

Case and Adverbials in Inari Saami and Finnish¹

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0. Introduction

This paper presents new data from Inari Saami, a language of the Finno-Ugric family spoken in northern Finland. The data will be contrasted with examples from a related language, Finnish, in order to explore the relationship between case-marked adverbials and event structure in the two languages. In particular, this paper will focus on two relations on the interface between morphosyntax and event semantics: (a) the *type* of case (grammatical vs oblique) associated with particular types of temporal adverbials (event delimiting vs non-delimiting); and (b) the relationship between accusative adverbials and aspect. Section 1 will provide a general overview of the case system of Inari Saami, and compare the role of oblique case for adverbial expressions in both Inari Saami and Finnish. Section 2 will focus on the distribution of accusative adverbials in the two languages.

Two main conclusions are drawn from the data (Section 3). Firstly, Inari Saami and Finnish pattern together in that for both languages, oblique case-marked adverbials do not delimit events. However, the two languages differ in the relationship between accusative case and aspect: in Inari Saami, not all accusative expressions are delimiting, while in Finnish, there is a one-to-one mapping between accusative case and event delimitation. These findings lend support to cross-linguistic hypotheses, particularly Tenny (1987), about the relationship between case and event structure.

1. Case in Inari Saami

Inari Saami (henceforth IS) is one of the Saami group of languages, currently spoken by approximately 250-400 people around the shores of Lake Inari in Finnish Lapland.² Word order in IS is extremely free. Like other members of the Finno-Ugric family, IS has a rich system of

¹ This paper is part of an ongoing joint project with Ida Toivonen. Thanks are due to our Inari Saami informants Anna Kuuva, Sammeli Kuuva, Kaarina Mattus and Iisakki Mattus; and thanks also to Pekka Sammallahhti, Satu Manninen and to Asya Pereltsvaig for valuable referee comments. All errors are definitely the responsibility of the author. This work was supported by British Academy research grants SG31040 and LRG31734.

² Inari Saami is listed as Seriously Endangered in the *Unesco Red Book of Endangered Languages* (Salminen 1993). No descriptive grammar has yet been published for this language. Alternate forms presented in the data reflect speaker variation.

inflection, including nine productive morphological cases. Examples are given below.

(1) Case paradigm for *litto* ‘alliance’ (Sammallahti & Morottaja 1993:125)

case	singular	plural
nominative	litto	litoḥ
genitive	lito	litoi
accusative	lito	littoid
illative	liiton	littooid
locative	littoost	littoin
comitative	littooin	litoigui'm
abessive	litottáá	litoittáá
essive	litton	
partitive	littod	

A tenth case, the (non-productive) prolativ, will also be discussed in Section 1.4.

1.1 IS stem phonotactics for case

Before the syntactic properties of the case system of IS are discussed, a brief overview of the stem phonotactics for case in IS will be presented to aid the reader in interpreting the data. Depending on the noun class and the case, stems may vary with respect to consonant quantity³ (2a, b), quality (2b, c), or related syllabic properties (2d):

(2) IS Stem phonotactics for case

a) $\eta > n$ with geminate in strong stem:

njuḥ nose.nom
 njune nose.acc/gen
 njunnee-st nose.locative
 njunnee-n nose.essive

b) $kk > h$ with stem variants:

okko week.nom
 oho week.acc/gen
 ooḥo-i-d week-acc-pl
 ohhoo-st week.locative
 okko-d week-partitive

³ IS has a three-way system of consonant quantity, with contrastive short, half-long and long consonants. Half-long consonants are marked with a subscript dot (C̣) in the orthography.

c) p > v with geminate in strong stem:

tupe	cottage.nom
tuve	cottage.acc
tuve-h	cottage-nom.pl
tuu vee-st	cottage-loc
tup pee-d	cottage-part

d) (') represents extra subglottal pulse in the preceding syllable (Sammalahti 1998):

kyes'si	guest.nom
kyesi	guest.acc/gen
kysessist	guest.loc

IS case morphology is therefore more complex than the case system of Finnish, which has only two consonant quantities and fewer stem classes for nouns.

