

**THE PARTITIVE IN FINNISH AND
ITS RELATION TO THE WEAK
QUANTIFIERS**

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ABSTRACT

The subject matter of this thesis is Partitive case, a case which, in Finnish, alternates with the Accusative case on direct objects. The circumstances under which it alternates with Accusative case can be characterised as follows: Partitive case on an objects indicates that the verbal predicate is atelic, either due to the direct object being an unbounded quantity of some entity (here the Partitive corresponds to the English bare plural/'some') or to the verb being Imperfective. The Accusative indicates telicity, and thus either corresponds to the English definite article, or indicates Perfectivity. The Partitive also occurs on the objects of negated transitive verbs, and on the complements of a certain group of quantifiers, the weak quantifiers.

The thesis attempts to give a unifying theoretical account of the principle occurrences of Partitive case in Finnish. It proposes that Partitive case is licensed by the weak group of quantifiers, and that such a quantifier is present whenever a Partitive object is present in a sentence. It may be present overtly, when the Partitive occurs on the complement of an overt weak quantifier, or it may be present as a null quantifier, heading a QP which dominates VP, the predicate. In the latter case, it is Heim's (1982) operator of existential closure, and is present to bind a variable in the predicate.

Chapter One outlines the main uses of the Partitive in Finnish, and introduces the Heim/Diesing theory of indefinites. It is argued in this Chapter that bare Partitives introduce variables, and thus require binding by the operator of existential closure. Chapter Two goes on to consider this in more detail, and argues that the bare and aspectual uses of the Partitive are unified by the presence of variables in both cases (in the

aspectual use of the Partitive, this will be a temporal variable) and hence by the presence of a QP dominating VP in both cases. It is proposed that the weak quantifiers license Partitive case, and that this accounts for the existence of both bare and aspectual Partitives. The use of the Partitive with overt weak quantifiers will follow naturally from this.

Chapter Three looks at the obligatory occurrence of the Partitive on the object of a negated transitive verb, and proposes that here the operator of existential closure is again present, but this time to bind an event variable.

Finally, Chapter Four looks at Partitive subjects, where the problem is movement, not case. It is proposed here, on the basis of evidence from the Finnish passive, that there are two subject positions in Finnish, and that Partitive subjects are to be found in the lower one.

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Abbreviations

Cases

NOM	Nominative
ACC	Accusative
PART	Partitive
GEN	Genitive
INE	Inessive (Location, "in")
ADE	Adessive (Location, "on, at")
ELA	Elicative (Source, "out of")
ABL	Ablative (Source, "from")
ILL	Illative (Goal, "into")
ALL	Allative (Goal, "to, onto")
ESS	Essive (State or duration, "as, during")
TRANS	Translative (Result)

Other nominal suffixes

pl.	Plural
1SGposs	Possessive pronoun ("my")
2SGposs	" " ("your")

3SGposs	“	“	(“his, her, its”)
1PLposs	“	“	(“our”)
2PLposs	“	“	(“your”)
3PLposs	“	“	(“their”)

Verbal affixes

PAST	Past tense
NEG	Negation (verb of)
INT	Interrogative suffix
INF1	First Infinitive (“to V”)
Pcple	Participle
PASS	Passive
IMP	Imperative
POL	Polarity
COND	Conditional
SG	Singular
PL	Plural
1, 2.	1 st , 2 nd person, etc
PERF	Perfective aspect
IMPF	Imperfective aspect
M	Masculine
N	Neuter

A note on vowel harmony and consonant
mutation

The phenomena of vowel harmony and consonant mutation both occur in Finnish. They have no syntactic significance, but I will give a brief outline of them here, in order to avoid any confusion that they may cause.

(i) Vowel harmony

Only vowels from certain groups may occur together in a single Finnish word. A word may contain: (a) only back vowels (b) only front vowels, or (c) a mixture of front and neutral vowels, or back and neutral vowels. These vowel groups are as follows:

(a) Front vowels: a (as in "father", but shorter), o (as in "law", but shorter), u (as in "book")

(b) Back vowels: ä (as in "cat"), ö (as in French "jeune"), y (as in French "une")

(c) Neutral vowels: e (as in "bet"), i (as in "sit")
(These can occur with either of the above groups of vowels).

Vowel harmony makes a difference to case-endings, when they are to be added to words. For example, the Inessive case, when it is to be added to *talo*, "house" is *-ssa*, giving us *talossa*, "in the house", but when it is to be added to *kylä*, "village", is *-ssä*, giving *kylässä*, "in the village". When it is necessary to discuss case-endings separate from words, a capital letter will be used for the vowel, e.g, the Inessive will be given as *-ssA*, where A can indicate either a or ä.

(ii) Consonant mutation

Certain consonants undergo mutation when an otherwise open syllable is closed by the addition of a consonant, such as the Nominative plural *-t*, the Accusative *-n*, the Inessive *--ssA* etc. The consonants affected are: *tt*, *t*, *pp*, *p*, *kk*, *k*, and the basic rules are:

<i>tt</i>	<i>t</i>	<i>pp</i>	<i>p</i>	<i>kk</i>	<i>k</i>
<i>t</i>	<i>d</i>	<i>p</i>	<i>v</i>	<i>k</i> disappears	

Examples: *katto*, roof, *katolla*, on the roof

kauppa, shop, *kaupassa*, in the shop

kirkko, church, *kirkolle*, to the church

pöytä, table, *pöydällä*, on the table

kylpy, bath, *kylvyssä*, in the bath

aika, time, *aiat*, times

There are other rules apart from the above - for example -*t* can be assimilated to a preceding consonant under certain circumstances - *aalto*, wave, *aallot*, waves - but the above should enable the reader to recognise the phenomenon when it occurs.

Introduction

The Partitive case is a long-standing problem for both traditional grammarians and theoretical linguists. Traditional grammarians have found it difficult to characterise precisely the circumstances under which it alternates with Accusative case on direct objects (Denison, 1957), and from the point of view of modern case theory, it is not clear exactly how or where it is checked, or even if it is structural or inherent. Belletti (1988) for example, has regarded it as an inherent case assigned by the verb. However, in many languages there is evidence against this and Lasnik (1995) simply regards it as checked in (spec, AGRo) in the same way as Accusative case is checked, without further consideration. However, no reasons are given as to why two different cases should be checked in the same place. Thus the Partitive remains a puzzle.

This thesis will concentrate on the Partitive in one particular language, Finnish, though its occurrence in other languages will also be referred to. In Finnish, the Partitive case has four main manifestations: (i) on a direct object, a bare Partitive indicates an unbounded quantity (ii) its occurrence on a direct object can indicate Imperfective aspect (iii) it occurs on the

complements of certain quantifiers, the "weak" quantifiers (iv) it occurs on the direct object of a negated transitive verb.

Approaches to the Partitive generally focus on one or more of these uses, but cannot account for all of them. For example, Kiparsky (1996) unifies the uses mentioned in (i) and (ii) to make unboundedness at the predicate level a criterion for the occurrence of Partitive case. However, this cannot account for its quantificational uses. Another hypothesis unifies (i) and (iii) by suggesting that bare Partitives and those that occur with overt quantifiers are Quantifier Phrases (the QP hypothesis). However, this cannot account for its aspectual uses. Its uses in negation are rarely mentioned.

This thesis will take the view that the quantificational uses of the Partitive provide the key to its understanding. It will be proposed that by combining the insights of the QP hypothesis with the well-known theory of indefinites proposed by Heim (1982) and further developed by Diesing (1992a, 1992b), it is possible to account for the uses of the Partitive described above.

It will be proposed that the weak quantifiers can license case, and that a weak quantifier is always present whenever Partitive case occurs, either overtly, as in its quantificational use, or as a null quantifier heading a QP dominating VP, Diesing's nuclear scope. This null quantifier will be Heim's operator of existential closure.

Chapter One will begin by giving an account of the principle occurrences of Partitive case in Finnish, and will go on to look briefly at its occurrences in some other languages, chiefly Russian. It will then go on to consider some influential theories of Partitive case, such as that of Belletti (1988), indicating both their strong and weak points. Chapter Two will then give an account of the Heim/Diesing theory of indefinites, and its applications to Finnish. The question of what precisely constitutes the nuclear scope will be looked at, and it will be proposed that above VP there is a vP headed by an eventive light verb where an event argument is merged. It will also be suggested that this event argument occurs explicitly in existential sentences as an expletive.

Chapter Three will consider Partitive objects in affirmative sentences. Both the unbounded quantity (bare Partitive) and aspectual uses of the Partitive give rise to what are traditionally called "partial" objects. It will be argued that all partial objects occur in predicates in which a variable which requires binding by the operator of existential closure is present. This variable may be either the direct object itself (this will be the case when a bare Partitive is present) or a "period of time" variable, when the Partitive is used aspectually. Since the operator of existential closure heads a QP dominating VP, it will be proposed that Partitive case is checked against this.

Finally, Chapter Three will look at some occurrences of Accusative case where Partitive case might otherwise be expected to occur. We will consider how Accusative case is checked, and then see how the obligatory occurrence of Accusative case with the Russian Imperfective (a state of affairs which is the opposite to that which occurs in Finnish) can be accounted for. Then the problem of the singular indefinite article in Finnish will be considered, though here it will not be possible to draw any final conclusions.

Next, Chapter Four will consider the quantificational uses of the Partitive, which can easily be accounted for on the basis of the hypothesis that weak quantifiers can license case. Some consideration will be given to why the weak quantifiers should be able to do this while the strong quantifiers cannot.

Chapter Five will go on to consider the Partitive of negation. First, an account of negation and negative quantification in Finnish will be given, as this is likely to be unfamiliar to most speakers of English. It will then be proposed that a Partitive is obligatory on the objects of negative sentences because of the presence of an event argument within the nuclear scope, which must again be quantified by the operator of existential closure, again present in a QP dominating the nuclear scope. Finally, some differences between negation in Finnish and Russian will be considered, and it will be seen that in Russian, too, the occurrence of Partitive case on the object of a negative sentence is linked to the presence of an event argument within the scope of negation.

Chapter Six will deal with Partitive subjects. The problems here will be somewhat different to those dealt with in the previous three Chapters. Here the problem is movement, not case.

In Chapter Six, we will first consider the absence of agreement with Partitive subjects, and its occurrence with Nominative subjects. It will be proposed that Nominative case is indeed checked against AGRs. This will lead onto the question of where Partitive subjects are to be found - is it necessarily the same place as Nominative subjects? We will consider what subject positions are available in Finnish, and see evidence that Finnish is a topic-prominent language. We will also consider evidence from Finnish for Rizzi's (1997) "split CP" hypothesis, and propose that topics in Finnish are likely to be found in the lower of Rizzi's Topic Phrases.

However, given that indefinites are unlikely to be topics, the possibility of a lower subject position will need to be considered. Evidence from the Finnish Passive will be brought to bear to establish what this is, and it will be proposed that both expletive *pro* in

existentials and indefinite Partitives move to this position. Finally, some outstanding problems will be considered.

Some general points should be raised here. The first is that Finnish is a free word order language. I will not for the most part concern myself with issues of word order (it will become an issue in Chapter Four) but confine myself to the most "neutral" word orders, with their most normal meaning. I will also confine myself to the standard language, and not take into account colloquialisms.

Many of the examples used in the thesis are taken or adapted from compilations of Finnish literary texts in Whitney (1971) and Aaltio, Vol.3 (1975). I have also taken or adapted many examples from traditional grammars such as Whitney (1956), Collinder (1957) Aaltio (1963), Leney (1993) and Karlsson (1999).

Chapter One

The Problem of the Partitive

1.1 Introduction

We will begin by considering the system of subject and object cases in Finnish. In many respects, Finnish is like the classical Indo-European languages in having a Nominative case for subjects, and an Accusative case for direct objects. However, the Accusative alternates under certain circumstances with a case known as Partitive, and it is also possible for this case to occur on the subjects of a certain subset of intransitive verbs, those of location, motion, or manner of motion. The circumstances under which the Accusative alternates with the Partitive have been the subject of much discussion among Finnish grammarians (see Denison (1957) for an introduction to the topic). A superficial summing up might be as follows: the occurrence of Accusative case on a direct object indicates that the object is in some way "totally" affected by the action or state denoted by the verb, while the occurrence of the Partitive indicates that the object is not totally affected, but only partially affected. In fact, traditional terms for Accusative and Partitive objects

in Finnish are "total" and "partial" object. In practice, partial objects are of two kinds; (i) they are unspecified, unbounded quantities (ii) they are the objects of Imperfective, or otherwise atelic, verbs. As we go on to consider the exact circumstances in which the Partitive occurs, we shall see that there is more to the matter than this, and that there are two distinct, but related, circumstances in which Partitive case can occur. These will later be found to be two different manifestations of the same phenomenon, and thus it will be possible to give a theoretical, unifying account of the most significant occurrences of the Partitive. But first, we need to see what the circumstances are. The rest of this section will give an account of the occurrences of the Partitive in Finnish. In section 1.2, the occurrence of Partitive case in some other languages will be discussed. Section 1.3 will give an account of previous approaches to the Partitive.

We will start with the Accusative/Partitive alternation.

1.1.1 The Partitive/Accusative alternation

Consider the following pairs of sentences:

(1) a. Kissa jo - i maido - n

Cat.NOM drink-PAST.3SG milk-ACC

"The cat drank the milk"

b. Kissa jo - i maito - a

Cat.NOM drink-PAST.3SG milk-PART

"The cat drank (some) milk."

c. Poika sö - i omena -t

Boy.NOM eat-PAST.3SG apple- ACCpl

"The boy ate the apples"

d. Poika sö - i omen - i - a

Boy.NOM eat-PAST.3SG apple-pl-PART

"The boy ate (some) apples."

Now, the Accusative objects are to be translated using the English definite article "the", while the Partitive objects can be translated with the English bare plural. It would also be appropriate to translate them with the English quantifier "some", which I have put in brackets¹. Thus, it can be seen that the Accusative is

used where the direct object is a definite, bounded quantity, either of a mass noun or plurality of count nouns, while the Partitive is used where the object is an indefinite, unbounded quantity.

Given sentences like (1a) and (1c), which in English require a definite article, we normally interpret them as indicating that the whole of the quantity denoted by the object has been affected by the verb. But in (1b) and (1d) there is no such implication. Here the Partitive, like the English bare plural, does not indicate that the whole of any quantity has been affected by the verb, merely that a quantity exists, which is affected by the verb, without further specification of how much it is affected. Hence, the terms "total object" and "partial object" for Accusative and Partitive objects, which for the time being we can define as follows:

A TOTAL DIRECT OBJECT is one which is totally affected by the action denoted by the verb.

A PARTIAL DIRECT OBJECT is one which is only partially affected by the action denoted by the verb.

To sum up, the Accusative on a nominal which is not otherwise quantified broadly corresponds to the English definite article, while a bare Partitive (a Partitive which occurs without an overt quantifier - see section 1.1.3 below) corresponds to the English bare plural/"some".

It should be pointed out here that the Partitive only corresponds to the existential use of the English bare plural, never to the generic use, as can be seen in the following sentences:

(2) a. Koirat ovat eläimiä
 Dog-NOMpl be.3PL animal-pl-PART
 "Dogs are animals"

b. Koirat juoksevat kadulla
 Dog-pl-PART run-3SG street-ADE
 "Dogs are running (about) in the street."

In (2a) we are of course talking about all dogs, hence the term "dogs" has a generic meaning, and the Nominative plural is used to translate this into

Finnish. In (2b) we are only talking about some indefinite and unspecified number of dogs, and here we find a Partitive (there will be more about Partitive subjects in Chapter 6). Also note the Partitive on the predicate in (2a) - dogs are only some of all the animals in existence.

A bare Partitive cannot normally occur on a singular count noun (unless the sentence is to be interpreted as Imperfective - see section 1.1.2 below). If it does, then it forces a mass noun interpretation on the noun. For example

(3) Hän sö - i karhu - a
 S/he.NOM eat-PAST3SG bear-PART

should be interpreted as meaning "s/he ate bear-meat" rather than as "s/he ate a bear."

This leads to one final point. Much of the above might give the superficial impression that the Accusative/Partitive alternation corresponds to definiteness/indefiniteness, and this is almost, but not quite, true. For example, the Accusative was described

above as "broadly" corresponding to the English definite article. This is indeed the case when it occurs on a mass noun or plurality of count nouns, but when it occurs on a singular count noun it need not be interpreted as definite. That is, in the following sentence

(4) Mies ost - i auto - n
 Man.NOM buy-PAST.3SG car-ACC
 "The man bought the/a car"

the direct object need not be interpreted as definite merely because it is Accusative, but can be interpreted as indefinite, according to context. As already mentioned, the Partitive will not normally occur on a singular count noun.

This fact is rather puzzling. As we go on, we will see that Partitive case has a close connection with the weak quantifiers (first so-named by Milsark, 1977), and the English singular indefinite article patterns with the weak quantifiers. It is strange therefore, that Partitive case does not occur on a singular count noun when it is to be interpreted as indefinite. I will again

return to this fact in Chapter Three, but for now, it should merely be noted.

Finally, it should be mentioned here that the Accusative in Finnish has two forms. The first, shown above, is indicated by the suffix *-n* in the singular, and *-t* in the plural. The second form is identical to the Nominative in the singular, and occurs in circumstances where there is no possibility of a Nominative subject occurring which could be confused with it - for example as the object of Imperatives. It is sometimes called the "short" Accusative.

Some take the view that the "short" Accusative is in fact a genuine Nominative object (Maling, 1993), while the other Accusative is in fact a Genitive as the singular *-n* ending is identical to the Genitive singular (although historically they have different origins, the Accusative ending being originally *-m*). This characterisation is often found in traditional grammars, e.g. Karlsson (1999). However, Reime (1993) regards both forms as genuine Accusatives for distributional reasons, and sees the difference in form as arising from

considerations of PF-visibility. This is the view I take.

Furthermore, from the point of view of this thesis, the occurrence of the "short" Accusative has no semantic significance and it alternates with the Partitive under exactly the same circumstances as the regular Accusative does, i.e, the occurrence of the Accusative indicates totality, and occurrence of the Partitive non-totality, as in the example below.

(5) Tuo ruoka/ruoka - a!

Bring.IMP food.ACC(short)/food - PART

"Bring the food/some food!"

This is further evidence that the two forms of the Accusative are different manifestations of the same case, likely to be licenced in the same way. Thus, I will not deal with the "short" Accusative further, although an account of Reime's views will be given in Appendix 2.

1.1.2 Aspectual uses of the Partitive

Finnish has no verbal aspectual morphology to indicate the Perfective/Imperfective distinction, unlike, for instance, the Slavic languages, but this distinction can be indicated by a difference in case marking. The occurrence of the Accusative on the direct object can indicate Perfectivity, and the occurrence of the Partitive can indicate Imperfectivity, as shown below.

(6) a. Lu - i - n kirja - n

Read-PAST-1SG book-ACC

"I read the/a book"

b. Lu - i - n kirja - a

Read-PAST-1SG book-PART

"I was reading the/a book."

c. Jussi lö - i Eino - n

Jussi.NOM hit-PAST.3SG Eino-ACC

"Jussi hit Eino."

d. Jussi lö - i Eino - a

Jussi.NOM hit-PAST.3SG Eino-PART

"Jussi was hitting Eino."

e. Sö - i - n nuo omena - t
 Eat -PAST-1SG those.ACC apple-ACCpl
 "I ate those apples."

f. Sö - i - n noita omen - i - a
 Eat-PAST-1SG those.PART apple-pl-PART
 "I was eating those apples."

We will call this use of the Partitive the Aspectual Partitive.

The Partitive is also obligatory on the objects of most verbs of mental/emotional state, most of which can be regarded as inherently Imperfective (or more precisely, as irresultative, or unbounded - see later in this section).

(7) a. Hän rakast - i kissa - a -nsa kovasti
 He.NOM love-PAST.3SG cat-PART-3SGposs dearly
 "He loved his cat dearly."

b. He pelkää - vät minu- a
 They.NOM fear-3PL I - PART
 "They fear me."

- c. Vihaa - n bensa - n haju - a
 Hate-1SG petrol-GEN smell- PART
 "I hate the smell of petrol."

Indeed, most verbs which express an inherently continuous or incomplete activity or state require an obligatory Partitive on their direct objects.

- (8) a. He katsel - i -vat talo -a
 They.NOM look at-PAST-3PL house-PART
 "They looked at the house."

- b. Odot- i - mme bussii -a
 Wait for - PAST - 2PL bus -PART
 "We waited for a bus."

- c. Etsi - n koira - a
 Look for-1SG dog - PART
 "I'm looking for a dog."

Finally, the Partitive/Accusative alternation can be used to indicate what appears at first sight to be a tense distinction, but which is really one of aspect.

Finnish has no separate future tense, and the so-called Present, really a non-past tense, is used for future time reference. Now, consider the following sentences;

- (9) a. Käännä - n tätä kirja - a Suome -ksi
 Translate-1SG this.PART book-PART Finnish-TRANS
 "I'm translating this book into Finnish."
- b. Käännä - n tämä - n kirja - n Suome-ksi
 Translate-1SG this-ACC book-ACC Finnish-TRANS
 "I will translate this book into Finnish."

In both sentences the verb is in the non-past tense. The Partitive/Accusative alternation may seem to indicate a tense distinction, but in fact it illustrates the fact that an activity going on in the present is usually (with a few exceptions) incomplete, and hence the present can be regarded as inherently imperfective (Comrie, 1976). It can only be complete in the future. Thus, the occurrence of the Accusative on the direct object in (9b) which implies completeness, gives the sentence a future time reference, as the future is the only time the action can be complete.

It is important to note that when the Partitive indicates Imperfectivity, the object need not be indefinite. It can, however, still be legitimately called a "partial" object, as it has not been totally affected by the verb, since Imperfectivity indicates that an action is incomplete at the Event Time which is picked out by whatever tense it is interacting with, while Perfectivity indicates that it is complete at some Event Time (Comrie, 1976).

In fact, if we compare the use of the Partitive to indicate Imperfectivity with its use to indicate an indefinite, unspecified, quantity, we can see a point of contact - in both cases we are dealing with a situation which has no clearly defined end-point. In the case of Imperfectivity this is because the activity denoted by the verb is taking place over some period of time, the endpoint of which has not been reached, and this is why the object is not totally affected. In the case of the indefinite reading of the Partitive, the activity denoted by the verb may have come to an end at some point in time, but the entity denoted by the direct object has still not been totally affected by it - thus an end result has not been attained.

This has led some grammarians to characterise the circumstances in which the Partitive can occur in terms of what may be called *irresultativity* (Denison, 1957, Itkonen, 1979, Karlsson, 1999) or *unboundedness* (Heinämäki, 1984, Kiparsky, 1996). (Tenny (1994) uses a term *non-delimitedness*, which has the same meaning as *unboundedness*). These terms correspond basically to what is better known as *atelicity*. An atelic predicate, as is well known, describes an action which does not reach an endpoint, and hence is a mere *activity*, while a telic predicate describes an action which does - hence it is an *achievement* or *accomplishment* (Vendler, 1967). An irresultative predicate is one which does not lead to an end result, while a resultative predicate does, hence a resultative predicate is usually an accomplishment or achievement. An unbounded predicate is one which lacks a fixed boundary point, either spatially ("I ate cakes" - here the spatial extension of the object "cakes" is unbounded, and not totally affected by the action of eating) or temporally ("I was eating cakes" - here the activity of eating takes place over an unbounded period of time). Such a predicate expresses an activity, or a long-lasting state of affairs, hence *statives* are also

unbounded (we saw with examples (7a-c), that statives such as "love", "hate", etc. also take Partitive objects in Finnish). A bounded predicate has both a spatial and temporal boundary point ("I ate the cakes")², and is usually an accomplishment or achievement (in Vendler's (1967) classification, an achievement is an accomplishment that happens almost instantaneously, having little or no temporal duration). By a spatial boundary point, what is meant is that, when the direct object is a specified, bounded quantity, its spatial extension has been totally affected by the action denoted by the verb.

The above terms are in effect different labels for the same thing³. The following example will illustrate this. Consider the pair of sentences below, which I will give without glosses.

(10) a. Metsästäjä ampu - i karhu - n

Hunter.NOM shoot-PAST.3SG bear-ACC

b. Metsästäjä ampu - i karhu - a

Hunter.NOM shoot-PAST.3SG bear-PART

What is the difference in meaning between the two sentences? The first one (10a), with the Accusative object, implies "The hunter shot the bear *dead*", while the second (10b), with the Partitive object, implies "the hunter shot *at* the bear", i.e, repeatedly, without necessarily killing or even hitting it. The first describes an *accomplishment*, hence the predicate is telic. It has also achieved a result, hence the predicate is resultative, and also has a fixed boundary point both spatially and temporally, hence the predicate is bounded. The second describes an *activity*, and so is atelic. No result has been achieved, hence it is irresultative, and the action described need not have a clear boundary point. Hence, the predicate is unbounded.

