## Just how many cases can one subject take?

Quirky subjects and raising verbs in Finnish

A thesis submitted

by

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Grown-ups are quirky creatures, full of quirks and secrets.

Danny, the Champion of the World

ROALD DAHL

There's no good raising hopes of magical help which (as I think) are sure to be disappointed.

Prince Caspian
C.S. Lewis

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All remaining errors are of course my own.

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## Abbreviations

A	ABL	ablative	INE	inessive
A	ABS	absolutive	INF	infinitive
A	ACC	accusative	MCC	multiple case checking
A	ADE	adessive	NOM	nominative
A	ALL	allative	PAR	partitive
(	CAUS	causative	PASS	passive
(	CNG	connegative	PL	plural
Ι	OAT	dative	PRS	present
Ι	DECL	declarative	PST	past
F	ELA	elative	PTCP	participle
F	ERG	ergative	SG	singular
F	ESS	essive	1	first person
(	GEN	genitive	2	second person
Ι	LL	illative	3	third person
I	MP	imperative		

Except where otherwise indicated, all glossed examples are in Finnish. I have changed the abbreviations in examples taken from other sources so as to conform to the Leipzig glossing rules.

## Abstract

Based on work in common European languages, it was always assumed that a single noun receives exactly one case assignment over the course of the derivation of a sentence. Bejar and Massam (1999) claimed that multiple case checking (MCC) is possible in languages such as Niuean, Icelandic, Norwegian, and Hungarian, and they developed a theoretical and typological account of these phenomena; in their theory, structural case may be overwritten multiple times, while inherent case is preserved. This possibility also appears to be in conflict with Case in Tiers theory (Yip et al. 1987), one of the most successful theories for Finnish, which places case in a separate tier from phrase structure and relies on preventing DPs from receiving more than one case assignment.

The primary aim of this thesis is to use Finnish to expand the empirical coverage of the MCC account. Bejar and Massam only looked at movement to grammatical-case positions. Finnish, with its genitive-assigning raising verbs, allows us to see the effects of movement to inherent-case positions. Our data force us to propose changes to the MCC and Case in Tiers models for case assignment and allow us to show that the two theories are in fact mostly compatible. The data also suggest that CP may be involved in the assignment of structural case.

The behavior of quirky subjects in Finnish also confirm suggestions that A'movement may depend on case rather than grammatical function (Carreiras et al.
in press), an important proposal in the study of ergative languages. Finnish quirky
subjects also have implications for non-structural case in general: their behavior allows us to question Woolford's (2006) strong structural distinction between inherent
and lexical case, confirms suggestions from Fanselow (2002) that quirky subjects are
a heterogeneous group cross-linguistically, and shows that case preservation is not
reliably linked with the status of a verb as a raising or control verb.

## Chapter 1

## Introduction

For over two millenia, grammarians have focused a lot of attention on case, the mechanism by which languages indicate the roles played by the nouns in a sentence (Butt 2006, Blake 2001).

- (1) a. Puer puella-m vide-t. (Latin) boy.NOM girl-ACC see-PRS.3SG 'The boy sees the girl.'
  - b. Puer-um puella vide-t. (Latin)boy-ACC girl.NOM see-PRS.3SG'The girl sees the boy.'

In example (1), we see two Latin sentences, distinguished only by the endings on the nouns *puer* 'boy' and *puella* 'girl'. These case markings are sufficient, on their own, to determine which of the two nouns is the subject and which is the object.

Within generative linguistic theory, developed since the 1950's, case has also played a central role (Ura 2001). However, case theory has expanded beyond simply a study of the endings of Latin and Greek nouns. Generative grammar distinguishes between abstract "Case" and morphological "case" (Bobaljik and Wurmbrand 2009). Abstract Case is present in all languages, including English, even when it is never visible. Morphological case is only present in some languages (English, for example,

only has morphological case on pronouns, such as he and him).

Based on work on common European languages like Latin and German, it was always assumed that a single noun could receive at most one case assignment over the course of the derivation of a sentence; the requirement that each noun receive at least one case assignment was enshrined as the Case Filter (Ura 2001). Bejar and Massam (1999) claimed that in languages such as Niuean, Icelandic, Norwegian, and Hungarian, it is possible for a noun to receive multiple distinct case assignments in a single sentence. They developed both a theoretical account of what determines which of these cases actually appears in the final sentence and a parametric characterization of the variation among languages, with some languages (such as English) never allowing Multiple Case Checking (MCC), some languages (such as Norwegian) allowing MCC only when the two forms are syncretic, and some languages (such as Icelandic) allowing true MCC.

Bejar and Massam's work can be seen as part of a general trend in contemporary generative theory towards a reunification of Case and case. They want to be able to determine the final morphological form of a noun based on the abstract Case features assigned to it in the syntactic derivation of the sentence. Similarly, Legate (2008) argues that morphological case in complex case systems such as those of Australian languages is derivable from the abstract Case features of the noun. For this reason, I do not distinguish between Case and case in this thesis, except where discussing the arguments of authors who make this distinction. (In general, I strive to use as theory-neutral language as possible, so that my results can be relevant to researchers using a variety of frameworks.)

The primary aim of this thesis is to expand the empirical coverage of the MCC account. A closer look at Finnish does not, however, merely add another language to their study and their typological classification. Bejar and Massam only looked at structures in which the last case assigned to a noun was a grammatical case (such as

nominative, the case of subjects, or accusative, the case of objects), though the base positions in their study included both grammatical case and inherent case (idiosyncratic case associated with a particular verb or semantic role, also known as quirky case). Finnish, with its genitive-assigning raising verbs, allows us to see the effects of movement to an inherent-case position.

As a preliminary to this study, I undertake an in-depth investigation of the properties of Finnish quirky subjects and raising verbs, as both of these phenomena vary greatly from one language to another. While many articles have made reference to quirky case or raising verbs in Finnish (and some even to their interaction), none have undertaken to rigorously demonstrate that they are in fact quirky subjects or raising verbs. The work in this thesis hopefully will enable future studies to make use of Finnish quirky subjects and raising verbs in addressing other linguistic questions.

In addition to expanding our understanding of MCC, these investigations shed light on wider theoretical issues. They suggest that the CP may be involved in structural case assignment, and that accounts of non-structural case assignment may not be cross-linguistically valid. Though Finnish is not itself an ergative language, Finnish quirky subject constructions support proposals that ergative subjects may be PPs rather than DPs and that A'-movement may be dependent on case rather than grammatical function. Finally, the Finnish data suggest that the relationship between case preservation and whether a construction involves raising or control verbs is not as clear-cut as previous scholars have assumed.

## 1.1 Structure of the Thesis

Chapter 2 provides background information on well-studied aspects of Finnish case and the most successful theoretical approaches accounting for Finnish case. It also looks more closely at Bejar and Massam's work.

The empirical results are covered primarily in chapters 3 and 4: chapter 3 gives an in-depth look at quirky subjects in Finnish and chapter 4 investigates Finnish raising verbs (including their case-assigning properties).

Chapter 5 looks at MCC in Finnish in the interaction between quirky subjects and raising verbs. It then explores the implications of the Finnish data for Bejar and Massam's general theory of MCC as well as for Case in Tiers theory, one of the most successful accounts of Finnish case. I suggest that, when one adapts these theories to cover the full range of cross-linguistic data, they become notational variants of one another. I also suggest that the best structural account for case assignment here is to let structural case (or at least nominative case) be determined by CP.

In chapter 6, I look at the broader theoretical implications for theories of non-structural case, ergativity, and raising and control.

Finally, chapter 7 summarizes the main results of the thesis and suggests directions for future research.

## Chapter 2

## Background

This chapter is divided into two main parts. In section 1, I describe the case phenomena most frequently addressed by the syntactic literature on Finnish as well as the particular constructions investigated in this thesis; any adequate explanation must be able to account for these data. In section 2, I discuss some general aspects of case theory in current generative grammar and introduce the two main theories I wish to investigate: Bejar and Massam's (1999) theory of Multiple Case Checking, whose cross-linguistic generalizations I am investigating in this thesis, and Yip et al.'s (1987) theory of Case in Tiers, one of the theories that best accounts for Finnish's case behavior.

## 2.1 Case in Finnish

Finnish has a rich system of morphological case, with approximately twelve productive cases (Karlsson 1999). Of these, four (nominative, accusative, partitive, and genitive) are considered grammatical cases, while the rest are semantic: there are six local cases (illative, inessive, elative, allative, adessive, ablative) and two cases for secondary predicates (essive, translative). However, this thesis will focus primarily on case assigned to arguments, rather than adjuncts. This summary focuses primarily on the

Table 2.1: Syncretism in Finnish Case

	Nominative	Nom-Acc	Gen-Acc	Genitive
Singular	-Ø		-n	
Pronoun	-Ø	-1	t	-n
Plural	-t			-ien

syntactic behavior of case: for the morphophonology of Finnish case, see Kiparsky (2003), and for the general structure of the Finnish clause, see Holmberg et al. (1993).

#### 2.1.1 Case Alternations

Two different case alternations among Finnish objects have drawn a lot of attention in studies of Finnish Case: the alternation between the so-called "nominative accusative" and "genitive accusative", and the alternation between accusative and partitive objects. While these alternations will not be a major focus of the thesis, they will appear in many of the examples I investigate and any theory of Finnish case must be able to explain them.

#### "Accusative Case"

The status of the Finnish accusative case is unclear because of a high level of syncretism in the morphological paradigms. Only pronouns have a separate accusative case; for plural NPs, the accusative is identical to the nominative, and for singular NPs, the accusative is identical sometimes to the nominative and sometimes to the genitive. A summary is given in Table 2.1. I follow the literature in refering to the two types of accusative as "nominative-accusative" and "genitive-accusative". In glosses, I have generally followed the morphology: singular nouns in the "nominative-accusative" are labeled as NOM and in the "genitive-accusative" as ACC; plural nominatives or accusatives are labeled simply as PL; and pronouns are labeled as NOM in the nominative and ACC in either type of accusative.

The range of situations in which each form of accusative is found is well characterized (Timberlake 1975, Kiparsky 2001). The nominative-accusative occurs as the object of an imperative, the object of a passive/impersonal construction, and as the object of "subject infinitives" (Timberlake's analysis of sentences with genitive subjects and raising verbs), and in more complicated structures based on these. The genitive-accusative occurs elsewhere. The key generalization is that the nominative-accusative occurs whenever there is no nominative subject; for these purposes, procounts as a nominative subject. Timberlake argues that this is a postcyclic rule, since it does not matter how many layers of embedding occur between the subject and the object. The Case in Tiers proposal (discussed in section 2.2.3 below) is similar in effect.

#### The Accusative-Partitive Alternation

The various accusative cases are not, however, the only cases that occur on objects in Finnish. While some verbs allow only partitive case on their objects, those verbs that do allow accusative case show an alternation between partitive and accusative objects based on three criteria neatly described by Megerdoomian (2000).<sup>1</sup> First, only objects of determinate quantity may appear with accusative case, as shown in example (2).

- (2) a. Ost-i-n leipä-ä. buy-PST-1SG bread-PAR 'I bought some bread.'
  - b. Ost-i-n leivä-n.buy-PST-1SG bread-ACC'I bought the bread.' (Megerdoomian 2000)

The second criterion is result-orientedness: i.e., whether or not the action of the verb is telic. (This distinction includes negation: the object of a negated verb is

<sup>&</sup>lt;sup>1</sup>This discussion follows Megerdoomian's (2000) summary. The analyses of Kiparsky (1998), Kiparsky (2001), Kiparsky (2005), and Nelson (1998) are roughly parallel.

always in partitive case.) This is the distinction between example (3a), in which the action has a result (the bears are wounded/killed), and example (3b), in which the action has no effect.

- (3) a. Ammu-i-n karhu-t. shoot-PST-1SG bear-PL 'I shot the bears.'
  - b. Ammu-i-n karhu-j-a. shoot-PST-1SG bear-PL-PAR'I shot at the bears.' (Megerdoomian 2000)

The final criterion is boundedness, which is a property of the entire VP: whether or not the action has a definite end point. Accusative objects may only appear in bounded VPs—the distinction may also be tested using the distinction between "in" and "for" temporal adverbials, as in example (4).

- (4) a. Matti luk-i kirja-t (tunni-ssa) M.NOM read-PST book-PL hour-INE 'Matti read the books (in an hour).'
  - b. Matti luk-i kirjo-j-a (tunni-n)
     M.NOM read-PST book-PL-PAR hour-ACC
     'Matti read books (for an hour).' (Aron-Dine 2008)

Most explanations for this phenomenon, including Megerdoomian's (2000), involve an aspectual head between TP and vP that assigns accusative case. The object moves to the specifier position of the aspectual head to receive/check accusative case only when the action of the sentence is bounded.<sup>2</sup>

While the accusative-partitive alternation will not be a major topic in this thesis, it is useful as a way of diagnosing which elements are subjects and which are objects, since only objects undergo this alternation.

<sup>&</sup>lt;sup>2</sup>However, this analysis may not be supported by scopal relations (Aron-Dine 2008).

### 2.1.2 Constructions under Examination

In this thesis, I will primarily address the interaction between quirky subject case and raising verbs. Because (in my investigation of the literature) no one has looked carefully at this interaction before, I present background information on each of these constructions independently.

#### Raising constructions

Finnish raising verbs fall into three main categories, based on what case is assigned to their subjects and what sort of complement they select. Verbs such as saada 'to be allowed to' and voida 'to be able to' have nominative, agreeing subjects, and take an infinitive complement.  $T\ddot{a}yty\ddot{a}$  and  $pit\ddot{a}\ddot{a}$ , both meaning 'must', also take infinitival complements but have genitive subjects and display default third-person singular agreement. Finally, verbs like  $n\ddot{a}ytt\ddot{a}\ddot{a}$  'to appear' have nominative subjects, but take active participles as complements (Nelson 1998: 230).

Finnish raising verbs with standard intransitive and transitive sentences behave typically for raising constructions cross-linguistically. (The (a) sentences are the base sentences, the (b) sentences include a nominative-subject raising verb, and the (c) sentences include a genitive-subject raising verb.)

- (5) a. Pallo pomppi-i katolta.
  ball.NOM bounce-3SG.PRS roof-ABL
  'The ball bounces down from the roof.'
  - b. Pallo voi pomppi-a katolta.ball.NOM can.3SG.PRS bounce-INF roof-ABL'The ball might bounce down from the roof.'
  - c. Pallo-n täyty-y pomppi-a katolta. ball-GEN must-3SG.PRS bounce-INF roof-ABL 'The ball must bounce down from the roof.'

- (6) a. Matti puukotta-a postimieh-en.
  M.NOM stab-3SG.PRS mailman-ACC
  'Matti stabs the mailman.'
  - b. Matti voi puukotta-a postimieh-en. M.NOM can.3SG.PRS stab-INF mailman-ACC 'Matti might stab the mailman.'
  - c. Mati-n täyty-y puukotta-a postimies. M-GEN must-3SG.PRS stab-INF mailman.NOM 'Matti must stab the mailman.'

In the standard word order, the subject moves to the beginning of the sentence before the raising verb, while verb complements remain at the end of the sentence after the infinitive. In (6c), we see that the object changes from a genitive-accusative to a nominative-accusative when  $t\ddot{a}ytyy$  is added and the subject is no longer nominative. (This change is predicted by the general rule that the highest-ranked non-inherent-case nominal in the sentence has nominative morphology, as discussed in section 2.1.1 above.)

It is unclear where the genitive case on the subject of  $t\ddot{a}ytyy$  comes from. Vainikka (1989: cited in Bayer (2000)) suggests that genitive is the default case of specifiers in Finnish, and so the subject receives genitive case as the specifier of VP before raising to the sentence-initial position. However, this analysis simply begs the question of why this occurs with  $t\ddot{a}ytyy$  but not with voida. Case in Tiers theory (see section 2.2.3), on the other hand, has viewed the genitive subject as inherent-case-marked, which is certainly a possibility, given that genitive quirky subjects exist in main clauses in Finnish (see section 2.1.2). This question is addressed in section 4.5.

#### Quirky subjects

Ever since Zaenen et al. (1985) showed that Icelandic has true non-nominative subjects, quirky subjects have been a constant topic of discussion in the theory of case and of grammatical functions. Non-nominative subjects necessitate either a dissociation

between a level of abstract case (in which the subjects still receive nominative or subjective case) and a level of morphological case, or a mechanism by which nominative case either is not assigned or is assigned to an object.