1.2 Case-marked adverbials in IS

Along with Korean, Chinese, Arabic, Warumungu and Finnish, IS has case-marked temporal adverbials.⁴ Both oblique and structural cases may appear with temporal expressions, but accusative case specifically is associated with duration, frequency, and measure phrases (Maling 1993).

Following Borer (1994), Wechsler & Lee (1996), and Pereltsvaig (2001), accusative adverbials are assumed to bear structural case and to function as *event delimiters*, which both delimit and quantize or 'measure out' an otherwise unbounded event in a similar way to direct objects (Tenny 1987):

- (3) Tun lavluh uppâ peivi. (IS)
you.sg sing.past.2s whole day.acc
 'You sang the whole day.'

In (3), the core predicate *lavluh* '(you) sang' is atelic (i.e. lacks an endpoint); the addition of the accusative expression *uppâ peivi* 'the whole

⁴ This paper will focus on temporal adverbials only and ignore other accusative-marked delimiters e.g. distance and location adverbials. However, as Asya Pereltsvaig (pers comm) has pointed out, it would be very interesting to see if other accusative adverbials in IS behave in a similar way. More research is needed to look at the case-marking and interpretation of other classes of adverbials in IS.

day’ to the VP therefore changes the event structure of the lexical verb. It makes the predicate VP bounded and provides an endpoint, because the end of the day also marks the end of the singing event. It also ‘measures out’ the event: when the day is half finished, the singing event is also half finished. In this sense *uppâ peivi* resembles a direct object, even though it is not an argument of the lexical verb.

In contrast, IS time adverbials marked with other cases, especially the locative case, are non-delimiting in the sense that they locate an event in time, but do not specify an endpoint or measure out the event:

- (4) Poccud livvuaðe táán ohhoo-st. (IS)
reindeer.pl sleep.3p this week-loc
 ‘The reindeer (will) sleep this week’

As in example (3), the lexical predicate *livvuaðe* ‘sleep’ in (4) is inherently atelic. However, the locative adverbial *ohhoost* ‘this week’ does not measure out the event the same way as the accusative *uppâ peivi* ‘the whole day’: the week being half finished does not entail that the sleeping event is also half finished. All that is known is that some sleeping will occur at some point during the week. The adverbial does not delimit the event either; the end of the week may or may not coincide with the end of the sleeping event.

Based on these intuitions, temporal adverbials will be classified in the following sections into two types, *delimiting* and *non-delimiting*. It will be argued that in both IS and Finnish, oblique case-marked adverbials in IS are non-delimiting, but that the two languages differ in the aspectual properties of accusative expressions.

1.3 Oblique cases and temporal expressions in IS and Finnish

Both IS and Finnish allow time expressions in oblique (i.e. non-structural) cases to locate an event in time, but not to delimit the event. Finnish employs a variety of cases in these environments, including adessive, inessive and essive forms; in IS some of these cases are conflated to a single locative case (temporal modifiers such as IS *pyätte* / Finnish *ensi* ‘next’ and IS *moonâm* / Finnish *viime* ‘last’ do not inflect for case):

- (5) a) Tun lávluh pyätte ohhoo-st. (IS)
you.sg sing.2s next week-loc
 ‘You will sing next week.’
 b) Sinä laula-t ensi viiko-lla. (Finnish)
you.sg sing-2s next week-adess

- (6) a) Muoi kuáláástáin moonâm ohhoo-st. (IS)
we.du fish.past.1du last week-loc
 ‘We (two) fished last week.’
- b) Me kalast-i-mme viime viiko-lla. (Finnish)
we fish-past1p last week-adess

In the examples above, the locative and adessive expressions are non-delimiting because they do not signal the endpoint or measure out the atelic event. The addition of these adverbials to an atelic predicate yields another atelic (or unbounded) predicate.