For consistency in terminology I will use the term *unboundedness*. All the examples so far given make it clear that in general, Partitive case occurs on the objects of unbounded predicates. When it is used to indicate an unbounded quantity, the predicate is spatially unbounded, due to the spatial unboundedness of the object, and when it is used to indicate Imperfectivity, the predicate is temporally unbounded.

Thus, it is tempting to claim that we now have a criterion for the occurrence of Partitive case which brings together two of its major uses - Partitive case occurs on the direct objects of unbounded predicates. However, the data to be dealt with in the next two sections indicate that something more is involved.

1.1.3 The Quantificational Partitive

Partitive case also occurs on the complements of a certain subset of quantifiers, those known as the "weak" quantifiers. The distinction between "weak" and "strong" quantifiers was first drawn by Milsark (1977), on the basis of their occurrence in the associates of existential sentences - a weak quantifier can occur in the associate of an existential sentence (the associate is the phrase which occurs post-verbally in an existential sentence, e.g, "some men" in "there are some men in the house"), while a strong quantifier cannot. The weak and strong quantifiers are be shown below in tabular form (adapted from Milsark, 1977):

Weak

Strong

a(n)	the
some	demonstratives
many/much(a lot of)	pronouns
several	possessives
few/a little	all
numerals	every
bare plural (existential)	each
any (non-assertive)	any
∃	most
	both
	bare plural (generic)
	∀

For Milsark, only the strong quantifiers are to be properly regarded as quantifiers, as only they have the property of picking out entities from a set according to whether they have a particular property or not. The weak quantifiers are only cardinality expressions. It is, however, possible for the weak quantifiers to have a "strong" or specific subset interpretation, and here they are often equivalent to "Q of the..."⁴. There is no doubt but that the Partitive can always occur when the quantifier has a "weak" or cardinality interpretation, but it is rather more debatable whether

it can occur when the quantifier has a "strong" interpretation. My native speaker informants have mixed intuitions on this matter, and I will not pursue it further. All the examples I will give will involve quantifiers with "weak" (cardinality) interpretation.

The following show the occurrences of Partitive case with the weak quantifiers.

(11) a. Kissa jo - i paljon maito - a

Cat.NOM drink -PAST.3SG much milk-PART

"The cat drank a lot of milk."

b. Kissa jo - i vähän maito - a

Cat.NOM drink-PAST.3SG little milk-PART

"The cat drank a little milk."

c. Kissa sö - i paljon hiir - i - ä

Cat.NOM eat-PAST.3SG a lot of mouse-pl-PART

"The cat ate a lot of mice."

d. Kissa sö - i vähän hiir - i - ä

Cat.NOM eat-PAST.3SG few mouse-pl-PART

"The cat ate a few mice."

e. Kissa sö - i useita hiir - i- ä
 Cat.NOM ate several mouse-pl-PART
 "The cat ate several mice."

f. Kissa sö - i monta hiir - tä
 Cat.NOM ate many mouse-PART
 "The cat ate many mice."

g. Kissa sö - i pari/kaksi/kolme.. hiir -tä
 Cat.NOM eat-PAST a couple/two/three..mouse-PART
 "The cat ate a couple of/two three/etc. mice"

We have already seen that a bare Partitive corresponds to the English bare plural/"some", a weak quantifier, and so we have a link between the Partitive and weak quantification which is as noticeable as the link with unboundedness.

Now, one thing is noticeable about the above - the Partitive occurs only on the complements of the quantifiers, and not on the quantifiers themselves. For example, the Partitive of *paljon*, "much, a lot of" is *paljoa*, and the Partitives of the numerals *kaksi*, *kolme*,

"two, three" are *kahta*, *kolmea* - forms clearly not present in the above. In this respect weakly quantified phrases behave quite differently to strongly quantified ones, as the following examples show:

(12) a. *Kissa sö - i jokaise - n hiire -n*
 Cat.NOM ate every-ACC mouse-ACC
 "The cat ate every mouse."

b. *Kissa sö - i tuo - n hiire - n*
 Cat.NOM ate that-ACC mouse-ACC
 "The cat ate that mouse."

c. *Kissa sö - i kaikki hiire - t*
 Cat.NOM ate all-ACC mouse-ACCpl
 "The cat ate all the mice."

d. *Kissa sö - i molemma - t hiire - t*
 Cat.NOM ate both-ACCpl mouse-ACCpl
 "The cat ate both the mice."

As can be seen the strong quantifiers agree in case with the nominals they quantify.

As far as unboundedness is concerned, it is clear that this criterion cannot be applied to some of the sentences given above, (11a-g), in particular, those involving numerals. If I say, for example, "the cat ate four mice", I am describing an accomplishment, completed at a point in time, in which all four mice were eaten, just as much as if I was to say "the cat ate all the mice." With regard to the other weak quantifiers, it is perhaps more difficult to establish if predicates with such objects are bounded or not⁵, nonetheless we have at least one circumstance where Partitive case occurs on the direct object of a bounded predicate. It appears then, that unboundedness by itself cannot be the only requirement for the occurrence of Partitive case.

In summary, we have now reached a point where we can say that there are two distinct criteria for the occurrence of Partitive case - (i) unboundedness and (ii) weak quantification. These do, however, have a point of contact, the bare Partitive, which in translating "some" corresponds to a weak quantifier, and in introducing an unspecified quantity as a direct object, makes a predicate unbounded. The next section introduces another point of contact.

1.1.4 The Partitive of negation

The Partitive is obligatory on the direct object of a negated transitive verb.

(13) a. E - mme osta tätä talo - a
 NEG-1PL buy this.PART house-PART
 "We won't buy this house."

b. Jussi ei lyö - nyt Heikki - ä
 Jussi.NOM NEG.3SG hit-PASTpcple Heikki-PART
 "Jussi didn't hit Heikki."

c. He ei - vät syö liha - a
 They.NOM NEG-3PL eat meat-PART
 "They don't eat meat."

(Negation in Finnish is achieved with use of what seems to be an auxiliary, sometimes called the "verb" or "auxiliary" of negation, to which agreement markers are added. They are the same agreement markers as those used on affirmative lexical verbs.)

Note that, as with the aspectual Partitive, the direct object can be definite. However, it is also possible for a Partitive to translate "no".

- (14) Kaapi - ssa ei ole ruoka - a
 Cupboard-INE NEG.3SG be food-PART
 "There is no food in the cupboard."

A bare Partitive can also translate non-assertive "any", though there is a quantifier *yhtään* which can optionally be used here:

- (15) a. Sa - i - t - ko (yhtään) leipä - ä
 Get-PAST-2SG-INT (any) bread-PART
 "Did you get any bread?"
- b. E - n saa - nut (yhtään) leipä - ä
 Neg-1SG get-PASTpcple (any) bread-PART
 "I didn't get any bread."

At the end of section 1.1.3, it was claimed that there seem to be two criteria for the occurrence of Partitive case, unboundedness, and weak quantification. Where does

the Partitive of negation fit in? For example, is the object of a negated verb a "partial" object or not? We can regard it as such if we are prepared to regard "unaffected" as a special case of "partially affected". We can then argue that we are dealing with a special case of unboundedness. If an event does not occur at all, it cannot have a boundary point, whether spatial or temporal. We should also recall that verbs of emotion such as "love/hate/etc." also take obligatory Partitive objects in Finnish, although such verbs cannot be regarded as physically affecting their objects at all. Again, this makes sense if we allow "unaffected" to be a special case of "partially affected".

On the other hand, the occurrence of a Partitive in a negative sentence can translate "no/any", weak quantifiers, seeming to link the Partitive of negation to the Quantificational Partitive. Thus, the Partitive of negation provides another point of contact between the two criteria.

1.1.5 Partitive subjects

Finally, Partitive case can occur on the subjects of a subset of intransitive verbs, chiefly the unaccusatives (I will include "be" with the unaccusatives), but also verbs of manner of motion, such as "run", "walk" which constitute something of a "grey area" between the unaccusatives and unergatives, and can, in many languages, show the characteristics of both (Levin & Rappaport Hovav, 1995).

- (16) a. Ihmis - i - ä saapu - i
 Person-pl -PART arrive - PAST.3SG
 "Some people arrived."
- b. Viisi nais - ta tul - i
 Five woman -PART come -PAST.3SG
 "Five women came."
- c. Auto - j - a liikku - i kadu - lla
 Car-pl-PART move-PAST.3SG road-ADE
 "Cars moved on the road."
- d. Useita poik - i - a juoks - i piha - lla
 Several boy-pl-PART run - PAST.3SG yard-ADE
 "Several boys ran in the yard."

It should be noted that the verb here is third person *singular* - it does not agree with the subject. This is characteristic of Partitive subjects. Indeed, in Finnish, only Nominative subjects occur with agreeing verbs. If a subject is strongly quantified, it must be Nominative. (As with objects, the Partitive only occurs on the complements of weak quantifiers).

(17) a. Mieh^e - t saapu - i - vat

Man-NOMpl arrive-PAST- 3PL

"The men arrived."

b. Kaikki auto - t liikku - i - vat kadu - lla

All.NOM car-NOMpl move-PAST-3PL road-ADE

"All the cars moved on the road."

c. Nämä poja - t juokse - vat piha - lla

These.NOM boy-NOMpl run-3PL yard-ADE

"These boys will run in the yard."

A Partitive cannot normally occur on the subject of a transitive or unambiguously unergative verb. There is one exception to this, viz., when the subject is

quantified by a numeral it can occur as a transitive/unergative subject. Thus, the following is acceptable:

- (18) a. Sata oppilas - ta luke - e kirja -n
 Hundred student-PART read-3SG book-ACC
 "A hundred students will read the book."

(Note that the verb is still third person singular.)

but not:

- b. *Oppila - i - ta luke - e kirja - n
 Student -pl-PART read-3SG book -ACC
 "Some students will read the book."

If it is necessary to bring out the "partial" nature of a transitive/unergative subject, then another type of quantifier is used, one which has basically the same meaning as the ones we have already considered, but which does not take a Partitive complement. For example, *jotkut*, "some", *muutammat*, "some, a few, several", *monet*, "many, a lot of", *harvat*, "few".

- (19) a. Jotku-t poika - t rikko - i - vat ikkuna -n

Some.NOMpl boy-NOMpl break-PAST-3PL window-ACC

"Some boys broke the window"

b. Mone- t poja - t rikko - i - vat ikkuna - n

Many-NOMpl boy-NOMpl break-PAST-3PL window-ACC

"Many boys broke the window."

c. Muutama - t poja - t rikko - i - vat ikkuna - n

A few -NOMpl boy-NOMpl break-PAST-3PL window-ACC

"A few boys broke the window"

In this respect such subjects behave exactly like strongly quantified subjects, which can occur as subjects of any kind of verb, are Nominative, and force verb agreement.

(20) a. Kaikki poja - t rikko - i - vat ikkuna - n

All.NOM boy-NOMpl break-PAST-3PL window-ACC

"All the boys broke the window."

b. Nämä poja - t rikko - i - vat ikkuna-n

These.NOM boy-NOMpl break-PAST-3PL window-ACC

"These boys broke the window."

c. Molemma - t poja- t rikko - i - vat ikkuna - n
 Both-NOMpl boy-NOMpl break-PAST-3PL window-ACC
 "Both the boys broke the window."

d. Jokainen poika sa-i lahja -n
 Every.NOM boy.NOM get-PAST present-ACC
 "Every boy received a present"

(Again, note that the strong quantifiers agree with their complements in case, as we also saw with objects (examples 12a - d)).

Since the subject matter of this thesis is the Partitive, I shall not attempt to deal with those quantifiers which do not take Partitive complements, though I shall, in Chapter Four, have some suggestions as to why the Partitive itself cannot occur on transitive/unergative subjects.

1.1.6 Existential sentences

Finnish is a language which allows considerable freedom in word order, and it is possible to have word orders, even with transitive verbs, in which the subject occurs post-verbally. However, when the "subject" of an

unaccusative is left post-verbal, it is most usual to interpret this as corresponding to the English existential interpretation, i.e

(21) a. Poik - i - a saapu - i
 Boy-pl-PART arrived-PAST.3SG
 "Some boys arrived"

b. Saapu - i poik - i - a
 Arrive-PAST.3SG boy-pl-PART
 "There arrived some boys"

The type of English existential sentence which is formed with "be" and a locative, is translated by putting the locative in sentence initial position and placing the associate after "be".

(22) Huonee - ssa on mies/mieh - i - ä
 Room- INE be.3SG man?/man-pl-PART
 "There is a man/some men in the room."

(It is not clear what case the singular associate *mies*, "man", has. It may be Nominative, or it may be in the Nominative-like "short" Accusative - see Appendix 2.)

As in English, only weakly quantified phrases can occur as associates in existential constructions, hence Partitives can always occur in existential sentences:

- (23) Huonee - ssa on paljon mieh - i - ä
 Room- INE be.3SG much man-pl-PART
 "There are a lot of men in the room."

Note again that the verb is third person singular - it does not agree with the associate.

The fact that morphological Partitive case can occur on the associates of existentials, and complements of unaccusatives in Finnish has led Belletti (1988) to propose that unaccusatives can assign Partitive case to their complements, although they lack the ability to assign Accusative case, and that even in such languages as English and Italian, which generally lack morphological case-marking, associates have an inherent

Partitive case. We shall return to this proposal in section 1.3.1.

1.2. Cross-linguistic comparisons

Morphological Partitive case occurs in many other languages apart from Finnish, including the other Baltic Finnic languages, of which Estonian and Karelian are the best known. These languages show the same system of subject and object marking as Finnish and indeed the uses of the Partitive which are found in modern day Finnish probably go back to the proto-Baltic Finnic language (Denison, 1957, Itkonen, 1979). A brief account of the Partitive's historical development will be given in Appendix 1.

The Slavic languages make use of their Genitive case to fulfil the same functions as the Finnish Partitive, that is, a direct object marked with the Genitive case will be a "partial" object, while an object in the Accusative case will be a "total" object. This occurrence of the Genitive case is known as the Partitive Genitive to Slavic linguists. The following example from Russian

illustrates this (all the examples shown below are from Russian, and adapted from Franks (1995)):

- (24) On vy-pil /aj//aj - u
 He.NOM PERF-drank tea.ACC/tea - GEN
 "He drank the tea/some tea."

As in Finnish, the Partitive Genitive occurs on the complement of weak quantifiers.

- (25) On pro-čital pjat' knig
 He.NOM PERF-read five book.GENpl
 "He read five books."

Also as in Finnish, the quantifier itself does not have Partitive case - this occurs only on its complement. It will be noticed that Perfective Aspect is marked on the verb in the above examples. In fact, all the Slavic languages mark the Imperfective/Perfective distinction on the verb, and thus the use of Partitive case to indicate this distinction is unnecessary. More than this, the Accusative is generally the only case that can occur on the object of an Imperfective verb in Slavic.

- (26) On pil čaj/*čaj - u
 He.NOM IMPF.drank tea.ACC/*tea - GEN

"He drank tea"

Thus we have an interaction of case with Aspect here which is markedly different from that which occurs in Finnish.

Slavic languages vary in whether they have a Partitive of Negation (called the Genitive of Negation by Slavic linguists). In some, such as Polish, it is obligatory, as it is in Finnish, while in others, such as Serbo-Croatian, it has died out. In Russian it is optional (though according to Neidle (1988) native speakers will nearly always accept a Genitive on the object of a negative sentence), and alternates with the Accusative under various complicated conditions, which have been listed by Timberlake (1975b). Some of its occurrences will be met with in Chapter Five.

As in Finnish, the Slavic languages do not allow a bare Partitive to be the subject of a transitive verb. However, it is possible for an overtly quantified Partitive to be a transitive subject.

(27 Neskol'ko student - ov pro - Čitali etu kneigu
 Several student-GENpl PERF- read this.ACC book.ACC

"Several students read this book"

While it is clear that the use of the bare/quantificational Partitive Genitive is identical to the use of the Partitive in Finnish, with the exception of the subjects of transitives, the differences that occur with respect to Aspect and Negation make it worthwhile to compare Finnish to these languages, and I will often make use of data from these languages, as, in developing a theoretical framework to account for the Partitive, it will be necessary to account for the differences as well as the similarities in the way it is used in various languages.

1.3. Previous Theoretical approaches to the Partitive

Let us now consider some of the theoretical approaches to the Partitive which have been proposed in recent years.

1.3.1 Partitive case as inherent case

Belletti (1988) put forward an influential suggestion that Partitive case is in fact an inherent case, assigned by the verb, but only to weakly quantified objects. This suggestion is based on the alternation of Partitive and Accusative case that has already been described in section 1.1.1, together with the fact that Partitives can occur post-verbally with unaccusatives in existential sentences.

(28) a. Mies pan-i kirja - t/kirjo - j -a pöydä-lle

Man put-PAST book-ACCpl/book-pl-PART table-ALL

"The man put the/some books onto the table"

b. Helsingi -sta tul- i kirje - i- tä

Helsinki-ELA come-PAST letter-pl-PART

"There came (some) letters from Helsinki"

Taking into account the well-known *Definiteness Effect* (Safir, 1982) that is found with existentials, Belletti suggests that all verbs have the ability to assign an inherent Partitive to a weakly quantified object, and that unaccusatives only lack an ability to assign Accusative case - they still retain an ability to assign this inherent Partitive case to weakly quantified objects. This is why the complements of unaccusatives can remain post-verbal in both Finnish and English, the only difference being that in Finnish the Partitive on the object is overt, as in (28b) above, while in English (and also in languages like French and Italian, Belletti suggests) it is non-overt. However, if the underlying object is strongly quantified, it cannot receive Partitive case, and since an unaccusative cannot assign accusative case either, such an object must move to a pre-verbal case position, and receive Nominative case.

This suggestion, while accounting for the fact that weakly quantified phrases can remain post-verbal with unaccusatives, is not without its problems. Firstly, there is good reason to believe that Partitive case is structural, at least in Finnish, though of course this may not be so cross-linguistically⁶. For instance, it

does not correspond to any obvious theta role, and indeed in a sentence like (29) below, the direct object has the same theta-role, regardless of its case.

- (29) Mies sö - i omena - t/omen - i - a
 Man eat-PAST apple-ACCpl/apple-pl-PART
 "The man ate the/some apples"

Furthermore, the Partitive only occurs on subjects and direct objects, roles usually associated with structural case. It is even possible for Partitive case to occur in Exceptional Case Marking contexts - which Belletti claimed was impossible. For example, when verbs of mental state (which obligatorily take Partitive objects) take small clause complements, the Partitive will still be found on the small clause subject.

- (30) a. Luul - i - mme itse- ä -mme tärke - i - ksi
 Think-PAST-1PL self-PART-1Plposs important-pl-
 TRANS
 "We thought ourselves important"

b. Pidä - n sinu - a ystävä-nä -ni

Consider-1SG you-PART friend-ESS-1SG.poss

"I consider you my friend".

This seems very convincing evidence for the structural status of the Finnish Partitive.

Secondly, it is possible for Partitive case to occur on strongly quantified objects, in the contexts of Imperfective aspect, or negation, as illustrated in sections 1.1.2 and 1.1.4.

(31) a. Jussi lyö Eino - a

Jussi hit.3SG Eino-PART

"Jussi is hitting Eino"

b. Jussi ei lyö - nyt Eino - a

Jussi NEG.3SG hit-PASTpcple Eino-PART

"Jussi didn't hit Eino"

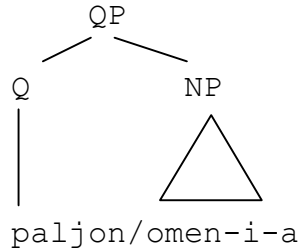
Finally, it should be noted that when a direct object is overtly quantified by a weak quantifier, only the complement of the quantifier is Partitive, not the whole phrase, as one shown in the examples in Chapter 1, section 1.1.3. If Partitive case is assigned by the

verb to its direct object as a whole, there is no reason why the whole phrase should not be Partitive.

Nonetheless the intuition that Partitive case is linked to the weak quantifiers gains strong support from the phenomenon discussed in section 1.1.3. It is necessary, however, to find a precise way of formulating this intuition. In the next section, we will look at an approach that attempts to do this.

1.3.2 The Quantifier Phrase Hypothesis

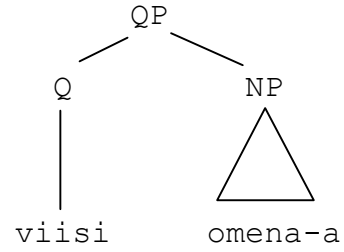
As we saw in section 1.1.3, we find Partitive case occurring on the complements of the weak quantifiers, as well as bare Partitives. Such structures as *paljon/vähän omenia*, “a lot of/a few apples”, *viisi omenaa*, “five apples”, are most naturally interpreted as Quantifier Phrases with the following structure:



vähän

a lot of/a few apple-pl-PART

"A lot of/a few apples"



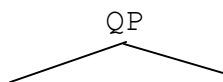
five

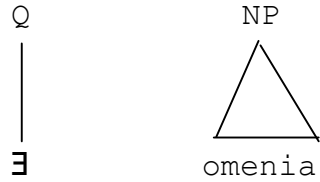
apple-PART

"five apples"

Now, given that the bare Partitive can be translated as "some", it is plausible to hypothesise that a bare Partitive may be a QP with the same structure as the above, but headed by an existential quantifier, rather than an overt quantifier. This hypothesis has been developed by those working in Slavic linguistics (e.g, Franks & Dwizirek, 1993, Franks, 1995) within the framework of Government-Binding theory. That is, the structure of *omenia*, "some apples" is seen as:

(33)





and Partitive case is seen as assigned under government by the quantifier (this hypothesis originated within the Government & Binding framework).

This hypothesis is plausible and is supported by a certain amount of evidence. For example, in Finnish, bare Partitives and those with overt quantifiers share the same distribution - they can both appear as direct objects, and as subjects of intransitives.

(34) a. Nä - i - n mieh - i - ä

See-PAST-1SG man-pl-PART

"I saw some men"

b. Nä - i - n viisi mies - tä

See-PAST-1SG five man-PART

"I saw five men"

c. Mieh - i - ä saapu - i

Man -pl-PART arrive-PAST

"Some men arrived"

d. Viisi mies - tä saapu - i

Five man -PART arrive-PAST

"Five men arrived"

Evidence from co-ordination also seems to support the idea that the two are the same type of phrase:

(35) Ota - n vähän salaatti - a ja kurkku - a

Take-1SG little lettuce-PART and cucumber-PART

"I'll have a little lettuce and some cucumber"

Nonetheless, the hypothesis is not totally unproblematic. In the above example (35), two indefinites are co-ordinated but it is possible to co-ordinate a bare Partitive with a definite marked with Accusative case.

(36) Ota - n kynä - t ja paperi - a

Take-1SG pen-ACCpl and paper-PART

"I'll take the pens and some paper"

It is natural to assume that the Accusative form in the above example is a DP (though this assumption may be wrong - see section 2.1.3). Now, if we accept Giusti's (1995) claim that determiners and quantifiers are not the same kind of category it should not be possible for a DP and QP to be co-ordinated. We will return to the question of the categorial status of the two object phrases in (36) in section 2.1.3, but for now, let us turn to some other problems with the QP hypothesis.

If we assume that Partitives are introduced into the derivation as QP's headed by a weak quantifier, we have a problem with the Partitives of aspect and negation, where it is possible for the Partitive object to be strongly quantified.

(37) Metsästäjä ampu - i kaikki - a karhu - j - a
 Hunter shoot- PAST all-PART bear-pl-PART
 "The hunter shot at all the bears"

It is completely semantically anomalous to imagine that the direct object in (37), which is already headed by the strong quantifier *kaikki*, "all", could be further embedded in a QP headed by an existential quantifier -

the Partitive on the object must arise from something else.

To turn to the Slavic languages, with regard to which the hypothesis originated, the distribution facts are less straightforward than in Finnish. For instance, in Finnish, neither bare Partitives nor those with overt quantifiers can occur as transitive subjects⁷. This is not the case in Slavic languages. Partitives with overt quantifiers can occur as transitive subjects, but bare Partitives cannot. That is, we can have (38a), but not (38b) (the examples below are from Russian).

- (38) a. Neskol'ko student-ov pro čitali etu kneigu
 Several student-GENpl read this.ACC book.ACC
 "Several students read this book"
- b. *Student - ov pro čitali etu kneigu
 Student-GENpl read this.ACC book.ACC
 "Some students read this book"

Now, if a bare Partitive is a QP headed by an existential quantifier, there is no obvious reason why it should not occur in transitive subject position, as this position is clearly available to other weak QP's.

It is also interesting that when a verb is Imperfective in Russian, only the Accusative occurs as an object case. When the verb is Perfective, the Accusative only occurs when the object is definite, and the Partitive is otherwise used.