Non-nominative subjects have not been a major focus of the syntactic literature on Finnish, perhaps partly because they do not display all of the subject properties of Icelandic quirky subjects. Koskinen (1999) discusses five examples of non-nominative subjects:

- (7) a. Minu-lla on uusi-a keltais-i-a narsisse-j-a.
  I-ADE be.3SG new-PAR yellow-PL-PAR daffodil-PL-PAR
  'I have new yellow daffodils.'
  - b. Minu-lta puuttu-u kynä.I-ABL lack-3SG pencil.NOM'I don't have a pencil.'
  - c. Minu-sta tule-e iso-na tutkimusmatkailija I-ELA come-3SG big-ESS explorer.NOM 'I'm going to become an explorer when I grow up.'
  - d. Minu-n on kylmä. I-GEN be.3SG cold 'I'm cold.'
  - e. Minu-a aivast-utta-a.
    I-PAR sneeze-CAUS-3SG
    'I feel like sneezing.'

These examples will also form the basis for my investigation of the interaction between quirky case and raising in Finnish. Finnish quirky subjects differ from those in Icelandic in several immediately apparent ways. First, unlike in Icelandic, where quirky subjects appear with many different lexical verbs, Finnish non-nominative subjects (except those in example 7e) generally appear with semantically light verbs such as olla 'to be' and tulla 'to come'. In particular, these verbs may also appear with nominative subjects. These nominative subjects are distinct from the nominative objects found with quirky subjects, in that only nominative subjects may induce

agreement on the verb. In example (8), only the nominative DP that is a subject (in (8a)) causes agreement, not the nominative object DP in (8b) (even with a definite object).

- (8) a. Poja-t #on/o-vat ulkona. Boy-PL be.3SG/be-3PL outside 'The boys are outside.'
  - b. Poja-lla on/\*o-vat Faust-in käsikirjoituks-et.
     Boy-ADE be.3SG/be-3PL F-GEN manuscript-PL
     'The boy has the manuscripts of Faust.'

(The ability to induce agreement may vary from verb to verb; for example, it seems much better with *puuttuu* 'to lack' than with *olla* 'to be'.) A full investigation into the subject properties of these non-nominative subjects has not yet been performed; this analysis forms the bulk of chapter 3.

## 2.2 Case in Theory

In this section, I look first at some general aspects of Minimalist approaches to case, and then at two theories of case which may have bearing on the Finnish phenomena under investigation; Multiple Case Checking deals with case chains, while Case in Tiers deals with inherent case and the assignment of Finnish accusative.

#### 2.2.1 Minimalist Theories of Case

Sections 2.2.2 and 2.2.3 will introduce the theories that will be under investigation in this thesis; here, I introduce some smaller topics that will also play a role.

#### Feature Checking

Minimalist theories have tended to view Case as a formal feature. DPs enter a derivation with their Case features already determined, and then check these fea-

tures against corresponding features on case-assigning heads. Once these features are checked off, however, they generally cannot be checked again against another head's features—hence the usual restriction that DPs receive only one case. Checking mechanisms vary from one theory to another: in some theories, checking may only occur between specifiers and their heads (Ura 2001), in others it may occur at almost any distance through Agree (Adger 2003). One typical statement of Agree is presented in (9).

### (9) Agree

An uninterpretable feature F on a syntactic object Y is checked when Y is in a c-command relation with another syntactic object Z which bears a matching feature F. (Adger 2003: 168)

In Adger's model, after Agree occurs, both features are checked off (at least when he discusses case), and so neither is available for future Agree relations. The key points for the discussion in later sections are that Case assignment is always a one-to-one relationship between the NP and the element against which it checks its case, and that it is always a phrase-structural relationship that determines Case assignment.

#### Non-structural Case

Woolford (2006) undertakes to categorize the different types of non-structural case. She draws a sharp distinction among non-structural cases between inherent and lexical case; her diagram showing the various types of cases is in (10).

Inherent case (such as ergative on agents or dative on goals) is associated with particular  $\theta$ -roles, while lexical case is idiosyncratically associated with particular verbs.

Drawing on evidence primarily from Icelandic and Basque, Woolford claims that external arguments and goals may receive inherent case but not lexical case while internal arguments may receive lexical case but not inherent case. She presents an appealing structural explanation, in which lexical case is assigned within VP while inherent case is assigned higher up in vP.

Within this thesis, I generally follow Bejar and Massam (1999) in using "inherent" for Woolford's "non-structural". In section 6.1.1, I take a second look at Woolford's categorization and find that it may not accurately reflect the behavior of non-structural case in Finnish.

## 2.2.2 Multiple Case Checking

One criticism of standard case theory comes from Bejar and Massam's (1999) discussion of multiple case checking (MCC). Unlike in most generative theories of case, they argue that it is possible for a single DP to receive multiple case assignments over the course of the derivation of a sentence. (This property is parametrized and therefore available only in some languages.)

### Language Variation in MCC

Bejar and Massam (1999) find that, unlike English, other languages may allow a single DP to receive multiple case assignments over the course of a derivation. Some, like Hungarian, allow movement from one structural case-marked position to another.

(11) Kiket mondtad hogy szeretnél ha eljönnének? (Hungarian) who.PL.ACC you.said that you.would.like if came(3PL)
'Who did you say that you would like it if they came?' (Bejar and Massam 1999)

In (11),<sup>3</sup> they argue that *kiket* 'who' has nominative case in its base position so that it can trigger plural agreement on the embedded verb; it gets accusative case in the higher position. In structural-structural case chains, it is always the last case assigned that is morphologically realized.

In Norwegian, Bejar and Massam also find structural-structural case chains, but MCC is only possible when there is syncretism between the two cases. Example (12) is acceptable with *Per* 'Peter' or with *dere* 'you (pl.)', which are identical in the nominative and the accusative, but not with other pronouns, which have distinct nominative and accusative forms.

(12) Per hadde de trodd ville komme for sent. (Norwegian)
Peter had they thought would arrive too late
'Peter they had thought would come too late.' (Bejar and Massam 1999)

In Icelandic, Bejar and Massam find inherent-structural case chains. When a verb with a genitive object is passivized, the subject of the passive is genitive, as in example (13b).

- (13) a. Við vitjuðum sjúklinganna. (Icelandic) we visited.1PL the.patients.GEN 'We visited the patients.'
  - b. Sjúklinganna var vitjað. (Icelandic) the patients GEN was visited'The patients were visited.'

The genitive inherent case assigned to  $sj\acute{u}klinganna$  in its base position is preserved when it undergoes A-movement to the (generally) nominative-marked subject position. In general, Bejar and Massam claim that an inherent case is realized over a

<sup>&</sup>lt;sup>3</sup>Bejar and Massam neglect to indicate in their gloss that *kiket* is plural; I have added it because it is important to their argument. I also do so when it is repeated as example (140). My Hungarian consultant suggests that the sentence should be

<sup>(1)</sup> Kiket mondtál hogy szeretnéd, ha eljönnének?

This simply replaces the first two verbs with the indefinite forms instead of definite forms; agreement remains the same.

MCC Types Structural-structural Inherent-structural
Allow MCC Hungarian, Niuean Icelandic
Allow MCC with syncretism Norwegian
Disallow MCC English

Table 2.2: Typology of MCC (Bejar and Massam 1999)

structural case assigned to the same DP.

The results of their typological study are shown in Table 2.2. One of the goals of this thesis is to determine where Finnish fits in this typology.

#### Inherent case

Bejar and Massam (1999) present a feature-based account for MCC that does well with structural case but makes inaccurate predictions about inherent case. In their model, NPs have [CASE] features which must be checked over the course of the derivation. However, these features differ from ordinary features in two important ways. First, the particular case assigned is merely a subscript ([CASE<sub>nom</sub>] or [CASE<sub>acc</sub>]) and is copied from the head against which the case feature is checked (and this can happen more than once, with the subscript getting replaced each time, ensuring that the last-assigned structural case is the one that is realized); the NP does not have a full case feature at the start of the derivation. Second, the case feature on the NP is not erased when checked, so that the particular case assigned to it is still visible to the morphology. While these changes are questionable on theory-internal grounds, since they defy the general definition and behavior of features, they also make inaccurate empirical predictions when one tries to use them to account for inherent case.

Bejar and Massam view inherent case as a separate feature from structural case (they draw them connected by a vertical line), so that each inherent-case-marked NP also has a structural case. For example, a dative quirky subject has the case feature complex in (14).

(14) 
$$[CASE_{nom}]$$
 dative

This set of features seems reasonable, since it accounts for the fact that dative subjects have both subject properties and dative case. However, Bejar and Massam do not work out this theory in full; in particular, they do not consider the case features of nominative objects. Their system seems to suggest that these DPs must have the case features in (15); they have accusative structural case because they are objects, and so they require nominative quirky case in order to have nominative morphology.

Bejar and Massam therefore cannot provide any explanation for why in many languages, such as Icelandic, Finnish, Basque (Hualde and de Urbina 2003), Punjabi (Bhatia 1993), etc., quirky subjects occur with nominative objects. The ability to account for nominative objects is an important criterion for deciding on the correct analysis for Finnish MCC.

### 2.2.3 Case in Tiers

Another theory, the Case in Tiers theory championed by Maling, does a better job accounting for case in sentences with inherent case-marked NPs, but it abandons generative structural theories of case.

#### The model

Case in Tiers theory, first proposed by Yip et al. (1987), treats case as a separate "tier" in syntax, analogous to the tone tier in autosegmental phonological theory. In the most recent exposition by Maling (2009), case is assigned in two distinct stages.

Lexical (inherent) case and semantic case (the case on adverbials) are assigned first based on thematic roles. Syntactic case (nominative and accusative) is then assigned based on a hierarchy of NPs in the clause: subject > objects > adverbials. Nominative case is assigned to the highest element that has not yet received case, and accusative case is assigned to all of the rest. This provides a very nice explanation for why nominative objects occur with quirky subjects (one of the problems with MCC): the object is the highest non-inherent-case-marked NP in the sentence.

#### Advantages of Case in Tiers

Case in Tiers has two important empirical successes. First, Yip et al. (1987) used it to explain which case frames are available for Icelandic ditransitive verbs and which are not. They discover that no verb in Icelandic assigns more than one lexical case, and that this one generalization by itself accounts for which case frames are available and which are not. Any successor to Case in Tiers should also be able to account for this result.

In Maling (1993), Case in Tiers also accounts for the distribution of the two different types of accusatives in Finnish, by treating the nominative-accusative as a nominative (ignoring pronouns) and the genitive-accusative as accusative. Timber-lake's (1975) generalization that the nominative-accusative occurs exactly in those situations where there is no nominative subject is then a direct consequence of Case in Tiers, as nominative case is only assigned to objects when the subject is no longer available for case assignment (either because it receives inherent case or because it is not present in the syntax). By making no sharp distinction between arguments and adjuncts, Case in Tiers also explains why Finnish adverbials can receive nominative case when there are no grammatical case-marked arguments of the verb.

### A stipulative rule

Case in Tiers theory includes one stipulative rule which suggests room for improvement in the theory. As framed by Maling (2009), it states:

(16) All internal arguments of a predicate must get the same grammatical case.

(Maling 2009)

This rule is proposed in order to account for two sets of data. First, as shown in example (17), when a Korean sentence with multiple accusative objects is passivized, all of the objects change to nominative case.

- (17) a. Cheli-ka Mary-lul panci-lul senmul-lul ha-ess-ta. (Korean)
  C-NOM M-ACC ring-ACC gift-ACC do-PST-DECL
  'Cheli presented Mary with a ring.'
  - b. Mary-ka panci-ka senmul-i toy-ess-ta. (Korean)
     M-NOM ring-NOM gift-NOM become-PST-DECL
     'Mary was presented with a ring.' (Maling 2009)

Neither Icelandic nor Finnish (the other two languages studied in CT theory) have verbs that take two separate accusative objects, so we cannot check whether other languages behave similarly with multiple internal arguments. The rule is used, however, to account for the case behavior of Finnish sentences with object control verbs, as in (18).

- (18) a. Maija pyys-i Juka-n luke-ma-an kirja-n. M.NOM ask-PST J-ACC read-INF-ILL book-ACC 'Maija asked Jukka to read a book.'
  - b. Pyydä Jukka luke-ma-an kirja/\*kirja-n ask J.NOM read-INF-ILL book.NOM/\*book-ACC 'Ask Jukka to read a book.' (Maling 2009)

In (18b), both the object of the control verb and the object of the lower verb appear in morphological nominative case. It is clear that this rule is constrained to arguments,

since it is not true of Finnish adverbials, as in (19), where the object and the adverbial (both internal to the VP) receive different cases in the imperative sentence.

- (19) a. Minä lue-n kirja-n kolman-nen kerra-n.
  I.NOM read.PST-1SG book-ACC third-ACC time-ACC
  'I read the book for the third time.'
  - b. Lue kirja kolman-nen kerra-n read book.NOM third-ACC time-ACC 'Read the book for the third time.' (adapted from Maling (1993))

This seems odd, because one of the key innovations of the Case in Tiers theory is that it does not draw a sharp distinction between subjects, objects, and adverbials. In particular, the rule's reference to *internal* arguments makes it clear that case theory needs some reference to phrase structure, suggesting that the insights of Case in Tiers could be incorporated within a more standard, phrase structure-based theory of case.

## Chapter 3

## Quirky Subjects

Quirky subjects have been mentioned in the literature on Finnish with little evidence for their status as subjects. In this chapter, I look at the five constructions used by Koskinen (1999) that potentially involve quirky case.

- (20) a. Minu-lla on uusi-a keltais-i-a narsisse-j-a. I-ade be.3.SG new-part yellow-PL-part daffodil-PL-part 'I have new yellow daffodils'
  - b. Minu-lta puuttu-u kynä.I-abl lack-3SG pencil.NOM'I don't have a pencil'
  - c. Minu-sta tule-e iso-na tutkimusmatkailija.
     I-ela come-3SG big-ess explorer.NOM
     'I'm going to become an explorer when I grow up'
  - d. Minu-n on kylmä / nälkä / jano.
     I.GEN be.3SG cold.NOM / hunger.NOM / thirst.NOM
     'I'm cold / hungry / thirsty'
  - e. Minua aivast-utta-a / pelo-tta-a / laula-tta-a.
    I.part sneeze-CAUS-3SG / fear-CAUS-3SG / sing-CAUS-3SG
    'I feel like sneezing / I'm frightened / I feel like singing' (Koskinen 1999)

I also look at the necessive construction with genitive-assigning raising verbs. For Koskinen's purposes, it was unimportant to know the exact range of subject properties that these alleged subjects have, but a thorough investigation of these properties is essential to the present topic and can aid in future research as well.

## 3.1 The Tests

As Zaenen et al. (1985) showed in their groundbreaking work on quirky subjects in Icelandic, it is necessary to come up with language-specific tests to determine when a non-nominative argument is a subject. Unfortunately, the traditional tests for subjecthood in Finnish are not relevant to determining whether a potential quirky subject is in fact a subject. A typical list of subject criteria is quoted in (21).

- (21) Subject Criteria in Finnish (Hakulinen and Karlsson 1979: ctd. and trans. in Vähämäki (1984))
  - a. The subject triggers subject-verb agreement in number and grammatical person.
  - b. The subject is marked with the nominative case if an object in the accusative (-n) or partitive case is present or if a nominal predicate is present (predicate noun/adjective as complement of the copula olla 'be').
  - c. The subject is marked with the genitive as the result of certain syntactic transformations.
  - d. Finnish is an SVO or SVX language, a property invoked if none of the above criteria cause positive determination.

Criterion (b) does not apply for obvious reasons. Because, as in many languages (Bobaljik 2008), Finnish agreement tracks case and so only nominative arguments can trigger agreement, criterion (a) is also irrelevant to determining the subjecthood of a quirky subject. Criterion (c) refers to the genitive case that appears on subjects of raising verbs like *täytyy* 'must' (see section 3.5). Therefore, criterion (d) is the only one left, and it is satisfied by all of the examples under consideration.

Järventausta (1991: 204-212) argues explicitly against the subjecthood of the initial DPs of several of the constructions below (in particular, the possessive, becoming, and necessive constructions). However, her arguments are based entirely on the case-assigning properties of these sentences. In discussion of quirky subjects, we are explicitly concerned with constructions where grammatical function may be dissociated from case assignment, and so I consider primarily non-case-related properties.

In the following subsections, I describe a range of tests that can help establish the subjecthood of a quirky subject or the non-subjecthood of its accompanying (often nominative-marked) object. While not all of these tests apply to every construction, together they should allow us to determine whether the so-called quirky subjects are in fact subjects.