For events that are potentially bounded, both IS and Finnish signal that the event is delimited with accusative case on the direct object, while the non-delimiting adverbial occurs in locative or essive case:

- (7) a) Muoi puurain kuolijd onne iðeði-st. (IS)
we.du eat.past.1du fish.pl.acc today morning-loc
 ‘We two ate fish this morning.’
- b) Me sö-i-mme kala-t tä-nä aamu-na. (Finnish)
we eat-past.1p fish-pl.acc this-ess morning-ess
- (8) a) Almai vuájuttij kárbá tiihme-st. (IS)
man sink.past.3s boat.acc hour-loc
 ‘The man sank the boat in an hour.’
- b) Mies upott-i venee-n tunni-ssa. (Finnish)
man sink-past.3s boat-acc hour-iness
- (9) a) Sun rahti táálu kulmân ~ kuulmâ ivvee-st. (IS)
s/he build.past.3s house.acc three year-loc
 ‘S/he built the house in three years.’
- b) Hän raken-si talo-n kolme-ssa vuode-ssa. (Finnish)
s/he build-past.3s house-acc three-iness year-iness

Neither language has a restriction on multiple locative expressions within the same finite clause; this is as expected, since they do not affect the aspectual status of the predicate:

- (10) a) Kuobžâh lijjii meeci-st moonâm ohhoo-st. (IS)
bear.pl be.past.3p forest-loc last week-loc
 ‘(The) bears were in the forest last week.’

- b) Karhu-t olivat metsä-ssä viime viiko-lla. (Finnish)
bear-pl be.past.3p forest-iness last week-adess

The data presented in this section show that IS and Finnish pattern in similar ways with respect to the distribution of non-delimiting oblique adverbials. Later, in Section 2, it is shown that Finnish, but not IS, has stricter constraints on accusative time adverbials. The explanation for this will hinge on different relationships between structural case and event structure in the two languages. The next section discusses new data from IS for other, non-locative cases in temporal expressions.

1.4 Genitive and prolative time expressions in IS

One interesting feature of the IS case system is that some non-delimiting time adverbials appear marked with genitive case.⁵ As can be seen from the examples, the equivalent expressions in Finnish appear in the essive, not the genitive:

- (11) Muoi tansajen **oho** keccin. (IS)
we.du dance.1du week.gen following
 ‘We will dance in a week (from now).’
- (12) a) **Tái iyii** mun rahtin tááluid. (IS)
this.pl.gen year.pl.gen I build.past.1s house.pl.acc
 ‘During these years I built houses.’
- b) ?Nä-i-na vuos-i-na minä rakensin talo-t. (Finnish)
this-pl-ess year-pl-gen I build.past.1s house-pl.acc
- (13) a) **Tái ohoi** lii arvan ennuu ~ ânnuu. (IS)
this.pl.gen week.pl.gen is.3s rain.pcp a lot
 ‘These weeks it rains a lot.’
- b) Nä-i-nä viikko-i-na on sata-nut paljon ve-ttä. (Finnish)
this-pl-ess week-pl-ess is.3s rain-pcp a lot water-acc

Interestingly, there is some speaker variation with respect to the genitive in time expressions in IS; genitive sometimes alternates freely with locative:

- (14) a) Táán **oho ~ ohhoo-st** luámáneh láttih. (IS)
this week.gen ~ week-loc cloudberry.pl ripen.3p
 ‘This week the cloudberry ripen.’

⁵ In this way IS differs from North Saami, which uses genitive for delimiting adverbials.

- b) Tä-llä viiko-lla hilla-t kypsy-vät. (Finnish)
this-adess week.adess cloudberry-pl ripen-3p

These facts suggest that genitive in these environments is not necessarily structurally assigned, since it occurs both with demonstrative pronouns (14), where it alternates with locative case, and with postpositions (11). Although more work is needed to establish the syntactic properties of the genitive in temporal expressions, including word order effects if any, it will be assumed that genitive here has the status of an inherent rather than a structural case.