(39) a. On pil čaj/*čaj-u
 He.NOM drank.IMPV tea.ACC/*tea-GEN
 "He drank tea"

b. On vy - pil čaj / čaj - u
 He.NOM PERF-drank tea.ACC/tea-GEN
 "He drank the tea/some tea"

(Interestingly, the direct object will usually have an indefinite interpretation in the Imperfective sentence – I will return to this in Chapter Three, section 3.2.2)

Now, the Accusative object in (39a) is interpreted as indefinite. If an indefinite object is introduced into the derivation as a QP headed by an existential quantifier, which is a plausible interpretation for the indefinite object in (39b), why should it not be introduced as a QP when the verb is Imperfective, and hence, why should Partitive case not occur with an

Imperfective verb form (assuming it is assigned under government by a Q)? Franks & Dziwirek (1993), and Franks (1995) propose that the QP can occur with the Perfective verb form because the presence of Perfective aspect can trigger a feature [+q] (= [+quantifying]) on the verb, which then allows it to take a QP direct object, while Imperfective aspect cannot. However, such a feature must be [+weak q], since the Partitive can only occur with weak quantifiers. There is no obvious reason why Perfective aspect, which is arguably the temporal equivalent of definiteness⁸ (Lyons, 1999), should trigger such a feature.

Thus, there are certain problems with the idea that a bare Partitive is a QP headed by a null weak quantifier. We will return to a consideration of what it actually is in section 2.1.3, but now let us turn to a proposal that comes closest to capturing the traditional notion of "partial" object.

1.3.3 Partitive case as licensing unboundedness

Kiparsky (1996) draws attention to the fact that Partitive case occurs on direct objects both when the direct object itself is to be interpreted as an indefinite, unspecified quantity, and when the predicate (VP) is to be interpreted as Imperfective. In both cases, the predicate can be regarded as unbounded (see section 1.1.2), i.e, as having no particular temporal or spatial endpoint. Thus, Kiparsky regards Partitive case as licensing unboundedness at the VP-level. The unboundedness may come either from the direct object itself being an unbounded quantity, and in this case the Partitive has its basic meaning of "some", or from the verb's aspectual properties, in which case we are dealing with temporal unboundedness.

This unification of the bare and aspectual uses of the Partitive is correct, and does indeed account for the occurrence of the Partitive on what have traditionally been called "partial" objects - the direct object in any unbounded predicate is a partial object. It does however, give rise to certain difficulties with regard to the Quantificational Partitive. Let us consider how we can tell if a predicate is bounded or not. Apart from

the "for an hour/in an hour test" (Vendler, 1967), unbounded predicates are characterised by a property known as PARTITIVITY (Carlson, 1981), which they share with unbounded NPs⁹. An entity has the property of Partitivity if a term used to refer to the entity as a whole can also be used to refer to any subpart of it. Thus, bare mass nouns and plurals, and plurals quantified by "some" such as "water", "(some)apples", and of course their Finnish Partitive equivalents, denote entities which have the property of Partitivity, and so do Imperfectives such as the English progressive - any subpart of "eating a cake" can still be described as "eating a cake". However, subparts of "the apples", "the water", "ate a cake" cannot be described using the same expressions. Such predicates as "the apples", "ate a cake", can be called QUANTIZED, following Krifka (1992)¹⁰, and do not have the property of Partitivity. The property of Partitivity is characteristic of unbounded predicates.

Now, it is debatable whether expressions quantified by overt weak quantifiers, with the exception of "some", have this property, and hence whether they are unbounded.

Kiparsky himself considers phrases headed by such quantifiers as "many", "few", the numerals, etc., as bounded, and in the case of the numerals, this is certainly true. Krifka (1992) includes numerically quantified expressions with his quantized predicates.

Consider a sentence such as the following:

- (40) Mies ost - i viisi omena - a
 Man buy-PAST five apple-PART
 "The man bought five apples"

We have no reason to regard the predicate "bought five apples" as unbounded. The verb is Perfective (and this is unambiguous - if it was Imperfective, there would be a Partitive on the quantifier, too, giving *viittä omena*, "five apples"), thus we are not dealing with an unbounded period of time, nor is the direct object, "five apples" unbounded. The predicate does not have the property of Partitivity - no subpart of what is described by this predicate could be described by the same predicate. And yet we have a Partitive present on the complement of *viisi*, "five". Clearly, then,

unboundedness by itself cannot be the decisive factor in licensing Partitive case.

Another matter which Kiparsky's account does not address is the fact that the Partitive is a structural case in Finnish, and hence must be checked, but Kiparsky gives no indication of how or where this occurs. The fact that Partitive case can always occur in unbounded predicates could be taken to indicate that Partitive case is checked in the specifier of an Aspect phrase marked for unboundedness (or, to use a more familiar term, atelicity). There is, however, no conflict between atelicity and the occurrence of Accusative case, as can be seen even in English - "he was hitting me" - and in Slavic languages, as has already been mentioned in section 1.2, only the Accusative case can occur on the objects of Imperfective verbs. Hence, it is unlikely that such an Aspect Phrase is where Partitive case is checked.

We have now seen three different approaches to the Partitive, all of which can account for some, but not all, occurrences of the Partitive. The QP hypothesis in particular captures the parallelism between bare and

overtly quantified Partitives very well, but cannot account for its aspectual uses (or its use in negation), and this is also a failing of Belletti's approach. Kiparsky's view captures the traditional notion of "partial" object very well, and accounts for the parallelism between the bare and aspectual uses of the Partitive, but cannot account for its quantificational uses.

We need to consider, then, how we can develop an approach which will enable us to account for all these uses. Such an approach should, wherever possible, preserve the insights of the theories described above. The following section will outline the main theoretical approaches which I will use in developing a unified account of the Partitive, in particular, the important Heim/Diesing theory of indefinites, which, combined with the insights of the QP hypothesis, provides us with our most effective way of understanding the Partitive.

Notes to Chapter One

1. More precisely "sm", in the sense of Postal (1966), the cardinality use of "some" which is interchangeable with the bare plural. The Partitive can never be used to translate "some (of the..)" according to my native speaker informants.

2. If there is only a temporal bound, but not a spatial one, the predicate is Perfective, but not telic. However, temporal unboundedness alone, as in Imperfective predicates, suffices to make a predicate atelic.

3. It is difficult to think of any circumstances in which irresultativity and atelicity would not coincide. However, Finnish does contain certain verbs, which, while apparently telic/resultative, take Partitive objects, e.g. *rangaista* "to punish" ("I punished the child in an hour") and certain apparently atelic/irresultative verbs which take Accusative objects, e.g. *omistaa*, "to own" ("I owned a dog for years"). Kiparsky (1996) takes this to indicate that boundedness and telicity/resultativity do not always coincide. He regards the defining feature of boundedness as the absence of gradability - one cannot own something more or less, but one can love or hate (or punish) something more or less. This view appears to be correct, since if a boundary is placed on something, it cannot then be bounded more or less. There are also certain verbs of mental state, e.g. *tietää*, "to know", *muistaa*, "to remember", which take Accusative objects, but which are not temporally bounded. Heinämäki (1984) considers the possibility that these verbs also express achievements, but it seems very difficult to characterise this in more precise terms. I will not consider these problems further, and confine myself to examples where (a)telicity and (un)boundedness coincide.

4. "Q of the.." is translated into Finnish by the use of the Elative case, which basically means "out of". For example "three of the apples" is *kolme omen - i - sta*, where the ending *-sta* is the Elative case ending, as opposed to *kolme omena - a*, "three apples", with the partitive ending *-a*.

5. A standard test for boundedness/telicity is the "in an hour/for an hour" diagnostic (Vendler, 1967). "In an hour" can be used with bounded predicates ("I ate the

apples in an hour/*apples in a hour) while "for an hour" can be used with unbounded (*I ate the apples for an hour/apples for an hour"). I attempted to use this test with native speakers of English to find out what their intuitions were when such expressions were used with weakly quantified objects. While all accepted "in an hour" with the numerals (I ate ten cakes in an hour) there were conflicting intuitions with regard to the other weak quantifiers. Thus, the status of such quantified expressions as bounded objects is debatable (Kiparsky (1996) regards them as bounded).

6. The Partitive genitive is structural in most Slavic languages with the exception of Serbo-Croatian (Franks, 1995).

7. With the exception of the numerals, of course

8. Definiteness, according to Lyons (1999) is characterised by *identifiability* and *inclusivity*. Both or either of these characterise definite expressions. It appears that Perfective predicates are characterised by the same properties. For instance, they can endure for an identifiable and inclusive period of time ("the king reigned for thirty years") or a period of time which is not identifiable ("the king reigned for years"), but which, due to the implication of a temporal bound in Perfectivity, is still inclusive.

9. This was first pointed out as early as 1903, by the Swedish Grammarian Adolf Noreen, according to Carlson (1981)

10. Krifka (1992) does not mention Partitivity, but a property that may be regarded as its inverse, Cumulativity. A predicate may be regarded as having the property of Cumulativity if, whenever there are two or more entities to which the predicate applies, it also applies to their sum.

Chapter Two

The Heim/Diesing theory of Indefinites and its applications to the Partitive

2.1 Introduction

The bare Partitive always indicates an indefinite quantity, whether of a mass noun or plurality of count nouns, as was shown in examples (1a-d), at the beginning of this chapter. An influential theory of indefinites is that put forward by Heim (1982) and further developed by Diesing (1992a, 1992b). I will use this as my starting point in dealing with the bare Partitive, and will outline the theory, and its applications to Finnish, in sections 2.1.2 and 2.1.3.

However, since the broad approach taken will be that of Minimalism (Chomsky, 1992, 1995, 1998, 2001), a brief outline of Minimalist approaches to case will be given first in section 2.1.1.

Finally, since we will often find ourselves dealing with quantification and quantifier phrases, it will be necessary on occasion to consider the scope positions of

these phrases. Beghelli & Stowell (1997) have developed a feature-checking theory of scope taking, which will be described in section 2.3.

2.1.1 Minimalist approaches to case

In early Minimalist approaches to case (e.g, Chomsky, 1992, 1995), it was seen as being checked under spec-head agreement. A brief account of this approach will be given below.

In this approach, lexical items are regarded as taken fully inflected (e.g, for case) from the lexicon, and combined via an operation, MERGE, to form new constituents. The morphological inflections, with which the lexical items are marked, themselves carry features (e.g, person, number, case - phi-features) which can be either [+interpretable] or [-interpretable] at the level of LF (logical form). If a feature is [-interpretable], it has to be checked and deleted before Spell-Out, the point in the derivation where it is mapped onto the levels of LF and PF (phonological form). Since case is generally regarded as [-interpretable], case features

have to be checked before Spell-Out, and this process is seen as being achieved via spec-head Agreement.

Nominative case was initially (Chomsky, 1992) seen as checked in the specifier of AGRsP (subject agreement Phrase), and Accusative case in the specifier of AGRoP (object agreement Phrase), though later (Chomsky, 1995), Chomsky was to argue that Nominative and Accusative case were checked in the specifiers of TP (Tense Phrase) and vP (light verb Phrase) respectively. Items move to these positions via an operation, MOVE, which occurs only when necessary, and is motivated by the need to check features (and also for other reasons, such as the EPP).

Initially, case was seen as checked via overt movement to the appropriate checking positions. However, it has also been suggested (Chomsky, 1995) that case-checking can occur via covert movement of features, without the lexical item itself being "pied-piped" along. As an example of this, consider English existential constructions. It is well-known that the verb agrees with the associate in English existentials, and Chomsky accounts for this by proposing that the phi-features of the associate raise covertly to adjoin to T, satisfying a specifier feature of T, which Chomsky assumes is

[assign:Nominative], and triggering agreement with the associate.

In more recent developments (Chomsky, 1998, 2001) Chomsky has claimed that it is possible to dispense even with covert feature movement, and instead proposed the possibility of long-distance agreement, or "checking at a distance". In this proposal, feature checking can take place without movement at all. Chomsky proposes an operation, AGREE, or feature-matching, which can occur between some functional head, alpha (called a PROBE), and some lexical item, beta (called a GOAL), which matches it in features. Features can check and delete under AGREE. For example, let's assume for the sake of argument, that Nominative case is checked by T (this is not actually my view, and later I will give arguments why, but let us assume it for illustrative purposes), and also that subject DPs have their first merge in (spec, v), v here being a causative light verb. How is Nominative case checked? The functional head T has certain uninterpretable phi-features. In order for these to be checked and deleted, it must find a lexical item which matches it in these features, and this is the subject DP, on which these features are interpretable.

The subject DP also has a Nominative case feature to be checked. The phi-features of T and the subject DP match, and hence these uninterpretable features of T are deleted under the operation Agree. The case feature is also checked and deleted under this operation. This is believed to take place prior to any kind of movement, and hence it is possible for both case-checking and agreement to occur without any movement at all. If movement does occur, it is motivated by something else. For example, if T has an EPP feature, then this must be satisfied by actual movement of the subject DP from (spec, v) to (spec, T). The operation Move can thus be regarded as a composite operation consisting of the two simpler operations Agree and Merge. In this framework, such movement must be licensed by agreement.

It is not immediately clear how all this is to be applied to the problem of the Partitive. One obvious problem is that the Partitive, although a case, does not seem to be semantically uninterpretable. Nor does the Accusative, where it indicates definiteness. Thus, we do not seem to have a feature which needs to be erased by checking here. Nor does the Partitive have any obvious connection with agreement. In Chapter 3, I will argue

that Partitive case is licensed by the weak quantifiers, and that it is possible to account for this under the relation AGREE if we are prepared to expand the ideas outlined above to include other features than conventional phi-features.

Finally, I should mention a point where I will diverge from Chomsky's current views. He has dispensed with both the agreement projections, but there are certain phenomena, both in Finnish and cross-linguistically, which are not explicable without the existence of AGRsP, and I will therefore make use of this projection. The evidence for its existence will be presented in Chapters 5 and 6. I will not take any position on the existence of AGRoP. While I do not rule out its existence, there does seem to be another possible checking position for Accusative case, namely an Aspect Phrase (AspP) encoding telicity/atelicity, which may dominate VP. This will be discussed in Chapter 3, section 3.4.

2.1.2. The Heim/Diesing theory of indefinites

Heim (1982) has developed an influential theory of indefinites, which moves radically away from the traditional idea that they are inherently quantified by existential quantifiers. Concentrating on expressions involving the English singular indefinite article, and, more importantly for our purposes, on bare plurals, Heim suggests that these have no quantificational force of their own, but instead serve to introduce *variables* into the logical representations of sentences, variables which can be bound by any available binder. For example, in a sentence like

(1) The hunter shot bears

the bare plural object has an existential interpretation, and could indeed be regarded as being existentially quantified. However in the sentence

(2) Bears are animals

the bare plural has a generic meaning, and "bears" is universally quantified. And in the sentences below, the interpretation of "bears" depends on the adverb present, as can be seen in the paraphrase put in brackets.

- (3) a. Bears are often vicious (many bears are vicious)
 b. Bears are seldom vicious (few bears are vicious)
 c. Bears are usually vicious (most bears are vicious).

Thus, the bare plural is not introducing something which is inherently existentially quantified. It should also be noted that in sentences (3a -c) other interpretations are possible. For example, (3a) could be interpreted as "bears are vicious *on many occasions*", or even as "many bears are vicious on many occasions". The adverbs in such sentences can, following Lewis (1975) be regarded as *unselective* quantifiers, that is, quantifiers which bind any variables within their scope, whatever they happen to be.

Thus, there is justification for regarding English bare plurals as introducing variables into the logical representation of a sentence, which can then be bound by anything available. Other English terms which introduce variables are the definite and indefinite articles, as in the following examples:

- (4) a. The dog is intelligent (species or individual)
b. The farmer saw a horse
c. Every time the farmer sees a horse, he beats it

In (4a) the expression "the dog" can either refer to an individual or be interpreted generically. In (4b), the indefinite article does indeed correspond to an existential quantifier, and the phrase "a horse" asserts the existence of an individual horse, but in (4c) "a horse" cannot be interpreted with this meaning, and is more naturally understood as universally quantified.

Heim's concern is with the logical representations of sentences, and she proposes that sentences can be represented in three parts: (a) a quantifier (b) a restrictive clause and (c) what Heim calls the Nuclear Scope, anything not part of the restrictive clause. This contains all unbound variables. Anything quantified by a strong quantifier will necessarily be part of a restrictive clause, since the function of a strong quantifier is to restrict the set of entities being quantified. Thus, Heim suggests that the underlying representation of a sentence like

(5) Every dog saw cats

will be (simplifying)

Every_x [x is a dog] [x saw cats]

Quantifier restrictive clause nuclear scope

In such a sentence the bare plural object, since it introduces a variable, remains within the nuclear scope. However, since it cannot remain unbound, and since bare plural objects nearly always have an existential interpretation in English, and probably in all languages, we need to ask how it is bound, and how it gets its interpretation.

Heim's answer to this is to propose an operation called EXISTENTIAL CLOSURE, wherein an existential quantifier is adjoined to the nuclear scope, closing it off, and binding any variables which are within it. Hence the bare plural, being bound by existential closure, receives an existential interpretation.

Diesing (1992a) takes this a step further. Since there must be a mapping between syntactic and logical

representations, Diesing proposes the MAPPING HYPOTHESIS, which claims:

(i) Material in the VP area of a syntactic representation is mapped into the nuclear scope. Thus, the VP area of a syntactic representation corresponds to the nuclear scope.

(ii) Material in the IP area of a syntactic representation is mapped into a restrictive clause.

A corollary of this position is that those expressions which introduce variables will remain within VP in a syntactic structure.

2.1.3 The three structural cases of Finnish introduce variables

How is all this to be applied to the Finnish Partitive? The fact that the bare Partitive can correspond to the English bare plural might lead us to assume that it too performs the function of introducing a variable, but we need to be cautious here. The Partitive corresponds only to the existential use of the English bare plural, never

to the generic use, and it does not have its interpretation changed by adverbs. Indeed, the very notion of "bare plural" is not really applicable to Finnish, as this language only has plural forms of various cases. Of these cases, the bare forms of the three structural cases, Nominative, Accusative, and Partitive, can be used to translate those English terms which introduce variables, i.e definite and indefinite articles, and the bare plural.

Thus, we need to consider whether these case forms can be regarded as introducing variables in Finnish, and the bare Nominative certainly fulfils this role, as the following examples show:

(6) a. Suomelaise - t ovat usein/harvoin/aina ujo-j-a
 Finn-NOMpl be.3PL often/seldom/always shy-pl-PART
 "Finns are often/seldom/always shy"

b. Koira on älykäs
 Dog.NOM be.3SG intelligent
 "The/a dog (species or individual) is intelligent".

- c. Varpuse -t ovat lintu - j - a
 Sparrow-NOMpl be.3PL bird-pl-PART
 "Sparrows are birds".

In (6a) the Nominative plural subject takes its interpretation from the quantifier, as in English, enabling the sentence to be interpreted as "many/few/all Finns are shy", in (6b) the Nominative singular can be interpreted as either generic or as referring to a single entity, also as in English, while in (6c) the Nominative plural corresponds to the English generic bare plural.

The bare Accusative singular may also introduce a variable, as a singular count noun in the Accusative can be interpreted as either definite or indefinite:

- (7) Ost - i - mme talo - n
 Buy-PAST-1PL house-ACC
 "We bought a/the house"

Of course, in languages without articles, it is normal for items to be interpreted as definite or indefinite depending on "context". Heim (1982) notes this, and

considers that it is possible that such items also introduce variables, the difference in interpretation arising from differences in the way they are bound. With regard to indefinites, Heim regards English singular indefinite count nouns as being bound by existential closure when they occur as direct objects with their existential meaning. The object, as a variable, is introduced into the derivation as an NP, and takes its quantificational force from the operator of existential closure. Heim also regards those expressions as can be translated with the English definite article "the" as being within the scope of existential closure, but rather than being bound by the operator, they are free variables, which have their value assigned to them by context. Heim regards indefinites as having a "novelty condition" attached to them, while definites have a "familiarity condition" attached to them, based on the well-known intuition that indefinites usually introduce novel items into a discourse, while definites usually refer back to items which have already been introduced into the discourse, or are otherwise salient, e.g from the discourse situation. Making this more precise, an NP is "novel" if it is not co-indexed with another NP that precedes it in the discourse (though it can be co-

indexed with the operator of existential closure) and "familiar" if it is co-indexed with such an NP. I will not deal further with precisely how definites get their interpretation¹, but there is no doubt that the Finnish singular Accusative can be interpreted as either definite or indefinite, and thus is likely to introduce a variable.

So we can regard the singular Accusative, when it occurs on a count noun, as introducing a variable. But what about the bare Accusative plural (and indeed the Accusative singular on a mass noun) and the bare Partitive? Do they also introduce variables? A superficial consideration of the matter would give the impression that they do not, as the bare Partitive only corresponds to the English existential bare Plural, and the Accusative plural to the English definite article. Thus, they do not seem to show the kind of variability in interpretation illustrated above. Their behaviour in this respect is compatible with the idea that the bare Partitive is introduced into the derivation by a QP headed by a null quantifier (as in the Quantifier Phrase hypothesis), and the Accusative plural by a DP headed by a null determiner corresponding to "the".

However, if we look at their distribution with regard to Aspect, a different picture emerges. Consider the following:

(8) a. Väinö rakens - i talo -n

Väinö.NOM build-PAST house-ACC

"Väinö built the/a house"

b. Väinö rakens - i talo - a

Väinö.NOM build-PAST house-PART

"Väinö was building the/a house"

c. Aino jo - i vede - n/vet-tä

Aino.NOM drink-PAST water-ACC/water-PART

"Aino drank the water/(some) water"

d. Aino jo - i vet - tä

Aino.NOM drink-PAST water-PART

"Aino was drinking the/(some) water"

e. Poika ost - i omena - t/omen - i -a

Boy.NOM buy-PAST apple-ACC.pl/apple-pl-PART

"The boy bought the apples/(some) apples"

f. Poika ost - i omen - i - a

Boy.NOM buy-PAST apple-pl-PART

"The boy was buying the/(some) apples"

Here, we can see that when the sentence is Imperfective, the Partitive, like the Accusative singular in a Perfective sentence, can have variable interpretation. This is also true of the objects of those verbs which take obligatory Partitive objects, i.e verbs which are inherently unbounded:

(9) Katsel - i - n talo - j - a

Look at-PAST-1SG house-pl-PART

"I looked at the/(some) houses"

The Partitive object can be interpreted as definite or indefinite, just as the Accusative singular object of a Perfective predicate can be. This is evidence that bare Partitives introduce variables, and hence are NPs not QPs.

Of course, definite objects appear as Accusatives or Partitives depending on Aspect. Accusatives and Partitives do in fact occur in complementary

distribution conditioned by Aspect, a sure sign that they are the same type of constituent. This is also supported by the fact that Accusatives and Partitives can be co-ordinated, as already mentioned²:

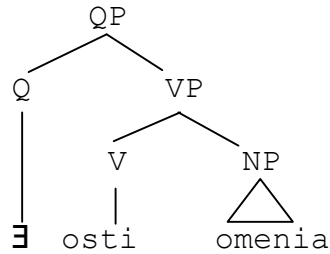
- (10) Ota - n lehde -n ja kirjo - j - a
 Take-1SG newspaper-ACC and book-pl-PART
 "I'll take the newspaper and some books"

Thus, rather than imagining that bare Partitives are introduced as QP's and bare Accusatives as DP's it makes more sense if we regard both case-forms as introducing variables, i.e as being NP's, and as taking their quantificational interpretation from something higher up in the derivation. In the case of the bare Partitive object, when it translates "some"/bare plural, this will be the operator of existential closure, as for English bare plural objects.

Now let us consider this from a syntactic point of view (Heim's concern was with logical representations). The domain of existential closure is the nuclear scope, and this, syntactically, corresponds to VP (in the next section we shall see that there is another projection

above VP, but for now let us regard the nuclear scope as VP). The simplest way to close off VP by existential closure is to let the operator of existential closure head a QP which is projected above VP (Borer, 1994). Now, let us consider the predicate with a Partitive object in (8e), *poika osti omenia*, where the Partitive on *omenia* is to be interpreted as indicating an unbounded quantity. For this, we have the following structure:

(11)



From now on, we will assume that this structure is projected in all cases where a bare Partitive indicates an unbounded quantity, and that the Partitive object introduces a variable bound by the operator of existential closure.

Having established that all three structural cases in Finnish introduce variables, and how a bare Partitive gets its quantificational interpretation, we must now

turn to another question arising from the Heim/Diesing view, the question of what precisely constitutes the nuclear scope and what variables are to be found there, as this issue will become important in Chapters Five and Six.

2.2 What constitutes the nuclear scope?

So what does constitute the nuclear scope? For Diesing, it is VP. Now, it has already been argued above that the operator of existential closure heads a QP which is generated in the syntax above VP. This QP forms the boundary between the nuclear scope and the "restrictive clause" area of the syntactic tree. But it is not necessarily the case that VP is the only projection which QP dominates.