### 3.1.1 Verb agreement test

According to criterion (21a) above and as shown in example (22) below, nominative subjects can trigger agreement on their corresponding verbs.

(22) Poja-t %ampu-i / ampu-i-vat karhu-n. boy-PL shoot-3SG.PST / shoot-PST-3sPL bear-acc 'The boys shot the bear.'

While this test does not allow us to show that quirky subjects are subjects (agreement never occurs with non-nominative arguments in Finnish), it can be used to show that the nominative-marked objects that appear with them are not in fact subjects if they are incapable of triggering agreement.

## 3.1.2 Domain of Negation

A second test that distinguishes between subjects and objects is that objects, falling under the scope of negation, change to partitive case when a sentence is negated.

- (23) a. Poika näk-i koira-n. boy.NOM see-PST.3SG dog-ACC 'The boy saw the dog.'
  - b. Poika ei näe koira-a / \*koira-n. boy.NOM not.PRS.3SG see.CNG dog-PAR / dog-ACC 'The boy didn't see the dog.'

Inherent-case-marked DPs do not undergo this alternation, and so this test only applies to the nominative-looking objects in the constructions above but not to the quirky subjects. If the objects are in fact objects, they should change to partitive case under negation.

### 3.1.3 Accusative Pronoun

A third way to demonstrate that the objects of the constructions above are not subjects is by looking at the case of pronouns that replace them. Nominative subjects are replaced by nominative pronouns, but, as discussed in section 2.1.1, nominal objects marked with apparent nominative case in fact correspond to accusative-case-marked pronouns. In example (24), a nominative-marked subject is replaced by a nominative-marked pronoun, while in example (25), a nominative-marked object of an imperative is replaced by an accusative-marked pronoun.

- (24) a. Tähti laulo-i. star.NOM sing-PST.3SG 'The star sang.'
  - b. Hän / \*hän-et laulo-i. 3SG.NOM / 3SG-ACC sing-PST.3SG 'S/he sang.'
- (25) a. Mainits-e opettaja. mention-IMP.2SG teacher.NOM 'Mention the teacher.'

b. Mainits-e hän-et / \*hän. watch-IMP.2SG 3SG-ACC / 3SG.NOM 'Mention him/her.'

If the nominatives in the constructions in question are subjects, they should be replaced by nominative pronouns, while if the constructions truly involve quirky case, they should be replaced by accusative pronouns.

### 3.1.4 Reflexive Binding

The next two tests make use of Binding Principle A: anaphors must be bound in their governing category. In particular, reflexives must be c-commanded by their antecedents. Because subjects generally c-command objects, this therefore provides a test of which argument in a particular construction is the subject and which is the object: the subject can bind a reflexive object, but not *vice versa*. Example (26) shows that this is the case for a normal transitive clause.

- (26) a. Poika näke-e itse-nsä. boy see-PRS.3SG self-3 'The boy sees himself.'
  - b. \*Itse-nsä näke-e poja-n. self-3 see-PRS.3SG boy-ACC Intended: 'Himself sees the boy.'

If the constructions above truly contain quirky subjects, we should see analogous results with reflexive binding.

## 3.1.5 Possessive Binding

Finnish marks possession with suffixes on the possessee that agree with the possessor in person and (except in third person) number. While the genitive possessor may be dropped when it is first or second person, third-person possessors cannot generally be dropped unless they are coreferential with a c-commanding DP (Nelson 1998: 206-207). We see this effect in example (27).

- (27) a. Poika näke-e äiti-nsä boy.NOM see-PRS.3SG mother-ACC.3 'The boy, sees his, mother.'
  - b. \*(Hän-en) äiti-nsä näke-e poja-n. 3SG-GEN mother.NOM-3 see-PRS.3SG boy-ACC 'His/her mother sees the boy.'

If the constructions above truly contain quirky subjects, then the possessive suffix should be permitted without an overt possessor on the nominative-looking object but not on the quirky subject.

### 3.1.6 Extraction with -va participle

The final test is our only test based on A'-movement properties. While post-nominal relative clauses in Finnish may extract any argument, pre-nominal participial relative clauses using the active participle can only extract the subject of a sentence (Karlsson 1972). We see this in example (28), where the subject but not the object can be extracted with the participle.

- (28) a. Varapresidentti ampu-i ystävä-n. vice.president.NOM shoot-PST.3SG friend-ACC 'The vice president shot a friend.'
  - b. ystävä-n aumpu-va varapresidentti friend-ACC shoot-PTCP.NOM vice.president.NOM 'the vice president who shoots a friend'
  - c. \*varapresidentti ampu-va ystävä vice.president.NOM shoot-PTCP.NOM friend.NOM
    Intended: 'the friend who is shot by the vice president'

If quirky subjects behave like other subjects, they should be the only argument in their clauses that can be extracted by the participial relative-clause-formation strategy.

## 3.2 Results

In this section, we look at the results of these tests on the five quirky subject constructions included in Koskinen (1999). The first three constructions, because they have two arguments, are subject to all of the tests above. The last two constructions, however, have only one true argument, and so only a few of the tests apply to them.

#### 3.2.1 Possessive Construction

The possessive construction, along with the direct perception construction below, uses the verb *olla* 'to be' but with a different case frame than usual. The possessor appears pre-verbally, while the following object appears in nominative-accusative or partitive case. Koskinen's (1999) example is given in (29) below, with an ordinary NP replacing the pronoun in her example.

(29) Poja-lla on uusi-a keltais-i-a narsisse-j-a. boy-ade be.PRS.3SG new-part yellow-PL-part daffodil-PL-part 'The boy has new yellow daffodils'

Criterion (21d) from above suggests that because *pojalla* appears pre-verbally, it ought to be the subject. The other tests generally confirm this conclusion.

First, several tests confirm that the nominative-marked object is not in fact a subject. Even a plural possessum cannot trigger plural agreement, as shown in example (30).

(30) Poja-lla on / \*o-vat Faust-in käsikirjoitukse-t. boy-ADE be.PRS.3SG / be-PRS.3PL F-GEN manuscripts 'The boy has the manuscripts of Faust.'

When the possessum is replaced by a personal pronoun, the pronoun can only appear in accusative case and not in nominative case, as shown in example (31).

(31) Ehdokkaa-lla on hänet / \*hän. candidate-ADE not.PRS.3SG 3SG-ACC / 3SG.NOM 'The candidate has him/her.'

Finally, the possessum is located within the domain of negation: when the verb is negated, it must appear in partitive case rather than nominative. This behavior is typical of nominative-accusative objects, but not of subjects.

(32) Poja-lla ei ole koira-a / \*koira. boy-ADE not.PRS.3SG be.NOT dog-PAR / dog.NOM 'The boy doesn't have a dog.'

Together, these three results indicate that the nominative-marked argument cannot be the subject in the possessive construction.

The results of the binding tests show that the possessor is in fact the subject and the possessum the object. The possessor can bind both reflexive objects (33) and objects with subject-oriented possessives (34).

- (33) a. Ehdokkaa-lla on itse-nsä. candidate-ADE be.PRS.3SG self.NOM-3 'The candidate has himself.'
  - b. \*Itse-llä-nsä on ehdokas. self-ADE-3 be.PRS.3SG candidate Intended: 'Himself has the candidate.'
- (34) a. Ehdokkaa-lla on perhee-nsä. candidate-ADE be.PRS.3SG family.NOM-3 'The candidate has his family.'
  - b. \*Ehdokkaa-lla-nsa on perhe. candidate-ADE-3 be.PRS.3SG family.NOM Intended: 'Its candidate has the family.'

These results show that the possessor does in fact c-command the possessum and not vice versa, and so, by this test, the possessor is the subject and the possessum the object.

The possessive construction does, however, fail the -va participle extraction test (the one test involving A'-movement). It is the possessum that can be extracted using the active participle, not the possessor.

- (35) a. poja-lla ole-va-t narsissi-t boy-ADE be-PTCP-PL daffodil-PL 'the daffodils that the boy has'
  - b. \* narsisse-j-a ole-va poika daffodil-PL-PAR be-PTCP.NOM boy.NOM Intended: 'the boy who has daffodils'

The active participle selects the nominative(-accusative) marked object rather than the quirky-case-marked subject.

### 3.2.2 Caritive Construction

The caritive construction uses a lexical verb *puuttua* rather than simply the verb 'to be'. In this construction, the missing item appears postverbally in nominative (or nominative-accusative) case, while the person missing the item appears preverbally in ablative case. Koskinen's (1999) example is repeated here with a full NP replacing the pronoun in her example.

(36) Poja-lta puuttu-u kynä. boy-ABL lack-PRS.3SG pencil.NOM 'The boy doesn't have a pencil.'

By the simple pre-verbal subject rule, we would expect *pojalta* to be the subject. This case, however, is somewhat more difficult to decide.

The results of the tests to determine whether the nominative-marked argument is the subject are mixed. Plural missing items are capable of triggering plural agreement on the verb, as shown in example (37).

(37) Pojalta puuttu-u / puuttu-vat Faust-in käsikirjoitukse-t. boy-ABL lack-PRS.3SG / lack-PRS.3PL F-GEN manuscript-PL 'The boy doesn't have the manuscripts of Faust.'

This result suggests that the missing item in this construction may be located in a higher specifier position where it can trigger verb agreement. This is not necessarily proof that it is a subject, though; nominative objects in Icelandic are capable of inducing number agreement on verbs (Thráinsson 2007).

The missing item is not, however, located outside of the scope of negation: when the verb is negated, the missing item must appear in partitive case, as shown in example (38).

(38) Poja-lta ei puutu kynä-ä / \*kynä. boy-ABL not.PRS.3SG lack.CNG pencil-PAR / pencil.NOM 'The boy isn't lacking a pencil.'

The missing item is also replaced by an accusative rather than a nominative personal pronoun.

(39) Ehdokkaa-lta puuttu-u ?hän-et / \*hän. candidate-ABL lack-PRS.3SG 3SG-ACC / 3SG.NOM 'The candidate lacks him/her.'

While the missing item clearly is not an ordinary subject, it does have more subject properties than the possessum in the possessive construction, suggesting there may be some difference in the underlying structures.

The results of the binding tests are also more equivocal. It is certainly impossible for the nominative argument to bind a reflexive or possessive in the ablative argument, but the sentences in which the ablative binds the nominative are also not perfect.

- (40) a. ? Ehdokkaa-lta puuttu-u jopa itse-nsä. candidate-ABL lack-PRS.3SG even self-3 'The candidate lacks even himself/herself.'
  - b. \* (Hän-en) itse-ltä-nsä puuttu-u jopa ehdokas. 3SG-GEN self-ABL-3 lack-PRS.3SG even candidate Intended: 'Himself/herself lacks even the candidate.'

- (41) a. ? Ehdokkaa-lta puuttu-u jopa perhee-nsä. candidate-ABL lack-PRS.3SG even family.NOM-3 'The candidate $_i$  lacks even his/her $_i$  family.'
  - b. \*(Hän-en) ehdokkaa-lta-nsa puuttu-u jopa perhe. 3SG-GEN candidate-ABL-3 lack-PRS.3SG even family.NOM Intended: 'His/her; candidate lacks even the family;.'

This may be due to semantic factors. In example (40a), it is odd for a person to lack him- or herself, while in example (41a), the sentence is more natural without the possessive  $-ns\ddot{a}$ , possibly because possession may be generally implied by this construction. There is definitely a contrast in grammaticality between the two sentences in each pair, suggesting that the ablative is in fact the subject of the sentences.

As with the possessive construction, the active participle selects the nominativemarked argument here as well, even though it is not the subject.

- (42) a. poja-lta puuttu-va kynä boy-ABL lack-PTCP.NOM pencil.NOM 'the pencil which the boy doesn't have'
  - b. \*kynä puuttu-va poika pencil.NOM lack-PTCP.NOM boy
    Intended: 'the boy who doesn't have a pencil'

As with the possessive construction above, this test selects the opposite argument from the one above.

## 3.2.3 Becoming Construction

The becoming construction uses the verb *tulla* 'to come' with an elative preverbal argument and a nominative postverbal argument. Koskinen's (1999) example is repeated below, again with an NP replacing the pronoun.

(43) Poja-sta tule-e iso-na tutkimusmatkailija. boy-ELA come-PRS.3SG big-ESS explorer.NOM 'The boy will become an explorer when he grows up.'

Criterion (21d) suggests that the elative argument is the subject, and the other tests mostly confirm this hypothesis.

The tests mostly confirm that the nominative argument cannot be the subject. First, it is incapable of triggering plural agreement on the verb, which must appear with default 3SG agreement morphology.

(44) Poj-i-sta tule-e / \*tule-vat iso-i-na boy-PL-ELA come-PRS.3SG / come-PRS.3PL big-PL-ESS tutkimusmatkailija-t. explorer-PL 'The boys will become explorers when they grow up.'

The nominative argument is also located within the scope of negation, so when the verb is negated, it obligatorily appears in partitive case instead of nominative.

(45) Poja-sta ei tule tutkimusmatkailija-a / boy-ELA not.PRS.3SG come.CNG explorer-PAR / \*tutkimusmatkailija.
explorer.NOM
'The boy won't become an explorer.'

The nominative-marked argument cannot be replaced by a pronoun, whether it is marked with accusative or with nominative case.

(46) \* Poja-sta tulee hän-et / hän. boy-ELA come-PRS.3SG 3SG-ACC / 3SG.NOM Intended: 'The boy will become him.'

This odd result may be due to information-structural constraints; it is possible that the result of the act of becoming must be new information, and so it cannot be replaced by a pronoun. Because two of these tests show the nominative argument not to be a subject while the third is inconlcusive, it is clear that the nominative argument cannot be the subject of the sentence.

The results of the binding tests confirm that the elative argument is in fact the subject and the nominative argument the object. The elative argument may bind

reflexives and possessives in the nominative-marked position, while the reverse is impossible.

- (47) a. Poja-sta tule-e itse-nsä uudelleen. boy-ELA come-PRS.3SG self-3 again 'The boy will become himself again.'
  - b. \*Itse-stä-nsä tule-e poika uudelleen. self-ELA-3 come-PRS.3SG boy.NOM again
    Intended: 'Himself will become the boy again.'
- (48) a. Poja-sta tule-e vihollise-nsa. boy-ELA come-PRS.3SG enemy.NOM-3 'The boy will become his own enemy.'
  - b. \*(Hän-en) poja-sta-nsa tule-e vihollinen. 3SG-GEN boy-ELA-3 come-PRS.3SG enemy.NOM 'His/her $_{i/*j}$  boy will become the enemy $_i$ .'

These results therefore show that the elative argument c-commands the nominative argument, and so they must be the subject and the object respectively.

Finally, as in the other constructions, participial extraction targets the nominative object rather than the elative subject.

- (49) a. poja-sta tule-va tutkimusmatkailija boy-ELA come-PTCP.NOM explorer.NOM 'the explorer that is coming out of the boy/the explorer the boy is becoming'
  - b. \*tutkimusmatkailija tule-va poika explorer.NOM come-PTCP.NOM boy.NOM Intended: 'the boy who is becoming an explorer'

#### 3.2.4 Direct Perception Construction

The direct perception construction again uses *olla* 'to be' as its verb, with a genitive preverbal argument<sup>1</sup> and a nominative postverbal argument. Koskinen's (1999) example is repeated here with a full NP replacing the pronoun.

(50) Etana-n on kylmä.
snail-GEN is cold.NOM
'The snail is cold (i.e. it perceives cold).'

Because the class of items that may appear postverbally is quite limited, this construction is not subject to many of the tests we have used for the other constructions. The agreement test does not work because it may not appear with a plural nominative argument, and the pronoun test will not work because humans cannot appear as the second argument either. Reflexive binding is impossible to test for the same reason.

The second argument does not seem to fall within the domain of negation, as indicated by the requirement in example (51) that it appear in nominative case rather than partitive case, which we would expect from an object when the verb is negated.

(51) Etana-n ei ole kylmä / \*kylmä-ä. snail-GEN not.PRS.3SG be.CNG cold.NOM cold-PAR 'The snail is not (does not feel) cold.'

As in the other constructions we have investigated, it is impossible to extract the first argument by the participal relative clause formation strategy (52).

(52) \* kylmä ole-va etana cold.NOM be-PTCP.NOM snail.NOM Intended: 'the snail that is cold'

We are left with only the fact that the neutral order has the genitive argument first as an argument for the fact that this is a quirky subject construction.

<sup>&</sup>lt;sup>1</sup>Genitive case here is actually somewhat dialectal; the standard uses adessive case. However, I chose to use genitive case so as to get a greater variety of quirky cases.