Another unusual pattern to emerge from the IS data involves an archaic prolicative case. The prolicative case is no longer fully productive in any of the Saami languages⁶ (see the table in 1) but has been retained in IS associated with a few non-delimiting time expressions, for example seasons (Pekka Sammallahti pers comm):

- | | | | |
|------|----------|-------|---------|
| (15) | | NOM | PROL |
| | ‘summer’ | keesi | keessiv |
| | ‘winter’ | tälvi | tälviv |
| | ‘autumn’ | čohčâ | čohčuv |
| | ‘spring’ | kidđâ | kidđuv |

In contrast to prolicative environments for IS, temporal location for seasons is expressed in Finnish via the locative and essive cases:

- (16) a) Keesi-v muu enni áásáh meeci-st. (IS)
summer-prol my mother live.3s forest-loc
 ‘In the summer my mother lives in the forest.’
- b) Kesä-llä äiti-ni asuu metsä-ssä. (Finnish)
summer-adess mother-1s live.3s forest-iness
- (17) a) Kiđđu-v párnáh siârâđeh olgon. (IS)
spring-prol child.pl play-3p outside
 ‘In the spring the children play outside.’
- b) Kevää-llä lapse-t leikki-vät ulkona. (Finnish)
spring-adess child-pl play-3p outside

⁶ For this reason it may be more appropriate to analyse these ‘prolicative’ forms as lexicalised adverbials. However, this still raises the interesting question of why Finnish has productive case-marked forms for these expressions and IS does not (Asya Pereltsvaig pers comm).

The IS prolativ case also occurs with days of the week:

- (18) a) Purruij-uv âânnâp lāvurtu-v ko moonnâm turastu-v? (IS)
eat-qu more Saturday-prol than last Thursday-prol
 ‘Did one eat more last Saturday than last Thursday?’
- b) Syö-ttiin-kö lauantai-na enemmän kuin viime torstaina? (F)
eat-pass-qu Saturday-ess more than last Thursday-ess

Again, Finnish non-delimiting expressions with days of the week occur in essive case in the same environments as IS prolatives.

In the next section, the distribution of accusative adverbials in the two languages will be examined.

2. Accusative adverbials as delimiting expressions

The data presented above show that when temporal adverbials are marked with oblique cases (locative and essive cases for Finnish, and locative, genitive and prolativ cases for IS), the adverbial does not delimit or measure out the event. In other words, an atelic event with an oblique case-marked adverbial in these languages is still unbounded and non-delimited. As mentioned in the previous section, both IS and Finnish also mark duration, frequency, and measure adverbials with accusative case; these expressions are potential *event delimiters*. This section will examine data from both languages in light of several cross-linguistic generalisations. Specifically, (a) Arad (1998) argues that all measurers are universally marked with accusative case; and (b) Tenny (1987) states that only one delimiting expression may occur within a given VP. At the same time, Arad also argues that only direct objects can measure out events. Pereltsvaig’s (2001) counter-position will be adopted here, namely that both direct objects and accusative adverbials can be event measurers. The data from both IS and Finnish support Arad’s first hypothesis, in the sense that event measurers in both languages, both direct objects and delimiting adverbials, do occur in accusative case as predicted. However, as is clear from the data below, accusative case and event delimitation do not always have a one-to-one relationship at the morphosyntactic level. While IS allows two accusative expressions within the same VP, only the adverbial in these cases appears to be the event measurer (section 2.3). Finnish, on the other hand, displays a much closer link between case and event structure: the semantic constraint on multiple event delimiters is mirrored by a morphosyntactic constraint on multiple accusatives within a single VP (section 2.1).

2.1 Accusative adverbials in Finnish

The distribution of objective case in Finnish as it relates to event structure has attracted a fair amount of attention in the literature (Heinämäki 1984, de Hoop 1992, Kiparsky 1998). Generally speaking, accusative case on the direct object signals that the event is +BOUNDED at VP-level (19a), while partitive case signals that it is –BOUNDED (19b):⁷

- (19) a) Aili rakensi venee-n.
Aili built.3s boat-acc
 ‘Aili built a/the boat.’
- b) Aili rakensi venettä.
Aili built.3s boat-part
 ‘Aili was building a/the boat.’