The nuclear scope is that part of the logical representation which contains unbound variables. What might these unbound variables be? We have already discussed one kind of variable, that which ranges over entities, and which is introduced by a bare plural/mass noun in English, and a bare Partitive in Finnish. Such a variable is introduced as a direct object. There may

also be, in Imperfective sentences, a covert "period of time" variable, which I will argue for in Chapter Three. Such a variable is likely to be an internal argument of the verb, and need not lead us to propose any other projection below QP (the phrase headed by the operator of existential closure) than VP. However, there may be another variable present which is rather more problematic, and that is the covert "event variable" proposed by Davidson (1967).

What evidence is there for such a variable and where exactly should it be placed in the syntax? An answer to this may come from a consideration of the role of expletives in existential constructions. Although expletives have long been considered to be syntactic dummies, lacking an intrinsic meaning and theta-role of their own, a view has developed in recent years (e.g., Ramchand (1996), Felser & Rupp (2001)), that expletives are in fact overt realisations of an event argument. Let us first consider this, and then consider where expletives are merged.

There is considerable evidence that existential sentences and their non-existential counterparts are not

semantically equivalent. For example in the pair of sentences

- (12) a. Some girls were at the party
 b. There were some girls at the party

the phrase "some girls" in (12a) is ambivalent between a specific subset reading, and a cardinality reading. In (12b) however, it only allows the cardinality reading.

Also existentials can have implications which non-existentials do not have, as in:

- (13) a. Three men remained in the house all day
 b. There remained three men in the house all day

(13a) implies that the same three men remained in the house all day, while (13b) does not imply this.

Finally, there are existentials which do not have a non-existential counterpart

- (14) a. There is a pain in my shoulder
 b. *A pain is in my shoulder

(Adapted from Felser & Rupp (2001))

Thus, the presence of the expletive clearly makes a difference to interpretation. Indeed, while (12a) and (13a) can be regarded as making claims about "some girls" and "three men" respectively, the same cannot be said of their existential counterparts. And yet, an existential makes a claim about *something*. The expletive, the subject of the sentence, has a property predicated of it, like any other subject, and this property is the state of affairs described by the rest of the sentence, i.e the subject has the property predicated of it that three men remained in the house all day, some girls were at the party, etc. Such properties can only be properties of events, and hence the subject of an existential sentence must be an event. (53b, 54b, 55a) are to be interpreted as meaning "an event occurred such that some girls were at the party/three men remained in the house all day/ I had a pain in my shoulder". The existential sentences are predicating a property of an event, and the expletive, occurring as the subject of the existential, represents that event. It may be, then, an overt realisation of the

Davidsonian event argument, which in non-existential sentences remains covert.

There is another view of expletives which comes from Kratzer (1995), who has proposed the existence of a spatio-temporal argument, present as a covert variable in predicates, which may not be the same thing as the Davidsonian event argument. It has been suggested (e.g. Ramchand, 1996) that event arguments are present in all predicates while spatio-temporal arguments are present only in stage-level predicates, ie. those which predicate more or less temporary properties of their subjects. Ramchand considers that expletives are overt realisations of such a spatio-temporal argument. My own view at present, based on a consideration of negative existentials, is that expletives are genuine event arguments.

If we consider a sentence like

(15) There are a lot of people in this room

the locative "in this room" can be regarded as a property predicated of a spatio-temporal argument, along

with the associate. That is, we have a "logical form" something like the following;

(16) (at l, a lot of people & (in this room, l))

where l= spatio-temporal location, following Kratzer's (1995) notation.

But if we negate (15) we have

(17) There aren't many people in this room

The negation must take scope over "there" and the sentence basically means: "It is not the case that there are many people in this room".

Now, if the expletive expresses a spatio-temporal argument, then (17) should involve the denial of the existence of the spatio-temporal location expressed by the locative. However, this is not the most natural way to interpret the sentence. It does not deny the existence of the location, rather it denies the occurrence of an event. Its meaning is really: "no event occurs such that there are many people in this room."

Likewise in a sentence such as

(18) I phoned for hours, but no answer came

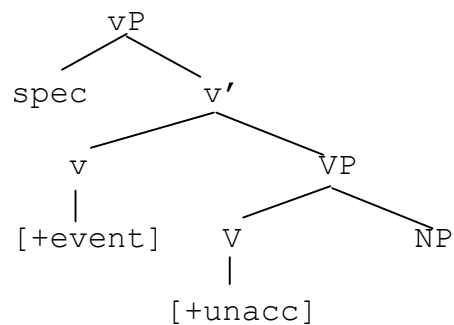
the most natural interpretation seems to be that no event occurred such that an answer came, rather than that no spatio-temporal location existed.

Thus, I will treat expletives as overt expressions of the Davidsonian event argument, and regard them as having a theta-role, which I will call EVENT. This leads us into the question of where they are merged in the syntax. If we can establish this, we can then see where event arguments are when they are covert variables, and hence what must be treated as the nuclear scope.

Now, if we follow Chomsky (2001), substantive categories (in this case, verbs) are selected by functional categories (in this case, light verbs) and this must hold for unaccusatives as well as transitives/unergatives. Let us hypothesise, then, that unaccusative VP's are immediately dominated by a phrase headed by a light verb which, following Radford (1997), we may call EVENTIVE and which has the basic meaning

"occurs", and further suggest that it is such a light verb which can theta mark the expletive, when it occurs, with the role of EVENT (Felser & Rupp (2001) suggest an Aspect Phrase in this position, but there is no reason why such a Phrase should be able to theta-mark something with the EVENT role). Thus we are proposing a structure as shown below:

(19)



[+event] = eventive light verb

The event argument, when it is made overt in the form of an expletive, will occur in the specifier position of vP, and will move from here to a subject position. (In English, this will be (spec, AGRs), though in Chapter Six I will argue that Finnish allows more than one subject position, and that the expletive in Finnish moves to another, lower, subject position). If it is

left covert, then it is simply part of the lexical specification of vP.

Thus we can finally reach a decision on what is to be treated as the nuclear scope. It is vP, rather than VP, as it is only by closing off vP, rather than VP under existential closure, that all variables can be bound. QP, the phrase headed by the operator of existential closure, which was proposed in section 2.1.3, must immediately dominate vP rather than VP.

Although we have now established what constitutes the nuclear scope, the event argument, and vP, will not play an important role in what follows until we come to Chapter Five. For convenience, then, I will often treat the nuclear scope as though it were VP.

We should now turn to the matter of scope.

2.3 A feature checking theory of scope

Since we will often be dealing with Quantifier Phrases, we should consider the question of scope positions for these phrases. An interesting theory of quantifier scope has been developed by Beghelli & Stowell (1997) which moves away from the conventional idea that QP's take scope by raising to adjoin to IP (or AGRsP). Instead, in this theory, QP's are seen as raising to the specifiers of various projections, each linked to a particular kind of QP, in order to check certain features. Thus, the movement of QP's to scope positions is driven by the need to check features, and is thus brought into line with Minimalism.

The following are Beghelli & Stowell's QP types, and the projections they raise to

WhQP's. These are familiar Wh-Phrases, and move to the specifier of CP, to check the feature [+Wh], as is uncontroversial.

NQP's or Negative QP's (e.g, "no books") move to the specifier of NEG.P to check the feature [+Neg]

DQP's or Distributive QP's, headed by "each" and "every", move to the specifier of a phrase called Dist.P

(Distributive Phrase), and check a feature [+dist] (distributive).

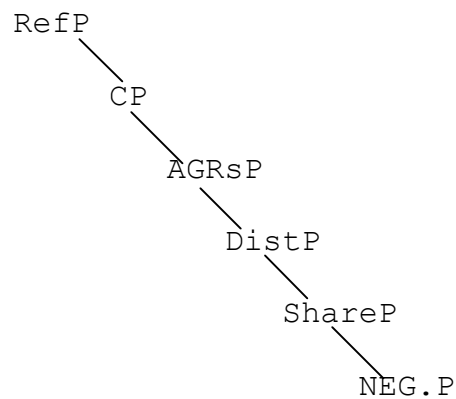
CQP's or Counting QP's are generally cardinality expressions involving modified numerals (e.g, more/less than five). These are considered to take scope *in situ*, i.e they do not move from their case positions.

GQP's or Group denoting QP's are all QP's headed by numerals, other weak quantifiers such as "some", "several", and definite expressions headed by, for example, "the". These can take scope in various positions: (i) when they are indefinite and have a cardinality interpretation, they can take scope *in situ* (ii) when indefinite, but with specific interpretation, they can take scope in the specifier of a Phrase called Share Phrase (ShareP, for "distributed share"), (iii) when definite, or specific indefinite, they can take scope in the specifier of a phrase called RefP (Referential Phrase). It is possible, then, for specific indefinite GQP's to take scope either in the spec of RefP or the spec of ShareP, but we will have no need to consider anything other than movement to (spec, Share), which will arise in Chapters Five and Six. In fact, it

will be argued in Chapter Six that non-specific indefinites can also move to the spec of ShareP, but for now we will leave this aside.

The order of phrases which Beghelli & Stowell give is:

(20)



The above order is based on considerations which arise from the scopal interactions of the different QP types.

Beghelli & Stowell do not take any stance on whether or not movement to these positions is overt or covert.

There is, however, some evidence that overt movement to such positions is possible. For example, RefP may correspond to one of Rizzi's (1997) Topic Phrases, and of course topics do undergo overt movement in many languages. As well as this, the Bantu language KiLega

gives evidence that distributive phrases (headed by "each" and "every") undergo overt movement to (spec, Dist) (Beghelli & Stowell, 1997). In Chapter Six, we shall see that overt movement to (spec, Share) can occur in Finnish.

It is obvious that we will largely be concerned with GQP's, and of Beghelli & Stowell's projections, ShareP will most concern us, so let us now give it some consideration. The head of ShareP is an existential quantifier, and those weakly quantified phrases which move to its specifier check a feature [+group reference] against it, according to Beghelli & Stowell. (However, in Chapter Six, I will argue that the feature checked here is in fact [+asserts existence]). The name Share Phrase comes from the term "distributed share", and arises from a consideration of the scopal interactions in sentences of the following type:

(21) Every boy read two books

This can be interpreted as meaning either "every boy read the same two books", in which case "two books" scopes over "every boy", and would raise to (spec, Ref)

in Beghelli & Stowell's system, or as meaning "every boy read a different two books", in which case "every boy" scopes over "two books". This is the situation in which "two books" raises to (spec, Share), a position below DistP (to the specifier of which, "every boy" raises). The number of books read here is given by the cardinality of "every" multiplied by two. Thus, when "every boy" scopes over "two books" we have a situation in which a large number of books is distributed, two by two, amongst whatever number of boys is referred to by "every". Hence, "two books" is here called the "distributed share", and the phrase to which it raises is called Share Phrase.

It is also possible for event arguments to raise to (spec, Share). For example, in a sentence such as

(22) Every boy visited Mary at 6p.m

if we interpret this as meaning "every boy turned up to visit Mary individually" (not all together), then we have a distributive construal over events, i.e there was a distinct event of visiting for each boy. This is compatible with an existentially quantified event

argument moving to (spec, Share), and taking on the role of distributed share.

ShareP is above NEG.P, as in sentences like

(23) John didn't see a banana skin on the floor, and he
slipped on it

the indefinite "a banana skin" takes scope over the negation. The indefinite must therefore move to a higher scope position than the negation.

On the whole, we will not have much need to consider movement to (spec, Share) since Partitives can always have a cardinality interpretation, and so we can assume that they take scope *in situ*. The question of movement to ShareP will, however, arise in Chapters Five and Six.

Notes to Chapter Two

1. From the point of view of the theory to be developed here, the interpretation of definites poses certain

problems. Heim allows those definites as are translated by "the" to be within the scope of the operator of existential closure (though not co-indexed with it). I argue that Partitive case is in fact checked against a weak quantifier, such as the operator of existential closure. Hence the question arises of why such definites are not also Partitive. From the point of view of the theory to be developed here, it would be preferable if such definites were bound by a universal quantifier heading a QP above VP. However, I will not attempt to deal further with the problems of definites here.

2. It will be recalled that bare Partitives can also be co-ordinated with quantificational Partitives, a seeming piece of evidence for the Quantifier Phrase status of bare Partitives. How can this be reconciled with the fact that they can also be co-ordinated with bare Accusatives, and the evidence which suggests that both are NPs? One possible solution comes from the ideas of Sportiche (2003), who suggests that all DPs and QPs are in fact formed compositionally, with determiners and quantifiers heading projections above VP, while all the arguments of the verb are merged as NPs. These are then raised to the determiners/quantifiers (precisely how is not specified) to form DPs/QPs. Thus, if we allow all Partitives and Accusatives in Finnish to originate as NP sisters of the verb, and then to raise to whatever quantifier binds them, it may be possible to account for the fact that Accusatives, bare and quantificational Partitives can be co-ordinated. Once again, however, I will not attempt to develop this idea further, owing to the present difficulties in establishing how this process takes place.

Chapter Three

Partitive Objects

3.1. "Partial" Objects

In the previous chapter, we saw that bare Partitives can be regarded as introducing variables into the logical representation of the sentence, and as bound by Heim's operator of existential closure, which appears in the syntax as the head of a QP dominating vP, the nuclear scope (though for convenience we shall treat VP as the nuclear scope throughout this chapter). In this Chapter, we will begin by considering the traditional notion of "partial" object, and see how the ideas developed in the previous Chapter can help us understand the occurrence of Partitive case on partial objects. We will then go on to consider the Accusative case, and look at some occurrences of Accusative case where Partitive case would be expected instead. Finally, there will be a consideration of a problem connected with the Mapping Hypothesis. But let us start with partial objects.

3.1.1 The relationship between partial objects and quantification

It will be recalled that a partial object is one which, at a given point in time, has not been totally affected by the action denoted by the verb. There are two ways in which an entity can be a partial object. One is for it to be an unbounded quantity in its own right. The other is for it to be the object of an Imperfective verb, where the action denoted by the verb has not yet reached an endpoint. Here, the object itself need not be unbounded, but it is still not totally affected by the verb, and in both cases the predicate as a whole is unbounded. As we have already seen, partial objects always have Partitive case in Finnish.

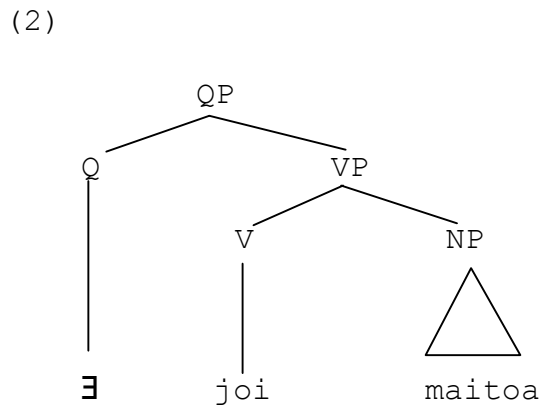
How is the phenomenon of partial objects to be related to quantification, and particularly to the idea of an operator of existential closure which binds variables, dominating VP?

It is easy enough to see that when a Partitive expression denotes an unbounded quantity, and translates the English bare plural/"some", it requires quantification in some way, and we have already established that bare Partitives introduce variables and

hence take their quantificational force from Heim's operator of existential closure. Thus, in a sentence like:

- (1) Poika jo - i maito - a
 Boy.NOM drink-PAST milk-PART
 "The boy drank (some) milk"

the predicate *joi maitoa*, "drank (some) milk" has the following structure:



where Q is the operator of existential closure binding the NP *maitoa*.)

But what about Imperfective predicates? Here, the direct object can be definite/strongly quantified, as in (3)

below, and hence does not require binding from any other quantifier.

(3) Käännä - n tätä kirja - a Suome -ksi
 Translate-1SG this.PART book-PART Finnish-TRANS
 "I'm translating this book into Finnish"

It is not immediately obvious that a QP dominates the predicate in (3), or even why such a thing should be present. But let us return for the moment to a consideration of the fact that Imperfective verbal predicates and unbounded nominals share the property of Partitivity (discussed in Chapter One, section 1.3.3). What accounts for this? It is the dimension of *time* - an Imperfective predicate must of necessity describe an action or state which takes place over an unbounded and unspecified period of time, which we shall call T. An Imperfective predicate can be used to describe that same action during any subperiod of T, just as a nominal which refers to an unbounded quantity can be used to refer to any subpart of that quantity. Imperfectivity is a Partitive operation in the temporal domain (Carlson, 1981).

This period of time need not be made explicit, but nonetheless it is implicit in every Imperfective sentence, and must occur, when it is implicit, as a covert variable, part of the predicate. Thus, although the direct object in an Imperfective sentence need not require binding, nonetheless there is still a variable present which does. There is a covert "period of time"¹ argument present in Imperfective verb forms, which requires binding by the operator of existential closure. This argument can be made overt in English by using such expressions as "for hours", "for some time". In Finnish, interestingly enough, the translation of such expressions requires the Partitive, which may be more evidence that Partitives are indeed bound by an existential quantifier.

(4) a. Asu - i - n Suome - ssa vuos - i - a
 Dwell-PAST-1SG Finland-INE year-pl-PART
 "I lived in Finland for years"

b. Ol- i - n sairala - ssa kuukaus - i - a
 Be-PAST-1SG hospital-INE month-pl-PART
 "I was in hospital for months"

c. Sö - i - n kakku - j- a tuntikaus - i - a
 Eat-PAST-1SG cake-pl-PART hour-pl-PART
 "I was eating cakes for hours"

Note the Partitives on both the direct object and the period of time argument² in (4c).

Thus all unbounded predicates, and hence, all partial objects, are dominated by a QP headed by the operator of existential closure. We have found a common factor linking both the bare and aspectual uses of the Partitive. However, this is not quite getting us where we want to go. We want to know how such objects acquire their case, and so far, this question has not been answered. However, the occurrence of QP above VP recalls the Quantifier Phrase hypothesis that Partitive case is assigned under government by a quantifier. In the QP hypothesis, the quantifier is not just a binder, but a case assigner. Adapting this to the modern framework, it is a case-licenser, and if we accept the above idea that a Partitive is bound by the operator of existential closure (rather than being a QP itself) then

it is possible to argue that Partitive case is in fact licensed by the operator of existential closure itself.

However, is it possible to make sense of this in the framework proposed by Chomsky (2001), in which case-licensing needs to be motivated by the relation AGREE?

3.1.2 Quantifiers as case licensers

Case expresses the role an argument plays in a relation, and thus it is not obvious that quantifiers would have the ability to license case, as they have been seen in traditional logic as operators, picking out sets of entities according to whether they have some property or another. However, Barwise & Cooper (1981), see quantifiers as relational terms, expressing relations between predicate-denotata, and the denotata of the quantified NPs. Thus, for example, in a sentence like "some dogs are intelligent", the quantifier "some" expresses a relation between the set of dogs, and the set of intelligent beings, i.e, that the two sets intersect, and that the intersection is not equal to zero. If, then, we see quantifiers as relational terms,

it is legitimate to regard them as having arguments, and perhaps, as having the ability to license case.

But more is required. Case needs to be checked, and this presumably occurs either by overt or covert movement to the specifier of a functional category, here Q, or even by checking at a distance. According to Chomsky's recent (2001) proposals, this process must be triggered by the operation AGREE, whereby features of some functional head and the lexical item whose case is to be checked are matched. Is it possible for this relation to occur between a quantifier and a lexical item?

There is some evidence that quantifiers can agree with their objects (the "object" of a quantifier is here to be understood as the NP it quantifies). In Hebrew, it is possible for quantifiers to show overt agreement with what they quantify, as the following examples (taken from Shlonsky, 1991) show:

- (5) a. Katafti et kol ha-praxim bi-zhirut
 I picked ACC all the-flowers with-care
 "I picked all the flowers carefully"

- b. Katafti et ha-praxim kul - am bi-zhirut
 I picked ACC the-flowers all-3M.PL with-care
 (Same meaning as above)

(The difference in spelling *kol*, *kul-*, "all", arises from the addition of the agreement marker.)

It will be noticed that when the quantifier *kol*, *kul-*, "all" precedes what it quantifies, it has no agreement marking. However, when it follows it, it has agreement marking, and in fact agrees with the quantified DP, which is masculine and plural. Shlonsky uses this fact to argue that in a sentence like (5b) the DP has moved first through the specifier position of QP^3 , arguing that agreement is a relation which holds between a head and a specifier, and also uses it to argue for an analysis of Quantifier Float as occurring via movement of the DP to the specifier position of Q , as opposed to Kayne's (1975) earlier analysis of rightward movement. However, what matters from our point of view is that agreement can occur between a quantifier and what it quantifies, though presumably this must be covert in most languages. Thus, we have evidence that the operation AGREE can occur between a quantifier (a

functional head), and the lexical item it quantifies. There is a clear matching of the features [+plural] and [+masculine] in (5b.)

Given that this is the case, and given that the Partitive can occur whenever a Noun Phrase is quantified by a weak quantifier, let us propose that the weak quantifiers do in fact have a Partitive case feature, which can be matched with a similar feature on a Noun Phrase. This will then be the case with the Operator of existential closure, an existential quantifier.

Now, we have already mentioned that the Partitive introduces a partially affected object, and that there are two ways in which an object can be partially affected: it can either introduce an unspecified, unbounded quantity, in which case it introduces a variable in its own right, or it can be the object of an imperfective verb, in which case there must be a "period of time" variable present. Either way, the operator of existential closure must be present above VP to bind the variable. Given that the relation of AGREE can exist between a quantifier and a lexical item, the operator of existential closure is the nearest probe to activate

this operation, the goal being the Partitive direct object. Thus, by analogy with the checking procedure for Nominative case given by Chomsky (2001) and outlined in Chapter Two, section 2.1.1, the Partitive case feature on the direct object will check along with the other features. In Chapter Two, section 2.1.1, it was mentioned that Partitive case appears to be semantically interpretable. If this is the case it should not be checked and deleted prior to the level of LF. However, in the light of the ideas developed above, it seems unnecessary to regard the Partitive case feature itself as semantically interpretable. Rather, the NP introduced by a Partitive takes its interpretation from the operator of existential closure, and hence it is this that is interpretable, not the case feature itself. Presumably then, the Partitive is checked and deleted prior to Spell-Out, like any other case.

It is not clear why a quantifier should have a case feature to be matched with one on the direct object (I will return to this in Chapter Four, section 4.1.2). However, if we are prepared to accept that such a process can take place, by analogy with the way other cases are checked, we can easily account for the

occurrence of Partitive case on partially affected objects.

We have achieved the aim of unifying the quantifier phrase hypothesis with the position of Kiparsky (1996) that Partitive case licenses unboundedness. It is indeed the case, as the quantifier phrase hypothesis would predict, that Partitive case is licensed by a weak quantifier, and this weak quantifier can only occur when the predicate is unbounded, i.e, whenever there is either an unbounded object or unbounded period of time variable present in the predicate. One thing needs to be kept clear, however. We must be careful to keep the distinction between case checking and binding clear. For example, consider the two sentences below:

(6) a. Poika sö - i kakku - j - a

Boy.NOM eat-PAST cake-pl-PART

"The boy ate (some) cakes".

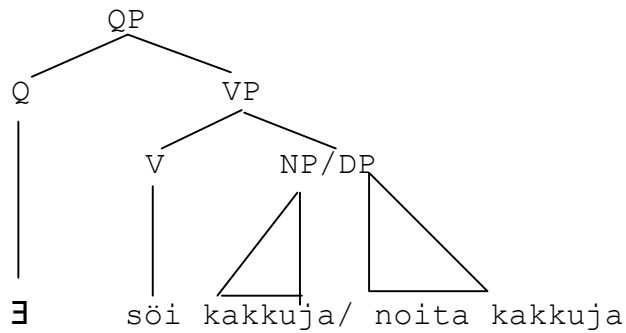
b. Poika sö- i noita kakku - j -a

Boy.NOM eat-PAST those.PART cake-pl-PART

"The boy was eating those cakes"

In both cases, we hypothesise that the nuclear scope can be shown as below:

(7)



In the case of (6a), the quantifier both binds the direct object, which is here assumed to be a variable, and licenses its case. In the case of (6b) it does not bind the direct object, but rather the covert “period of time” variable which we assume is present. However, it can still check its case, as this is only dependent on the feature matching which can take place between the quantifier and the object.

3.2 The Accusative case

We will now go on to consider the occurrence of Accusative case in certain circumstances where we would expect to find the Partitive instead. Before doing this, however, it is worthwhile to give some thought as to how Accusative case is checked.

