

Morphological case and interpretation

There are a variety of approaches to case alternation in Finnish, including Vainikka 1989, Nelson 1998, Kiparsky 1998, 2001, and Kratzer 2004. These offer an account of the alternation between partitive and other structural cases (acc/nom) on nominals. The majority of the proposals focuses on a subset of the environments where case alternation is attested. I propose a Minimalist account which covers all environments, providing a natural description of partitive case.

Case marking in Finnish: The basics. Abstract and morphological case (see Legate 2008) must be sharply distinguished in a successful account of case in Finnish. I assume that *abstract case* is licensed as usual in earlier Minimalist treatments (e.g. in Chomsky 2001), by checking the [Case] feature of the DP. Subject [Case] is licensed (= checked) by T and object [Case] by ν , both in the syntactic component. *Morphological case* (m-case) is determined in the postsyntactic morphological component, which I assume to be sensitive to compositionally determined semantic properties. The relevant semantic property is divisibility, a type of homogeneity, since partitive case arises within divisible domains. Roughly, a predicate P is divisible iff whenever $P(x)$, then for all $y \subseteq x$, $P(y)$. For instance, either a divisible eventuality (more precisely, a νP , *loving x* in (1a)) or a divisible object (*apples* in (1b)) can yield partitive m-case on the object:

- | | | | | | | | |
|------|--------------------|---------------|---------------|---|---------------------------|--------------|---------------|
| (1)a | Hän | rakasti | <u>kissaa</u> | b | Hän | osti | <u>omenia</u> |
| | he.NOM | love.PAST,3SG | cat.PART | | he.NOM | buy.PAST,3SG | apples.PART |
| | 'He loved the cat' | | | | 'He bought (some) apples' | | |

I argue that divisibility is determined compositionally, at LF. Duplicating the compositional process within syntax is superfluous, and it also raises some problems for coercion phenomena. In sum, m-case is influenced by semantic properties, and it is determined within morphology.

Divisibility and phases. The divisibility of some domain licenses partitive case; otherwise another structural m-case (nominative or accusative) surfaces on the nominal. I argue that the relevant domain is the one that undergoes Transfer to the interfaces. A syntactic constituent undergoes Spell-out after completion; it is transferred to LF (where divisibility is determined) and PF (the branch which contains the morphological component, where m-case is determined).

I assume that the relevant domain undergoing Transfer is the entire phase. In support, I note that defining properties of phases (cf. Chomsky 2001, 2008) refer to properties determined at the interfaces; thus they require the property to apply to the entire phase. The semantic type of the phase (t) on the LF side, or PF-related properties (isolability, stress assignment) are diagnostics that require the phase to function as a Transfer unit. This view of Transfer units requires an alternative approach to the locality restriction imposed by the Phase Impenetrability Constraint (PIC). I follow a solution along the lines of Abels 2003 or Fox and Pesetsky 2004 to derive these restrictions, which does not require the inaccessible phase complement to be the Transfer unit.

Some phases, including νP s and DP's can be divisible (cf. (1a-b); in (1a) the divisibility of νP is relevant). A CP phase, in contrast, is never divisible. Divisible phases yield partitive m-case:

- (2) A divisible phase licenses partitive m-case for the [Case] feature minimally contained in the phase

Minimal containment requires that either the phase head (e.g. transitive ν) or the entire phase (e.g. DP) contain a [Case] feature. (2) permits partitive case licensing on any divisible DP which has [Case], including subjects and some adjuncts. A divisible νP will only yield partitive m-case for the object, whose [Case] is checked within the νP (cf (1a)). This difference between the effect of DP- vs. νP divisibility is desirable, because it derives the m-case patterns attested in Finnish.

Partitive case elsewhere. Partitive m-case in other environments also follows from (2). First, negation permits only partitive objects, even if accusative case is possible in absence of negation:

- (3)a Helena kutoi villatakin
 Helena.NOM knit.PAST,3SG sweater.ACC
 'Helena knitted a sweater' (Vainikka 1989:151)
- b Helena ei kutonut villatakkia /*villatakin
 Helena.NOM not.3SG knit.PARTICIPLE sweater.PART / sweater.ACC
 'Helena didn't knit a sweater' (Vainikka 1989:152)

The facts follow if negation is a restructuring verb (in support, note the agreement morphology on negation). Restructuring verbs select a defective vP complement, where *v* is neither a phase head nor capable of [Case] checking. Instead, [Case] is checked by negation. At the same time, negation yields a divisible domain; whenever a predicate does not hold for an argument *x*, it also fails to hold for any part of *x*. If NegP is divisible, a phase and contains the [Case] checking Neg head, partitive m-case is expected on the object, whose [Case] feature is checked by Neg.

The restructuring verb *anna* 'let' can appear with an accusative object of the lexical verb. Whenever the clause containing *anna* is negated, the object is obligatorily partitive (4). Again, it is Neg which checks [Case] and since it yields divisibility, the m-case of the object is partitive.

