting motion to a location, it differentiates this meaning into three cases: the illative, the allative and the sublative.

Notice that we see plenty of case names ending in 'lative'. These are all directional cases. However, none of them qualifies for a lative.

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Table 3: Hungarian Local Cases

INESSIVE	ILLATIVE	ELATIVE
a házban	a házba	a házból
in the house	*into the house*	*out of the house*
ADESSIVE	ALLATIVE	ABLATIVE
a háznál	a házhoz	a háztól
at the house	*to the house*	*from the house*
SUPERESSIVE	SUBLATIVE	DELATIVE
a házon	a házra	a házról
on the house	*onto the house*	*(down) from the house*

Table 4: Finnish Local Cases

INESSIVE	ILLATIVE	ELATIVE
talossa	taloon	talosta
in the house	*into the house*	*out of the house*
ADESSIVE	ALLATIVE	ABLATIVE
talolla	talolle	talolta
at the house	*to the house*	*from the house*

§7. Finnish. The case system of Finnish (shown in Table 4) is similarly organized as the Hungarian case system. However, it only has two rows. Like in Hungarian, there are additional cases to be considered here, the essive /`talona`/ 'as a house' and the translative /`taloksi`/ '(changing) into a house'. The name translative is actually misleading, transformative would have been a better choice.

Now, Finnish is said to have a lative suffix */`s`/. It is claimed to exist in adverbials like /`ulos`/ 'to outside' (= /`ulo`/ + /`s`/), /`alas`/ 'to downstairs' (= /`ala`/ + /`s`/). I found this claim in Mäkinen (2004) but not in Karlsson (1984). However, there are some problems with this view. This 'case' in Finnish is unproductive and furthermore not a nominal case at all. The reason for calling this suffix a lative is because it actually derives from a PF (= Proto-Finnic) lative suffix */`s`/. This suffix can be seen in the inner cases (see the discussion in Blake

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Table 5: Local Cases of Mari

LATIVE	olmaš	*to the apple*
ILLATIVE	olmaš(ke)	*into the apple*
INESSIVE	olmašte	*in the apple*
ABLATIVE	olmaleč	*from the apple*
APPROXIMATIVE	olmaškôla	*in direction of the apple*

(1994)).[1] For example, /talosta/ decomposes into /talo/ 'house', /s/ 'inside', and /ta/ 'away from'. (/ta/ derives from a FU (= Finno-Ugric) ablative suffix.) Likewise, /talossa/ decomposes into /talo/, /s/ and /na/, the latter historically also being the ending of the essive in Finnish (see also Hungarian /a házon/ 'on the house'). The only form that poses some difficulties is the illative. However, it can be shown that /taloon/ actually contained the /s/. Nowadays, in words ending in a long vowel, the /s/ is still preserved. (For example, notice the form /Espooseen/ 'into Espoo', illative). The lative in Mari is /š/, as we shall see, lending further support to this analysis.

§8. Mari (= Cheremiss). Finally, here is the system of local cases of Mari (taken from Bereczki (1990)). We see that the ending /š/ of the lative actually occurs in the illative, inessive and approximative, but not in the ablative. It is a common pattern that the ablative is formed differently from the directional and the local cases. This pattern can be found in Indo-European as well.[2] Similar cases and distributions can be found in Mordvin (Keresztes (1990)) and Ostyak (see Honti (1984)).

§9. Tsez. The Tsez system is very rich. It distinguishes 7 spatial relations, and has the additional feature that local cases come in two varieties, a non-distal and a distal one. The local cases shown in Table 6 and 7 are taken from Comrie et al. (1999). The case names are as in Polinsky (2005). The latter shows far less cases

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[1]The PU (= Proto-Uralic) lative suffix was *ŋ. We shall not discuss the fate of this latter suffix in this paper.

[2]German prepositions are a case in point; the meaning 'to' is expressed with the same preposition as the meaning 'at' (/an/), only that the case that the preposition selects in turn is different. For 'from' you need a different preposition altogether (/von/). In English, the case distinctions are lost making most prepositions (eg /under/) ambiguous between local and directional meaning.