3.2.1 The checking position for Accusative case

The checking position for Accusative case must be fairly low down in the derivation, preferably as near to VP as possible (of course if the operator of existential closure is present, then that will head the projection which is nearest to VP, and, as we have seen, license Partitive case, blocking off Accusative case). AGRoP has often been proposed as providing a checking position for Accusative case (Chomsky, 1992), and more recently Chomsky (1995) has suggested that the outer spec of vP(causative) is the checking position for Accusative case.

It is however, possible that there is another checking position for Accusative case, one which is nearer to VP than vP(causative), and that is an Aspect Phrase encoding telicity/atelicity⁴ (Borer, 1994), which is

effectively the same thing as we have so far called boundedness/unboundedness.

Telicity and atelicity are dependent both on the temporal duration of the activity denoted by the verb, and the degree of affectedness of the direct object. For example, in the sentences below

(8) a. I drank the tea

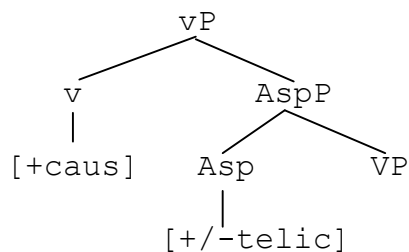
b. I drank tea

c. I was drinking the tea

(8a) is telic as both the action of drinking has come to an end and the direct object has been totally affected by the action (we most naturally interpret this sentence as implying that all the tea had been drunk). However, (8b -c) are both atelic - in the first case the direct object has not been totally affected, and in the second, the temporal duration of the activity has not yet come to an end. The aspectual property of telicity/atelicity is dependent on both the verb and direct object, but not on the subject, which in the above sentences is a causal

agent. The subject is not being affected in the same way as the direct object is (it could be argued that the agent is being affected, e.g, by being filled as the action continues, but this is not being affected in the same way as the direct object is being affected, i.e, its spatial extension actually undergoes physical, and visible, change as the action goes on. This does not occur with the agent). Thus, telicity/atelicity is a property of the predicate, i.e VP alone. An aspect phrase which encodes telicity/atelicity must have scope over VP, but not over vP(causative) (Travis, 2001). The position of such a phrase is as shown below:

(9)



In the above, the operator of existential closure is not shown. If it was, then of course its QP would be above VP, but below AspP. (Borer (1994) also places a phrase headed by the operator of existential closure above VP but below AspP). Thus, if QP is not present, then AspP

is certainly the nearest functional head to VP, and thus the most likely checker for Accusative case. Is there any other reason to suppose this might be so?

It has already been mentioned that the aspectual property of telicity/atelicity is dependent on the degree of affectedness of the direct object. Let us imagine an event, described by the sentence (8a) "I drank the tea". Although this is both Perfective and telic, the event must take place over some timespan T. As the timespan increases, the object is more and more affected by the action of drinking - its spatial extension physically decreases with time. Finally, we reach the end of the timespan, by which point the object has been totally affected by the action. Thus, the degree of affectedness of the object is a function of time. The direct object in effect "measures out" the event, and the aspectual properties of the predicate are dependent on the degree of this measuring out. For example, when it has been totally measured out, the predicate is telic and Perfective.

To account for this, Tenny (1994) has proposed a set of what she calls ASPECTUAL ROLES (which may subsume the

more traditional theta roles), which the arguments of a verb can take, depending on the aspectual properties of a situation. These are:

MEASURE: the role assigned to an argument of the verb which either undergoes some internal change or motion, along a single parameter, or provides a scale or parameter, without undergoing change or motion, that measures out and defines the temporal extent of the event.

PATH: this is a defective measure role, which is assigned to an argument of the verb that provides a scale or parameter along which the event is measured out, and along which the Terminus role marks the endpoint of the event. The Path role accompanies the Terminus role, explicitly or implicitly.

TERMINUS: This role is assigned to an argument of the verb which marks the endpoint of a course traversed in measuring the event, and which defines the temporal endpoint of the event.

(adapted from Tenny (1994))

Along with this, Tenny proposes:

The measuring out constraint on direct internal arguments

(i) The direct internal argument of a verb is constrained so that it undergoes no necessary internal motion or change unless it is motion or change which measures out the event over time.

(ii) Direct internal arguments are the only overt arguments which can measure out the event.

(iii) There can be no more than one measuring out for any event described by a verb.

Now, it is clear that Accusative case can always occur on a direct object with the role of Measure. In fact, as far as Finnish is concerned, the Accusative can *only* occur on a direct internal argument with the role of Measure, as it can only occur on totally affected objects, which of course measure out an event completely. The role which Tenny calls "Path" seems to

be the role which corresponds to what we have previously called "partial" objects.

So, putting all this together, when we have an accusative object, we have a direct object with the role of Measure, and an Aspect head that requires a direct object with that role in order to encode the telic/atelic distinction. If we allow Accusative case to be the morphological realisation of the Measure role, it can easily be seen that this can be matched to a corresponding feature on Aspect, and thus, that Accusative case can be checked in this way.

However, this is not the whole story. So far, I have used the term Measure as Tenny (1994) uses it, as something that defines the temporal extent of the action denoted by the verb - in other words, a totally affected object. However, there is nothing to stop Accusative case occurring on partially affected objects, as even a simple English sentence will illustrate:

(10) He was hitting me

It is also the case that in Russian, and the Slavic languages in general, Accusative case is the only case allowed on the direct objects of Imperfective verbs, objects which must necessarily be partially affected. So we need to modify the above proposals somewhat. As already mentioned the role which Tenny calls PATH, and which she defines as a defective Measure, corresponds to what has so far been called a partial object, and indeed a partial object also fulfills the function of measuring out an event, it just does not do so completely - it can be regarded as a Partial Measure. Thus, if we subsume the Path role under the role of Measure, and simply change the terminology somewhat, calling the Measure role MEASURE[+TOTAL], and the Path role MEASURE[-TOTAL], we can still account for the licensing of Accusative case as proposed above. Any direct object with the role of Measure, whether total or partial, can have Accusative case.

Thus, it is plausible that Accusative case is licensed by an Aspect Phrase dominating VP, but not vP(+causative). However, this now leaves us with another problem. Why, if Accusative case can realise the role of Measure, whether total or partial, should some languages

allow Accusative case on any direct object, while others, such as Finnish and the other Baltic Finnic languages, only allow Accusative case on total objects? We will now turn to such a problem, but first one point needs to be mentioned. In what follows, we will consider why Russian only allows the Accusative case on the objects of Imperfective verbs and will be discussing Perfectivity/Imperfectivity, although the Aspect Phrase which I have suggested checks Accusative case encodes telicity/atelicity. However, since Imperfective predicates are automatically atelic, this is not a problem. (A Perfective predicate need not be telic, and in Russian, as in Finnish, a Perfective atelic predicate has a Partitive object, and therefore the Aspect Phrase is not relevant).

3.2.2 Accusative case and the Russian Imperfective

A case in point is the Russian Imperfective verb form, which will only allow Accusative case on its direct objects (Klein, 1978, Franks, 1995). Perfectives allow either Accusative or Partitive (genitive) depending on

whether or not the object is definite, as in Finnish.

The following sentences illustrate this.

- (11) a. On vy-pil čaj / čajju
 He.NOM PERF-drank tea.ACC/tea.GEN

"He drank the tea/some tea"

- b. On pil čaj/* čajju
 He.NOM drank.IMPF tea

"He was drinking tea"

(The Russian Imperfective does not wholly correspond to the English progressive, but I use this form for illustrative purposes.)

Now let us consider these two sentences translated into Finnish:

- (12) a. Hän jo - i tee - n/ tee - tä
 He.NOM drink -PAST tea-ACC/tea-PART

"He drank the tea/some tea"

- b. Hän jo - i tee - tä/*tee - n
 He.NOM drink-PAST tea-PART

"He was drinking tea"

It is obvious that the behaviour of the two languages is identical with regard to Perfective verb forms, but not with regard to Imperfective. Russian only allows Accusative case on the objects of Imperfective sentences, and Finnish only allows Partitive case. Kiparsky (1996), who regards Partitive case as licensing unboundedness, comments on the Russian Imperfective, and mentions that there is no obvious reason why it should not allow Partitive case on its direct objects, given that an Imperfective predicate must be unbounded. So let us consider what could account for this.

One thing is obvious; Russian has Perfective/Imperfective aspect marked on the verb, while Finnish does not. Perfectivity in Russian is usually indicated by a prefix, while Imperfective verb forms are usually unmarked. There is, however, no possibility of getting the two forms confused, so we can speak of both Perfectivity and Imperfectivity as being indicated by the morphology of the verb.

But what is the significance of this? Let us recall the ideas of Heim (1982), mentioned in Chapter 2, section 2.1.2, regarding the binding of variables. It will be

recalled that Heim proposed that English bare plurals introduced variables, which could be bound, and hence take their quantificational force, from any suitable binder that also happened to present, for example, adverbs, as in the following:

(13) Bears are often/seldom/usually ferocious

The operator of existential closure is only present when no other binder is available. Let us consider the marking of aspect in both Finnish and Russian in this light, then.

It has already been proposed that an aspect phrase encoding telicity/atelicity is present above VP, and that it provides the checking position for Accusative case. We will now call this phrase Asp_1P . Now, telicity/atelicity and Perfectivity/Imperfectivity are not the same thing. Perfectivity/Imperfectivity expresses the temporal boundedness, or lack of it, of an action, while to be telic, a predicate must be both spatially and temporally bounded. If either of these requirements is not met, the predicate is atelic. Let us propose then, that dominating Asp_1P is another Aspect

Phrase, call it Asp_2P , which encodes Perfectivity/Imperfectivity. Languages which have overt Perfective/Imperfective verbal morphology will check it against the head of this phrase. This phrase, which encodes the purely temporal aspects of the predicate's boundedness, acts as a binder for the temporal variable which, it has been proposed, is present in Imperfective predicates.

Let us apply this to Russian. Verbs in Russian are all marked either Perfective or Imperfective. Asp_2P must then be present for verbs to check their aspect marking against. It also acts as a binder for the "period of time" variable in an Imperfective sentence, and therefore there is no reason for the Operator of existential closure to be present. The object will then check Accusative case against Asp_1P , as this is the nearest case licenser. Thus, Imperfective predicates always take Accusative objects in Russian.

Now, Finnish does not have any aspectual marking on the verb to indicate Perfectivity or Imperfectivity. Given a sentence like:

- (14) Poika sö - i omen - i - a
 Boy.NOM eat-PAST apple-pl-PART
 "The boy ate (some) apples/the boy was eating (the) apples"

we cannot tell its status with regard to Perfectivity/Imperfectivity out of context. All we can say is that it is atelic. Finnish predicates are marked solely for telicity/atelicity, not for Perfectivity/Imperfectivity. It is likely then that Asp₂P is not projected in Finnish, but only Asp₁P. This means that no binder is present for the temporal variable. However, since this must be bound, the presence of the operator of existential closure is required, to bind the temporal variable in an Imperfective sentence. Therefore, there is a QP dominating VP, and Q is the nearest functional head to trigger case-checking. Hence, the direct object in a Finnish Imperfective sentence must be Partitive.

It remains to consider Russian Perfective verb forms. When the Accusative occurs with a Perfective verb form, and the direct object is definite, as in (12a) and (12c), there is no problem. We have no reason to suppose

that any QP is present above VP, and thus the direct object has Accusative case. This is also true of Finnish. Nonetheless, in both Finnish and Russian, when the direct object of a Perfective verb corresponds to the English bare plural/some, it has a Partitive, as shown below:

(15) a. On vy-pil čaj (Russian)
He.NOM PERF-drank tea.GEN

"He drank some tea"

b. Hän jo - i tee - tä (Finnish)
He.NOM drink-PAST tea-PART

"He drank some tea"

This means that there must be a QP present above VP. For Finnish, this poses no problem, as it has no verbal aspectual morphology to act as a binder, but why should it be so in Russian, which does?

The answer is that Perfective aspect carries with it the implication of a bound. The direct object in (15a-b) is an unbounded quantity of a mass noun. It cannot take this interpretation from Perfective aspect, which could

only give a bounded interpretation. If we wish to form a sentence with an unbounded direct object, then Perfective aspect cannot act as a binder, and hence QP must be projected above VP, in both languages, in order for the direct object to have the unbounded interpretation⁵.

It should also be mentioned here that Imperfective aspect on a Russian verb gives a tendency for objects to be interpreted as indefinite. This makes sense if such objects are bound by Imperfective aspect itself, as the most likely interpretation this would give is indefinite (just as the covert "period of time" variable, which we have hypothesised is present in Imperfective sentences must be an indefinite period of time.)

The hypothesis proposed above suggests that the difference in case-marking of objects, which occurs in Finnish and Russian Imperfectives, is dependent on the presence or absence of overt aspectual morphology. If this is correct, we would expect to see similar phenomena in languages with similar morphology. That is, if a language has both Accusative and Partitive case, and also overt Perfective/Imperfective morphology,

we would expect to see only Accusative case allowed on the objects of Imperfective verbs, while Perfective verbs could have Accusative or Partitive objects. If, on the other hand, the language had no overt Perfective/Imperfective morphology, like Finnish, we would expect to see only Partitive case on the objects of Imperfective verbs.

At the present time, I know of no other languages that are exactly like Finnish in terms of their case-marking and aspectual system, other than the other Baltic Finnic languages. Here, the system of aspect and case-marking goes back to the proto-language (Denison, 1957, Itkonen, 1979), and thus this tells us nothing, except about the languages' historical development. It is interesting to note, however, that exactly the same system of aspect and case-marking as exists in Slavic also existed in Old and Middle High German (Abraham, 1997). These languages also had overt Perfective/Imperfective marking, and also used their Genitive case with Partitive function, as in modern Slavic. With Perfective verb forms, an Accusative object was interpreted as definite, and a Genitive object as indefinite, as in Slavic. However, only the Accusative was allowed on the objects of

Imperfective verbs, also as in Slavic. This provides some corroborating evidence for the hypothesis proposed above.

3.2.3 The singular indefinite article in Finnish

We now turn to the most puzzling fact connected with the Partitive/Accusative alternation in Finnish.

When a direct object in Finnish is a plurality of count nouns or a mass noun, then the bare Partitive/Accusative alternation corresponds to the English "some"/"the".

However, when a direct object is a singular count noun, there is no Partitive/Accusative alternation corresponding to "an"/"the". That is, an Accusative on a singular count noun can be interpreted as definite or indefinite depending on context.

(16) Sö - i - n omena - n

Eat-PAST-1SG apple-ACC

"I ate the/an apple"

It is also the case that the numeral *yksi*, "one", is alone amongst the numerals in not requiring a Partitive complement.

- (17)a. Ost - i - n yhde - n auto - n
 Buy-PAST-1SG one-ACC car-ACC
 "I bought one car"

but

- b. Ost - i - n kaksi/kolme.. auto - a
 Buy-PAST-1SG two/three.. car-PART
 "I bought two/three.. cars"

This fact is not immediately understandable in terms of the ideas which have so far been proposed to account for the Partitive. There is no doubt but that the indefinite article, and the numeral "one" belong to the weak quantifiers, which have the ability to license Partitive case. Furthermore, it will be recalled that in the ideas proposed by Heim (1982), the English singular indefinite article is like bare plurals in that its function is to introduce variables. It does not correspond to the logician's existential quantifier. However, in a

sentence such as "I ate an apple", the direct object does have an existential interpretation, and here Heim regards it as being bound by the operator of existential closure, with which it is co-indexed. It has already been suggested (Chapter Two, section 2.1.3) that the Finnish singular Accusative on a count noun introduces a variable into the derivation, and so when it has an indefinite (existential) meaning, it should be bound by the operator of existential closure. Hence, QP should exist above VP, which means that, in Finnish, a singular indefinite count noun object should have Partitive case. This is clearly not the case⁶.

Why is it not the case? At present, I cannot see a principled solution to this problem, but the following suggestions may be pointers in the right direction.

Intuitively, a singular indefinite count noun, when it is the direct object of a Perfective verb, cannot be partially affected. When I say "I ate an apple", I imply that I ate all of it, just as much as if the object was definite. The sentence is in fact telic.

Now, it has already been proposed that QP is immediately dominated by an Aspect Phrase which encodes

telicity/atelicity. Indeed, QP can only occur when this Aspect Phrase is marked [-telic]. It is possible then, that QP is in fact *selected* by Aspect, when it is marked [-telic], and thus need not be projected when Aspect is [+telic]. If this is so, then the nearest case licenser will be Aspect, when the object is a singular count noun, and hence the object is Accusative. This does, however, leave open the question of how the object gets its indefinite interpretation - possibly from an existential quantifier heading a projection higher up in the derivation, such as Share Phrase (Beghelli & Stowell, 1997).

3.3. The Mapping Hypothesis and the Partitive

The hypothesis proposed above helps us to unify some of the most significant occurrences of the Partitive, but it does raise another problem to which I do not see a clear solution, at the moment. This concerns Diesing's Mapping Hypothesis (1992a), which claims that only material in the VP area of a clause is mapped into the nuclear scope, while material in the IP area is mapped into a restrictive clause. What this means in practice is that definite/universally quantified expressions

should be raised out of VP in the syntactic representation, to some position in the IP area (which we are taking to be everything above QP), since they correspond semantically to restrictive clauses. The implications of this are that the definite objects of Imperfective verbs should be raised to some position above QP, as in this way they escape the nuclear scope. This should also apply to the objects of verbs of emotional state such as "love", "hate", etc., as the objects of these verbs are virtually always interpreted with generic or universal meaning, i.e. "I hate dogs" is usually interpreted to mean "I hate all dogs". In Finnish, however, such verbs obligatorily take Partitive objects.

(18 Rakasta - n koir-i - a mutta vihaa - n kisso -ja
 Love -1SG dog-pl-PART but hate -1SG cat-pl-PART
 "I love dogs but I hate cats"

It is not difficult to see why such verbs take Partitive objects, as they are inherently temporally unbounded, and must describe states which persist over unspecified periods of time, hence the arguments so far applied to Imperfective verbs also apply to such verbs. However,

the same problem of the Mapping Hypothesis arises, as for the definite objects of Imperfective verbs - are the objects of such verbs being raised out of VP, and hence out of the nuclear scope?

Within the framework proposed by Chomsky (2001) there is no necessity for movement to take place in order for case to be checked, and if it does, this will be for some other reason, such as an EPP principle to be satisfied. However, there is no reason to suppose that quantifiers have an EPP principle to be satisfied, and in consequence, no reason to suppose that movement, either overt or covert, is involved in the checking of Partitive case. Therefore there is no reason to suppose that any Partitive object moves from its base position at all.

It may be that the solution to this problem lies in covert movement to scope positions, such as those proposed by Beghelli & Stowell (1997), described in Chapter 2, section 2.3. Beghelli & Stowell do not claim that movement to such positions is overt, nor does it seem to be necessary for movement of objects out of VP to be overt, to satisfy the Mapping Hypothesis. Thus, it

may be that such definite/universally quantified direct objects as we have discussed above, move covertly to a scope position such as RefP, the scope position for universally quantified DPs, which Beghelli & Stowell locate above CP, and that this is enough to fulfil the requirements of the Mapping Hypothesis. (There is no problem with Partitive objects when they are indefinite. The Mapping Hypothesis does not require that they move from VP, and they can take scope *in situ* (Beghelli & Stowell, 1997), and hence no movement is required for any reason). However, this is a problem I will leave for future research.

Notes to Chapter Three

1. Lewis (1975) includes periods of time as among the variables which can be bound by unselective quantifiers

2. Such periods of time can of course occur with Perfective predicates. Here, although the period of time is not specified, there is still the implication of a temporal bound. When a specified period of time occurs with a Perfective predicate in Finnish, it occurs in the Accusative case, e.g. *poika juoksi tunnin*, "the boy ran for an hour", where *tunnin* is the Accusative of *tunti*, "hour".

3. The whole phrase is Accusative. This is to be expected, as the head of the QP is "all", a strong quantifier, and as far as we know, the strong quantifiers cannot license case. The phrase has presumably moved to the first available case position above QP, possibly AspectPhrase, to check its case.

4. A phrase which encodes (a)telicity is more likely than one which encodes (im)perfectivity, as a sentence can be Perfective without the direct object being totally affected, but not telic.

5. There is a problem here with regard to what happens to the Accusative case feature on Aspect, when QP is projected below it to check Partitive case. Borer (1994) allows the Accusative case feature of Aspect to be optional, but gives no guidelines as to what determines its occurrence or non-occurrence.

6. Partitive case can occur if the sentence is Imperfective, or if the noun is to be given a mass noun interpretation.

Chapter Four

The Quantificational Partitive

4.1 Introduction

Let us see how the framework proposed above can account for the quantificational Partitive, illustrated in Chapter One, section 1.1.3 by examples (11a-g), repeated below as (1a-g).

(1) a. Kissa jo - i paljon maito - a
 Cat.NOM drink -PAST.3SG much? milk-PART
 "The cat drank a lot of milk."

b. Kissa jo - i vähän maito - a
 Cat.NOM drink-PAST.3SG little milk-PART
 "The cat drank a little milk."

c. Kissa sö - i paljon hiir - i - ä
 Cat.NOM eat-PAST.3SG a lot of mouse-pl-PART
 "The cat ate a lot of mice."

d. Kissa sö - i vähän hiir - i- ä
 Cat.NOM eat-PAST.3SG few mouse-pl-PART
 "The cat ate a few mice."

e. Kissa sö - i useita hiir - i- ä
 Cat.NOM ate several mouse-pl-PART
 "The cat ate several mice."

f. Kissa sö - i monta hiir - tä
 Cat.NOM ate many mouse-PART
 "The cat ate many mice."

g. Kissa sö - i pari/kaksi/kolme.. hiir -tä
 Cat.NOM eat-PAST a couple/two/three..mouse-PART
 "The cat ate a couple of/two three/etc. mice"

One thing is clear; a direct object quantified by an overt quantifier is not necessarily a "partial" object, as it is not necessarily partially affected by the verb. This is most obvious in the case of the numerals. For example, in the following sentence

(2) Kissa sö - i viisi lintu -a
 Cat.NOM eat-PAST five bird-PART

"The cat ate five birds"

this claim can only be true if the cat actually has eaten five birds (all of them), and completed this action at some point in time. The direct object is not an unbounded quantity here, it is already quantified, and the sentence is Perfective, so there is no reason to suppose an unbounded "period of time" variable is present, either. (Incidentally, we can tell that this sentence is Perfective from the morphology - if it was Imperfective, there would be a Partitive on the quantifier too - more on this in section 4.3). We have no reason to suppose that a QP is present dominating VP in this sentence, and the simplest conclusion is that the quantifier itself is responsible for the Partitive on its complement, as the Quantifier Phrase hypothesis suggests, although of course it cannot be assigned under government. In fact, it is easy enough to extend the proposal suggested in the last Chapter in relation to the Operator of existential closure to include the other weak quantifiers, and hence account for the Partitive on their complements. However, first let us deal with the evidence that the Quantificational Partitive is structural.

4.1.1 Structural nature of the Quantificational Partitive

It might be thought that the simplest way to account for the Quantificational Partitive is to consider it a lexical or inherent case, but it is easy enough to establish that, like the bare Partitive, it is a structural case. Like the bare partitive, it can only occur on direct objects, and the subjects of intransitives. It is overridden whenever a genuine semantic case is required:

- (3) a. Tapa-si - n kolme lasta
 Meet-PAST-1SG three children
 "I met three children"

but

- b. Puhu - i - n kolme -lle lapse - lle
 Speak-PAST-1SG three-ALL child -ALL
 "I spoke to three children"

Here, it can be seen that the semantic Allative case completely overrides the Partitive. Likewise, if a genuine lexical case is required, this also overrides

the quantificational Partitive. For example, *tykätä*, “to be fond of”, requires the Elative case on its complement.

- (4) Tykkää - n kolme-sta tyttö -sta
 Be fond of-1SG three-ELA girl-ELA
 “I’m fond of three girls”

Again, no quantificational Partitive occurs on the complement of the numeral - it is overridden by the lexical case.

The Quantificational Partitive should not be confused with another phenomenon in Finnish, in which certain nouns of quantity/measure take obligatory Partitive complements, as shown below:

- (5) a. Lasi olut - ta
 Glass beer-PART
 “A glass of beer”
- b. Levy suklaa - ta
 Bar chocolate-PART
 “A bar of chocolate”

c. Kimppu kukk - i - a
 Bouquet flower-pl-PART
 "A bouquet of flowers"

d. Litra maito - a
 Litre milk-PART
 "A litre of milk"

e. Joukko ihmis - i - ä
 Crowd person-pl-PART
 "A crowd of people"

Vainikka (1993) considers such structures to be QPs, like the structures in (1a-g), and if they are, they would seem to provide evidence that the Quantificational Partitive is an inherent or lexical case, as the Partitive that is required on the complements of such terms does not disappear when a semantic or lexical case is required.