#### 3.2.5 Experiencer Construction

The experiencer construction consists of a single partitive argument together with a causative verb such as *pelottaa* 'to frighten'. Koskinen's (1999) example is repeated below with a full DP argument.

(53) Siili-ä pelo-tta-a. hedgehog-PAR fear-CAUS-PRS.3SG 'The hedgehog is frightened.'

Because this construction has no second argument at all, it is not subject to any of the tests that were excluded for the direct perception construction above. In addition, it is not subject to the scope-of-negation test, because it lacks a nominative-marked argument entirely.

This construction, like all of the others, fails the participial extraction test. When we try to use a -va participle to extract the one argument (54a), we get semantics as in (54b), the related active sentence using the same verb.

- (54) a. pelo-tta-va siili fear-CAUS-PTCP.NOM hedgehog.NOM 'a frightening hedgehog'
  - b. Siili pelo-tta-a poika-a. hedgehog.NOM fear-CAUS-PRS.3SG boy-PAR 'The hedgehog frightens the boy.'

The participle picks out the nominative argument of this sentence for extraction.

A number of other tests were considered, such as quantifier float (see Holmberg and Nikanne 2002) and binding a possessed PP, but none of these distinguished subjects from objects in a normal transitive clause, and so they can show merely that *siiliä* is an argument, not that it is a subject. Again, we are left with only the fact that the partitive object must be preverbal (55) as an argument for its subjecthood.

(55) \* Pelo-tta-a siili-ä. fear-CAUS-PRS.3SG hedgehog-PAR Intended: 'The hedgehog is frightened.'

#### 3.2.6 Necessive Construction

The necessive construction involves a raising verb such as *täytyy* 'must' (we'll show that it is in fact a raising verb in the next chapter). Some past analyses have considered the genitive argument to be the subject, while others have analyzed the VP as the subject (see Bayer 2000 for an overview of past approaches). I examine example (6c), repeated below:

(56) Mati-n täyty-y puukotta-a postimies. M-GEN must-PRS.3SG stab-INF mailman.NOM 'Matti must stab the mailman.'

All of our tests indicate that the nominative-marked object cannot be the subject. First, it cannot induce agreement on the verb (57).

(57) Mati-n täyty-y / \*täyty-vät puukotta-a postimieh-et. M-GEN must-PRS.3SG / must-PRS.3PL stab-INF mailman-PL 'Matti must stab the mailmen.'

The nominative argument is also located within the domain of negation, so it must be replaced by a partitive in a negated sentence such as (58).

Finally, the nominative argument can only be replaced by an accusative pronoun (59).

(58) Mati-n ei täydy puukotta-a postimies-tä / M-GEN not.PRS.3SG must.CNG stab-INF mailman-PAR / \*postimies.
mailman.NOM
'Matti doesn't have to stab the mailman.'

(59) Mati-n täyty-y puukotta-a hän-et / hän. M-GEN must-PRS.3SG stab-INF 3SG-ACC / 3SG.NOM 'Matti must stab him/her.' Binding properties also show that the genitive argument is the subject and the nomininative argument the object. The genitive argument can bind a reflexive (60) and a possessive (61) nominative argument, but not *vice versa*.

- (60) a. Mati-n täyty-y puukotta-a itse-nsä.
  M-GEN must-PRS.3SG stab-INF self-3SG
  'Matti must stab himself.'
  - b. \*Itse-nsä täyty-y puukotta-a Matti. self-3SG must-PRS.3SG stab-INF M
    Intended: 'Himself must kill Matti.'
- (61) a. Mati-n täyty-y puukotta-a ystävä-nsä. M-GEN must-PRS.3SG stab-INF friend-3SG 'Matti $_i$  must stab his $_i$  friend.'
  - b. \*Ystävä-nsä täyty-y puukotta-a Matti. friend-3SG must-PRS.3SG stab-INF M Intended: 'His<sub>i</sub> friend must stab Matti<sub>i</sub>.'

Though  $t\ddot{a}ytyy$  passes all of the other tests, like the other constructions it fails the participal extraction test (62).

(62) \* mennä täyty-vä mies go.INF must-PTCP.NOM man.NOM Intended: 'the man who must go'

## 3.2.7 Summary

The constructions discussed by Koskinen (1999) do in fact seem to have quirky subjects, though with varying degrees of proof. Because the possessive, caritive, and becoming constructions were subject to all of our tests, I am quite confident in declaring them to have quirky subjects. I am less confident about the direct perception and experiencer constructions; I nevertheless include them in chapter 6 in my investigation of the interaction between quirky subjects and raising verbs. For a summary of the results of the tests, see Table 3.1.

Table 3.1: Quirky Subjects in Finnish

	Possessive	Caritive	Becoming	Dir. Perc.	Experiencer
Verb agreement	✓	X	$\checkmark$		
Domain of negation	✓	$\checkmark$	$\checkmark$	X	
Accusative pronoun	✓	$\checkmark$			
Reflexive binding	✓	$\checkmark$	$\checkmark$		
Possessive binding	✓	$\checkmark$	$\checkmark$		
Participial extraction	X	X	X	X	X

<sup>✓&#</sup>x27;s indicate results supportive of the conclusion that a construction involves a quirky subject, while X's mark results that contradict such a conclusion.

It is interesting that none of these constructions passed the participial extraction test, the only A'-movement-based test I used. This result suggests that A'-properties are separate from other subject properties, an idea I investigate further in section 6.2.1.

# Chapter 4

# Raising Verbs

While many articles about Finnish mention or discuss raising verbs (e.g. Koskinen 1998, Koskinen 1999, etc.), they do not undertake an in-depth investigation of which verbs are in fact raising or control verbs or if this is even a clear-cut distinction in Finnish. In sections 1-4, I look at both 2-place and 3-place potential raising verbs in Finnish. Section 5 investigates the source of genitive case marking on the subjects of  $t\ddot{a}ytyy$  'must' and  $pit\ddot{a}\ddot{a}$  'should.'

#### 4.1 The Tests

I use four tests to distinguish between raising and control construction, based on the discussion in Davies and Dubinsky (2004). The first three of these tests rely on the observation that control verbs, such as wanted in example (63a), assign semantic roles to their subjects, while raising verbs, such as appeared in example (63b), do not enter into semantic relationships with their subjects.

- (63) a. The student wanted to finish his homework.
  - b. The student appeared to finish his homework.

The fourth test relies on the syntactic differences between raising and control. In control sentences, as shown in (64a), the subject originates as the subject of the control verb and is coreferential with a lower PRO, which it binds; in raising sentences, as in (64b), the subject originates as the specifier of the lower verb and moves to become the subject of the raising verb.

- (64) a. The student<sub>i</sub> wanted  $PRO_i$  to finish his homework.
  - b. [The student]<sub>i</sub> appeared  $t_i$  to finish his homework.

Idealized raising verbs should pass all four of these tests, while idealized control verbs should fail all four tests.

#### 4.1.1 Selectional Restrictions Test

The selectional restrictions test relies on the assumption that, because there is no semantic connection between a raising verb and its subject, raising verbs cannot impose restrictions on the types of subjects with which they may appear (i.e., raising verbs do not subcategorize for their subjects). Control verbs, however, do establish semantic relationships with their subjects, and so they may (and usually do) impose semantic restrictions on their subjects. For example, while the raising verb seemed in (65a) may appear even with inanimate or abstract subjects, the control verb tried in (65b) may not.

- (65) a. The girl/dog/refrigerator/sin seemed to be included.
  - b. The girl/?dog/\*refrigerator/\*sin tried to be included.

In order to test this property, I use the four basic sentences in example (66), which have human, non-human animate, inanimate, and abstract subject respectively.

(66) a. Poika ost-i kaniini-n.
Boy.NOM buy-PST.3SG rabbit-ACC
'The boy bought a rabbit.'

- b. Kaniini söi porkkana-n. Rabbit.NOM eat.PST.3SG carrot-ACC 'The rabbit ate a carrot.'
- c. Kivi putos-i kaivo-on. Stone.NOM fall-PST.3SG well-ILL 'The stone fell into the well.
- d. Syllogismi todist-i lause-en. Syllogism.NOM prove-PST.3SG theorem-ACC 'The syllogism proved the theorem.'

Raising verbs should be acceptable when used with any of these base clauses, while control verbs should not be possible for some of them (usually the inanimate and abstract subjects).

#### 4.1.2 Impersonal Verb Test

The impersonal verb test similarly makes use of the fact that control verbs assign  $\theta$ -roles to their subjects while raising verbs do not. In particular, this means that control verbs require referential subjects (because only referential subjects can receive  $\theta$ -roles) while raising verbs do not. We see this in English with the pleonastic subjects of verbs like rain.

- (67) a. It appeared to rain.
  - b. \* It wanted to rain.

In order to test this property of the Finnish verbs in question, I use the equivalent Finnish verb sataa 'to rain', which appears without an overt pleonastic subject.

(68) Sata-a.
Rain-PRS.3SG
'It is raining.'

Raising verbs should be able to appear with sataa, while control verbs should not.

#### 4.1.3 That-clause Extraposition Test

In English, many raising verbs may appear with pleonastic subjects and that-clauses rather than with moved subjects and infinitival VPs, while control verbs cannot.

- (69) a. The printer seems to be out of toner.
  - b. It seems that the printer is out of toner.
- (70) a. The linguist wants to gloss the sentences.
  - b. \*It wants that the linguist glosses the sentences.

This result again follows from the fact that control verbs must assign  $\theta$ -roles to their subjects; in example (69b), this  $\theta$ -role can be assigned neither to the pleonastic subject it nor to the subject of the subordinate clause. In Finnish, we expect that only raising verbs should be able to appear with that-clauses (I test this with the subordinate clause below); though it is possible that some raising verbs might not permit that-clauses, if a verb does permit them, it must be a raising verb.

(71) ...että lapse-t mene-vät koulu-un. that child-PL.NOM go-PRS.3PL school-ILL '...that (the) children go to school.'

#### 4.1.4 Idiom Test

The final test rests on the assumption that the subjects of raising verbs originate in the specifier position of the lower VP and, crucially, that entries in the lexicon form syntactic constituents (Radford 1997). Idioms containing subjects may interact with raising verbs but not with control verbs. (While example (72c) is grammatical, it does not have an idiomatic reading; (72b) does.)

- (72) a. The cat is out of the bag.
  - b. The cat seems to be out of the bag.
  - c. # The cat wants to be out of the bag.

This is because the idiom is stored in the lexicon as a complete vP [the cat be out of the bag]. In sentence (72b), the idiom is inserted as a chunk and then the DP the cat moves to become the subject of seems. In sentence (72c), the vP is [PRO be out of the bag], which is not identical to the idiom chunk stored in the lexicon.

In Finnish we test this property with the idiom in (73). It should be able to appear with raising verbs but not with control verbs.

(73) Vintti pimeni.
attic.NOM darken-PST.3SG

'Someone lost his wits. (lit. The lights in the attic went out.)'

## 4.2 Raising vs. Control Verbs

In this section, I examine six verbs which exhibit what may be either subject-tosubject raising or subject control. I include verbs expected to be control verbs as well as verbs described in the literature as raising verbs.

#### 4.2.1 haluta 'to want'

I include the verb haluta 'to want', which is expected to be a control verb based on its meaning, in order to check that our tests separate out two distinct classes: control verbs and raising verbs. Haluta can only appear with animate, conscious subjects (74), indicating that it assigns a  $\theta$ -role to its subject.

- (74) a. Poika halua-a osta-a kaniini-n. boy.NOM want-PRS.3SG buy-INF rabbit-GEN 'The boy wants to buy a rabbit.'
  - b. Kaniini halua-a syö-dä porkkana-n. rabbit.NOM want-PRS.3SG eat-INF carrot-GEN 'The rabbit wants to eat a carrot.'

- c. # Kivi halua-a pudo-ta kaivo-on. stone.NOM want-PRS.3SG fall-INF well-ILL 'The stone wants to fall into the well.'
- d. \*Syllogismi halua-a todista-a lause-en. syllogism.NOM want-PRS.3SG prove-INF theorem-GEN Intended: 'The syllogism wants to prove the theorem.'

Example (74c) is only acceptable in a fantasy scenario where the rock is anthropomorphized. Haluta also may not appear with impersonal verbs, again suggesting that it requires a referential subject to which it can assign a  $\theta$ -role.

(75) \* Huomenna halua-a sata-a. tomorrow want-PRS.3SG rain-INF Intended: 'It wants to rain tomorrow.'

Haluta cannot appear with a that-clause, which does not prove it to be a control verb but is also not incompatible with its being one.

(76) \* Halua-a, että lapse-t mene-vät koulu-un. want-PRS.3SG that child-PL go-PRS.3PL school-ILL Intended: 'It wants that the children go to school.'

Finally, the idiomatic reading is completely unavailable in example (77) and even the literal meaning is odd, because it requires the attic to be conscious. All four tests therefore give results indicating that *haluta* is a control verb.

(77) # Vintti halua-a pime-tä. attic.NOM want-PRS.3SG darken-INF 'The attic wants to have its lights turned off.'

## 4.2.2 voida 'may'

Voida 'may' appears to be a textbook example of a raising verb. It does not subcategorize for its subject, appearing with any of the four sentences with complete grammaticality.

- (78) a. Poika voi osta-a kaniini-n.
  Boy.NOM may.PRS.3SG buy-INF rabbit-ACC
  'The boy may buy a rabbit.'
  - b. Kaniini voi syö-dä porkkana-n. Rabbit.NOM may.PRS.3SG eat-INF rabbit-ACC 'The rabbit may eat a carrot.'
  - c. Kivi voi pudota kaivoon. Stone.NOM may.PRS.3SG fall-INF well-ILL 'The stone may fall into the well.'
  - d. Syllogismi voi todista-a lause-en. Syllogism.NOM may.PRS.3SG prove-INF theorem-ACC 'The syllogism may prove the theorem.'

It can also appear with pleonastic subjects.

(79) Huomenna voi sata-a.
Tomorrow may.PRS.3SG rain-INF
'It may rain tomorrow.'

While *voida* may not appear on its own with a *that*-clause, the sentence becomes fully grammatical when we add *olla* 'to be' (in fact, my consultant says that this construction is quite common).

(80) Voi \*(olla), että lapse-t mene-vät koulu-un. May.PRS.3SG be.INF that child-PL go-pres.3PL school-ILL 'It may be that the children will go to school.'

Finally, when *voida* is used with the subject idiom, the idiomatic reading is still available.

(81) Vintti voi pime-tä.
Attic.NOM may.PRS.3SG darken-INF
'Someone may lose his wits./The lights may go out in the attic.'

All of these tests therefore confirm that voida is a raising verb, both in its semantic and its syntactic properties.

#### 4.2.3 saada 'to be permitted'

Saada 'to be permitted' also appears to be a raising verb, though its tests are not quite as clear-cut. It nearly passes the selectional restrictions test:

- (82) a. Poika saa osta-a kaniini-n.
  Boy.NOM get.PRS.3SG buy-INF rabbit-ACC
  'The boy is allowed to buy a rabbit.'
  - b. Kaniini saa syö-dä porkkana-n. Rabbit.NOM get.PRS.3SG eat-INF carrot-ACC 'The rabbit is allowed to eat a carrot.'
  - c. Kivi saa pudo-ta kaivo-on. Stone.NOM get.PRS.3SG fall-INF well-ILL 'The stone is allowed to fall into the well.'
  - d. ? Syllogismi saa todista-a lause-en. Syllogism.NOM get.PRS.3SG prove-INF theorem-ACC 'The syllogism is allowed to prove the theorem.'

Example (82d), with an abstract subject, is grammatical but odd, though this may be because it is strange to think of anyone being in a position to permit syllogisms to do anything. It is better in a context where mathematicians are arguing about the rules for formal proof and one of them declares that the syllogism is, in fact, permitted to prove the theorem within the system.

Saada may appear with impersonal constructions, however, which strongly suggests that it is a raising verb. (If true subcategorization were in fact responsible for the results in (82), the verb should definitely not permit sentences without subjects.)

(83) Huomenna saa sata-a.
Tomorrow get.PRS.3SG rain-INF
'It's good if it rains tomorrow.'

Saada may not appear with that-clauses, even if we add olla 'to be'. However, as discussed above, this test is a sufficient but not a necessary condition for a verb to be a raising verb, so failure in this test is not decisive.

(84) \* Saa (olla), että lapse-t mene-vät koulu-un. get.PRS.3SG be.INF that child-PL go-PRS.3PL school-ILL Intended: 'It is permitted for the children to go to school.'