Table 6: The Locatives of Tsez (Non-Distal)

| Place ↓ | Motion → | | | |
	None (ESSIVE)	From (ELATIVE)	To (LATIVE)	Towards (VERSATIVE)
in (IN)	-ā	-āy	-ā-r	-āɣor
among (INTER)	-ł	-ł-āy	-ł-er	-ł-xor
at (AD)	-x(o)	-x-āy	-xo-r	-x-āɣor, -x-ār
under (SUB)	-ƛ	-ƛ-āy	-ƛ-er	-ƛ-ɣor
on (horizontal) (SUPER)	-ƛ'(o)	-ƛ'-āy	-ƛ'o-r	-ƛ-āɣor, -ƛ-ār
on (vertical) (CONT)	-q(o)	-q-āy	-qo-r	-q-āɣor, -q-ār
near (APUD)	-de	-d-āy	-de-r	-d-āɣor, -d-ār

for Tsez, and we shall return to the question below in § 18.[3] The difference of a distal case as opposed to a non-distal case is that the former marks the location as invisible or distant.

§10. Trimorphemic Analysis. Above I organized the cases into rows and columns. In this section I shall give some formal analysis to support this organization. It has emerged in work on locatives that their meaning is obtained in (at least) three steps, and some case systems even show this semantic layering in a morphologically transparent way. I propose to analyze local cases as a sequence of the following morphemes.

$$[[[[\text{talo}]_{\text{DP}} \quad -\varnothing]_{\text{LocP}} \quad -\text{s}]_{\text{LP}} \quad -\text{ta}]_{\text{DirP}}$$
the house   place of   in   away
  'from inside the house'

(The AxPart described in Svenonius (2006) is not needed in our discussion; its meaning is contained in the meaning of L. For a semantic analysis see Kracht (2008).) The parts are described as follows.

① DP 'the house': This is the *landmark*. The landmark is an object (or a group of objects) that serves to establish the reference location.

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[3]The morphological segmentation has also been taken from Comrie et al. (1999). [ɣ] is an uvular fricative, [q] an uvular affricate. [ƛ] and [ƛ'] are both lateral affricates, the latter in addition ejective. [ł] is a lateral fricative.

Table 7: The Locatives of Tsez (Distal)

| Place ↓ | Motion → | | | |
| | None | Away | To | Towards |
	(ESSIVE)	(ELATIVE)	(LATIVE)	(VERSATIVE)
in (IN)	-āz	-āz-ay	-āz-a-r	-āz-a
among (INTER)	-ł-āz	-ł-āz-ay	-ł-āz-a-r	-ł-āz-a
at (AD)	-x-āz	-x-āz-ay	-x-āz-a-r	-x-āz-a
under (SUB)	-λ-āz	-λ-āz-ay	-λ-āz-a-r	-λ-āz-a
on (horizontal) (SUPER)	-λ'-āz	-λ'-āz-ay	-λ'-āz-a-r	-λ-āz-a
on (vertical) (CONT)	-q-āz	-q-āz-ay	-q-āz-a-r	-q-āz-a
near (APUD)	-d-āz	-d-āz-ay	-d-āz-a-r	-d-āz-a

② LocP '∅ the house': *reference location*. Objects and their locations are semantically distinct. The reference location is simply the location occupied by the object itself. In this case it is where the bricks etc. are. To get this location we must apply some function that actually yields the location of an object.

③ LP 'in the house': A *neighborhood*. This is a set of regions, namely all regions that qualify for the description 'in the house'. This is clearly distinct from the reference location. The bookshelf is not part of the house, so its location is not part of the reference location, but it is in the house, so it is part of that neighborhood.

④ DirP 'out of the house': A *mode of change*. This describes how the trajector moves with respect to the neighborhood. It can, for example, move into it (*cofinal mode*), out of it (*coinitial mode*), it can approach the neighborhood (*approximative mode*), or remain (*static mode*) in it during event time.

I shall give a type theoretical analysis. I start with the first two morphemes, which generate the neighborhoods. Our types will be t of truth values, e of objects, z of time points, r of regions (path connected subsets of $\mathbb{R}^3$) and $r \to t$ of neighborhoods.

1. Let $\mathsf{loc}'(x)(t)$ be the location of x at t. Hence, loc' has the type $e \to (z \to r)$. LocP has the type $z \to r$. It denotes a time dependent location.

2. /in/, /on/, /under/ denote relations between regions; thus their type is $r \to (r \to t)$.