(6) a. Puhu - i - n jouko -lle ihmis - i - ä
 Speak-PAST-1SG crowd-ALL person-pl-PART
 "I spoke to a crowd of people"

b. Tutustu - i - n joukko - on ihmis - i - ä

Get acquainted with-PAST-1SG crowd-ILL person-pl-
PART

"I got acquainted with a crowd of people"

(*Tutustua*, "to get acquainted with", requires an
Illative complement.)

However, terms such as "crowd", "glass", etc, form an open class, unlike the small closed class of weak quantifiers, and otherwise show the properties of nouns (e.g, they can be modified by adjectives, and indeed quantified by the genuine quantifiers - "several large glasses of water"), not quantifiers. Thus, such expressions are more likely to be NPs, headed by nouns. Furthermore, their behaviour with regard to lexical and semantic case is clearly different to that of QP's headed by unambiguous quantifiers, as can be seen by comparing (6a-b) to (3b). Thus we are plainly dealing with a different phenomenon to the Quantificational Partitive here. The simplest explanation for it is, that as nouns, such expressions can assign an inherent (or lexical) Partitive case to their complements, which functions similarly to "of" in English expressions such

as " a crowd of people", where "of" is the overt reflex of an inherent Genitive case (Chomsky 1986).

The above phenomenon is the only example of inherent (or lexical) Partitive case in Finnish that I have so far found. So far as the Quantificational Partitive is concerned, the evidence indicates that it is a structural case.

Having established that the quantificational Partitive is structural, what licenses it? There is no reason to suppose that the operator of existential closure is responsible, since, as mentioned above, there is no reason for it to be present. The Quantificational Partitive must therefore be licensed by the overt quantifier itself. Indeed if the hypothesis proposed in section 3.1.2 is correct, and all quantifiers can trigger the operation AGREE, this is the most likely explanation, as the overt quantifier is the nearest functional head available for feature-matching. Just as with bare and aspectual Partitives, the phi-features of the complement are matched to those of the quantifier, and the case checks along with them. We can now see why the quantificational Partitive occurs only on the

complements of quantifiers, and why the head quantifier itself does not have Partitive case - the Partitive is licensed by the head quantifier, not by anything higher up in the derivation. This is quite compatible with the hypothesis proposed to account for bare and aspectual Partitives given above - Partitive case is licensed by the nearest available weak quantifier.

This also enables us to link Belletti's (1988) insight that Partitive case occurs only on weakly quantified objects, to the hypothesis given in section 3.1.2. Partitive case does indeed occur only on weakly quantified objects, but this is not because the verb assigns it to that particular type of phrase, but rather because it comes from the quantifier itself - in the case of bare Partitives a quantifier heading a phrase above VP, and in the case of Quantificational Partitives, from the overt quantifier itself.

We have no reason to suppose that the strong quantifiers can licence case. As was shown in Chapter One, examples (12a-d) and (20a-d), and as shown in the examples below, the strong quantifiers agree in case with what they quantify.

(7) a. Jokainen lapsi sa - i lahja - n
 Every.NOM child.NOM get-PAST present-ACC

"Every child got a present".

b. Nä - i - n jokaise - n lapse - n
 See-PAST-1SG every-ACC child-ACC

"I saw every child".

Strongly quantified phrases are Nominative when the phrase is a subject, and Accusative when it is an object. If they licensed any particular case (e.g. Accusative) we would not expect to find this, but rather we would expect to find such a case on the complement of the strong quantifier, regardless of whether the phrase was in subject or object position. The fact that this does not occur indicates that they do not licence case. Why this should be so will be considered in the next section.

It should be pointed out here that the influence of quantification on case-marking is not restricted to languages with overt Partitive case (as mentioned in Chapter One, section 1.2, the Slavic languages also have a Quantificational Partitive). Many Asian languages,

including Hebrew and Hindi (Moravscik, 1978) and Turkish (Enç, 1991, de Hoop, 1992), which do not have morphological Partitive case, nonetheless only allow Accusative case on strongly quantified objects. When an object is weakly quantified, it appears in a form identical to the Nominative, as the following examples from Turkish (adapted from Enç, 1991) show:

(8) a. Ali her kitab - i okudu

Ali.NOM every book-ACC read

"Ali read every book"

b. Ali iki kız tanıyordu

Ali.NOM two girl? knew

"Ali knew two girls"

It is not entirely clear how this phenomenon should be interpreted. What is the case of the direct object in (8b), as it obviously cannot be Nominative? Enç proposes that objects such as *iki kız* in (8b) are being semantically incorporated into the verb, to form a complex verb. My own supposition at present is that there may be an inherent Partitive case present on the complement of the quantifier, and that the phenomenon

illustrated above may be another manifestation of the Quantificational Partitive¹. More research would be needed to establish this, but nonetheless the phenomenon does provide more evidence that object case marking is affected by quantification.

It has already been suggested (section 3.3) that overt movement to the specifier of QP is not required for the checking of Partitive case. On the basis of the evidence of the quantificational Partitive, if there is movement, it must be covert, not overt, as if it were overt, the complements of the weak quantifiers would precede them, not follow them. This is, however, not grammatical.

- (9) a. Tapa - si - n paljon ihmis - i - ä
 Meet-PAST-1SG much person-pl-PART
 "I met a lot of people"

but not

- b. *Tapa - si - n ihmis - i - ä paljon

It is of course quite possible for case to be checked without movement (Chomsky, 2001), and the

Quantificational Partitive offers evidence that this is so, as far as Partitive case is concerned.

One last thing remains to be considered. So far, Partitive case appears to be the morphological realisation of a semantic feature [+partially affected]. When we dealt with the bare and aspectual Partitives, it was clear that we were dealing with direct objects that were, literally, partially affected, and it was suggested that the main function of Partitive case is to introduce partial objects into the derivation. But the direct object, when it is overtly quantified, need not be partially affected by whatever action is denoted by the verb, as a sentence like (2) repeated below as (10), shows.

- (10) Kissa sö - i viisi lintu -a
 Cat.NOM eat-PAST five bird-PART
 "The cat ate five birds"

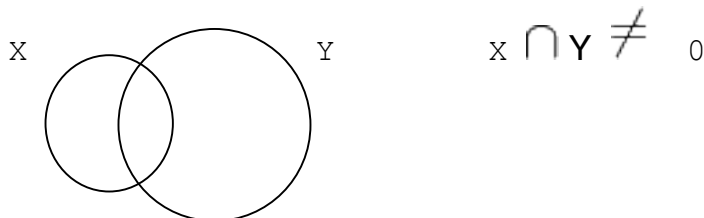
The Partitive occurs only on the complement of the quantifier, but a quantifier cannot be said to "affect" its object in the same way that a verb affects it. Thus, it does not seem that the Partitive is introducing a

partial object here. There is, however, a point of contact - the referent of an NP quantified by a weak quantifier can be regarded as an unbounded quantity, just as a bare Partitive can be an unbounded quantity. In the light of this, let us attempt to reconsider the nature of partial objects

4.2 Reconsidering the nature of Partial objects

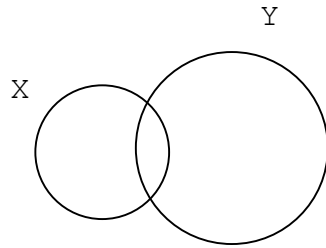
Let us return to the view of quantifiers developed by Barwise & Cooper (1981), already mentioned in section 3.1.2. Here, quantifiers are seen as expressing the relation between predicate and NP-denotations². For example, in a sentence such as "some dogs are intelligent" the quantifier "some" expresses a relation between the set of dogs and the set of intelligent things. In fact, it expresses the fact that the intersection between the two sets is not zero. If we call the set of intelligent things Y and the set of dogs X , then we can show this as follows:

(11)



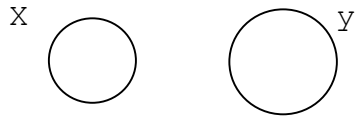
This holds for all the weak quantifiers. For example
 “three/four/...no dogs are intelligent” can be represented
 by:

(12)



$$X \cap Y = 3, 4\dots$$

and

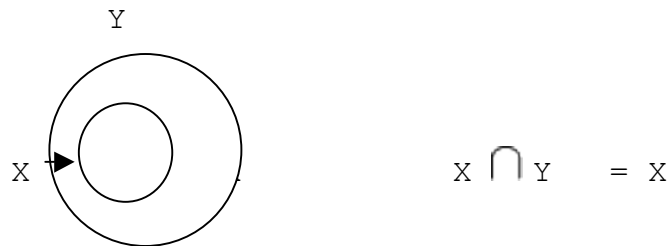


$$X \cap Y = 0$$

The quantifier can be translated into a cardinality term
 which is identical to the cardinality of the
 intersection, and there is a crucial point that needs to
 be raised here - the size of the intersection is not
 dependent on the size of X. That is why it is legitimate
 to say that when an NP is quantified by a weak
 quantifier, the NP indicates an unbounded quantity - we
 know nothing about its size, nor do we need to know
 this.

This is not the case with the strong quantifiers. Here, the cardinality of the intersection cannot be given unless we first know the cardinality of whatever it quantifies. For example in "all dogs are intelligent", the intersection of the set X of dogs and the set Y of intelligent things is a proper subset of Y, and equal to X.

(13)

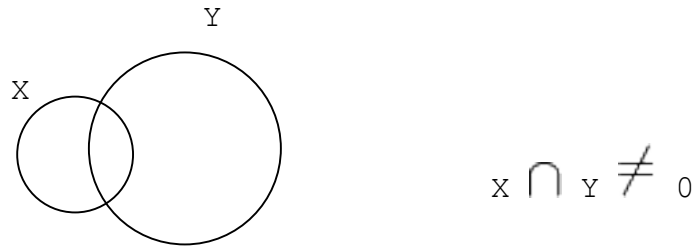


So the size of the intersection cannot be established without first knowing the size of X.

So, as a first approximation, let us consider that weakly quantified NPs are introduced as unbounded quantities. This may give us an explanation as to why the weak quantifiers should have a case feature, which the strong quantifiers apparently do not possess - the Partitive case feature on an NP introduces it as an unbounded amount, and only the weak quantifiers can quantify such an NP, hence they have a Partitive case

feature to be matched to that on the NP. Now, suppose we let Partitive case introduce NP's with the feature [+unbounded], rather than [+partially affected]. We can now account for why the weak quantifiers should have a case feature which can be matched to a Partitive case feature on a direct object - since only the weak quantifiers can quantify an object with such a feature. But this cannot be the whole story, since we know the aspectual partitive can occur on definite direct objects, and these are bounded. They are also certainly partial objects. However, let us consider what happens when we bring the dimension of time into the picture. When we utter a sentence such as "I was eating the apples", we claim that at a given point in time, the event time picked out by the past tense, an activity was ongoing, and had not yet been completed - the apples were, at this point in time, only partially affected by the action of eating. The intersection of the NP-denotation (X) and the predicate denotation (Y) is not yet a proper subset of Y. This will only be the case when the action is complete. It is in fact, *at the point in time picked out by the tense*, identical to the intersection of X and Y when X is quantified by "some, i.e

(14)



In particular, although X is bounded in itself, the cardinality of the intersection is not dependent on the cardinality of X, just as if it were quantified by a weak quantifier. And this appears to be the crucial point.

So the picture that has emerged is this. Partitive case does not introduce partial objects alone, or unbounded quantities alone, but NPs or DPs whose intersection with the predicate denotation is, *at a given point in time*, not dependent on the cardinality of the NP-denotation. Bare Partitives, aspectual Partitives, and quantificational Partitives are all included here. (Bare Partitives and aspectual Partitives are what we have so far called partial objects, and thus we can see that partial objects are a special case, subsumed under the

more general notion given above). They can all check this against the nearest quantifier with a matching case feature, which must of necessity be a weak quantifier. In the case of bare and aspectual Partitives this is the operator of existential closure, and for quantificational Partitives it is the overt quantifier which quantifies the NP.

4.3 The interaction between the Quantificational and Aspectual Partitive

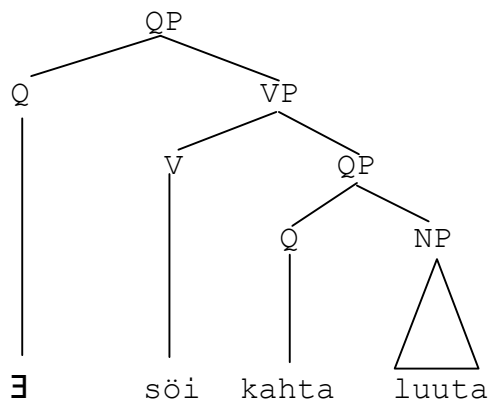
It has already been mentioned that in a sentence such as the following:

- (15) Koira sö - i kaksi luu - ta
 Dog.NOM eat-PAST two bone-PART
 "The dog ate two bones"

there is no reason why the operator of existential closure should be present, as there are no unbound variables for it to bind. The sentence is Perfective, and the direct object is already quantified. But what about an Imperfective sentence, for example, "the dog was eating two bones"? How can this be translated into

Finnish? Here, there should be a covert “period of time” variable, and hence there is a reason for the operator of existential closure to be present. In consequence, a QP dominating VP should be present. That is, we should have two quantifier phrases present, one dominating VP, and the other being the direct object, and the following structure:

(16)



(*kahta* is the Partitive of *kaksi*, “two”).

Since we have hypothesised that the higher QP, headed by \exists , licenses Partitive case on the whole direct object phrase, it is reasonable to expect that, when a QP occurs as the direct object of an imperfective sentence, a Partitive will occur on the head quantifier, as well as on its complement. This is quite true. Thus we have:

- (17) Koirä sö - i kahta luu - ta
 Dog.NOM eat-PAST two.PART bone-PART
 "The dog was eating two bones"

Compare with (15), above. It is in fact possible to tell that (15) is Perfective, and (17) Imperfective, by the presence of the Partitive on the quantifier. In this respect, such sentences are different from those with bare Partitive objects, where it is often only possible to decide this on the basis of context. That is,

- (18) Koirä sö - i lu - i- ta
 Dog.NOM eat-PAST bone-pl-PART

can be interpreted as "The dog ate bones" or "The dog was eating bones", according to context.

The absence of Partitive case on the head quantifier of a QP direct object, in a Perfective sentence, is further evidence that the operator of existential closure is not present in such sentences.

Notes to Chapter Four

1. de Hoop (1992) regards both the Turkish phenomenon and the Finnish Partitive case as examples of what she calls "weak structural case". Weak structural case is, according to de Hoop, licensed at D-structure in a certain configuration, and can only occur on weakly quantified phrases. De Hoop considers that phrases bearing weak structural case cannot undergo scrambling. This is, however, not true for Finnish, as Partitives can be scrambled in this language. It is also not clear how the concept of weak structural case should be interpreted in the Minimalist framework, which has dispensed with D- and S-structure.

2. de Hoop (1992) also notes both the fact that quantifiers are relational terms, and the intersective nature of the weak quantifiers.

Chapter Five

The Partitive of Negation

5.1.Negation in Finnish

We must now turn to the difficult problem of the Partitive of Negation. It has already been mentioned (Chapter One, section 1.1.4) that Partitive case is obligatory on the direct object of a negated transitive verb. But before we go on to consider why this is so, it is first necessary to consider how negation is achieved, and how negative quantification is expressed in Finnish, as this is very different from English and thus will require some explanation.

5.1.1 The verb of negation

There are no words in Finnish which correspond exactly to the English "not", "no", etc. Instead, to express negation, an item called the "verb (or auxiliary) of negation" is used, which has the stem e-, and which is

marked with the subject agreement markers like a lexical verb. Tense in a negative sentence is indicated by either leaving the lexical verb in its stem form for the non-past tense, or putting it in a past participle form for the past tense. Some examples follow.

- (1) a. Minä e - n mene
 I.NOM NEG-1SG go
 "I'm not going/will not go"
- b. Minä e - n men - nyt
 I.NOM NEG-1SG go- PASTpcple
 "I didn't go"
- c. Sinä e - t mene
 You.NOM NEG-2SG go
 "You arn't going/will not go"
- d. Sinä e - t men - nyt
 You.NOM NEG-2SG go- PASTpcple
 "You didn't go"
- e. Hän ei mene
 S/he.NOM NEG.3SG go

"S/he isn't going/will not go"

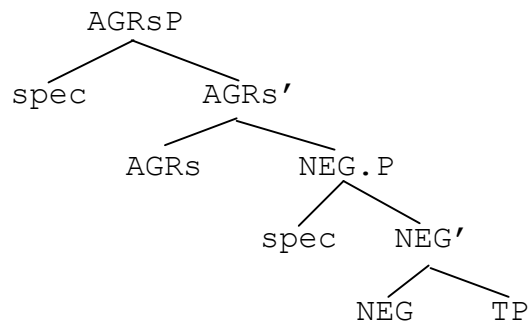
And similarly for all six persons.

Since the main verb is marked for tense alone, but not for agreement, we can conclude that it is not rising any higher than Tense in the derivation. It also seems certain that NEGP is projected above TP in Finnish as the verb of negation precedes the tense-carrying main verb. Furthermore, the verb of negation cannot occupy (spec, NEG) like the English "not", but must be the head of NEG.P as the relation between it and the subject is clearly one of spec-head agreement, as seen in examples (1a-e), just as with a main verb (we will see another reason why it is the head of NEGP in the next section). NEGP must, therefore, be projected above TP, as if it were projected below it, as in English, movement of the verb to Tense could not take place. However, it is unlikely that the subject itself is to be found in (spec, NEG) as this is a position for polarity items ("nothing", etc.). The best way to account for the word order shown above is the hypothesis proposed by Mitchell (1991), that NEGP immediately dominates TP, and that the verb of negation is merged there as its head. If the

projection AGRsP is then generated above NEGP (again following Mitchell (1991)), the verb of negation, after being merged as the head of NEG, can raise to AGRs, while the subject raises to (spec, AGRs) and checks its Nominative case there. This is the first of the reasons why I accept the existence of AGRsP (the second will be dealt with in the next chapter).

Thus the following order of projections for negative sentences is hypothesised:

(2)



Now let us go on to consider the interactions of the verb of negation with the Partitive, and how this enables us to express negative quantifiers in Finnish.

5.1.2 Negative quantification in Finnish

As already mentioned, the Partitive is obligatory on the direct object of a negative sentence, as in the following examples:

(3) a. Hän ei luke - nut kirja - a
 He.NOM NEG.3Sg read-PASTpcple book-PART
 "He didn't read the book"

b. Jussi ei lyö - nyt Heikki - ä
 Jussi.NOM NEG.3SG hit-PASTpcple Heikki-PART
 "Jussi didn't hit Heikki"

c. E - n omista kahta auto - a
 NEG-1SG own two.PART car-PART
 "I don't own two cars"

Here, the verb of negation translates "not". The direct object is definite in (3a-b), and its Partitive case does not of itself translate any other quantifier - it is present because it is obligatory¹. It is also obligatory in (3c), where the Partitive of negation is shown interacting with the Quantificational Partitive

(cf. the interaction of the Aspectual and Quantificational Partitives in Chapter 4, section 4.3). The Partitive on the numeral in (3c) again indicates the presence of a QP above VP). However, it is possible for the verb of negation to interact with Partitive case in such a way as to give the sense of the English quantifiers "no" and "any".

(4) a. Jääkaapi - ssa ei ole ruoka - a
 Fridge-INE NEG.3SG be food-PART
 "There's no food in the fridge"

b. E - n saa - nut raha - a
 NEG-1SG get-PASTpcple money-PART
 "I received no money"

The above can also be translated as "There isn't any food in the fridge", "I didn't receive any money". Thus, here we have the verb of negation and Partitive case combining to give the English "no/not..any".

Now let us consider how to form expressions such as "nothing/anything", "nowhere/anywhere" in Finnish. This is best illustrated first by examples.

- (5) a. Hän ei sano mi - tä - än
 She.NOM NEG.3SG say wh-PART- POL
 "She will say nothing/won't say anything"
- b. E - mme mene mi- hin - kään
 NEG-1PL go wh- ILL- POL
 "We're going nowhere/not going anywhere"
- c. Älä kerro tätä kene- lle- kään
 NEG.IMP tell this.PART wh- ALL- POL
 "Don't tell this to anyone/tell this to no-one"

It can be seen that these expressions are formed from three components. First, there is a stem, usually *mi-*, but *kuka*, *kene-*, for a person (*kuka* is the Nominative form of "who"), which also forms the basis of *wh-* expressions. Then, the appropriate case ending is added to this stem, the Partitive ending *-tä* in (5a), as we have a direct object, the Illative in (5b), to indicate motion "into", and the Allative in (5c), which is used both for motion towards a goal, and indirect objects. Finally, a suffix *-An*, *-kAAn* is suffixed. Here, this indicates negative polarity². Thus we can see a "double negation" similar to French *ne..rien*, etc. In fact,

structures such as the above are most easily understood along the lines suggested for French (Pollock, 1989), though with NEGP above TP in Finnish. That is, the verb of negation is the head of NEGP (like French *ne*), and moves to AGRs, while the polarity item moves to (spec, NEG), like French *rien*, etc., where the suffix *-An*, *-kAAAn* (which I assume carries the negative polarity item's feature [+Neg] similarly to "no.." in English "nothing, nobody, nowhere"), is checked³. This is further evidence that the verb of negation is the head of NEGP.

Now, although it has already been mentioned that the verb of negation/Partitive combination can translate "no" by itself, it is also possible for *mitään* to translate "no" as well as "nothing".

- (6) Sii - tä ei ole mitään hyöty - ä
 That-ELA NEG.3SG be "no" use-PART
 "That is no use." (Literally, "from that is no use")

Thus it can be seen that there is an absence of distinct words in Finnish for negative quantifiers. The verb of negation is always required to give a sentence a

negative sense, but negative quantifiers as such arise from the interaction of the verb of negation with various cases, and the same expression can be used to translate different expressions in English.

Having established how negative quantification is achieved in Finnish, we now need to look at the implications of this for the Partitive of negation, and to establish why it is obligatory on the object of a negative sentence.

5.2. Partitive objects in negative sentences

What conclusions can be drawn from the phenomena illustrated above? First, let us consider the verb of negation. From examples such as (3a-c), above, we can see that the verb of negation essentially translates "not" - it does not by itself correspond to any other quantifier. We can conclude from this that the verb of negation corresponds to the negative operator itself, and not to any other quantifier. This is further borne out by its position as the head of NEGP, a position reserved for the negative operator (Beghelli & Stowell, 1997).

However, we can also get the sense "no" from a combination of the verb of negation and the Partitive. Now, "no" is formed from a combination of the negative operator and an existential quantifier. Since we have already seen that a QP headed by a weak quantifier is always present whenever a direct object in an affirmative sentence has Partitive case, this does at first sight make perfect sense - the existential quantifier which combines with the negative operator to give "no" is present as the head of a QP dominating VP, and the Partitive direct object checks its case against this.

However, while this makes sense for the examples in (4a-b), above, it is not immediately obvious what is happening in the case of such sentences as (3a-c). These have definite, or otherwise quantified direct objects, and thus there is no possibility of the verb of negation/Partitive combination having the meaning of "no". So we are faced with the following problem. Even the definite direct objects of negative sentences are obligatorily Partitive in Finnish. This indicates the presence of a QP headed by a weak quantifier dominating

VP. But why should such a QP be present? What needs to be quantified?

5.2.1 Quantifying over event arguments in negative sentences

Let us return to sentence (3b), repeated below as (6).

(7) Jussi ei lyö - nyt Heikki - ä
 Jussi.NOM NEG.3SG hit-PASTpcple Heikki-PART
 "Jussi didn't hit Heikki"

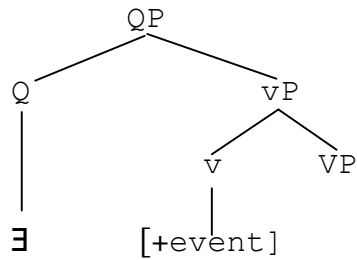
Now, if there is a QP dominating VP in the above sentence, it is not immediately clear why it should be present. We have accounted for the occurrence of bare and Aspectual Partitives by suggesting that the QP is present because of the need to bind variables, in the first case a variable representing an unspecified quantity, and in the second case a variable representing a period of time. In both cases the direct object checks its Partitive case against the head of the QP. But in (7) the direct object is the name of an individual, and thus is not introducing a variable ranging over entities. There is also no reason to suppose that time

is being quantified, as the sentence is most naturally interpreted as claiming that an event did not occur, in which case the event cannot have had a duration.

However, there is another variable which needs to be bound, viz. the Davidsonian event variable discussed in Chapter 2, section 2.2.