- (4) En antanut sinun nähä karhua
 not.1SG let.PARTICIPLE you.GEN shoot.2INF bear.PART
 'I did let you see a/the bear' (Kiparsky 2001:357)

The partitive m-case in (5a) also follows. Prepositions describe relations of 'lacking' (Vainikka 1993), which I argue to amount to a divisible PP predicate. As before, divisibility of PP and the [Case] feature on P yield partitive case on the DP complement. For partitive case with quantifiers and numerals, illustrated in (6), divisibility also holds; the complement of the quantifier itself is divisible. A case assigning quantifier thus permits partitive m-case on its complement (the complement may also bear elative case or share the case of Q; these are addressed as well). I sketch a case stacking approach to partitive rather than accusative case on *hiiriä* 'mice' in (6).

- (5)a ilman sateensuojaa b pöydän kanssa
 without umbrella.PART table.GEN with
 'without an umbrella' (Vainikka 1989:143; preposition) 'with a table' (postposition)
- (6)a Ostin paljon autoja b Kissa söi useita hiiriä
 buy.PAST,1SG many.ACC car.PL,PART cat.NOM eat.PAST,3SG several.ACC mouse.PL,PART
 'I bought many cars' 'The cat ate a lot mice' (Thomas 2003:20)

Universality. The Finnish case alternation patterns are far from universal, but they have general implications. First, they support the view that some of the phenomena often ascribed to syntax are better explained by referring to morphology. A morphology- or surface-oriented approach to case (cf. Legate 2008, Woolford 2003, a.o.) is more attractive than the 'standard' approach, where case is determined by the [Case] checking head (T or *v*). Bobaljik 2008 also argues for this conclusion with reference to phi-feature agreement. This view is not uncontested; Richards 2007 and Rezac 2008 recently argue that case morphology is assigned within syntax. Second, the data support a cyclic view of computation, and provide clear evidence for the constituents whose divisibility is relevant for m-case marking. Finally, I will also argue that the relevance of divisibility makes it unlikely that [Case] can be universally reduced to some interpretable feature, such as [T], [Asp(ect)] or [Div(isible)], contra Pesetsky and Torrego 2001, 2004, 2007.

References

- Abels**, K. 2003. Successive cyclicity, anti-locality and adposition stranding. Ph.D. dissertation, University of Connecticut. **Bobaljik**, J. 2008. Where's phi? Agreement as a postsyntactic operation. in D. Harbour, D. Adger and S. Bejar (eds.) *Phi Theory: Phi-features Across Modules and Interfaces*. Oxford: Oxford University Press. **Chomsky**, N. 2001. Derivation by phase. in M. Kenstowicz (ed.) *Ken Hale: A Life in Language*. Cambridge, MA: MIT Press. **Chomsky**, N. 2008. On phases. in R. Freidin, C. Otero and M.-L. Zubizarreta (eds) *Foundational Issues in Linguistic Theory*. Cambridge, MA: MIT Press. **Dal Pozzo**, L. 2007. The Finnish Noun Phrase. MA thesis, Università Ca' Foscari di Venezia. **Fox**, D. and D. Pesetsky. 2004. Cyclic Linearization of Syntactic Structure. *Theoretical Linguistics* 31. **Kiparsky**, P. 1998. Partitive case and aspect. in M. Butt and W. Geuder (eds.) *The Projection of Arguments: Lexical and Compositional Factors*. Stanford: CSLI. **Kiparsky**, P. 2001. Structural case in Finnish. *Lingua* 11. **Kratzer**, A. 2004. Telicity and the meaning of objective case. in J. Guéron and J. Lecarme (eds.) *The Syntax of Time*. Cambridge, MA: MIT Press. **Legate**, J. 2008. Morphological and abstract case. *Linguistic Inquiry* 39. **Nelson**, D. 1998. *Grammatical Case Assignment in Finnish*. New York: Garland. **Pesetsky**, D. and E. Torrego. 2001. T-to-C movement: Causes and consequences. in M. Kenstowicz (ed.) *Ken Hale: A Life in Language*. Cambridge, MA: MIT Press. **Pesetsky**, D. and E. Torrego. 2004. Tense, case, and the nature of syntactic categories. in J. Guéron and J. Lecarme (eds.) *The Syntax of Time*. Cambridge, MA: MIT Press. **Pesetsky**, D. and E. Torrego. 2007. The syntax of valuation and the interpretability of features. in S. Karimi, V. Samiian and W. Wilkins (eds.) *Phrasal and Clausal Architecture*. Amsterdam: Benjamins. **Rezac**, M. 2008. Phi across modules. ms, University of Basque Country and University de Nantes. lingBuzz/000765. **Richards**, N. 2007. Lardil 'Case stacking' and the structural/inherent case distinction. ms, MIT. lingBuzz/000405. **Thomas**, R. 2003. The partitive in Finnish and its relation to weak quantifiers. PhD dissertation, University of Westminster. **Vainikka**, A. 1989. Deriving syntactic representations in Finnish. PhD dissertation, University of Massachusetts at Amherst. **Vainikka**, A. 1993. The three structural cases in Finnish. in A. Holmberg and U. Nikanne (eds.) *Case and Other Functional Categories in Finnish*. Berlin: Mouton de Gruyter. **Woolford**, E. 2003. Burzio's generalization, markedness, and locality constraints on nominative objects. in E. Brandner and H. Zinmeister (eds.) *New Perspectives on Case Theory*. Stanford: CSLI