Finally, saada passes the idiom test, indicating that its subject does in fact originate as the subject of the lower verb and move to its surface position.

(85) Vintti saa pime-tä. Attic.NOM get.PRS.3SG darken-INF 'Someone is permitted to lose his wits.'

Despite the questionable result in the selectional restrictions test and the failure in the that-clause extraction test, the positive results in the other two tests are sufficient to establish that saada is a raising verb.

#### 4.2.4 $t\ddot{a}ytyy$ 'must'

Unlike the above two verbs,  $t\ddot{a}ytyy$  'must' appears with a subject in genitive case rather than in nominative case. However, despite this difference in case marking, it still seems to be a raising verb. It does not subcategorize for its subject and is acceptable with all four test sentences.

- (86) a. Poja-n täyty-y osta-a kaniini. Boy-GEN must-PRS.3SG buy-INF rabbit.NOM 'The boy must buy a rabbit.'
  - b. Kaniini-n täyty-y syö-dä porkkana. Rabbit-GEN must-PRS.3SG eat-INF carrot.NOM 'The rabbit must eat a carrot.'
  - c. Kive-n täyty-y pudo-ta kaivo-on. Stone-GEN must-PRS.3SG fall-INF well-ILL 'The stone must fall into the well.'
  - d. Syllogismi-n täyty-y todista-a lause. Syllogism-GEN must-PRS.3SG prove-INF theorem.NOM 'The syllogism must prove the theorem.'

It also may appear with impersonal verbs grammatically.

(87) Huomenna täyty-y sata-a.
Tomorrow must-PRS.3SG rain-INF
'It must rain tomorrow.'

Like *saada*, however, it cannot appear with *that*-clauses, even if *olla* 'to be' is added. As we said before, a failed result in this test is not necessarily a sign that a verb is not a raising verb.

(88) Täyty-y \*(??olla), että lapse-t mene-vät koulu-un. Must-PRS.3SG be.INF that child-PL go-PRS.3PL school-ILL Intended: 'It must be that the children will go to school.'

Finally, *täytyy* may appear with our idiom with the idiomatic reading, completing the confimation that it is a raising verb.

(89) Vinti-n täyty-y pime-tä.
Attic-GEN must-PRS.3SG darken-INF
'Someone must lose his wits.'

## 4.2.5 $pit\ddot{a}\ddot{a}$ 'must'

Pitää 'must', like täytyy 'must', assigns genitive case to its subject but is still a raising verb. It allows inanimate and abstract subjects in addition to human ones, indicating that it does not have a semantic relationship with the subject.

- (90) a. Poja-n pitä-ä osta-a kaniini. boy-GEN should-PRS.3SG buy-INF rabbit.NOM 'The boy must buy a rabbit.'
  - b. Kaniini-n pitä-ä syö-dä porkkana. rabbit-GEN should-PRS.3SG eat-INF carrot.NOM 'The rabbit must eat a carrot.'
  - c. Kive-n pitä-ä pudo-ta kaivo-on. stone-GEN should-PRS.3SG fall-INF well-ILL 'The stone must fall into the well.'

d. Syllogismi-n pitä-ä todista-a lause. syllogism-GEN should-PRS.3SG prove-INF theorem.NOM 'The syllogism must prove the theorem.'

It also may appear with impersonal verbs, again indicating that there is no direct semantic connection between  $pit\ddot{a}\ddot{a}$  and any surface subjects with which it may appear.

(91) Huomenna pitä-ä sata-a. tomorrow should-PRS.3SG rain-INF 'It must rain tomorrow.'

As with the previous two verbs,  $pit\ddot{a}\ddot{a}$  may not appear with that-clauses, but this does not affect the argument that it is a raising verb.

(92) \* Pitä-ä (olla), että lapse-t mene-vät koulu-un. should-PRS.3SG be.INF that child-PL go-PRS.3PL school-ILL Intended: 'It must be that the children will go to school.'

Finally,  $pit\ddot{a}\ddot{a}$  does not prevent an idiomatic interpretation of example (93). Together, these tests all confirm that  $pit\ddot{a}\ddot{a}$  is in fact a raising verb.

(93) Vinti-n pitä-ä pime-tä. attic-GEN should-PRS.3SG darken-INF 'Someone must lose his wits.'

## 4.2.6 $n\ddot{a}ytt\ddot{a}\ddot{a}$ 'to seem'

Our last verb,  $n\ddot{a}ytt\ddot{a}\ddot{a}$  is again a textbook example of a raising verb, passing all four tests. It does not subcategorize for its subject, appearing equally acceptably with all of our test sentences.

- (94) a. Poika näyttä-ä osta-va-n kaniini-n. boy.NOM seem-PRS.3SG buy-PTCP-GEN rabbit-GEN 'The boy seems to buy a rabbit.'
  - b. Kaniini näyttä-ä syö-vä-n porkkana-n. rabbit.NOM seem-PRS.3SG eat-PTCP-GEN carrot-GEN
     'The rabbit seems to eat a carrot.'

- c. Kivi näyttä-ä putoa-va-n kaivo-on. stone.NOM seem-PRS.3SG fall-PTCP-GEN well-ILL 'The stone seems to fall into the well.'
- d. Syllogismi näyttä-ä todista-va-n lause-en. syllogism.NOM seem-PRS.3SG prove-PCP-GEN theorem.GEN 'The syllogism seems to prove the theorem.'

It also may appear with impersonal verbs, further confirming that it does not form a semantic relationship with its subject.

(95) Huomenna näyttä-ä sata-va-n. tomorrow seem-PRS.3SG rain-PTCP-GEN 'It will seem to rain tomorrow.'

In addition,  $n\ddot{a}ytt\ddot{a}\ddot{a}$  is the only verb tested in this section that permits that-clauses without even requiring the addition of olla 'to be'.

(96) Näyttä-ä, että lapse-t mene-vät koulu-un. seem-PRS.3SG that child-PL go-PRS.3PL school-ill 'It seems that the children are going to school.'

Finally,  $n\ddot{a}ytt\ddot{a}\ddot{a}$  preserves the idiomatic reading of idioms with which it is used (97). Together, all of these tests confirm that it must be a raising verb.

(97) Vintti näyttä-ä pimene-vä-n. attic.NOM seem-PRS.3SG darken-PTCP-GEN 'Someone will seem to lose his wits.'

## 4.3 ECM Verbs vs. Object Control Verbs

In this section, I look at four verbs which may be either subject-to-object raising verbs (I refer to them as ECM verbs without meaning to imply anything about how case is assigned) or object control verbs.

#### $4.3.1 \quad pyyt\ddot{a}\ddot{a}$ 'to ask'

Based on its semantics,  $pyyt\ddot{a}\ddot{a}$  'to ask' would be expected to be a clear-cut case of an object control verb, because only humans (and potentially animals) can respond to requests. As it turns out, the results are not quite so straightforward.  $Pyyt\ddot{a}\ddot{a}$  does subcategorize for its subject, which must be animate, as in example (98).

- (98) a. Äiti pyys-i poja-n osta-ma-an kaniini-n. mother.NOM ask-PST.3SG boy-GEN buy-inf-ill rabbit-GEN 'The mother asked the boy to buy a rabbit.'
  - b. Poika pyys-i kaniini-n syö-mä-än porkkana-n.
     boy.NOM ask-PST.3SG rabbit-GEN eat-inf-ill carrot-GEN
     'The boy asked the rabbit to eat a carrot.'
  - c. \*Tyttö pyys-i kive-n putoa-ma-an kaivo-on. girl.NOM ask-PST.3SG stone-GEN fall-inf-ill well-ill Intended: 'The girl asked the stone to fall into the well.
  - d. \* Matemaatikko pyys-i syllogismi-n todista-ma-an mathematician.NOM ask-PST.3SG syllogism-GEN prove-inf-ill lause-en. theorem-GEN Intended: 'The mathematician asked the syllogism to prove the theorem.'

However, it may also appear with impersonal verbs (99), which should not be possible if it is truly assigning a  $\theta$ -role.

(99) Zeus pyytä-ä sata-va-n huomenna. Z.NOM ask-PRS.3SG rain-PTCP-GEN tomorrow 'Zeus asks for it to rain tomorrow.'

It may also appear with *that*-clauses, which should also be an indication that it is a raising verb and not a control verb.

(100) Presidentti pyys-i, että lapse-t mene-vä-t koulu-un. president.NOM ask-PST.3SG that child-PL go-PRS.3PL school-ill 'The president asked that children go to school.'

Pyytää does not, however, allow an idiomatic interpretation (or any interpretation at all, in this case) of idioms with which it is used.

(101) \* Juhlan isäntä pyys-i vinti-n pimene-mä-än.
party-GEN host.NOM ask-PST.3SG attic-GEN darken-inf-ill
Intended: 'The host of the party asked the lights in the attic to go out/himself
to lose his wits.'

Pyytää therefore does not appear to fall neatly into either of our categories. One possibility is that there are in fact two separate lexical items involved here, one of which is an ECM verb and one of which is an object control verb. The object control verb is the default interpretation when there is in fact an object (in the selectional restrictions and idiom tests), while the ECM interpretation is accessible when it is used with an impersonal verb or with a that-clause, i.e., when it has no object and so cannot be interpreted as an object control verb. (Similar analyses have been given for verbs like threaten in English.)

#### 4.3.2 antaa 'to allow'

Antaa 'to allow' is the active form corresponding to saada 'to be permitted', discussed above in section 4.2.3; in fact, these verbs also mean 'to give' and 'to receive' when used with DP objects. Antaa's behavior parallels that of saada quite closely, leading to the conclusion that it is an ECM verb. It can appear with all four sentences in our selectional restrictions test, though, as with saada, the (d) sentence is only plausible in the context of a debate over mathematical foundations.

- (102) a. Äiti anto-i poja-n osta-a kaniini-n. mother.NOM give-PST.3SG boy-GEN buy-inf rabbit-GEN 'The mother let the boy buy a rabbit.'
  - b. Poika anto-i kaniini-n syö-dä porkkana-n.
     boy.NOM give-PST.3SG rabbit-GEN eat-inf carrot-GEN
     'The boy let the rabbit eat a carrot.'

- c. Tyttö anto-i kive-n pudo-ta kaivo-on. girl.NOM give-PST.3SG stone-GEN fall-inf well-ill 'The girl let the stone fall in the well.'
- d. ? Matemaatikko antoi syllogismi-n todista-a mathematician.NOM give-PST.3SG syllogism-GEN prove-inf lause-en.
  theorem-GEN
  'The mathematician let the syllogism prove the theorem.'

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Antaa can also appear with impersonal verbs, meaning that it does not assign a  $\theta$ -role to its immediately following noun when it has one.

(103) Zeus anta-a sata-a huomenna. Z.NOM give-PST.3SG rain-inf tomorrow 'Zeus will let it rain tomorrow.

It cannot appear with a *that*-clause, but as discussed for *saada*, this is not a necessary condition for being a raising verb.

(104) \* Presidentti anto-i, että lapse-t mene-vät koulu-un. president.NOM give-PST.3SG that child-PL go-PRS.3PL school-ill Intended: 'The president allowed that the children go to school.'

Finally, the idiomatic reading is permitted with *antaa*, confirming that, at least underlyingly, its immediately following noun is not its object.

(105) Juhla-n isäntä anto-i vinti-n pime-tä. party-GEN host.NOM give-PST.3SG attic-GEN darken-inf 'The host of the party let himself lose his wits.'

These results all suggest that antaa is an ECM verb.

## 4.3.3 odottaa 'to expect'

In English, expect is the original example of an ECM verb, and the data bear out prediction based on semantics that it should be one in Finnish as well. Odottaa 'to expect' can appear grammatically with all four sentences in our selectional restrictions test.

- (106) a. Äiti odott-i poja-n osta-va-n kaniini-n. mother.NOM expect-PST.3SG boy-GEN buy-PTCP-GEN rabbit-GEN 'The mother expected the boy to buy a rabbit.'
  - b. Poika odott-i kaniini-n syö-vä-n porkkana-n. boy.NOM expect-PST.3SG rabbit-GEN eat-PTCP-GEN carrot-GEN 'The boy expected the rabbit to eat a carrot.'
  - c. Tyttö odott-i kive-n putoa-va-n kaivo-on. girl.NOM expect-PST.3SG stone-GEN fall-PTCP-GEN well-ill 'The girl expected the stone to fall into the well.'
  - d. Matemaatikko odott-i syllogismi-n mathematician.NOM expect-PST.3SG syllogism-GEN todista-va-n lause-en. prove-PTCP-GEN theorem-GEN

    'The mathematician expected the syllogism to prove the theorem.'

It also may appear without any overt DP between it and the infinitive, further demonstrating that it does not enter into a semantic relationship with its following DP.

(107) Meteorologi odotta-a sata-va-n huomenna. meteorologist.NOM expect-PST.3SG rain-PTCP-GEN tomorrow 'The meteorologist expected it to rain tomorrow.'

That-clauses are entirely acceptable with odottaa; the infinitives used in the other examples are perceived as upper-register.

(108) Presidentti odott-i, että lapse-t mene-vät koulu-un. president.NOM expect-PST.3SG that child-PL go-PRS.3SG school-ill 'The president expected that the children will go to school.'

Lastly, *odottaa* preserves the idiomatic meaning of idioms with which it is used, further demonstrating that it is an ECM verb.

(109) Juhla-n isäntä odott-i vinti-n pimene-vä-n.
party-GEN host expect-PST.3SG attic-GEN darken-PTCP-GEN
'The host of the party expected to lose his wits.'

#### 4.3.4 sanoa 'to say'

Finnish sanoa 'to say', unlike its English equivalent, may take infinitival complements. As its semantics would suggest, though, it is an ECM verb. It does not subcategorize for its subject, appearing with abstract objects as easily as human ones.

- (110) a. Äiti sano-i poja-n osta-va-n kaniini-n. mother.NOM say-PST.3SG boy-GEN buy-PTCP-GEN rabbit-GEN 'The mother said the boy bought a rabbit.'
  - b. Poika sano-i kaniini-n syö-vä-n porkkana-n. boy-NOM say-PST.3SG rabbit-GEN eat-PTCP-GEN carrot-GEN 'The boy said the rabbit ate a carrot.'
  - c. Tyttö sano-i kive-n putoa-va-n kaivo-on. girl.NOM say-PST.3SG stone-GEN fall-PTCP-GEN well-ill 'The girl said the stone fell in the well.'
  - d. Matemaatikko sano-i syllogismi-n todista-va-n mathematician.NOM say-PST.3SG syllogism-GEN prove-PTCP-GEN lause-en.
    theorem-GEN

'The mathematician said the syllogism proved the theorem.'

It also appears with impersonal verbs, indicating that the object is in fact not required and therefore that it does not receive a  $\theta$ -role. (Again, these sentences are rather high-register.)

(111) Meteorologi sano-o sata-va-n huomenna. meteorologist.NOM say-PRS.3SG rain-PTCP-GEN tomorrow 'The meteorologist says it'll rain tomorrow.'

Like English say, sanoa may appear with that-clauses, again indicating that an object that can receive a  $\theta$ -role is unnecessary.

(112) Presidentti sano-i, että lapse-t mene-vät koulu-un. president.NOM say-PST.3SG that child-PL go-PRS.3PL school-ill 'The president said that children will go to school.'

Verb	Selection	Impersonal	Idiom	That-clause
haluta 'to want'	X	X	X	X
voida 'may'	✓	$\checkmark$	$\checkmark$	$\checkmark$
saada 'to be permitted'	?	$\checkmark$	$\checkmark$	X
$n\ddot{a}ytt\ddot{a}\ddot{a}$ 'to seem'	✓	$\checkmark$	$\checkmark$	$\checkmark$
$t\ddot{a}ytyy$ 'must'	✓	$\checkmark$	$\checkmark$	X
$pit\ddot{a}\ddot{a}$ 'should'	✓	$\checkmark$	$\checkmark$	X
pyytää 'to ask'	X	✓	X	<b>√</b>
antaa 'to allow'	?	$\checkmark$	$\checkmark$	X
odottaa 'to expect'	✓	$\checkmark$	$\checkmark$	$\checkmark$
sanoa 'to say'	✓	$\checkmark$	$\checkmark$	$\checkmark$

Table 4.1: Raising Verb Results

 $\checkmark$ 's indicate results supportive of the conclusion that a verb is a raising verb, while X's mark results that contradict such a conclusion. ?'s indicate inconclusive results.