3. The time dependence is passed up: LP has the type $z \to (r \to t)$.

$$
\frac{
\begin{array}{ccc}
[[[\mathtt{talo}]_{\mathrm{DP}} & \varnothing]_{\mathrm{LocP}} & \mathrm{s}]_{\mathrm{LP}} \\
\underline{\mathsf{house}' : e \quad \mathsf{loc}' : e \to (z \to r)} & & \\
\mathsf{loc}'(\mathsf{house}') : z \to r & & \mathsf{in}' : r \to (r \to t)
\end{array}
}{
\lambda t.\mathsf{in}'(\mathsf{loc}'(\mathsf{house}')(t)) : z \to (r \to t)
}
$$

Notice that in the first step we used function application, while in the second step we used function composition. For $\mathsf{in}' \circ (\mathsf{loc}'(\mathsf{house}')) = \lambda t.\mathsf{in}'(\mathsf{loc}'(\mathsf{house}'))(t)$, by the definition of composition. If the base noun also depends on time (as does /president/) then we should likewise use composition: $\mathsf{loc}' \circ \mathsf{house}' = \lambda t.\mathsf{loc}'(\mathsf{house}'(t))$. However, semantic complications may arise when the object delivered by the DP changes during event time, which is not supposed to happen.

§11. Change of Place. I shall briefly say how the semantics deals with modes, that is, change of place. The DirP says how the trajector changes place relative to the landmark (cf. /John threw the ball out of the window./). The neighborhoods, that is the meanings of eg /under the house/, are graded, or "fuzzy" (O'Keefe (2003, 1996)). Rather than saying an object is in a neighborhood or outside of it, we say that it is *more or less* in the neighborhood. This allows us to say, for example, that the ball is under the table with degree 0.7. It is then more under the table than a ball that is under table with degree 0.5. Suppose now that the ball is rolling under a table; then the degree to which it is under the table will be rising. It will start out with, say, degree 0.1, and end with degree 0.95.

In place of setting t to be the set $\{0, 1\}$, the set of the standard truth values 0 and 1 we therefore put $t := [0, 1]$, which is the interval of numbers between 0 and 1. We then say that $\mathsf{to}'(P)(I)$ is true if the degree of truth of P increases monotonically in I and surpasses a critical value. We choose for P the proposition: *the trajector is in the said region*. This generalises an idea found in Fong (1997) that the meaning of modes are phase quantifiers. The generalization is in fact twofold. First, we admit more truth values and therefore allow for a lot more functions from the time interval to the set of truth values. Second, we place no restriction on the nature of the function itself, thus accounting for the possibility of no change (ESSIVE), or incomplete change (in the approximative). In the latter case there is no mention of that critical value to be surpassed.

§12. Selection.   Selection is an expectation of a head towards its complement concerning its form. The consequence of selection is that the selected parts of the complement are void of their meaning. For example, if a verb selects a complement in the genitive case then the meaning of the genitive marker is empty. This means that if the head has meaning *F* and the complement has meaning *M*, and the default meaning is function application, then the entire constituent has meaning *F(M)*. Thus, /`the description of the house`/ denotes the event of describing a house, and the event of describing something in the possession of the house. In this sense the contribution of the genitive case (more exactly by the P /`of`/) is zero.

It may be important to safeguard this principle against a misunderstanding. It is noted that the meaning of constructions does depend on the nature of the arguments, for example /`the discussion of the participants`/ versus /`the discussion by the participants`/. However, in the latter case the preposition only signals the participant of the event (participant of the discussion versus topic of discussion). In this case the meaning is a function of several arguments, and the P signals which of the arguments is denoted by the PP. Similarly with genitive of subject and genitive of object, which even can have the same form.

The trimorphemic analysis allows for very important distinctions in connection with selection. For as has been argued in Kracht (2003), selection is not necessarily a relation between two heads. Rather, it frequently happens that a head selects a *series* of heads. It follows that in the case of selection of local cases, we can have at least theoretically the following four forms of selection:

1. Case selection. The head selects all three morphemes of the local case: $\langle m, \ell, c \rangle$.

2. Locality Selection. This is the selection of $\langle m, \ell \rangle$.

3. Directionality selection. This is selection of $\langle m \rangle$ (cf. Kracht (2006)). The head selects only the Dir-head (cf. German /`sich irgendwo`/*`irgendwohin verstecken`/ 'to hide somewhere').