It will be recalled that it was suggested in Chapter 2, section 2.2, that the event argument, which we will call e , may occur overtly as the expletive in existential structures. If it does, it is merged in the specifier position of an eventive light verb, v , which heads a projection immediately dominating VP. If it is not overt, which is the case in most sentences we are considering, it remains a covert variable, part of the lexical make-up of v . The nuclear scope thus corresponds to vP , not VP, although so far we have omitted vP for convenience. QP must then be present, so that its head can bind e . It immediately dominates vP and closes off the nuclear scope, giving us the following:

(8)



Now let us consider how this applies to negation. A conventional way of representing the logical form of a sentence like (7) would be (leaving out considerations like tense):

(9) $\sim H(j, h)$

H=hit, j= Jussi, h=Heikki

However, if we bring in the event argument, a better way might be

(10) $\sim \exists e(H, j, h, e)$

That is, "no event occurs such that Jussi hit Heikki"⁴.

The event argument needs to be quantified by the equivalent of "no". This is given to us in Finnish by the combination of the verb of negation (the negative

operator) and the operator of existential closure, which is present to bind *e*.

We can now see how it is possible for Partitive case to be obligatory on the direct objects of negative sentences, and also how it can translate "no/any". In any sentence in which the occurrence of an event is denied, whether the object is definite or indefinite, a QP dominating vP must be present, so that the event argument can be appropriately bound. Once again, the nearest case licenser is Q, present, as with bare and Aspectual Partitives, to bind a variable. Q again has a Partitive case feature. The Partitive case feature itself can only occur on a particular *kind* of direct object, most often a partially affected object. The direct object of a negated transitive verb is an unaffected object, and if "unaffected" is regarded as a special case of "partially affected", then such an object will be introduced as Partitive. Hence there will be matching of features, triggering the operation AGREE.

But it should be recalled that in Chapter 4, section 4.2, a partial object was defined as a special case of

an object DP whose denotation intersected with the predicate denotation in such a way as to make the cardinality of the intersection not dependent on the cardinality of the denotation of the object DP. This is the case with the object of a negative sentence. The object denotation does not intersect with the predicate denotation at all. (In fact, the relation between the two sets is exactly the same as if the object was quantified by the weak quantifier "no"). It was also suggested in Chapter 4, section 4.2 that Partitives serve to introduce such objects into the derivation. Hence, the direct objects of negative sentences must be introduced as Partitives, and check their case against Q, the nearest case licenser.

The use of the Partitive case to translate "no/any" arises naturally from the combination of a negative operator and an existential quantifier. The verb of negation/Partitive combination, will translate "no", whenever the direct object is such an entity as can be quantified by this quantifier, for example, an unspecified amount of an entity, where "no/any" is a polarity item of "some", as in (4a-b), repeated below as (11a-b).

(11) a. Jääkaapi - ssa ei ole ruoka - a
 Fridge-INE NEG.3SG be food-PART
 "There's no food in the fridge".

b. E - n saa - nut raha - a
 NEG-1SG get-PASTpcple money-PART
 "I received no money"

Finally, let us consider expressions of the "nothing" type, such as *mitään*. It has already been suggested that the suffix *-An*, *-kAAn*, which occurs in such expressions, has the same function as "no.." in English "nothing", "nowhere", etc, and is checked by raising the expression to (spec, NEG). If *mitään* is present to translate "no", then presumably the whole expression raises to (spec, NEG) to check the Polarity suffix *-An*, as would also be the case with a negatively quantified English expression such as "no use".

(12) a. E - n saa - nut mi - tä - an
 NEG-1SG get+PASTpcple wh-PART- POL
 "I recieved nothing".

b. Sii - tä ei ole mi - tä - an hyöty - ä

That-ELA NEG.3SG be wh-PART-POL use-PART

"That is no use"

c. E - n välitä mi -stä - än

NEG-1SG care about wh- ELA-POL

"I don't care about anything"

(The Elative case is used to translate "about" in Finnish.)

This has no implications for the checking of Partitive case against a weak quantifier. As can be seen in examples (12a-b), there is a Partitive suffix (-tä) present in *mitään*, attached before the Polarity suffix. The whole expression, then, whether *mitään* translates "nothing" or "no", first checks Partitive case against the operator of existential closure (in (12b) the whole object expression does this), and then checks the suffix -An against NEG. As far as (12c) is concerned, the semantic Elative case does not require checking, and hence we can assume there is only movement to (spec, NEG) to check the Polarity suffix.

Having established why a Partitive is obligatory on the direct object of a Finnish negative sentence, let us now turn to a language where it is optional, and see what implications the circumstances under which it is optional have for the analysis proposed above.

5.3. The interaction between negation, case and Aspect in Russian

Until around the middle of the 19th century (Moravscik, 1978) a Partitive Genitive (traditionally called "the Genitive of negation") was obligatory on the direct objects of negated transitive verbs in Russian, but since then, there has been a growing tendency to replace it under certain circumstances with the Accusative⁵. These circumstances are complex (see Timberlake, 1975b), and for the most part outside the scope of this work. There is, however, an interesting interaction between negation and aspect in Russian, which raises some questions for the analysis given above. It is illustrated by the examples given below (taken from Klein, 1978).

(13) a. Sasha ne vypil Čaj
 Sasha.NOM not PERF.drunk tea.ACC

"Sasha didn't drink the tea

b. Sasha ne pil Čaj
 Sasha.NOM not drank.IMPF tea.ACC

"Sasha didn't drink/wasn't drinking tea"

c. Sasha ne vypil Čaju
 Sasha.NOM not PERF.drunk tea.GEN

"Sasha didn't drink the tea".

d. Sasha ne pil Čaju
 Sasha.NOM not drank.IMPF tea.GEN

"Sasha didn't drink/wasn't drinking tea"

The above sentences illustrate that it is possible for both the Partitive genitive and the Accusative to occur with both Perfective and Imperfective aspect. In particular, note (13d). Here, the rule that only the Accusative can occur with an Imperfective verb (discussed in Chapter 3, section 3.2.2) is overridden when the verb is negated.

It may be surmised that examples (13a-b) differ in meaning from (13c-d) and this is correct. First, let us

consider the two Perfectives (13a,c). According to Klein (1978), the sentence with the Accusative object (13a) only denies the completion of the action of drinking tea (i.e, it denies what is expressed by Perfective aspect), not that the action of drinking tea itself took place. Thus, (13a) is quite compatible with the following affirmative Imperfective sentence:

- (14) Sasha pil Čaj
 Sasha.NOM drank.IMPF tea.ACC
 "Sasha was drinking tea."

(Taken from Klein, 1978)

That is, Sasha was engaged in the action of drinking tea for some time, but didn't actually complete it.

In sentence (13c), however, what is denied is that the event of Sasha's drinking tea took place.

Now let us turn to the Imperfective examples (13b, d). Sentence (13d), like (13c), denies the occurrence of an event. Sentence (13b), however, according to Klein,

denies that Sasha ever drank tea - that is, he habitually didn't drink tea.

Thus, we can see that the two examples with the Partitive genitive objects (13c-d) both deny the occurrence of an event. One claims that an event did not occur that was complete at a point in time, the other that an event did not occur which was in duration over a period of time, but in both cases the claim is that an event did not occur. The examples with Accusative objects (13a-b), on the other hand, appear to deny the aspectual properties of an event, though not necessarily its occurrence. In (13a) it is not denied that an event occurred, only that it was completed, i.e the Perfectivity is denied. (13c) is rather more difficult to interpret, but its meaning is basically "Sasha habitually did not drink tea". Habituality is a form of Imperfectivity, and so here again, we seem to have the denial of the aspectual properties of what is being described.

(13c-d) are not difficult to account for in the framework proposed in section 5.2.1. They deny the

occurrence of an event, and thus are likely to have a logical form as follows:

$$(15) \sim \exists e \text{ Asp}(D, s, t, e)$$

where D=drink, s=Sasha, t=tea, e=event argument

Asp = aspectual operator.

The event argument will require binding by "no", given by the combination of the negative operator (here represented by "ne") and the operator of existential closure. It may be asked why this should be present in the Imperfective sentence, when it is not present in affirmative Imperfective sentences - in Chapter 3, section 3.2.2 it was suggested that the presence of Imperfective aspect alone was enough to provide a binder for variables in the nuclear scope. However, in a negative sentence, the event argument needs to be bound by the equivalent of "no", which cannot be provided by Imperfective aspect, but must come from the combination of the negative operator and an existential quantifier. Hence, a QP headed by an existential quantifier can be projected in a negative Imperfective sentence in Russian, while it is not necessary in an affirmative one. Thus, in both sentences QP is present immediately

dominating vP (the nuclear scope), and the direct object can be introduced as a Partitive object, and check its Partitive case against Q.

Now let us turn to the examples with Accusative objects. These raise rather more difficult problems. First, let us consider the sentence with the Perfective verb, (13a), in which the Perfectivity is denied, but not the occurrence of the event itself. This indicates that the event argument is taken outside the scope of negation, but Aspect remains within its scope. Thus, for (13a) we may have the following logical form:

(16) $\exists e \sim \text{Asp}(D, s, t, e)$

It is not difficult to find a position for the event argument to move to. This is the specifier of ShareP, proposed by Beghelli & Stowell (1997) as the scope position for weakly quantified QP's, as explained in Chapter 2, section 2.3. It will also be recalled that Beghelli & Stowell propose that event arguments can move to this position. Since ShareP is located above NEG.P, an event argument moved to this position is taken outside the scope of negation, as we require.

Now, ShareP is headed by an existential quantifier itself. It may be that the presence of this quantifier is enough to bind the event argument which moves to its specifier. If this is so, then QP projected above vP will not be necessary. The nearest case-checking position for the direct object, then, will be AspP, an Aspect Phrase encoding telicity/atelicity, which we have already suggested is an Accusative position. Hence, the object will be Accusative.

Now let us consider (13b), where the verb is Imperfective. This gives rise to rather different problems. This sentence is not the denial of the occurrence of a single event of tea-drinking. It is a negative habitual, and claims that Sasha habitually didn't drink tea. The claim being made is that, over a long period of time, a particular type of event didn't occur, viz. that Sasha didn't drink tea - not at all the same thing as denying the occurrence of an event of drinking tea.

Two possibilities exist with regard to (13b). The first is that an event argument is not present in the predicate. This is a possibility if the predicate is the

type known as *individual-level*, i.e. expressing an inherent or otherwise long-lasting property of something, as opposed to *stage-level*, a stage-level predicate expressing a more or less temporary state of affairs (Carlson, 1977). It has been suggested (Kratzer, 1989) that individual-level predicates do not have an event argument. If this is so, and the predicate in (13b) is individual-level, then there would of course be no need for QP to be projected above vP, and hence the object must be Accusative. However, it is not obvious where the line between individual and stage level predicates is to be drawn. The predicate in (13b) could hardly be an intrinsic property of someone, though it does express a long-lasting state of affairs.

A more likely scenario is that the predicate does contain an event argument, but that this is generically quantified. This is the view of Ramchand (1996) with regard to habituals (although she only considers affirmative habituals). On this view, the logical structure of (13b) would be:

(17) \sim GENeAsp(D, s, t, e)

where GEN = generic operator⁶

The meaning of (13b) can be paraphrased as “for all (or most) events of tea drinking, Sasha habitually doesn’t do e”.

Obviously, if the event argument in (13b) is generically bound, it cannot be existentially bound. The direct object, too, in this case, has generic interpretation and need not be bound by an existential quantifier. There is, therefore, no existential quantifier heading a QP above vP, and hence the direct object cannot have Partitive case. Again, it must check its case against the nearest case licenser, Aspect, and be Accusative.

The explanations for (13a-b) must necessarily be speculative, given the complexity of the phenomenon being dealt with. There seems little doubt, however, that the event argument has been removed from the scope of negation in (13a), while in (13b) it may not be present, or is generically quantified. No difficulty arises in dealing with (13c-d). Thus, sentences (13a-d.) seem to provide evidence for the hypothesis proposed in section 5.2.1, that Partitive case on the direct object

of negated transitive verbs is present because of the presence of an event argument in the nuclear scope, which requires binding by a quantifier.

Notes to Chapter Five

1. The obligatory nature of the Partitive of Negation might give the superficial impression that it is inherent, but in fact, like most other occurrences of the Partitive in Finnish, the Partitive of negation is structural. This can easily be seen by the fact that it is overridden by lexical case, as for example in the case of *luettaa*, "to trust", which requires an Illative complement: *luetan noi -hin miehi - in* "I trust those-ILL men-ILL", and *en lueta noi -hin miehi - in* "I don't trust those-ILL men-ILL".

2. It can also occur in interrogative contexts - *onko täällä ketä - än*, "Is there anybody here?" where *ketä* is the Partitive of *kuka*, "who". (-*ko*, attached to *on*, "is" is an interrogative suffix). The suffix can also be used in negative sentences with a function which it is difficult to precisely define, but which seems to be emphatic, and here it can be attached to any element of the sentence. I will not deal with this use of the suffix.

3. In fact, there is a difficulty in obtaining the required word order of *subject-verb of negation-lexical verb-polarity item*, since if the lexical verb raises no higher than Tense, while the polarity item is in (spec, NEG) and the verb of negation has moved to AGRs, the word order for e.g, (5a) should be **hän ei mitään sano*. It is not entirely clear how to attain the correct word order, though one possibility comes from Kayne (2001), who proposes the existence of a projection WP (for Word Order Phrase) between AGRsP and NEG.P, to the specifier of which other projections, including VP, can raise, when a particular word order is required in a language. For Finnish, we would have to have TP raising to the specifier of WP, as the verb must raise as high as Tense in a negative sentence. With TP raised to such a position, and the polarity item in (spec, NEG), we would have the required word order.

4. Another possibility is to bring in the role of the agent, and make the logical representation $\sim\exists e[(H,h, e)^{(Agent,e,j)]}$, i.e, there are no events of hitting Heikki where Jussi is the agent. This is suggested by

Schein (1993). For simplicity, I will leave out the agent.

5. According to Neidle (1988) native speakers will almost always accept a genitive on the object of a negated transitive verb, but there are distinct preferences for the Accusative in certain circumstances. It should be pointed out that a preference for the Accusative over the Genitive in Russian (or vice versa) is not a matter of fixed rules, but of tendencies.

6. The difference between a generic and a universal operator is that a generic operator allows for exceptions. Diesing (1992) considers that such a quantifier has a meaning similar to the adverbs "generally" and "typically". It may, for instance, quantify bare plural subjects in such sentences as "Dogs are intelligent", where the meaning is "Dogs (in general) are intelligent". I would see it as corresponding to "most". Such a quantifier belongs with the strong group of quantifiers, and thus cannot license Partitive case (in Finnish, subjects in sentences like the above are Nominative).

Chapter Six

Partitive subjects

6.1. Occurrence of Partitive subjects

The Partitive, as has been shown in the previous three Chapters, is primarily an object case. It can, however, occur on the subjects of unaccusative verbs, as well as a "grey area" of verbs of manner of motion, such as "walk", "run", etc., which do not seem to be either quite unaccusative or quite unergative¹, but, in many languages, show the characteristics of both. I will not attempt to deal here with why such verbs should show such characteristics, and, for convenience, include them with the unaccusatives. Transitive verbs, and verbs which are definitely unergative do not allow Partitive subjects (with the exception of a phrase quantified by a numeral). In the light of the ideas developed in the previous Chapters, it is not difficult to see why this is so - transitive and unergative subjects are presumably merged in the specifier of a causative light verb, and hence are merged too high to acquire Partitive

case from the operator of existential closure.

Nominative case, therefore, is the only case available.

The following are some examples of intransitives with Partitive subjects:

(1) a. Ihmis - i - ä saapu - i

Person-pl-PART arrive-PAST.3SG

"Some people arrived."

b. Sellais-i-a virhe-i- tä esiinty -y usein

Such -pl-PART mistake-pl-PART occur-3SG often

"Such mistakes occur often."

c. Kolme mies - tä kulk - i kadu - lla

Three man -PART walk-PAST street-ADE

"Three men walked in the street."

d. Ihmis - i - ä kuole -e joka päivä

Person-pl-PART die-3SG every day

"People die every day."

Although the Partitives are pre-verbal in the above examples, there is a preference for keeping Partitives

post-verbal, and here it is most usual for the sentence to have an existential interpretation.

(2) a. saapu - i ihmis - i - ä

arrive-PAST person -pl- PART

"there arrived some people"

b. Piha - lla leikki - i laps - i - a

Yard-ADE play-3SG children-pl-PART

"There are some children playing in the yard"

c. Maljako -ssa on kukk - i - a

Vase-INE be.3SG flower-pl-PART

"There are some flowers in the vase".

d. Lattia -lla on vet - tä

Floor - ADE be.SG water-PART

"There's water on the floor."

Examples (2c-d) show the usual way of translating English existential sentences into Finnish.

Strongly quantified subjects are usually pre-verbal, and have Nominative case:

(3) a. Kaikki vieraa - t saapu - i - vat

All.NOM guest-NOMpl arrive-PAST-3PL

"All the guests arrived."

b. Nämä lapse - t leikki - vat ulkona

These.NOM child-Nom.pl play-3PL outside

"These children will play outside."

In the case of strongly quantified subjects, movement to a pre-verbal position is probably for case reasons, as in English. The strong quantifiers cannot license any case, and since Accusative case is not available, the verb's complement must check Nominative case in a position which we will assume is (spec, AGRs). But Partitive subjects do not need to move to check case. Since they originate in an underlying object position, they presumably acquire their case in the same way as any other object, i.e by checking against the head of QP. The problem, then, is why they should move to a pre-verbal position (when this occurs), as there is obviously no reason to do so for case reasons. There is also the question of *where* they move to - are they necessarily in the same position as that occupied by Nominative subjects?

We will go on to consider what subject positions are available for Finnish in section 6.3, but first, let us consider how Nominative case is checked. This will become apparent from the data in the next section.

6.2 Absence of agreement with Partitive subjects

Now, one thing is immediately noticeable about the above examples (1a-d) and (2a-d), viz., the verbs are all third person singular, although the subjects are plural. However, we also saw that if the subject is quantified by a strong quantifier, as in examples (3a-b), then the verb agrees in number with the subject. In fact, we consistently find agreeing verbs only with Nominative subjects in Finnish - if the subject has any other case, then the verb is third person singular, as in the following examples:

(4) a. Minu -lla on auto

I - ADE be.3SG car

"I have a car" (Literally, "at me is a car")

b. Sinu - sta tule - e opettaja

You-ELA come-3SG teacher

"You will become a teacher"

c. Minu - n pitä - isi häve - tä

I -GEN ought-COND.3SG be ashamed-INF1

"I ought to be ashamed"

Now, it could be argued that the expressions translated above as English subjects are not in fact subjects (the literal translations are respectively "at me is a car", "from you comes a teacher", "of me it would hold to be ashamed") and we will return to this in the next section, but for now, only the absence of verbal agreement should be noted.

To return to Partitive subjects, the phenomenon of non-agreeing verbs with such subjects also appears in the Slavic languages, which allow Partitive subjects of transitive verbs (though not bare Partitives), while Nominative subjects occur with agreeing verbs. The examples below are from (a) Russian (b) Polish, (c) Serbo-Croatian, and (d) Czech. Russian and Serbo-Croatian allow plural agreement optionally. It appears that in Russian there is a preference for plural

agreement marking, but native speakers will accept singular, while in Serbo-Croatian there is a preference for singular marking, but plural marking is acceptable (Franks, 1995.)

- (5) a. Neskol'ko student -ov pro Čital-i/(?)pro Čital-o
 Several student-GEN.pl read-3PL/(?)read-3SG.N

etu kneigu (Russian)

this.ACC book.ACC

"Several students read this book."

- b. Mase kobiet przeczytal-o te ksiazke (Polish)

Much woman.GENpl read-3.SG.N this book

"A lot of women read this book."

- c. Nekoliko ljudi je kupilo (Serbo-Croat)

Several person.GEN.pl AUX.3SGN bought.3SG.

imanja u Tetovu

home.ACCpl in Tetovo.LOC

"Several people bought homes in Tetovo."

- d. Sedm ko Ček shezere vshchezny myshi (Czech)
 Seven cat.GENplwill eat.3SG.N all mice

"Seven cats will eat all the mice."

In fact, the absence of agreement with non-Nominative subjects is also found in certain dialects of Belfast English (Henry, 1995). In these dialects, it is possible for subjects to occur in the Accusative case (this is even possible for subjects of transitive verbs), and when this is so, the verb is third person singular, as we have seen above in Finnish and Slavic. However, when the subject is Nominative, then the verb agrees, also as in Finnish and Slavic.

- (6) a. Them is/*are no good
 b. They are/*is no good

Henry argues that the phenomenon illustrated above is genuine lack of agreement, not merely the replacement of a plural form by a singular, as it also occurs with 1st person plural subjects, where, if we were only replacing a plural with a singular, we would expect "am", not "is", to replace "are". However, this does not occur.

- (7) John and me is/*am going

It seems that the third person singular is being used as a default non-agreeing form here. The Finnish examples shown in (4a-c) would also support that idea that third person singular verb-forms are used as default forms, and we will later see some more evidence that this is so.

We can see, then, that the absence of agreement with non-Nominative subjects, and its occurrence with Nominative subjects is a consistent cross-linguistic phenomenon. It is consistent enough to indicate that the checking position for Nominative case is indeed the specifier of a projection which, for now, we will call AGRsP, and not the specifier of TenseP², as has been suggested, for instance, in Chomsky's recent work (Chomsky, 1995, 2001). We have already seen that the behaviour of the verb of negation (Chapter 5, section 5.1.1) provides evidence for the existence of AGRsP, and the obvious relation of spec-head agreement which exists between verbs and the Nominative subjects of sentences provides evidence that (spec, AGRs) is the checking position for Nominative case.

So we will accept that Nominative case is checked against AGRs, and that Nominative subjects, when they

are pre-verbal are indeed in the specifier of AGRsP. (It is possible for such subjects to occur post-verbally in free-word order languages like Finnish, and of course, in the light of Chomsky (2001) it is not necessary for a DP to actually undergo movement in order to check its case. This is only required if the projection has an EPP feature to be satisfied - more on this in the next section). But are pre-verbal Partitive subjects in the same position? It seems unlikely that they would also move to a Nominative-checking position, as they are already cased, and the absence of verb agreement also argues against this.

We must, therefore, consider the problem of subjects, and the positions which are available for them in Finnish, in more detail. First, however, a definition of the term "subject" should be given, as it will become apparent as we go on that Finnish shows the features of a topic-prominent language. The term "subject" will be used for Nominatives which occur with agreeing verbs (here following Vilkuna, 1995), but also for Partitives with non-agreeing verbs. The reason for restricting the term in this way is that these elements are always nominal, and cross-linguistically, it is a

characteristic of subjects that they are almost overwhelmingly nominal (McCloskey, 1997). Topics need not be nominal, and hence all topics, whether they are translated as subjects in English or not, will be referred to as "topics".

6.3 Is Finnish a topic-prominent language?

It has already been mentioned that Finnish is a language which shows considerable freedom in word order. Although the most neutral word order is SVO, it is certainly possible for the word order OVS to occur, and as can be imagined, this indicates a topicalisation of the object. The order OVS is often translated by the English Passive, which also, of course, topicalizes the object.

(8) Talo ol - i kallio - lla ja se -n omist - i
 House be-PAST hill-ADE and it-ACC own-PAST

Emil Svarsvars

Emil Svarsvars.NOM

"The house was on a hill, and it was owned by Emil Svarsvars"

In fact, Finnish shows the characteristics of a topic-prominent language, that is, a language in which syntactic structure reflects topic-comment structure (Kiss, 1995) and in which the topic occurs in a privileged position, or is otherwise marked. In Finnish, it is routine for topics to occur in sentence-initial position. (In most transitive sentences with the order SVO, the subject will also be the topic, of course). For example, recall the sentences given in (4a-c), repeated below as (9a-c):

(9) a. Minu -lla on auto

I - ADE be.3SG car

"I have a car" (Literally, "at me is a car")

b. Sinu - sta tule - e opettaja

You-ELA come-3SG teacher

"You will become a teacher"

c. Minu - n pitä - isi häve - tä

I -GEN ought-COND.3SG be ashamed-INF1

"I ought to be ashamed"

Although the expressions marked with the Adessive, Elative, and Genitive cases are translated as English subjects, they are most naturally understood as topics. In fact the Adessive and Elative expressions are most likely Postpositional Phrases (Nikanne, 1993), in which the semantic case is licensed by an empty postposition, corresponding to English "on, at", and "from" respectively, and merged as sisters of the verb. From that position they must be raised to a pre-verbal topic position.

In Finnish existential sentences, too, we can see movement of topics to a pre-verbal position

- (10) a. Huonee -ssa on mies
 Room-INE be.3SG man
 "There is a man in the room."
- b. Kato -lla on kissa
 Roof - ADE be.3SG cat
 "There is a cat on the roof."

We also find evidence that topics are preferentially placed in a pre-verbal position from the structure

commonly known as the Finnish "passive" (really a misnomer, as the structure is more correctly an impersonal verb-form, and corresponds more to the French *on* passive than to the English structure of the same name.)