Finally, sanoa may appear with idioms in their idiomatic reading (113), and so it passes all four tests indicating it to be an ECM verb.

(113) Juhla-n isäntä sano-i vinti-n pimene-vä-n.
party-GEN host say-PST.3SG attic-GEN darken-PTCP-GEN
'The host of the party said he lost his wits.'

## 4.4 Summary

A summary of the results is provided in Table 4.1. Only haluta 'to want' fails every single test and only voida 'may', näyttää 'to seem', sanoa 'to say', and odottaa 'to expect' pass every single test. However, because the That-clause Extraction Test (as discussed above) is mainly dependent on properties of particular lexical items rather than on properties of raising verbs in general, it seems safe to leave this test out. This allows us to draw a clear division between the control verbs haluta and pyytää and all of the rest, which are raising verbs. This division is what we expected based on the verbs' semantics.

## 4.5 Genitive-assigning raising verbs

Because we are interested in looking at the effects of raising to inherent-case-assigning positions, we must make sure that the genitive case appearing on the subjects of  $t\ddot{a}ytyy$  and  $pit\ddot{a}\ddot{a}$  is actually assigned by these verbs. An alternative analysis would be that the genitive in sentences like (114a) is assigned by the infinitive in the lower verb, as it appears to be in sentences like (114b) (and as argued by Vainikka 1989).

- (114) a. Poja-n täyty-y <pojan> men-nä eläintarha-an. boy-GEN must-PRS.3SG go-INF zoo-ILL 'The boy must go to the zoo.'
  - b. Äiti anto-i poja-n men-nä eläintarha-an. mother.NOM give-PST.3SG boy-GEN go-INF zoo-ILL 'The mother allowed the boy to go to the zoo.'

In Vainikka's (1989) view, genitive is simply the case assigned to all specifiers, and so there is no way to distinguish which head is actually assigning the genitive case. In modern theories of case assignment/checking, though, case needs to be assigned by a particular element. There are two possibilities that we need to distinguish between:

- 1. In sentence (114a), the genitive case is assigned/checked by *täytyy*. There may or may not be a case assigned/checked by *mennä*.
- 2. In sentence (114a), the genitive case is assigned/checked by mennä. Täytyy does not assign or check any case on its specifier.

Explanation 2 would become problematic when we begin to look at quirky case and MCC. Quirky subject case might be assigned *instead* of genitive in the lower position, and so we would not be dealing with MCC but rather with a simple replacement of one case with another. In this section, I provide several arguments for favoring explanation 1 over explanation 2, though the result is not entirely conclusive.

One argument for explanation 1 comes from the interaction between  $t\ddot{a}ytyy$  and genitive quirky subjects. Sentence (115a) is ambiguous between two different readings,

one in which the snail is a physical object with a low temperature (example (115b), without a quirky subject) and one in which the snail is a conscious organism that perceives cold (example (115c), with a quirky subject). There is a preference for the former reading.

- (115) a. Etana-n täyty-y olla kylmä. snail-GEN must-PRS.3SG be.INF cold.NOM

  'The snail must be cold (i.e. perceive cold / be cold to the touch).'
  - b. Etana on kylmä. snail.NOM be.PRS.3SG cold.NOM 'The snail is cold (to the touch).'
  - c. Etana-n on kylmä. snail-GEN be.PRS.3SG cold.NOM 'The snail is (feels) cold.'

Under the assumption that different readings reflect different syntactic structures, it seems likely that these two readings reflect two different positions where genitive case is assigned. With the (115b) reading, genitive case is assigned by  $t\ddot{a}ytyy$  in the upper position. With the (115a) reading, genitive case is assigned by olla in the lower position (and then possibly again by  $t\ddot{a}ytyy$ ). A supporter of explanation 2 would have to argue that  $menn\ddot{a}$  can assign two different types of genitive case, but this would necessitate a new theory of how the same element can assign the same case in multiple distinct ways.

Another argument depends on the possible positions of the genitive subject. When we passivize example (114b) above, the subject of the infinitive retains its genitive case.<sup>1</sup> It may appear either before or after the passivized verb, as shown in example (116). On the other hand, the genitive subject of  $t\ddot{a}ytyy$  must appear before  $t\ddot{a}ytyy$  in example (117).

<sup>&</sup>lt;sup>1</sup>The Finnish passive is not a true passive but rather an impersonal construction, interpreted as having a plural human agent (Manninen and Nelson 2004).

- (116) a. Anne-taan poja-n men-nä eläintarha-an. give-PRS.PASS boy-GEN go-INF zoo-ILL
  - b. Poja-n anne-taan men-nä eläintarha-an.boy-GEN give-PRS.PASS go-INF zoo-ILL'They allowed to boy to go to the zoo.'
- (117) a. Poja-n täyty-y men-nä eläintarha-an. boy-GEN must-PRS.3SG go-INF zoo-ILL 'The boy must go to the zoo.'
  - b. \* (Huomenna) täytyy pojan mennä eläintarhaan. tomorrow must-PRS.3SG boy-GEN go-INF zoo-ILL 'The boy must go to the zoo (tomorrow).'

This difference suggests that there is something forcing the subject to move in the (117) sentences but not in (116). It cannot be accounted for simply by an EPP property that prevents the verb from appearing at the beginning of the sentence, because including huomenna 'tomorrow' in this position does not repair the sentence. This position also is not required to be filled when  $t\ddot{a}ytyy$  is used with impersonal verbs, as in (118).

(118) Täyty-y sata-a. must-PRS.3SG rain-INF 'It must rain.'

The movement appears therefore to be motivated by some characteristic of the genitive subject. Explanation 1 provides the answer: it must move in order to check its case feature. Case has typically been considered the motivation for A-movement in raising constructions (Davies and Dubinsky 2004), and so explanation 1 should therefore be viewed as the null hypothesis for Finnish. Explanation 2 would have to come up with a new, separate motivation for movement, and no obvious solutions present themselves.

# Chapter 5

# Multiple Case Checking

In this chapter I investigate MCC phenomena in Finnish. In section 1, I show that inherent case assigned at a lower position is preserved, whether the higher position assigns grammatical or inherent case. In sections 2 and 3, I investigate the implications of this result for Bejar and Massam's (1999) theory of MCC and for the Case in Tiers model respectively; and in section 4, I show that the necessary changes in fact make the two theories compatible. Finally, section 5 shows that structural case assignment may occur at CP rather than IP.

## 5.1 Results

As we saw in chapter 2, normal, non-quirky-case-assigning verbs have nominative or genitive subjects when used with raising verbs in Finnish. The example is repeated below.

- (119) a. Pallo pomppi-i katolta. ball.NOM bounce-3SG.PRS roof-ABL 'The ball bounces down from the roof.'
  - b. Pallo voi pomppi-a katolta. ball.NOM can.3SG.PRS bounce-INF roof-ABL 'The ball might bounce down from the roof.'

c. Pallo-n täyty-y pomppi-a katolta. ball-GEN must-3SG.PRS bounce-INF roof-ABL 'The ball must bounce down from the roof.'

We do not know that any case is actually assigned at the lower position in the chain, however, so we do not know whether there are any MCC chains in which grammatical case is assigned in the lower position. With quirky subjects, however, we can easily see whether the lower case appears when raising verbs are used. In fact, whether the raising verb assigns nominative or genitive case, it is always the quirky subject case assigned by the lower verb that appears with the raising verb. Koskinen (1998) actually notes this fact and uses it as a test for whether verbs are raising verbs, though she does not actually look into quirky subjects or raising verbs in any depth.

I looked at the pairwise interaction of each raising verb I investigated in chapter 4 with each quirky subject construction I investigated in chapter 3. Some representative examples are included below.

- (120) a. Eläkeläis-i-llä saa olla sukellusvene-i-tä. pensioner-PL-ADE get.PRS.3SG be.INF submarine-PL-PAR 'The pensioners are allowed to have submarines.'
  - b. Siili-ä näyttä-ä pelo-tta-va-n.
     hedgehog-PAR seem-PRS.3SG fear-CAUS-PTCP-GEN
     'The hedgehog seems to be frightened.'
  - c. Etana-n voi olla kylmä. snail-GEN may.PRS.3SG be.INF cold.NOM 'The snail may be cold (i.e. perceive cold).'
- (121) a. Keisari-lta pitä-ä puuttu-a alusvaatte-et. emperor-ABL should-PRS.3SG lack-INF underwear-PL 'The emperor must be lacking underwear.'
  - b. Huijare-i-sta täyty-y tulla pankkiire-j-a. conman-PL-ELL must-PRS.3SG come.INF banker-PL-PAR 'The conmen must become bankers.'

The subject of these sentences must appear in the quirky case and cannot appear in the case ordinarily assigned by the raising verbs, as shown in example (122).

- (122) a. # Eläkeläise-t saa-vat olla sukellusvene-i-tä.

  pensioner-PL get-PRS.3PL be.INF submarine-PL-PAR

  'The pensioners are allowed to be submarines.'

  Intended: 'The pensioners are allowed to have submarines.'
  - b. \* Keisari-n pitä-ä puuttu-a alusvaatte-et. emperor-GEN should-PRS.3SG lack-INF underwear-PL Intended: 'The emperor should lack underwear.'

It is also impossible for the nominative object to be assigned genitive case by genitive-assigning raising verbs (123), indicating that raising obligatorily targets the quirky subject and not the nominative-marked DP.

(123) \* Keisari-lta täyty-y puuttu-a alusvaatte-i-den. emperor-ABL must-PRS.3SG lack-INF underwear-PL-GEN Intended: 'The emperor must be lacking underwear.'

These ungrammatical examples indicate that we are truly dealing with raising of an inherent-case-marked subject in these examples.

Control verbs, as expected, do not allow the preservation of quirky-case-marked subjects.

- (124) a. \*Huijare-i-sta halua-a tulla pankkiire-j-a. conman-PL-ELA want-PRS.3SG come.INF banker-PL-PAR
  - b. \*Huijari-t halua-vat tulla pankkiire-j-a. conman-PL want-PRS.3PL come.INF banker-PL-PAR Intended: 'The conmen want to become bankers'

It is both impossible for the subject to maintain its quirky case (124a) and for the subject to control a quirky-case-marked PRO (124b). There was only one example that violated this generalization; it is discussed in section 5.1.1. In this regard, Finnish differs from Icelandic, which does allow control of non-nominative subject positions (Bobaljik and Landau 2009).

We get the same results with ECM and object control verbs. With ECM verbs, the subject of the infinitive appears in the associated quirky case (125).

- (125) a. Kenraali sano-i eläkeläis-i-llä ole-va-n general.NOM say-PST.3SG pensioner-PL-ADE be-PTCP-GEN sukellusvene-i-tä. submarine-PL-PAR
  - 'The general said the pensioners had submarines.'
  - b. Räätäli anto-i keisari-lta puuttu-a alusvaatte-et. tailor.NOM give-PST.3SG emperor-ABL lack-INF underwear-PL 'The tailor allowed the emperor to lack underwear.'
  - c. Tyttö odott-i siili-ä pelo-tta-va-n. girl.NOM wait-PST.3SG hedgehog-PAR fear-CAUS-PTCP-GEN 'The girl expected the hedgehog to be frightened.'

Object control verbs, like subject control verbs, cannot appear with quirky-subject constructions at all.

(126) \* Ehdokas pyys-i huijare-i-sta / huijare-i-den candidate.NOM ask-PST.3SG conman-PL-ELA / conman-PL-GEN tulla pankkiire-j-a. come.INF banker-PL-PAR

Intended: 'The candidate asked the conmen to become bankers.'

## 5.1.1 Exceptional example

Example (127) is the one sentence that did not conform to the generalizations above.

(127) Siili-ä halua-a pelo-tta-a. hedgehog-PAR want-PRS.3SG fear-CAUS-INF 'The hedgehog wants to be frightened.'

Despite the fact that *haluta* is a control verb, as we established in chapter 4, the subject appears in the quirky case assigned by the lower verb. However, similar constructions with partitive subjects do not behave in the same way (128, 129).

- (128) a. Isoäiti-ä aivastu-tta-a. grandmother-PAR sneeze-CAUS-PRS.3SG 'Grandmother feels like sneezing.'
  - b. \*Isoäiti-ä halua-a aivastu-tta-a. grandmother-PAR want-PRS.3SG sneeze-CAUS-INF Intended: 'Grandmother wants to feel like sneezing.'
- (129) a. Tähte-ä laula-tta-a. star-PAR sing-CAUS-PRS.3SG 'The star feels like singing.'
  - b. \*Tähte-ä halua-a laula-tta-a. star-PAR want-PRS.3SG sing-CAUS-PRS.3SG Intended: 'The star wants to feel like singing.'

It is unclear why these structures should behave differently; given that the only difference between them is the particular verb root involved, we can only guess that there is some lexical property of *pelo*- 'fear' that allows the partitive case to be preserved. These results suggest that the relationship between whether or not case is preserved and whether a verb is a raising or control verb is more complicated than a simple one-to-one relationship; this issue is discussed further in section 6.3.

## 5.2 Implications for Multiple Case Checking

In this section, I look at the implications of Finnish for two different aspects of MCC theory as presented by Bejar and Massam (1999). First, I look at where Finnish fits in the typology of languages that they found. Then, I look at the implications of inherent-inherent case chains for their theoretical model.

## 5.2.1 Typological status of Finnish

Bejar and Massam (1999) looked at English, Hungarian, Icelandic, Niuean, and Norwegian in their survey of MCC phenomena, and found that they fell into the cate-

MCC Types Non-inherent Inherent
Allow MCC Hungarian, Niuean Icelandic, Finnish
Allow MCC with syncretism Norwegian Disallow MCC English

Table 5.1: Typology of MCC (adapted from Bejar and Massam 1999)

gories shown in Table 5.1, adapted from their article. In Finnish, we saw inherent-structural and inherent-inherent case chains, but had no evidence for chains starting in a structural-case-assigning position; Finnish also does not seem to have any requirements for syncretism in case chains.

I have changed the labels on Bejar and Massam's columns: where their table had "structural-structural" and "inherent-structural", I mark only whether the case chain involved inherent case or not. This allows me to capture the similarity between Finnish and Icelandic, both of which allow inherent-case-marked arguments to move to other case-marking positions (though the original inherent case is always the one that is morphologically realized). The fact that Finnish has inherent-inherent chains while Icelandic does not may simply be a result of an accidental gap in the Icelandic lexicon; it may simply happen not to have any raising verbs that assign inherent case to their subjects (there is no evidence to support a principled distinction). It is interesting that one slot in the table (languages that allow inherent-structural or inherent-inherent chains but only when the two forms are syncretic) remains unfilled: this may reflect underlying syntactic constraints, or it may be simply less common for inherent and structural cases to share their overt morphology.

## 5.2.2 Inherent case and Multiple Case Checking

As presented by Bejar and Massam (1999), MCC theory simply makes no predictions for what should happen when a DP is assigned multiple inherent cases. The rules they present for choosing between cases basically boil down to the following two principles:

- Inherent case takes precedence over structural case.
- Of several structual cases, the one assigned last is the one that is morphologically realized (assuming no inherent case has been assigned).

These rules are consistent with morphological realization of either the higher or the lower of two different inherent case assignments. We must add the following rule as a stipulation in order to account for the behavior of Finnish quirky subjects:

#### (130) Inherent Case Indelibility Rule

Inherent case assignments may not be deleted or replaced.

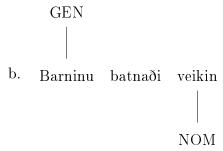
Within the visual representation of their system, this means that once the separate feature slot for inherent case has been filled, it cannot change further over the course of the derivation. This allows us to predict that, for example, a subject that is assigned elative case by *tulla* 'to become' and genitive case by *pitää* 'must' will appear with morphological elative case.

## 5.3 Implications for Case in Tiers

Unlike MCC theory, Case in Tiers explicitly relies on the idea that a single DP may receive only one case assignment (however, as we shall see in section 5.4 below, the two theories are not incompatible). Maling (2009), among others, uses this fact to explain why quirky subjects in Finnish and Icelandic appear in nominative case: because the subject has already been assigned inherent case, it cannot receive nominative case as well, and so the next highest argument (the object) receives nominative case.

(131) a. Barninu batnaði veikin. the.child[DAT] recovered.from the.disease[NOM]

'The child recovered from the disease.' (Yip et al. 1987)



In order to account for the data above, though, we do not need to tamper with Case in Tiers' very successful account of grammatical case assignment on objects—assuming correct assignment of inherent case, Case in Tiers assigns the proper case to the object: accusative when the subject is nominative, nominative when it is not.