4. Null case selection. This is selection of $\langle \rangle$, corresponding to verbs that need an adverbial argument.

I shall briefly mention that there is a third possibility, namely the selection of just two heads. Such is the case with the German preposition /`nach`/ in the sense of 'behind', which expects a phrase denoting a location (/`nach Frankreich`/ 'to

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France', but not */nach dem Auto/ in the meaning of 'to the car'). We shall not deal with this case in order not to overcomplicate the discussion.

§13. Directionality selection.   In the Uralic languages directionality selection is quite common.

(7)   `Tuovi jäi bussi.in/`*`bussi.ssa.`
         Tuovi-NOM remained Bus-ILL/*bus-INE

(8)   `Tuovi pysyi `*`bussi.in/bussi.ssa`
         Tuovi-NOM remained *bus-ILL/bus-INE
         'Tuovi remained in the bus.'

As a consequence of the previous definitions we can see that directionality selection suppresses the motion meaning but not the place meaning. The fact that it obscures the motion meaning means that the directional may be present in a construction without there being motion. This has led Fong in Fong (1997) to claim that directionals in Finnish actually lack the directional meaning, because there is no way to cancel the meaning of a morpheme in her framework. However, the mechanism of directionality selection allows to maintain that directionals do have a directional meaning in Finnish, and that the absence of it in these constructions is due to selection (Kracht (2003)).

§14. Definition of the Lative.   We are now ready to give a definition of the *lative*. As an M-case it is a combination of an L head ℓ with unspecific local meaning and a Dir head *m* with meaning to′ (and the third morpheme converting the landmark into the reference location). Notice that the meaning of the element ℓ cannot be specific. This is why, for example, Finnish and Hungarian have no lative. For the case system has differentiated the morphological L heads, leading to several cofinal cases (in Finnish the Illative and Allative and in Hungarian additionally the sublative). The outer part is a morpheme denoting motion towards the location ('cofinal').

I should note that while the lative specifies the motion towards a location, there are other cases that are similar to the lative in that the location is only generally specified. One is the *prolative*, another the *ablative* and the *perlative*. The *prolative* specifies that the trajector is in motion but that its motion is stationary relative to the specified location. A case in point is found in sentences like 'Diana is walking on the meadows' or 'The ink is spreading on the paper'. The *perlative*

Table 8: Hungarian Postpositions

static	cofinal	coinitial	
alatt	alá	alól	'under'
mellett	mellé	mellől	'next to'
mögött	mögé	mögül	'behind'

specifies motion through a location; and the *ablative* a motion away from it. (Notice that both Hungarian and Finnish have an ablative. There is a terminological conflation here with the ablative in Mari, which is used both with general locations and so does not contrast with any other case, while in the ablative contrasts with one other case in Finnish, two other cases in Hungarian, and six in Tsez.)

There are alternatives to the previous definition, two of which I shall discuss here. One is to assume that it is an *archicase*, a group label applied to all cases in cofinal mode. Thus, the lative would be the set {ALLATIVE, ILLATIVE} in Finnish, and the set {ALLATIVE, ILLATIVE, SUBLATIVE} in Hungarian. This would be enough to explain why Finnish and Hungarian have no lative M-case: there is no single case to which the label can be applied.

A variation on this theme is to say that the lative simply is the *cofinal case*. Here, cofinal is the case consisting of the single M head for cofinal mode (in Finnish, for example, this is /Vn/, where V denotes a vowel). In a language with a genuine morphological lative the latter is composed out of three heads: c, ℓ and m. However, there also is the S-case $\langle m \rangle$, called *cofinal* in Kracht (2003). The latter naturally arises in the inflection of local nouns (see below), but also in postpositions in Hungarian, shown in Table 8. This pattern is very regular; there are additional words of this kind, for example /kint/ 'outside', with /ki/ 'to outside' and /kintről/ 'from outside'.

I have argued that in syntax there are circumstances when nouns in a local case actually are in the cofinal case. This happens under directionality selection: the verb expects a cofinal. The selection of the cofinal is especially frequent in Finnish. Thus, all the languages under discussion have a cofinal case. The cofinal actually fits the definition above just as well; in this sense Hungarian, Finnish, but also English can be said to have a lative.