The addition of an accusative adverbial delimits an otherwise unbounded event (20a, b). However, Finnish disallows accusative case on both the direct object and the adverbial (20c):

- (20) a) He lauloi-vat laulu-t.
they sang-3p song-pl.acc
 ‘They sang (the) songs.’
- b) He lauloi-vat laulu-j-a koko yö-n.
they sang-3p song-pl.part whole night-acc
 ‘They sang songs the whole night.’
- c) *He lauloi-vat laulu-t koko yö-n.
they sang-3p song-pl.acc whole night-acc

These facts show that for Finnish, as is the case cross-linguistically, only one delimiting expression is available per VP (Arad 1998, Tenny 1987). In syntactic terms, this looks like a restriction on more than one accusative-marked DP occurring in a given predicate. If the adverbial bears accusative case, the direct object must appear in partitive case (20b, 21a). Conversely, if the direct object is accusative, case-marked temporal adverbials must bear oblique (inessive) case, not accusative case (21b):

⁷ This is admittedly an oversimplification of the system in Finnish, since the partitive-accusative case alternation is associated with NP semantics (mass/count, definiteness, specificity) as well. Objects appear in the accusative only if both the NP and the VP are +BOUNDED (Kiparsky 1998).

- (21) a) Matti osti maito-a tunni-n.
Matti bought.3s milk-part hour-acc
 ‘Matti bought milk for an hour.’
- b) Matti osti maido-n tunni-ssa / *tunni-n.
Matti bought.3s milk-acc hour-iness / hour-acc
 ‘Matti bought the milk (with)in an hour.’

As shown in the previous section, inessive time expressions such as Finnish *tunnissa* in (21b) do not function as event delimiters, but accusative objects do.

One important question that arises from these examples involves the nature of the syntax-semantics interface. Given the close relationship between case and event structure in Finnish, is the restriction on multiple accusatives encoded in the syntax or does it fall out of purely semantic constraints? Evidence from stative predicates (Itkonen 1976) supports the latter view: one class of verbs (what Kirparsky 1998 terms ‘bounded states’) allow both an accusative direct object and an accusative adverbial:

- (22) Näi-n naise-n koko tuo-n tunni-n.
saw-1s woman-acc whole that-acc hour-acc
 ‘I saw the woman for that whole hour.’
- (23) Tiesi-n vastaukse-n koko viiko-n.
knew-1s answer-acc whole week-acc
 ‘I knew the answer all week.’

Unlike other event types, states are not delimited by their direct objects (Tenny 1987). A duration adverbial, however, can delimit a stage-level state in the sense that it signals that the state has an endpoint (though it does not *measure* an event in the same way as a direct object; seeing a woman for half an hour does not entail seeing half a woman). As expected, the adverbial bears accusative case, but because the direct object itself is not a delimiter, the aspectual constraint on multiple accusatives is not violated.⁸ Importantly, stative predicates such as (22-23) show that a two-way correlation between accusative case and event delimitation is untenable; although it may be true that event delimiters are always accusative (Arad 1998), accusatives are not always event delimiters.

⁸ The question remains as to why this class of (typically stage-level) stative verbs select accusative objects in the first place, when most stative verbs in Finnish take partitive objects. See Kirparsky (1998) for a discussion of these phenomena.

In the next section, the distribution of accusative adverbials in IS will be explored in light of these generalisations for Finnish.

2.2 Accusative adverbials in Inari Saami

Like in Finnish, IS duration adverbials bear accusative case when they delimit events. Certain verbs select accusative duration adverbials as arguments (24b and 25b), or adjunct accusative adverbials may delimit an otherwise unbounded event (26, 27):

- (24) a) Tiime lâi kukke. (IS)
hour.nom was.3s long
 ‘The hour was long.’
- b) Lavlum piištij tijme. (IS)
singing lasted.3s hour.acc
 ‘The singing lasted an hour.’
- (25) a) Ijjâ lâi sâvnâd. (IS)
night.nom was.3s dark
 ‘The night was dark.’
- b) Juhle piištij uppâ ijjâ. (IS)
party last.past.3s whole night.acc
 ‘The party lasted all night.’
- (26) Tun vaccih tijme. (IS)
you.sg walked hour.acc
 ‘You walked for an hour.’
- (27) Sun lâi illâvaje uppâ čoovča. (IS)
s/he was.3s ill whole autumn.acc
 ‘S/he was ill all autumn.’