Case in Tiers theory simply does not address the possibility that a single argument may receive multiple inherent case assignments. We must add the Inherent Case Indelibility Rule (130) from above: within the visual representation of their model, this could be interpreted as saying that no DP may be associated with two inherent cases, and that once an inherent case is associated with a DP, it cannot be replaced. This means that quirky-case-assigning raising verbs may simply fail to assign case if the raised subject already has received inherent case; in particular, inherent case does not shift to the next highest argument the way that grammatical case does.

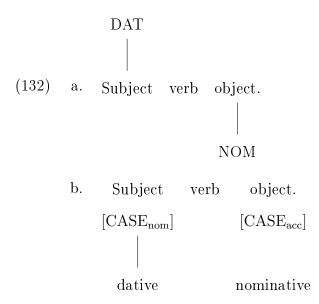
The fact that inherent case does not shift is not explained by Maling's specification that it is assigned based on  $\theta$ -role, rather than simply on structural position: because raising verbs can assign inherent case, the Case in Tiers account of inherent case is not adequate to account for the genitive case on the subject of verbs like  $t\ddot{a}ytyy$  'must' in Finnish. Here, the inherent case clearly cannot be assigned based on  $\theta$ -role, because raising verbs do not assign  $\theta$ -roles to their raised arguments. It also cannot be simply assigned in the manner of grammatical case, because, as we saw in example (123) above, genitive case cannot be assigned to the object. The assignment of genitive case with raising verbs therefore appears to be based on grammatical function—raising verbs like  $t\ddot{a}ytyy$  target the subject of the clause. This reliance

on grammatical function is not problematic, however, because Case in Tiers theory already includes grammatical function among its theoretical primitives in order to account for the order of preference in assigning nominative case (subjects > objects > adjuncts).

### 5.4 Which theory do we want?

Neither theory was able to account for the Finnish results presented here without the addition of a stipulation equivalent to the Inherent Case Indelibility Rule (130). Case in Tiers also required a change in how inherent case is assigned more generally, from a system based on  $\theta$ -roles to one based on grammatical functions, but this change leads to minimal differences in the the way we account for any particular sentence. After these changes, each theory continues to account for all of the data it dealt with before, while also accounting for the new data.

The decision between the two theories is therefore based mainly on the simplicity of their accounts. One key area of difference is in how they deal with nominative objects in languages like Finnish and Icelandic: in Case in Tiers (132a), the fact that objects of verbs with quirky subjects receive nominative case simply falls out from the way that grammatical case is assigned, while in MCC (132b), some head must be assigning a nominative case feature to the object each time (as discussed in section 2.2.2, because the object is assigned structural accusative case). Therefore, on the base of Finnish and Icelandic alone, a Case-in-Tiers-based approach is more attractive.



When we look at the cross-linguistic picture, it becomes more complicated. In Faroese, whose quirky subjects behave virtually identically to Icelandic ones (Thráinsson 2007), the objects of verbs with quirky subjects appear in accusative case.

- (133) Honum tókti skattin ov lítlan. (Faroese) him[DAT] thought tax-the[ACC] too small[ACC] 'He thought the tax was too small.' (Barnes and Weyhe 1994: 213)
- (134) Henni hefur alltaf þótt Ólafur leiðinlegur. (Icelandic) her[DAT] has always thought Olaf[NOM] boring[NOM]

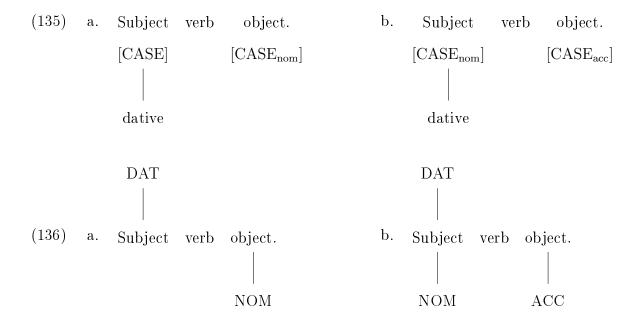
  'She has always found Olaf boring.' (Zaenen et al. 1985)

In Russian as well, objects of quirky-subject verbs appear in accusative case (Babby 2010). These constructions are better accounted for under an MCC-like model, in which quirky subjects also have structural nominative case (which is obscured by the inherent case) and their objects receive structural accusative case. One possible approach, then, is to parametrize our theory of case assignment.

Of course, if we allow parametrization of the ability of a single DP to receive both structural and inherent case, the theories become much more similar. In languages such as Faroese, Case in Tiers would allow the subject to receive both quirky case and structural nominative case; a stipulation would then say that it is the quirky case that is morphologically realized (just as a stipulation was required in MCC).

In languages such as Finnish, MCC could disallow DPs with both inherent case and structural case, so that whatever head assigns structural nominative case would be forced to assign it not to the subject but to the next available DP, the object.

Once we allow this parametrization, the two theories simply become notational variants of one another. In languages like Finnish and Icelandic, we get the case assignments shown in (135a) and (136a); the subject receives only an inherent case assignment (here, dative) and the object receives a structural nominative case assignment. In languages like Russian and Faroese, we get the case assignments shown in (135b) and (136b); the subject receives both an inherent case assignment and a structural nominative case assignment, while the object is assigned structural accusative case.



Of course, to parametrize in this way renders the two theories equivalent and eliminates their substantive claims about these structures: MCC's hypothesis that quirky subjects universally receive structural nominative case as well, and Case in Tiers's universal prohibition of multiple case assignments. It remains to be seen whether simply parametrizing their two analyses is sufficient; there may be languages

beyond those discussed here that do not fit either the original MCC analysis or the original Case in Tiers analysis.

One open question is whether subjects in inherent-structural case chains receive an inherent case assignment at all (even if it is not nominative). One piece of evidence suggesting this may be the case is the positional restrictions on these subjects.

- (137) a. Poja-sta voi tulla tutkimusmatkailija. boy-ELA may.PRS.3SG come.INF explorer.NOM 'The boy may become an explorer.'
  - b. \* (Huomenna) voi poja-sta tulla tutkimusmatkailija. tomorrow may.PRS.3SG boy-ELA come.INF explorer.NOM

    Intended: 'The boy may become an explorer.'

One simple (and typical) explanation for why the subject must appear preverbally is that it must move to receive case from the upper verb.

### 5.5 Where case is assigned

The idea of separating a part of syntax into its own independent tier is not inherently implausible, and has been suggested for other phenomena, such as adverb order (Bobaljik 1999). However, as generative grammar generally proposes structural explanations for syntactic phenomena, it would be preferable to provide a structural explanation for the case phenomena described by Case in Tiers theory. Two sets of evidence suggest that structural case assignment is associated with CP,<sup>1</sup> rather than with IP, as is usually assumed (Ura 2001).

The first main piece of evidence is something noted by Maling (2009) herself: finite complements have their own Case Tier, while non-finite complements do not. Though she states that finite complements are IPs and non-finite complements VPs,

<sup>&</sup>lt;sup>1</sup>I make no claims regarding which head(s) is (are) involved within an articulated structure of CP such as that proposed by Rizzi (1997). Also, there is of course no way to distinguish very low heads in the CP domain from very high heads in the IP; I merely hope to show that case assignment is higher than usually thought

I would propose that they are in fact CPs and IPs, respectively. At least some non-finite complements allow a present-past tense distinction on the non-finite verb, as in (138a).

- (138) a. Isä sano-o tytö-n pitä-vä-n / father.NOM say-PRS.3SG girl-GEN like-PRS.PTCP-GEN / pitä-ne-en trillere-i-stä. like-PST.PTCP-GEN thriller-PL-ELA 'The father says the girl likes/liked thrillers.'
  - b. Isä sano-o, että tyttö pitä-ä / pit-i father.NOM say-PRS.3SG that girl.NOM like-PRS.3SG / like-PST.3SG trillere-i-stä. thriller-PL-ELA 'The father says the girl likes/liked thrillers.'

These non-finite constructions therefore exhibit the same tense distinctions as finite verbs, which also conjugate only for present and past (Karlsson 1999). Tense, in the TP, is generally considered one of the highest functional heads in the articulated IP (Adger 2003), and so these structures are most likely IPs. Finite complements, as in

(138b) appear with an overt complementizer and are therefore most likely CPs.

It therefore appears that Finnish has one Case Tier per CP (considering the highest clause to be a CP as well); i.e., nominative case is assigned to the highest structural case-marked DP in the CP and all of the other DPs receive accusative case. While the IP may be involved in case assignment, the CP is clearly essential to structural case assignment, given the difference between CP and IP complements.

The second set of evidence comes from Bejar and Massam's (1999) survey of MCC phenomena in a variety of languages. As we found in Finnish, they find case chains with both a structural case assignment and an inherent case assignment within a single CP in Icelandic: in example (139), sjúklinganna 'the patients[GEN]' moves from object position to subject position within a single clause.

- (139) a. Við vitjuðum sjúklinganna. (Icelandic) we visited.1PL the.patients.GEN 'We visited the patients.'
  - b. Sjúklinganna var vitjað. (Icelandic)
     the.patients.GEN was visited
     'The patients were visited.'

All of their examples of case chains where multiple structural cases are assigned involve movement across CP. The Hungarian example (140) includes an overt complementizer ha 'if', so there can be little doubt that it is a CP.

(140) Kiket mondtad hogy szeretnél ha eljönnének? (Hungarian) who.PL.ACC you.said that you.would.like if came(3PL)
'Who did you say that you would like it if they came?' (Bejar and Massam 1999)

The Niuean example (141) includes the subjunctive marker ke.

- (141) a. Manako a ia ke momohe e na tama. (Niuean) want ABS he SBJV sleep ABS pair child
  - b. Manako a ia ke he na tama ke momohe. (Niuean) want ABS he middle pair child SBJV sleep'He wants the children to sleep.' (Bejar and Massam 1999)

While it is possible that this is actually an inflectional head, Seiter (1980: 133-134) analyzes it as taking a sentential complement, albeit one that "describe[s] an unrealized or hypothetical situation." Example (142) shows that it can in fact introduce complete sentences and not just raising or control complements, suggesting that ke is in fact a complementizer.

(142) Ligaliga nī ke eke e tama mo tagata kaihā. (Niuean) likely Emph SBJV become ABS child for person thief 'It's likely that the child will become a thief.' (Seiter 1980: 133)

The Norwegian example (143) is less clear, as there is no overt element that could be a complementizer.

(143) Per hadde de trodd ville komme for sent. (Norwegian)
Peter had they thought would arrive too late

'Peter they had thought would come too late.' (Bejar and Massam 1999)

It would take further research to establish whether [ville komme for sent] is a CP, though the fact that ville is finite suggests that. (Movement across CP is definitely possible in Norwegian, even if it not required: the complementizer at 'that' may be inserted in example (143) before ville.)

One natural explanation for this distinction is that structural case is assigned on the level of the CP, so that each DP may only receive a single structural case assignment within a particular CP. In the MCC examples, the DPs were assigned a particular structural case in each CP in their chains.

While I do not have enough data to justify a particular model of CP-based case assignment, I will outline one possibility. IP and VP may assign simply a structural feature where in ordinary theories they would assign a particular case. The C head then checks nominative case to the highest structural-case-marked DP that it c-commands. Languages like Icelandic could differ from languages like Faroese in whether or not inherent-case-marked DPs may also receive a structural case feature.

# Chapter 6

# Other Theoretical Implications

In this chapter, I investigate the implications of MCC in Finnish for other areas of syntax. I first look in section 1 at the relationship between these results and our general understanding of inherent case. Section 2 investigates what quirky case in Finnish can tell us about the structure of ergative languages. Last, in section 3, I examine the implications of the Finnish data for our general theory of raising and control.

## 6.1 Inherent Case

In this section, I discuss the implications of Finnish quirky subjects first for Woolford's (2006) theory of different types of non-structural case and for Fanselow's (2002) discussion of whether or not quirky subjects in fact exist.

#### 6.1.1 Inherent vs. Lexical Case

Woolford (2006) divides non-structural cases into inherent case, which is associated with particular  $\theta$ -roles, and lexical case, which is idiosyncratic to particular verbs. She also claims, based on her investigations of Icelandic and Basque, that inherent

	Internal	External
Source	-sta	-lta
	elative	ablative
Location	-ssa	-lla
	inessive	a dessive
Goal	- Vn	-lle
	illative	allative

Table 6.1: Finnish locative cases (based on Holmberg and Nikanne 1993)

case only appears on external arguments and goals while lexical case only appears on internal arguments.

We can ask into which of these categories each of the Finnish examples discussed in chapter 3 falls. Of the quirky subjects discussed there, the only one which could be an internal argument is the subject of the Experiencer Construction, <sup>1</sup> and it has been argued that the partitive case is actually a structural case (Vainikka 1989; 1993).

Of the other quirky subject constructions, the subjects of the possessive and caritive constructions seem to fit Woolford's generalization that external arguments can only receive inherent case. The external locative cases are generally used for discussing possession in Finnish; the allative case generally parallels the dative in other European languages, though it also has the spatial meaning "onto", the adessive is used in the possessive construction and with the spatial meaning "on", and the ablative is used in the caritive construction and with the spatial meaning "off of". If we view the Finnish locative cases as compound cases similar to those discussed by Comrie and Polinsky (1998), a view supported by the morphology (Table 6.1),<sup>2</sup> we can then view the external case morpheme -l- as the inherent case associated with the role of possessor. These cases (both of which are external locative cases) therefore seem to be inherent cases and thus follow Woolford's generalization that external

 $<sup>^{1}</sup>$ It in fact likely is one, since this verb behaves like ergative verbs such as roll in English; the experiencer appears in partitive case either way.

<sup>&</sup>lt;sup>2</sup>The illative case ending repeats the final vowel of the stem. Its morphological relation to the others has been obscured by various sound changes; the relationship is still visible in closely related Estonian, where the illative ending is -sse (Manninen and Nelson 2003).

arguments may only receive inherent (but not lexical) case.

The use of elative case in the becoming construction seems also to reflect the  $\theta$ -roles in that the source in other inchoative constructions also appear in elative case.

- (144) a. Ehdokkaa-sta tul-i ulkoministeri. candidate-ELA come-PST.3SG foreign.minister 'The candidate became foreign minister.'
  - b. Presidentti tek-i ehdokkaa-sta ulkoministeri-n. president.NOM make-PST.3SG candidate-ELA foreign.minister-ACC 'The president made the candidate foreign minister.'

Elative case on a source therefore appears to be inherent case as well, and so the becoming construction discussed in section 3.2.3 and shown in example (144a) does conform to Woolford's generalization. However, in example (144b), this inherent elative case appears on an internal argument, and so this example violates Wolford's generalization. (It is possible, though, that the last two arguments form a small clause, in which case the elative could be considered a subject and therefore would not violate the generalization.)

The direct perception construction is more problematic for Woolford's generalization. The genitive case appearing on the subject of the direct perception construction does not fit among the normal roles of the genitive (possession and some specifier positions). It seems to be an idiosyncratic use of the genitive case, and so it should be lexical case, but it appears on an external argument, where only inherent case should be permitted.

These last two constructions therefore suggest that Woolford's generalization, as appealing as it might be, may be too restrictive. It appears that, at least in Finnish, lexical case (and possibly inherent case) may appear on both internal and external arguments. While Woolford's generalization may still be an accurate characterization of quirky case assignment in Icelandic, it does not seem to be universally true cross-

linguistically.

#### 6.1.2 Is there such a thing as a quirky subject?

Finnish results can also contribute to our understanding of the cross-linguistic behavior of quirky subjects, and even of whether such a term is linguistically meaningful. There have been many debates over the years over whether everything linguists have called "quirky subjects" in fact deserve the name: see, for example, Moore and Perlmutter's (2000) argument with Sigurðsson (2002) over which of the various types of dative first arguments in Russian are in fact subjects. Fanselow (2002) suggests that, because the DPs described as quirky subjects in different languages vary wildly, the term "quirky subject" is only a descriptive term meaning for something like "a highest argument that happens not to be marked with nominative case," rather than a true element of the theory. He looks in particular at the difference between between German and Icelandic sentences like those in (145).

- (145) a. Honum var hjalpáð. (Icelandic) him.DAT was helped
  - b. Ihm wurde geholfen. (German) him.DAT was helped'He was helped.' (Fanselow 2002)

He argues that the differences between the behavior of the dative arguments is a result of a variety of other differences: German requires Case<sup>3</sup> identity in coordination, while Icelandic does not; German requires that idiosyncratic Case appear on a pronounced lexical item, while Icelandic allows idiosyncratic Case on PRO; etc. For Fanselow, there is no clear definition of subjecthood (and it may not be a useful notion at all).<sup>4</sup>

<sup>&</sup>lt;sup>3</sup>I use "Case" here instead of "case" because Fanselow does. He does not, however, make clear why he considers abstract Case to be involved here rather than morphological case.