All three definitions are different. Assume that the lative is a case consisting of three morphemes: $\langle m, \ell, c \rangle$. Then according to the first definition, this combination is a lative just in case m denotes cofinal mode and ℓ is most gen-

eral, covering 'in', 'at' and 'on'. According to the second definition, it is the set $\{\langle m, \ell, c\rangle, \langle m, \ell', c\rangle, \cdots\}$ of all M-cases containing m. According to the third variant it is simply the syntactic case $\langle m\rangle$.

§15. Finnish /s/.   Finnish has no lative in the first sense: a nominal case in cofinal mode, with general locational meaning. We have noted on the other hand that it has a suffix /s/ which is on the one hand the descendant of the FU lative. This suffix is called a lative in Mäkinen (2004). Let us take a look at the facts. Finnish synchronically has *two* morphemes /s/ with quite distinct use and meaning. One is the inner case suffix $/s_1/$ and the other is the ending of the adverbials $/s_2/$. The latter has directional meaning, the former does not. The latter attaches to locative adverbials, the former to nouns.

$$[[[\text{Espoo}_{\text{DP}} \quad \varnothing]_{\text{LocP}} \quad s_1]_{\text{LP}} \quad \text{een}]_{\text{DirP}}$$

Espoo	location	in	to

$$[\text{ulo}_{\text{LP}} \qquad\qquad s_2]_{\text{DirP}}$$

outside	to

We note the following.

⇨ The so-called lative $/s_2/$ does not constitute a nominal case.

⇨ The $/s_1/$ in the inner cases historically goes back to the suffix $/s_2/$

⇨ Synchronically the suffix $/s_2/$ is a Dir-head, the suffix $/s_1/$ an L-head.

The second point needs elaboration since we need to motivate the fact that directionals acquire a locative meaning. The third is a consequence of the semantic change since the distinction between Dir-heads and L-heads is in terms of their semantics.

before	→*after*
$/s_2/$	→$/s_1/$
directional	→place
Dir-head	→L-head

In between there is a stadium in which the lative suffix has lost its telic meaning and denotes both movement at a particular place (prolative) and in direction of (lative).

$$\neg P(x)(t_0) \wedge P(x)(t_1) \rightsquigarrow P(x)(t_1)$$

(These stages are often present in a language at the same time though in different mixtures.)

§16. The Lative in Mari.   According to Bereczki (1990)) these are the functions of the lative case in Mari.

1. Lative: rarely (!).

2. Prolative: /čerńila *puma*ɣ*aeš* šärlä/ 'the ink is spreading *on the paper*'

3. Illative: /Sâlwa wüt koč pašazâwlak *pušeš* šinӡ̂n wońӡat/ 'the workers are getting *on board of the ship* [and] cross the Selwa'

4. Inessive: /alem *kaj*âš šokšeš/ 'my strength is waning *in the heat*'

5. Transformative: /imńim *kuz*âkeš puaš/ 'to give a horse *as dowry*'.

6. Sometimes it is selected: /ərwezə *alaeš* koδen/ 'the son remained *in the city*'.

Alhoniemi has written at length about the local cases in Mari (see Alhoniemi (1967), Alhoniemi (1968), Alhoniemi (1975), Alhoniemi (1970)). In his words the lative is a *Wohin-Kasus* (directional case, more exactly cofinal). On the other hand he cites examples where the lative denotes the means:

(9)   pum *trakt*âreš kantat
        'They are bringing (the) wood with a tractor.'

I disagree with this assessment on the grounds that it cannot be demonstrated that the lative unequivocally denotes the means and not the location. In (9), for example, the wood is on the tractor so that the tractor is both means and location. Therefore, there is no evidence that it expresses the means. It is clear, though, that no relative motion is expressed. This suggests in fact that the lative has lost almost completely its directional meaning and has become a locative. It is therefore in competition with the inessive. The lative is used with verbs that denote change.