Like Finnish, IS allows more than one accusative expression in ‘bounded states’ (typically stage-level verbs of perception, mental states, etc):

- (28) Mun oinim tuu ubbâ ton tijme. (IS)
I see.past.1s you.acc whole that.acc hour.acc
 ‘I saw you that whole hour.’
- (29) Mun muštım mainâs tijme. (IS)
I remember.past.1s tale.acc hour.acc
 ‘I remembered the tale for an hour.’

However, IS does not show the same restriction as Finnish when it comes to non-stative predicates. Unlike Finnish, IS allows an accusative direct object to co-occur with an accusative adverbial:

- (30) a) Tun vuojih tuâid⁹ avdoid uppâ táid iivijd. (IS)
you.sg drive.past.2s those.acc cars.acc whole these years.acc
 ‘You drove those cars all these years.’
- b) *Sinä ajo-i-t nuo auto-t koko nämä vuode-t. (F)
you drive-past-2s those car.pl.acc whole these year-pl.acc
- (31) a) Sij lavluu lavluid uppâ iijjâ. (IS)
they sang.3p song.pl.acc whole night.acc
 ‘They sang (the) songs all night.’
- b) *He lauloivat laulu-t koko yö-n. (Finnish)
they sang.3p song-pl.acc whole night-acc
- (32) a) Sun raahitij kárbá uppâ iijjâ. (IS)
s/he built.3s boat.acc whole night.acc
 ‘They built the boat all night.’
- b) *Hän rakensi venee-n koko yö-n. (Finnish)
s/he built.3s boat-acc whole night-acc

The explanation for the acceptability of the IS examples above lies in the relationship between case and event structure in IS compared to Finnish. As mentioned above, Finnish has two objective cases, accusative and partitive, which alternate according to the boundedness of the predicate. An accusative direct object in Finnish triggers a +BOUNDED interpretation (19 above). However, objective case in IS does not encode the feature +/-BOUNDED, and there is no equivalent of the partitive-accusative alternation reflected in the case morphology. Instead, accusative is normally the default structural case for direct objects:

- (33) Mun luuhim kirje. (IS)
I read.past.1s book.acc
 ‘I read the book / I was reading the book.’

IS informants provide (33) as a translation from Finnish with both accusative and partitive objects, and confirm that an accusative object in IS is ambiguous between a +BOUNDED and a –BOUNDED interpretation.

⁹ *Tyeid* appears as a variant form of this demonstrative pronoun.

Since the objective case morphology of IS does not signal aspectual contrasts, the question remains as to which accusative expression (or both) in a potentially bounded predicate like (32) delimits the event. If both are interpreted as event delimiters, then the IS data pose a potential challenge to the generalisations mentioned above by Arad (1998) and Tenny (1987) that each predicate may only contain one delimiter. In fact, informant intuitions support their proposals. In sentences like (7-9), where an accusative direct object occurs with a locative adverbial, the object is interpreted as the event delimiter (34a, 35a). In sentences with two accusative expressions like in (32), the event is interpreted as delimited by the temporal adverbial but not by the object (34b, 35b):

- (34) a) Sun raah̄tij kárbá̄ t̄ijmest. (IS)
s/he built.3s boat.acc hour.loc
 ‘They built the (whole) boat all night.’
- b) Sun raah̄tij kárbá̄ uppâ̄ iijjâ̄. (IS)
s/he built.3s boat.acc whole night.acc
 ‘They built (some of) the boat all night.’
- (35) a) Eeči čurkij uáđimviste t̄ijmest. (IS)
father clean.past.3s bedroom hour.loc
 ‘Father cleaned (the whole) bedroom in an hour.’
- b) Eeči čurkij uáđimviste tuon̄ iijđeet. (IS)
father clean.past.3s bedroom that.acc morning.acc
 ‘Father cleaned (some of) the bedroom that morning.’

(34a) and (35a) entail that the entire boat was built and the entire room was cleaned, whereas (34b) and (35b) do not entail such a result, only that the whole span of time (morning or night) has elapsed. Although IS predicates with two accusative DPs appear to violate the general constraint on delimiting expressions, in fact the “problem” is morphological. IS turns out to pattern less like Finnish and more like Russian, which also allows two accusative expressions in a single predicate but only with imperfective verbal morphology (Pereltsvaig 2001:11-12):

- (36) Maria taskala /*pritaschila knigu ves’ vecher.
Mary carried.imprf / carried.prf book.acc all.acc evening.acc
 ‘Mary carried / brought the book for the whole evening.’