<sup>&</sup>lt;sup>4</sup>Keenan's (1976) list of more than twenty properties that correlate with subjecthood, not one of which is a completely reliable test, suggests that any attempt to define the subject once and for all may be futile.

Finnish contributes to Fanselow's argument that there is no uniform, cross-linguistic category of quirky subjects—the quirky subjects discussed in this thesis are less subjectlike than Icelandic quirky subjects, generally considered to be subjects, and German quirky highest arguments, not usually considered to be subjects (Sigurðsson 2002; 2004). While Finnish quirky subjects share the binding properties of their Icelandic parallels (Zaenen et al. 1985), they cannot be controlled (as we saw in chapter 5) and they cannot undergo coordination reduction (146).

(146) ?\* Poja-lla on ystävä ja pela-a jalkapallo-a. boy-ADE be.PRS.3SG friend.NOM and play-PRS.3SG football-PAR Intended: 'The boy has a friend and plays soccer.'

However, they are still more subject-like than German examples like those discussed by Fanselow (2002), which lack even the ability to control the other arguments in the sentence.

(147) \* Ihm gefällt sich. (German) him.DAT pleases self Intended: 'He likes himself.'

It therefore appears that Finnish quirky subjects do not share all of their properties with either their Icelandic or German parallels, and so Fanselow's claim that "quirky subject" is at best a descriptive term appears to be substantiated: there is no set of properties that all quirky subjects share (beyond being a highest argument marked with a case other than nominative).

The question remains, however, why Finnish is different from German, because both appear to share the requirements of Case identity in coordination and of pronunciation of idisyncratic Case (i.e. they both disallow quirky-case-marked PRO in control constructions). The simplest explanation would be that German happens not to have any lexical items that assign quirky case to their highest arguments, but this may not even be true (see, e.g., Fanselow's discussion of German gefallen 'to please'). The different binding properties of German and Finnish quirky-case-marked highest

arguments seems to demand a deeper explanation, which could be explored in future research.

## 6.2 Ergativity

Even though Finnish is not itself an ergative language, the quirky-subject constructions discussed in chapter 3 resemble ergative-absolutive sentences in that their objects appear with the unmarked (nominative) case that also appears on the subjects of normal intransitive clauses. Because Finnish is not an ergative language, it will help us to see which properties of ergative subjects and absolutive objects are special to ergative languages and which are simply the natural result of having non-nominative subjects.

#### 6.2.1 Accessibility Hierarchy

Keenan and Comrie (1977) performed a broad typological study of relative clauses and found that there is a hierarchy of arguments in terms of their accessibility to relativization (148).

#### (148) The Accessibility Hierarchy (Keenan and Comrie 1977)

Subject > Direct Object > Indirect Object > Oblique > Genitive > Object of Comparison

Any language that can relativize one element type in the hierarchy can relativize any type to its left. They provide examples of languages that stop at each point in the continuum, with some (such as Malagasy) allowing only subject relatives and others (such as English) allowing all six types of relative clauses considered in the article.

The hierarchy runs into trouble with ergative languages. While Basque is permissive and allows subjects, direct objects, and indirect objects to relativize (deRijk 1972), most ergative languages allow only absolutive-marked elements to be extracted

in relative clauses (Polinsky 2010). In fact, A'-movement in general is restricted in these languages to absolutives. This is problematic for Keenan and Comrie's hierarchy because in these languages, some subjects (those from transitive clauses) cannot be relativized, while all direct objects can. It seems reasonable, therefore, to reframe the Accessibility Hierarchy in terms of case rather than grammatical functions.

#### (149) Revised Accessibility Hierarchy

$$NOM/ABS > ACC/ERG > \cdots$$

In nominative-accusative languages, the revised hierarchy functions identically to the old one because it still puts (nominative-marked) subjects before (accusative-marked) direct objects. The difference is usually only visible in ergative-absolutive languages.<sup>5</sup>

Finnish, with its quirky-subject constructions, allows us to see the dissociation between grammatical function and case in a nominative-accusative language. The prenominal, participle-based relative clause formation strategy in Finnish ordinarily allows only subjects to relativize (Karlsson 1972). In chapter 3, we found that these participles failed to relativize non-nominative arguments that passed every other test for subjecthood, while they were able to relativize nominative objects that failed every test for subjecthood. It therefore appears that relativizability in Finnish tracks case rather than grammatical function, lending credibility to our revision of the Accessibility Hierarchy.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup>Fox (1987) has suggested that the hierarchy may be ABS > ERG in all languages. Through corpus research, she found that intransitive subjects and transitive objects (i.e., the arguments marked with absolutive case in ergative languages) are more commonly relativized than transitive subjects even in a nominative-accusative language like English. I am unaware, however, of any nominative-accusative languages that categorically permit only intransitive subjects and direct objects to relativize, or of any ergative-absolutive languages that only permit subjects to relativize, and so Fox's work does not have a direct impact on the hypothesis that case is responsible for the grammaticality or ungrammaticality of relative clause formation.

<sup>&</sup>lt;sup>6</sup>Additional evidence in favor of the revised Accessibility Hierarchy comes from Carreiras et al.'s (in press) processing study on Basque relative clauses. Although Basque allows both subjects and objects to relativize, it appears that object (absolutive) relative clauses are easier to process than subject (ergative) ones, thereby differing from accusative languages, in which subject relatives are generally easier to process.

The revision of the Accessibility Hierarchy to take case into account means that case must somehow be visible at the point when A'-movement occurs, and that whatever mechanisms are proposed to account for A'-movement, they must be able to target specific DPs based on their case features. The fact that "nominative-accusative" objects pattern with nominative subjects also provides evidence to support Maling's (1993) decision to treat both of these as nominative in the Case in Tiers system.

The restriction of participial extraction to nominative-marked DPs is also supported by object participial relative clauses (see the Appendix).

#### 6.2.2 Ergative as PP

Polinsky (2009) has proposed that the ergative argument in an ergative-absolutive transitive clause is base-generated as a PP in the specifier of vP. This proposal at first seems somewhat strange, given that ergative arguments generally look like ordinary case-marked DPs. Quirky subject constructions in Finnish show that this analysis is actually quite plausible.

The adessive, elative, and ablative subjects in Finnish quirky cases usually function as local cases indicating being on, motion out of, and motion off of respectively (Karlsson 1999). They are therefore parallel in their semantic and syntactic distribution to PPs in other languages. Nikanne (1993) provides evidence that they are in fact PPs, with a silent prepositional head assigning the appropriate case to the noun and its modifiers. As he shows, they have the same distribution as PPs (150).

- (150) a. Elina käveli kohti koti-a. Elina walked toward home-PAR 'Elina walked toward home.'
  - b. Elina käveli koti-in. Elina walked home-ILL 'Elina walked to home [sic].' (Nikanne 1993)

The PP kohti kotia appears in the same position as the single word kotiin, suggesting

that they have the same semantic category. Nikanne proposes *kotiin* has a structure like that in (151)

(151) 
$$[_{PP} [_{P'} [_{NP} \text{ kotiin}] \text{ ILL}]]$$
 (adapted from Nikanne 1993)

Nikanne notes that this structure poses a problem for the fact that the possessor can bind the possessum in the possessive construction (section 3.2.1), since NPs are generally considered incapable of c-commanding out of containing PPs. He therefore suggests that the possessive construction may need a different analysis. However, the fact that PPs seem to be able to bind other arguments may not be such a big problem, given that even in English they seem to be capable of binding other arguments.

(152) The postal service transported a letter from the madman to himself.

In example (152), the DP the madman binds the reflexive himself, despite the fact that the the madman is contained within a PP. Therefore, Nikanne's proposal stands even in the possessive construction (and in the other quirky-subject constructions, which he does not explicitly discuss).

Finnish PP subjects, as we saw in chapter 3, behave like subjects in terms of their binding and word order properties, but not in terms of their A'-movement properties. In these regards, they resemble ergative subjects as described by Polinsky (2009), and so Polinsky's analysis of ergative subjects seems reasonable and may parallel the proper analysis of quirky subject constructions in Finnish.

#### 6.3 Raising and Control

The interaction between raising verbs and quirky subjects has played an important role in the debate over how best to analyze raising and control structures. In the traditional analysis, raising constructions involve movement of the subject while control constructions involve binding of an anaphoric PRO (Davies and Dubinsky 2004).

More recently, it has been suggested (Hornstein 1999) that control may involve movement as well.

Bobaljik and Landau (2009) use Icelandic evidence to argue against Hornstein's proposal. They show that case is preserved under raising in Icelandic (153), supporting a movement analysis, while it is not preserved under control (154), supporting the older view, in which the overt noun and the PRO in a control structure are part of separate chains.

- (153) a. Strákunum var bjargað. (Icelandic) the.boys.DAT was rescued.'

  'The boys were rescued.'
  - b. Ég tel strákunum (hafa verið) bjargað. (Icelandic)
    I believe the.boys.DAT to.have been rescued
    'I believe the boys to have been rescued.'
- (154) a. Honum var bjargað af fjallinu. (Icelandic)
  Him.DAT was rescued of the mountain.

  'He was rescued from the mountain.'
  - b. Hann/\*Honum vonast til að verða bjargað af fjallinu. (Icelandic)
    He.NOM/\*DAT hopes to be rescued of the.mountain

    'He hopes to be rescued from the mountain.' (Bobaljik and Landau 2009)

While these examples appear to provide a compelling argument against an analysis of control as movement, cross-linguistic evidence suggests there may actually be a double-dissociation between case preservation and raising-control distinctions. The exceptional example discussed in section 6.1.1 shows that it is possible for case preservation to occur with (some) control verbs in Finnish. A set of Faroese examples in (Fanselow 2002) show that it is also possible for case *not* to be preserved in raising constructions (155).<sup>7</sup>

<sup>&</sup>lt;sup>7</sup>These examples also suggest that we may need to parametrize which case is morphologically realized when a DP has received both an inherent case assignment and a structural case assignment.

- (155) a. Jógvani tørvaðî ein nýggjan bil. (Faroese) Jogvann.DAT needed a new car 'Jogvann needed a new car.'
  - b. Eg helt Jógvan tørva ein nýggjan bil. (Faroese) I believed Jogvann.ACC need a new car 'I think [sic] Jogvann needs a new car.' (Fanselow 2002: 241)

We therefore can see that there is no firm correspondence between raising verbs and case preservation on the one hand and control verbs and case non-preservation on the other. Further arguments in the debate between the two analyses of control construction will therefore have to avail themselves of other sources of evidence.

This dissociation also shows that the research presented in this thesis is not redundant, even though Koskinen (1999) uses case preservation as a test for identifying raising verbs. It was essential for us to establish first which verbs were raising verbs using independent, non-case-based tests, before we could make claims about the general behavior of raising verbs in Finnish.

# Chapter 7

## Conclusion

We began the thesis by asking whether multiple case checking phenomena are found in Finnish. Our investigation has shown that MCC in Finnish is an empirical reality, and we are now in a position to give a tentative answer to the question posed by the title of the thesis: at least three. In example (156), the DP 'the boy' is first assigned elative case by tulla, then genitive case by  $t\ddot{a}ytyv\ddot{a}n$ , and structural case by  $n\ddot{a}ytt\ddot{a}\ddot{a}$ .

(156) Poja-sta näyttä-ä täyty-vä-n tulla tutkimusmatkailija. boy-ELA seem-PRS.3SG must-PTCP-GEN come.INF explorer.NOM 'The boy seems to need to become an explorer.'

The new data presented here on raising verbs and quirky case in Finnish will also be of assistance to future researchers, who will be able to use these constructions as part of their work on other topics.

Because MCC phenomena in Finnish are real, they require a theoretical explanation. Though we were ultimately unable to decide between the MCC and the Case in Tiers models for case assignment, we were able to propose changes to each theory to account for constructions in Finnish where multiple inherent cases are assigned to a single DP and we showed that the two theories are not as incompatible as they appear at first sight. Our data also suggested that assignment of structural case may be associated with CP and not just IP. Our investigation of quirky subjects in Finnish found that nominative-marked objects group with nominative subjects for the purposes of A'-movement, confirming suggestions that A'-movement may be closely related to case rather than grammatical function (Carreiras et al. in press), an important proposal in the study of ergative languages. Because Finnish quirky subjects are likely to be PPs, it also allowed us to establish the plausibility of proposals that ergative case is a PP rather than DP, a result which would potentially explain the relationship between A'-movement and case (Polinsky 2009).

The data on Finnish quirky subjects also had implications for the theory of nonstructural case in general. It allowed us to question Woolford's (2006) strong structural distinction between inherent and lexical case because we found inherent case on internal arguments and lexical case on external arguments. It confirmed suggestions from Fanselow (2002) that quirky subjects are a heterogeneous group crosslinguistically, with Finnish quirky subjects generally less subject-like than Icelandic quirky subjects and more subject-like than German dative experiencers. Finally, we found that preservation of inherent case assignment is not a failsafe way of distinguishing raising verbs from control verbs, as it has been used in the debate over the structure of these constructions (Bobaljik and Landau 2009).

#### 7.1 Areas for Further Research

There are a number of open questions left by this thesis:

- Why do quirky subjects in Finnish behave differently from preposed dative objects in German? Is this a reason to posit the existence of subjects as a meaningful category in linguistic theory?
- How can we account for the behavior of Finnish pronouns? In particular, how is accusative case assigned to them when ordinary DPs receive (morphological)

nominative case?

- Is the cross-linguistic generalization that structural-structural movement must cross CP empirically valid?
- There was one predicted category in our revised typology of MCC (Table 5.1) for which we do not have any examples: languages with inherent-structural case chains that only allow MCC with syncretism. Do such languages exist? If not, is it an accidental gap or does it require a theoretical explanation?

# Appendix: Participial Extraction of Objects

As discussed in section 2.1.1, object case in Finnish is used to express aspectual differences. Partitive objects, as in (157a), are associated with atelic readings, while accusative objects, as in (157b) are associated with telic readings.

- (157) a. Tyttö luk-i läksy-ä. girl.NOM read-PST.3SG homework-PAR 'The girl was doing her homework.'
  - b. Tyttö luk-i läksy-n. girl.NOM read-PST.3SG homework-ACC
    'The girl did her homework (and finished).' (Karlsson 1999: 85)

The same distinction is available in passive sentences, as shown in (158).

- (158) a. Lue-tt-iin läksy-ä. read-PASS-PST homework-PAR 'The homwork was being done.'
  - b. Lue-tt-iin läksy.read-PASS-PST homework.NOM'The homework was done (and finished.)

Notice that the genitive-accusative object in (157b) becomes nominative-accusative in (158b). When we extract the object with the passive participle (159), only the telic interpretation is possible.

(159) Lue-tt-u läksy on pöydä-llä. read-PASS-PST.PTCP.NOM homework.NOM be.PRS.3SG table-ADE 'The homework that was done (and finished)/\*the homework that was being done is on the table.'

This suggests that participal relativization strategies for objects in Finnish, like those for subjects (section 6.2.1), target morphological nominatives, rather than arguments of other cases, even those with the same grammatical function.

We see the same results in the following two examples:

- (160) a. Väinö rakens-i talo-a. V.NOM build-PST.3SG house-PAR 'Väinö was building the house.'
  - b. Väinö rakens-i talo-n.V.NOM build-PST.3SG house-ACC'Väinö built the house.' (Karlsson 1999: 85)
  - c. Rakenn-ett-u talo on ihana. build-PASS-PST.PTCP.NOM house.NOM be.PRS.3SG lovely.NOM 'The house that was built (and finished)/\*the house that was being built is lovely.'
- (161) a. Presidentti ampu-i lintu-a. president.NOM shoot-PST.3SG bird-PAR 'The president shot at the bird.'
  - b. Presidentti ampu-i linnu-n. president.NOM shoot-PST.3SG bird-ACC'The president shot the bird (dead).' (Karlsson 1999: 85)
  - c. Ammu-tt-u lintu on musta. shoot-PASS-PST.PTCP.NOM bird.NOM be.PRS.3SG black.NOM 'The bird that was shot (dead)/?\*the bird that was shot at is black.'

For example (161c), both consultants found the telic (nominative) interpretation completely grammatical, though one found the non-telic (partitive) interpretation marginally acceptable.

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