§17. Locative Nouns.   In Alhoniemi (1988), Alhoniemi has also described an interesting case of nouns whose inflection is different from that of ordinary nouns. A case in point is Mari /olâmbal/ 'bank'. Table 9 gives the full paradigm contrasted with that of /kit/ 'hand'. The explanation for the different behavior is

Table 9: Two Paradigms in Mari

nominative	kit	olə̂mbal
genitive	kiδə̂n	olə̂mbalə̂n
dative	kitlan	olə̂mballan
accusative	kiδə̂m	olə̂mbalə̂m
comparative	kitla	olə̂mballa
comitative	kitke	olə̂mbalγe
inessive	kiδə̂šte	olə̂mbalne
illative	kiδə̂ke	olə̂mbake
lative	kiδeš	olə̂mbalan
elative	—	olə̂mbač(ə̂n)

this. The word /olə̂mbal/ is composed with the help of /ə̂mbal/ 'on top of' (cf. Finnish /päällä/). Its literal meaning is something like 'the place to sit on'. Like its Finnish counterpart, this word comes from a noun meaning 'head', but has effectively become a postposition. In an earlier stage the inflection of nouns was different; this different stage is reflected in the 'inflection' of postpositions and adverbials. The compound expression /olə̂mbal/ is thus morphologically like a postposition, and inflects like one. This means that morphologically it has four cases only since these are the ones that can be derived from its status as a postposition. Compare that with the four forms of /ə̂mbal/:

(10)

static	ə̂mbalne	(< *nA)
cofinal 1	ə̂mba(l)ke	(< *k)
cofinal 2	ə̂mbalan	(< *n)
coinitial	ə̂mbač	(< *tA)

Its meaning however is that of a simple noun. Thus the need quickly arises to provide endings for all other cases, too. These are modeled after the inflection of standard nouns, after a suitable base has been established.

§18. Analysis of Tsez. Let us now turn to the Caucasian languages. According to Forker (2008), the Lative is found in Hinuq, and Tsez (also known as Dido), where it takes the form /r/, and in Khwarshi and Bezhta, where it takes the form /l/. It is absent in Hunzib. I shall concentrate on Tsez here, partly because the languages are quite similar to each other, partly because data on Tsez is more readily

available. Tsez differentiates 4 modes (static, cofinal, coinitial and approximative) and 7 localizers. Tsez is said to have a dative/lative case. Its ending is /r/. Often we find it in conjunction with /qo/.

(11)
kidb-ā	ži-qo-r	k'et'u	b-ikʷa-r-xo
girl:OBL-ERG	boy-POSS-DAT/LAT	cat:[III]-ABS	[III]-see-CAUS-PRES

‘The girl shows the cat to the boy.’

The suffix /qo/ is glossed as POSS, suggesting a meaning of possession, but its meaning is otherwise given as 'on (vertical)', whence it is a localizer. Moreover, according to Diana Forker (p.c.), /qo/ also rather has the meaning 'contact' (which may be the reason why Polinsky (2005) uses CONT instead). The suffix /r/ signals cofinal mode (cf. English dative /to/).

Like Finnish, Tsez has no verb 'to have' and uses the expression 'to someone is', whence the dative/lative is also used to express possession.

(12)
kidbe.qo.r	k'et'u	zow.si
girl:OBL-POSS-DAT/LAT	cat:[III]	be:PST-PST

‘The girl has a cat.’

Pending a closer analysis I shall suggest the following. It is known that local cases expand into the habitive domain (in Finnish the allative is used for the dative, for example). Furthermore, the transition from 'contact' to 'possession' is rather natural (in general, locatives may develop into H-possessives, see Heine and Kuteva (2002), a similar point for Tsez is argued in Comrie and Polinsky (1998)).

When governed by verbs of perception or emotion, /r/ appears without the the POSS-suffix:

(13)
ʔAli.r	Pat'i	y.eti.x
Ali-DAT/LAT	Fatima:[II]-ABS	[II]-love-PRES

‘Ali loves Fatima.’

This is one of the puzzling facts of Tsez, for prima facie we like to think of this /r/ as being the same as the morpheme meaning 'to'. Yet, if it is, it should be able to attach without a localizer. I can see two answers. One is historical: like Finnish the historical situation could have been that the case system originally only had the modes and that the differentiation into different localizers arose later. Notice here the similarity with Uralic languages: the morphology is transparent, and there are nouns ('locational nouns') to which the modalizers including /r/ can be added directly: /idu/ 'home', /idur/ 'to home', /id-āy/ 'from home' and /idu-ɣor/

'towards home' (Comrie and Polinsky (1998), the historical analysis presented here is only indirectly suggested by Comrie and Polinski via the comparison with Uralic). The other answer uses the difference in type. An experiencer predicate may expect not a location but a person in cofinal case. The only way to supply this argument is to attach the mode directly to the noun. However, as cases tend to be at least originally semantically motivated, this second answer is not satisfactory.