Inari Sami does not encode perfectivity via verbal morphology, but the irresultative interpretation of (34b) and (35b) means that the accusative

direct object is not an event delimiter. Russian and Inari Saami, then, also provide evidence against a one-to-one correlation between accusative case and event delimitation: all event delimiters are accusative, but not all accusatives are event delimiters.

3. Conclusion

Both Inari Saami and Finnish are languages with rich case morphology, which employ a variety of grammatical and oblique cases with temporal adverbials. The data presented here firstly support a broad taxonomy of case with respect to event delimitation. In both languages, oblique case-marked adverbials (especially locative and essive) are non-delimiting; they may locate the event in time, but they do not signal an aspectual bound. In Inari Saami, two non-locative cases, prolativ and genitive, may also pattern in this way. Conversely, in both languages, objects or adverbials that do delimit events are marked for accusative case. This is consistent with Arad's (1998) proposals about the link between accusative case and event structure cross-linguistically.

However, accusative case in Inari Saami turns out to have a distinct distribution from the same case in Finnish in +BOUNDED events. While Finnish disallows an accusative direct object with an accusative adverbial, IS has no such restriction. This is shown to be the result of different relationships between case and event structure in the two languages. While accusative case in Finnish is closely associated with event delimitation and the aspectual feature +BOUNDED, no isomorphic association holds in IS: accusative case for direct objects does not entail event delimitation. On the other hand, the case system of Finnish is "transparent" with respect to event structure: with accusative direct objects, 'what you see is what you get'.

References:

- Arad, Maya. 1998. *VP-structure and the syntax-lexicon interface*. PhD Thesis, University College London.
- Borer, Hagit. 1994. 'The projection of arguments,' In E. Benedicto & J. Runner (eds) *Functional Projections*. UMass Occasional Papers 17, pp. 19-48.
- de Hoop, Helen. 1992. *Case Configuration and Noun Phrase Interpretation*. PhD thesis, University of Groningen.
- Heinämaa, Orvokki. 1984. 'Aspect in Finnish,' in C. de Groot and H. Tomola (eds) *Aspect Bound*. Dordrecht: Foris, pp. 153-177.
- Itkonen, Terho. 1976. 'Erään sijamuodon ongelmia,' *Opusculae Instituti Linguae Fennicae, Universitas Helsingiensis* 53.
- Kiparsky, Paul. 1998. 'Partitive case and aspect,' in M. Butt & W. Geuder (eds) *The projection of arguments. Lexical and compositional factors*, Stanford: CSLI Publications, pp. 265-308.

- Maling, Joan. 1993. 'Of nominative and accusative: the hierarchical assignment of grammatical case in Finnish,' in A. Holmberg and U. Nikanne (eds) *Case and Other Functional Categories in Finnish Syntax*, Berlin: Mouton de Gruyter, pp. 49-74.
- Pereltsvaig, Asya. 2001. 'On accusative adverbials in Russian and Finnish,' in A. Alexiadou and P. Svenonius (eds.), *Adverbs and Adjunction, Linguistics in Potsdam 6*, pp. 155-176.
- Salminen, Tapani. 1993. *Unesco Red Book on Endangered Languages: Europe*, http://www.helsinki.fi/~tasalmin/europe_report.html.
- Sammallahti, Pekka. 1998. *The Saami Languages: An Introduction*, Karasjok, Norway: Davvi Girji OS.
- Sammallahti, Pekka & Morottaja, Matti. 1993. *Säämi-Suomâ Sänikirje / Inarinsaamelais-suomalainen sanakirja* [Inari Sami-Finnish Dictionary], Ohcejohka: Girjegiisá Oy.
- Tenny, Carol. 1987. *Grammaticalizing Aspect and Affectedness*, PhD thesis, MIT.
- Wechsler, Stephen & Lee, Yae-Sheik. 1996. 'The domain of direct case assignment,' *Natural Language and Linguistic Theory* 14, 629-664.