I note here another complication. I came across the following example.

(14)
di	nesi.q	žawab	esi.r.si
I.ERG	he-POSS	answer(NOM)	ask-CAUS-PST

'I asked him for the answer.'

As the the mode marker for essive is $\varnothing$, the gloss could also have been he-POSS-ESS.

The terminology of Polinsky (2005) is different. She has no case for the combination of CONT and LATIVE, and reserves the name 'lative' for the cofinal for the surface string consisting of the mode marker alone. Interestingly, she gives us the following data.

(15)
kidbā	t'ek'	uži.r	tełsi	
girl-ERG	book.ABS	boy-LAT	gave	(permanent transfer)

'The girl gave the boy a book (to keep).'

(16)
kidbā	t'ek'	uži.q	tełsi	
girl-ERG	book.ABS	boy-CONTESSIVE	gave	(temporary transfer)

'The girl gave the boy a book (for a while).'

What is interesting about this data is not just that the contrast between contessive and lative signals permanent versus temporary transfer.

Now, if as this data shows, /r/ can occur alone in Tsez, Tsez actually has a lative only in the sense of 'cofinal case'. This is in line with other observations, for example, that possession is expressed by the contessive, while verbs of knowledge and experience have their subjects in the lative. For all this suggests that the lative is a case that is selected rather than semantic. For a mode head can otherwise not be attached to a noun; this would result in a type mismatch. The only admissible combination is that the lative in Tsez invariably functions as a syntactic case. The weak point of this analysis, however, is that the alternation between /q/ and /r/ cannot be accounted for. For it suggests a semantic contribution of the selected case, an impossibility under the present analysis.

*§19. **Are there more languages with a lative?*** Among the Uralic languages, Ostyak and Mordvin also have a lative. The clearest case is that of Mordvin,

where it is stated in Keresztes (1990) that the lative as opposed to the illative does not allow to say whether motion is to or into. I should also note that Australian languages generally only have one ℓ, and it is used indiscriminately for 'in', 'on' and 'to'. The case corresponding to the lative is however generally called *allative*. Thus, it is important to realize that the lative is not such a rare phenomenon at all, and that in many languages it simply *is* the same as the allative.[4]

§20. Conclusion. Cases are caught between different classificatory systems. One is the morphological classification, another the semantic and a third the historical classification. None of them fits the other in an exact way. However, in establishing a terminology for cases that is used across languages we cannot use morphological criteria since they are language bound. Historical criteria work up to a point, since they might allow for a comparison within a language group. This leaves semantics as the only workable classificatory system. In order to apply it, however, we need to do a careful analysis of the semantics of the cases in the various languages.

The lative is interesting since it is by definition a directional case. Yet, Uralic languages have the tendency to use directionals with verbs of any kind of change, which cancels the directional meaning in certain constructions. Over time this can (and often does) lead to a general weakening of the directional meaning. The case then becomes a locative. On the other hand, Uralic languages insist on marking the directionality. Hence they feel compelled to reinstate the contrast between motion and non-motion and so they recruit new means for doing so. We can see that Finnish has already completed one round of this: the lative has lost its directional meaning, became a morpheme denoting inner locations, and new suffixes were added to convey directionality. Mari however was still relying for somewhat longer on the lative to carry the weight of denoting directionality. However, nowadays this meaning is lost almost completely but the language has not yet compensated for that loss. The lative no longer deserves to be called lative if we only look at its semantics.

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[4]I note here that the label allative is also somewhat ambiguous. The Finnish allative does not cover the same deep cases as does the Hungarian allative. Hence the term allative as any other label should be seen as relative to a language.

References

Alhoniemi, Alho. 1967. Über die Funktion des Wohin-Kasus im Tscheremissischen. No. 142 in Suomalais–Ugrilaisen Seuran Toimituksia. Helsinki: Suomalais–Ugrilainen Seura.

Alhoniemi, Alho. 1968. Suomen ja tšeremissin kielen suuntaijärjestelmien funktionaalisesta rakenteestä. (The functional structure of the direction-case systems in Finnish and Cheremiss.) Finnish with English summary. Sananjalka 10, 66–77.

Alhoniemi, Alho. 1970. Zur Ausdrucksweise des Mittels durch die Wohin-Kasus im Tscheremissischen. Symposium über Syntax der uralischen Sprachen, edited by Schlachter, Wolfgang, no. 76 in Abhandlungen der Akademie der Wissenschaften in Göttingen, 11–22. Vandenhoek Ruprecht.

Alhoniemi, Alho. 1975. Erästä suomen kielen paikallisijojen keskeisistä käyttötavoista. (On some characteristic usages of Finnish local cases). Finnish with German summary. Sananjalka 17, 5–24.

Alhoniemi, Alho. 1988. Postpositiorakenteiden synkroniaa ja diakronikaa. (Synchrony and diachrony of postpositional constructions), Finnish with German summary. Sananjalka 30, 27 – 42.

Bereczki, Gábor. 1990. Chrestomathia Ceremissica. Budapest: Tankönyvkiadó.

Blake, Barry J. 1994. Case. Cambridge Textbooks in Linguistics. Cambridge University Press.

Comrie, Bernhard and Maria Polinsky. 1998. The Great Daghestanian Case Hoax. Case, Typology and Grammar. In honor of Barry J. Blake, edited by Siewierska, Anna and Jae Jung Song, 95–114. John Benjamin's.

Comrie, Bernhard, Maria Polinsky, and Ramazan Rajabov. 1999. Tsezian languages. The Languages of the Caucasus, edited by Harris, Alice and Riek Smeets. London: Curzon.

Daniel, Michael, Zaira Khalilova, and Zarina Molochieva. 2007. Ditransitives in Nakh-Dagestanian. Handout, Max-Planck Institute, Leipzig.

Fong, Vivienne. 1997. The Order of Things: What Directional Locatives Denote. Ph.D. thesis, Stanford University.

Forker, Diana. 2008. Non-local uses of local cases in Daghestanian languages. Manuscript.

Heine, Bernd and Tania Kuteva. 2002. World Lexicon of Grammaicalization. Cambridge: Cambridge University Press.

Honti, László. 1984. Chrestomathia Ostiacica. Budapest: Tankönyvkiadó.

Karlsson, Fred. 1984. Finnische Grammatik. Hamburg: Helmut Buske Verlag.

Keresztes, László. 1990. Chrestomathia Mordvinica. Budapest: Tankönyvkiadó.

Kracht, Marcus. 2003. Against the Feature Bundle Theory of Case. New Perspectives on Case, edited by Brandner, Ellen and Heike Zinsmeister. CSLI.

Kracht, Marcus. 2006. Directionality selection. Linguistic Dimensions of Prepositions, edited by Saint-Dizier, Patrick, 101–114. Springer.

Kracht, Marcus. 2008. The Fine Structure of Local Expressions. Syntax and Semantics of Spatial P, edited by Asbury, Anna, Jakub Dotlacil, Berit Gehrke, and Rick Nouwen, 35–62. Amsterdam: John Benjamin's.

Mäkinen, Panu. 2004. Finnish grammar. http://users.jyu.fi/~pamakine/kieli/suomi/.

O'Keefe, John. 1996. The Spatial Prepositions in English, Vector Grammar, and the Cognitive Map Theory. Language and Space, edited by Bloom, Paul, Mary A. Peterson, Lynn Nadel, and Merrill F. Garrett, 277–316. Cambridge, Mass.: MIT Press.

O'Keefe, John. 2003. Vector Grammar, Places, and the Functional Role of the Spatial Prepositions in English. Representing Direction in Language and Space, edited by van der Zee, Emile and John Slack, no. 1 in Explorations in Language and Space, 69–85. Oxford: Oxford University Press.

Polinsky, Maria. 2005. Case systems. Handout Lecture 2.1, LSA.

Svenonius, Peter. 2006. The Emergence of Axial Parts. Nordlyd. Tromsø University Working Papers in Language and Linguistics 49–77.