(11) a. Auto vie - t- i - in pois

Car take-PASS-PAST-?

"The car was taken away."

b. Auto voi - da - an aja - a piha -lle

Car be able-PASS-? drive-INF1 yard-ALL

"The car can be driven into the yard."

A few words of explanation about the structure of the Passive should be given. This verb form is indicated by a morpheme which occurs as either -ttA-, -tA- or -dA-, and which can be assimilated to the final consonant of the verb stem to which it is being attached, depending on considerations of consonant mutation. After this suffix, there occurs the tense suffix, zero for the non-past tense, -i- for the past. Then a suffix - Vn is added, where V indicates the preceding vowel, -a- for the non-past tense, -i- for the past. This has been

glossed as ? in the above examples - we will return to what it signifies in section 6.3.1.

Another point should be raised in connection with the Passive, which will turn out to have some importance. The "subject" of a passive is not in the Nominative case, as would appear to be the case in examples (11a-b), but in the "short" Nominative-like Accusative referred to in Chapter One, section 1.1.1. This can be seen when the "subject" is a pronoun, as the pronoun have no short Accusative form:

(12) a. Minut vie - t - i - in pois
 I.ACC take-PASS-PAST-? away
 "I was taken away."

cf.

b. He ve - i - vat minut pois
 They.NOM take-PAST-3PL I.ACC away
 "They took me away."

The Accusative "subject" can in fact remain post-verbal if another topic, usually a locative or directional phrase is present.

(13) a. Kuusi koristel - la - an

Christmas tree decorate-PASS-?

"The Christmas tree is decorated

b. ...ja sii - hen pan - na - an kynttilä - t

and it -ILL put-PASS-? candle-ACCpl

"...and the candles are put onto it."

Thus, we can see that Finnish does appear to be a topic-prominent language, and that topics can have a variety of cases, including the Accusative.

However, this does not immediately advance us in understanding Partitive subjects, as these subjects are always indefinite, and an indefinite is not likely to be a topic. It has already been mentioned that there is a preference for keeping Partitives post-verbal, and this accords with them having a non-topic status. However, even when they occur pre-verbally, they are not usually

topics, and hence it seems unlikely that they are to be found in the same landing-site as topics.

However, we do not as yet know where this landing site is, so this must now be considered.

6.3.1 The landing site for subjects and topics

It was established in section 6.2 that Nominative case is checked against AGRs, and that it seems likely that pre-verbal Nominative subjects move to this position. The question then arises, do topics which have other cases, as well as Partitive subjects, also end up in this position?

The answer to this question is yes, according to Holmberg et al. (1993) who propose that the projection above NEG.P, which we have so far called AGRsP, is really a Finiteness Phrase (FP), only optionally marked for agreement. The specifier of this projection is the landing-site for all topics, Nominative and non-Nominative, as well as for Partitive subjects. In Holmberg & Nikanne (2002) it is proposed that all that

is required for this projection's EPP feature to be satisfied is movement of a topic to its specifier - it need not be Nominative. Thus, its ability to check Nominative case is separated from its EPP feature.

Certain sentences, such as existentials with post-verbal Partitives, do not have topics:

(14) a. Tul - i mieh - i - ä

Come-PAST man-pl-PART

"There came some men."

b. Liikku - i huhu - j - a

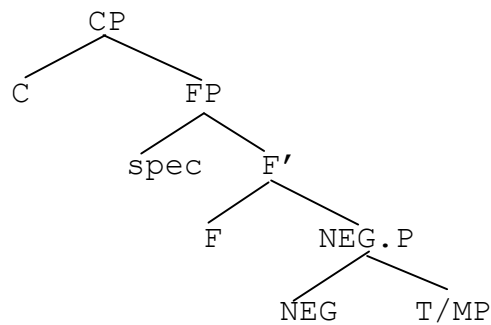
Move-PAST rumour-pl-PART

"There were (literally, moved) rumours around".

Here, Holmberg & Nikanne suggest that the EPP feature of F is optional in Finnish. They do not believe that expletive *pro* is present in such structures, as they claim that in Finnish non-referential *pro* cannot be licensed. (Later, we will see that a different view can be taken of existential constructions in Finnish).

The reason for the choice of the name Finiteness Phrase is that in any finite construction in Finnish a suffix occurs after the tense suffix, which, in the case of an active verb is usually a subject agreement marker, but in the case of the passive is the suffix *-Vn*, mentioned above. Thus, Holmberg et al. (1993) propose the following structure (leaving out unnecessary details):

(15)



T/MP indicates that both Tense and Modality are encoded under the head of this phrase. This is based on the fact that Tense and Modality suffixes cannot occur together on the same root in Finnish, and hence are likely to be checked by the same head (Mitchell, 1991). This does not concern us and for convenience the projection below NEGP

will continue to be referred to as TP. Other projections below TP also do not concern us.

The proposal that all pre-verbal subjects and topics are to be found in (spec, F) is supported by a considerable amount of evidence. We have already seen the preference for putting topics in pre-verbal position. Now let us consider the following:

(16) a. Laps - i - a leikk - i piha -lla

Child-pl-PART play-PAST yard-ADE

"Children played in the yard."

b. Poik - i - a juokse -e kadu - lla

Boy-pl-PART run-3SG street-ADE

"Boys are running in the street."

In the above sentences, the obvious candidate for topic status is the locative. Yet it is not pre-verbal. This can be explained if the position to which it would otherwise move is already occupied by the Partitive.

However, such sentences also give rise to two problems. The first has already been mentioned - the locative is a

more likely candidate for topic status than the indefinite Partitive. Why then, is the Partitive in a position which should be reserved for topics? The second is that the following word orders are also acceptable.

(17) a. Piha - lla leikk - i laps - i - a
 Yard-ADE play-PAST child-pl-PART
 "There played some children in the yard."

b. Kadu - lla juokse - e poik- i - a
 Street-ADE run-3SG boy-pl-PART
 "There are some boys running in the street."

Indeed, even the translations given above are not obligatory. It is possible, for instance, to translate the sentences in (16a-b) as "there played some children in the yard", "there are some boys running in the street". Here, the Partitives are certainly not topics, and yet they are (or appear to be) in a topic position, blocking off movement of the movement of the more likely topic to the same position. There appears to be something quite arbitrary about this.

There are also other problems with Holmberg & Nikanne's view. It is arbitrary to suggest that the EPP feature of F is optional - why should this be so? Also, let us consider how Nominative case is checked by F. If we are to accept Chomsky's (2001) current views of case-checking, checking Nominative case requires the operation AGREE to occur between the Nominative DP and some functional head (which we will here assume to be F). It must be possible for a matching of features to occur between F and the Nominative. This requires us to believe that F must have AGRs features whenever a Nominative is present, but not when any other topic is present, since, as we have seen, verbs show agreement with Nominative subjects, but not with any other subjects or topics. Once again, it seems quite arbitrary to allow F to sometimes have AGRs features and sometimes not.

It is also possible to take a different view of the suffix *-Vn*, which occurs in final position in affirmative passives. Holmberg et al. (1993) consider both this and agreement suffixes to be realisations of finiteness. However, Mitchell (1991) points out that this suffix does not occur with negative passives, the

verb of negation being present instead, as the following examples show:

(18) a. Kahvi - a ei juo - tu
 Coffee-PART NEG.3SG drink -PASTpcple

"The coffee was not drunk."

b. Tätä ei tarvi - ta
 This.PART NEG.3SG need -PASS

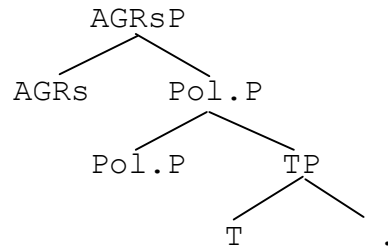
"This is not needed."

Instead, the passive morpheme is simply attached to the verb stem in the non-past tense, as in (18b) or a suffix known as the passive Past Participle is attached to indicate past tense, as in (18a). The verb of negation is always third person singular in the negative passive. (Note the Partitives on the logical objects in the two examples above. This is of course the Partitive of negation, which is not influenced by passivising a verb. Since there is no reason why a definite Partitive should not be a topic, it is likely that the logical objects in the above sentences are in fact in a topic position, though this is not likely for an indefinite Partitive. As we shall see, the preference for keeping Partitives

post-verbal is even more marked with the passive form of the verb than with the active).

Mitchell (1991) suggests that the suffix *-Vn* is in fact an indicator of affirmative (or assertive) Polarity, while the verb of negation is present to indicate Polarity in a negative passive. Thus, instead of simply having NEG.P projected above TP, as and when it is needed, as suggested by Holmberg et al. (1993), what we may in fact have is a Polarity Phrase, which I will call Pol.P (Mitchell called it AstP, for Assertion Phrase). This projection is present for all forms of the verb. In a negative sentence, the verb of negation is generated under the head of this projection, as we have already seen. In an affirmative sentence the suffix *-Vn* is checked in this projection if the verb is in the passive form, while if it is in the active form affirmative Polarity is presumably indicated by a null suffix. That is, the order of projections we are now envisaging is (leaving out specifiers):

(19)



Accepting *-Vn* as a Polarity suffix leads us to a different view of clause structure than that proposed by Holmberg et al(1993). On this view, the projection above Pol.P will be a genuine AGRsP, and the checker for Nominative case. The suffix *-Vn* is simply a marker of Polarity, and has no connection with Agreement at all. The third person singular agreement on the verb of negation is thus to be seen as default agreement (as Henry (1995) also suggested for non-agreeing verbs in Belfast English), and not as genuine agreement at all. Extrapolating from this, we can conclude that the third person singular verb forms which occur with Partitive subjects, are also default forms, which also do not need to be checked against an agreement projection.

If no agreement is present on the verb, as in the passive form, then what is the role of of AGRsP? Recall the examples from Belfast English in section 6.2. Henry (1995) suggests, in connection with non-agreeing verbs in this dialect, that AGRs may have weak head and specifier features when there is lack of agreement, and thus be unable to force movement either of verbs to its head or subjects to its specifier. When, however, there is agreement and a Nominative subject, AGRs has strong features. However, there is something quite arbitrary about allowing the projection to have either strong or weak features, apparently quite haphazardly, and indeed it seems more likely that AGRsP is not present when agreement does not occur. Hence I will suggest that AGRsP is in fact an optional category, projected only when a Nominative subject is present. When a Partitive subject, or a topic which has any other case than Nominative is present, it is not necessary.

Thus what is now being proposed is as follows: an affirmative passive must raise as high as Pol.P, but no further, as AGRsP is not projected. In a negative passive, the verb of negation is generated under the head of PolP, and remains there, while the main verb, as

is usual in negative sentences, moves no further than the head of TP. If the verb is active and affirmative, it will still rise to Polarity, but will only rise to AGRsP if there is a Nominative subject - this is the only circumstance which will lead to AGRsP being projected. If no Nominative subject is present, then the verb will rise as high as Polarity, but no further.

This also enables us to rule out the specifier of TP as a subject position for Finnish. If all verbs must rise as high as Polarity, then pre-verbal subjects cannot be in (spec, T)³.

However, we still have a problem. We appear to have ruled out (spec, AGRs) (or (spec, F)) as a subject position for anything other than Nominative subjects, and (spec, T) as a subject position for anything. This leaves us with the problem of where topics are, if they are not in Holmberg et al.'s (spec, F), and we are still no nearer to finding the subject position for Partitive subjects.

Let us consider what other positions might be available then. We will start by considering topic positions.

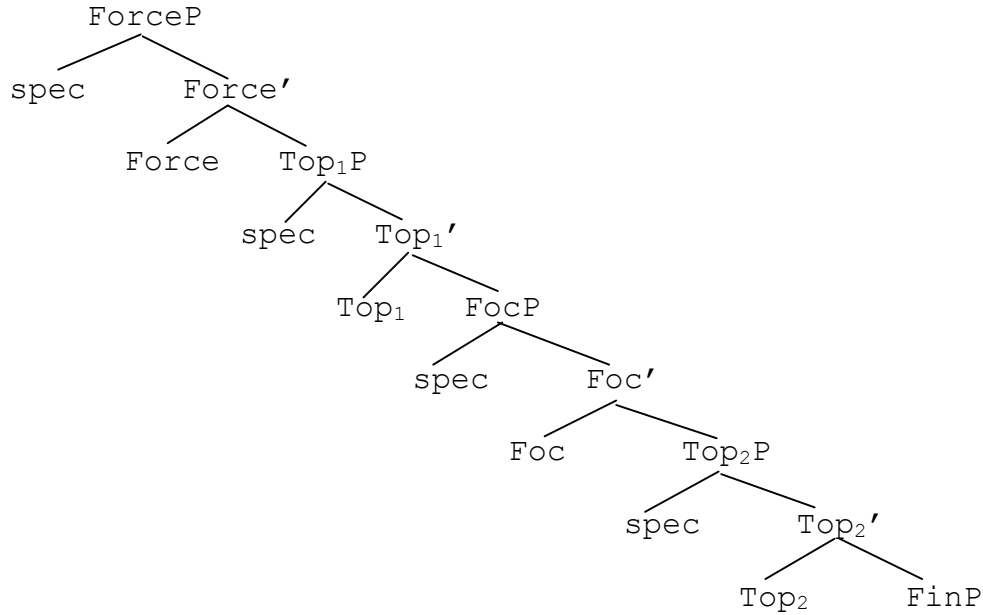
6.3.2 Evidence for a "split CP" from Finnish

In proposing that (spec, F) is the landing-site for all subjects and topics in Finnish, Holmberg et al. (1993) work with the assumption that only one projection occurs above FP, namely CP, a landing-site for focussed elements such as wh-expressions. Vilkuna (1995), in a discussion of discourse configuration in Finnish, works with a similar assumption. She proposes that the specifier of IP, which would correspond to (spec, F) in Holmberg et al.'s (1993) terminology, is the landing site for what she calls a Continuous Topic, that is, a discourse referent that is the topic of a long stretch of discourse, and which is old with respect to immediate premises. The specifier of CP, she suggests is the landing site for contrastive elements, such as foci, and what Vilkuna calls Contrastive Topics, topics which are old with regard to a longer stretch of discourse, but new with respect to immediate premises.

However, it may be that CP is not a single projection, but can itself be split into several other projections, as was done with IP under the influence of Pollock (1989). Rizzi (1997), in his "split CP" hypothesis, has

proposed just this. Using data from Italian, he proposes splitting CP into five projections, which are as follows:

(20)



The highest projection, Force Phrase, encodes the interface between the clause and some superordinate structure, e.g. a higher clause, and its head is where Italian *che*, "that" is merged, according to Rizzi. Finiteness Phrase (FinP) encodes finiteness, as its name suggests, and is where the Italian complementizer *di*, "of", a form which occurs only with non-finite verb-forms, is merged⁴. Between these two projections are two

topic phrases, with a focus phrase in between them. It is suggested by Rizzi that focussed and topicalised elements move to the specifiers of these phrases. He suggests the existence of two Topic Phrases, as it is possible for a sentence to have multiple topics, but not usually multiple foci. Rizzi proposes that wh-elements are in the specifier of FocP.

Does Finnish provide any evidence for this hypothesis? Let us begin by considering the behaviour of the complementizer *että*, "that", the interrogative suffix *-ko*, which also translates "whether", and the suffix *-han*, which is sometimes described as an "emphatic" or "focussing" particle. Each of these elements, when it occurs alone in a clause, is usually in sentence initial position, and on the hypothesis of a single CP, we would expect them all to be merged in the same place, i.e the head of CP⁵.

- (21) a.että hyti - ssä ol - i mies
 that compartment-INE be-PAST man
 "... that there was a man in the compartment."

b. E-t-kö itse ajattele sellais - ta
 NEG-2SG-INT self think about such - PART
 "Don't you think about such things yourself?"

c. Minä - hän kaupa - t te - i - n
 I- ? shopping -ACCpl do-PAST-1SG
 "I did the shopping."

However, when more than one of these elements is present, a different picture emerges.

(22) a.että vo-isi-han hän otta - a
 that be able-COND-? she.NOM take-INF1
 toveri - n muu -hun huonee - seen
 companion-ACC other-ILL room-ILL
 "...That she COULD take a companion into the other
 room."

b. Tietä - ä - kö - hän hän se - n
 Know-3SG-INT-? he.NOM it-ACC
 "Does he KNOW it?"

It is obvious from the above that these elements cannot be merged in the same position. In (22a) *että* precedes

the item marked with *-hAn* and in (22b), the order of morphemes indicates that the interrogative suffix *-kO* must occupy a lower projection than *-hAn*. There must, therefore, be at least three projections corresponding to what we have previously called CP in Finnish. Let us consider what they might be.

It is natural to assume that the interrogative suffix *-kO* occurs under FocP, as questioning is a particular kind of focussing. If this is so, the particle *-hAn* must occur under the higher of Rizzi's Topic Phrases, while *että* must occupy the head of ForceP, as does Italian *che*, which has the same meaning. The particle *-hAn* is a complicating factor, as it does sometimes appear to be a focussing particle. However, a survey of its use in texts has convinced me that it does in fact indicate a contrastive topic, and that its contrastive nature gives it the appearance of being a focussing particle. This accords with Karlsson's (1999) view that the particle indicates something already known - obviously a topic, not a focus, as a focus is new information. Its use with questions, as in (22b) is to soften the force of the question. (There is a suffix *-pA(s)* which may be a genuine focussing particle, as it seems to introduce

items which are genuinely new information. I have been unable to find any examples in the texts I have used, of this particle interacting with the interrogative suffix, or with *että*, and so I will make no claims about it). Thus, we have evidence for the existence of ForceP, Top₁P (the upper topic phrase) and FocP. Further evidence for the existence of the upper topic phrase comes from the fact that it is possible for a contrastive topic to occur in front of such subordinators as *jos*, "if", which are most naturally interpreted as heading FocP:

- (23) Se - n jos sinä tee - t, niin ei hyvä
 That-ACC if you.NOM do-1SG so NEG.3SG good

 seura - a
 follow-3SG
 "If you do THAT, no good will come of it"

(Example adapted from Vilkuna (1995))

Now, there are two topics in the above sentence, one contrastive, one continuous, separated by an item which is most naturally interpreted as heading FocP. We can

assume then, that the two topics occupy the specifiers of both of Rizzi's topic phrases, and that the higher topic phrase, Top₁P is the landing site for contrastive topics, while the lower topic phrase, Top₂P, hosts continuous topics. Vilkuna (1995) points out that contrastive topics always precede continuous topics in Finnish, as in the following examples:

(24) a. mutta kissa - a - nsa hän rakast -i kovasti
 but Cat-PART-3SGposs he.NOM love-PAST dearly
 "...but his cat, he loved dearly."

b. mutta laatiko - n hän kanto - i
 but box-ACC he.NOM carry-PAST
 ola - lla - an
 shoulder-ADE-3Sgposs
 "...but the box he carried on his shoulder."

In both cases above, the topicalized objects have had their existence established earlier in the discourse, and are being reintroduced - hence are contrastive topics.

The topics we considered in section 6.3 were continuous topics, and hence can be regarded as occupying Top₂P. This is supported by the fact that such topics are always preceded by wh-expressions, items which end up in the specifier of FocP, according to Rizzi:

(25) a. Mitä joulu - na syö - dä - än

What.PART Christmas-ESS eat-PASS-?

"What is eaten at Christmas?"

b. On -ko sinu -lla raha - a

Be.3SG-INT you-ADE money-PART

"Have you got any money?"

((25a) is a passive with a locative topic. (25b is the "habitative" construction illustrated in section 4.3, example (9a)).

Now let us attempt to sum everything up. Finnish shows evidence for Rizzi's "split CP", and this leads to the conclusion that continuous topics are to be found in the specifier of Top₂P. Combining this with the fact that the suffix *-Vn*, which occurs with passives seems to be a polarity suffix, it appears we can dispense with FP, at

least as providing a landing site for topics⁶. Instead, the second of the alternatives presented in section 4.3.1 seems the more likely scenario. That is, there is a Polarity Phrase dominating TP for all verb forms, and AGRsP is only projected above this if a Nominative subject is present. If a Nominative is not present, then those topics which are marked with other cases go to (spec, Top₂). There is, of course, no reason why a Nominative subject which is also a topic should not move to this position, having checked its Nominative case against AGRs.

Thus we have established a landing site for topics. Nonetheless, the landing-site for Partitive subjects continues to elude us, as the two Topic Phrases are effectively ruled out for indefinite Partitives. However, with what has been established above to guide us, let us now attempt to consider this.

6.4 A lower subject position in Finnish

As already mentioned, Rizzi's (1997) Topic Phrases are unlikely landing-sites for Partitive subjects, as these

are always indefinite. The specifier of Focus Phrase is, however, a possibility, as this is a position reserved for expressions which introduce new information, as is usual with indefinites.

It is certainly possible to focus a Partitive, as in the following:

- (26) Olut - ta jääkaapi - ssa on
 Beer-PAR fridge-INE be.3SG
 "There's BEER in the fridge."

However, such word orders are very marked in Finnish, and we cannot assume that pre-verbal Partitive subjects routinely end up in this position. It appears then, that there must be another subject position, lower down in the derivation, to which they are moving. Such a position must be above Polarity Phrase, as it has been proposed that all verbs raise as high as this. However, it cannot be (spec, AGRs) as this projection is only projected when Nominative subjects are present. It also cannot be (spec, T), as this is below Polarity Phrase, and hence is not a possibility for a pre-verbal subject.

It is by looking at the passive that we can establish what this subject position is.

6.4.1 Evidence from the Passive for a lower subject position

It has already been claimed that the landing site for continuous topics is (spec, Top₂). This includes the definite logical objects of passives, whether they are Accusative or Partitive (as, for example, in the case of the logical objects of negated or inherently unbounded verbs, as in the following:

(27) a. Hänet surma - tt - i - in Suome -ssa
 He.ACC murder-PASS-PAST-POL Finland-INE
 "He was murdered in Finland."

b. Tätä on pelät - ty
 This.PART be.3SG fear/PASTpcple
 "This has been feared."

This is in fact the most neutral word order for passives with a definite logical object. When a

Partitive logical object is indefinite, or unbounded, however, the most neutral word order is for it to be kept post-verbal.

(28) a. Mei - lle anne - tt - i - in neuvo - a
 We- ALL give-PASS-PAST-POL advice-PART
 "We were given some advice (to us was given...)"

 b. Suome - ssa juo - da - an paljon kahvi - a
 Finland-INE drink-PASS-POL much coffee-PART
 "In Finland, they drink a lot of coffee."

Now, it may be pointed out that there are topics in the above sentences. It may be then, that the Partitive logical objects must remain post-verbal because the position to which they would otherwise move is already occupied. However, apart from objections to the idea that an indefinite would move to a topic position, this word-order is also preferred even when there is no topic present.

(29) On esite - tty kolme ehdotus - ta
 Be.3SG put forward -PASTpcple three proposal-PART
 "Three proposals have been put forward."

We will return to this fact later in this section, but for now, let us look at (27a), repeated below as (30):

(30 Hänet surma - tt- i - in Suome -ssa
 He.ACC murder-PASS-PAST-POL Finland-INE
 "He was murdered in Finland."

It will be noticed that the Accusative case is not lost under passivization. This fact has already been mentioned in section 6.3, where it was pointed out that the seemingly Nominative "subjects" of passives are in fact in the short, Nominative-like Accusative - this can be established on the basis of pronouns, as in (30), which have no short Accusative form. From this fact, we can draw the conclusion that Finnish passives must have an external argument, since by Burzio's Generalization (1986), only verbs which lack an external argument do not license Accusative case. This conclusion is also supported by the fact that Finnish passives are always agentless - they never occur with anything corresponding to an English *by*-phrase. This fact is readily understandable if there is already an external argument present, as a *by*-phrase would then be a second external

argument, and hence must be excluded (this is also mentioned by Holmberg et al. (1993)).

The external argument of a passive verb, should therefore be regarded as the verb's true subject, rather than the phrase which occupies the topic position. Such an external argument must be *pro*, and must have the features of an indefinite pronoun, similar to French *on*. This is supported by the fact that Finnish passives can often be translated by putting the English "one" in subject position, or by the colloquial use of "they/people":

- (31) Sano - ta - an, että Suomi on vaikea kieli
 Say-PASS-POL that Finnish is difficult language
 "It's said/one says/they/people say, that Finnish
 is a difficult language."

Let us consider where this external argument is likely to be merged, and where it may move to. As the external argument of a transitive or unergative verb, it must be merged in the specifier of vP(causative). It is thus merged too high to take its interpretation as an indefinite pronoun from QP, the phrase which closes off

the nuclear scope. It could however, take its interpretation from ShareP, the phrase headed by an existential quantifier, which has been proposed by Beghelli & Stowell (1997) as a scope position for indefinites. In fact, it seems likely that the external argument does take scope in the specifier of this phrase.

Now we must find a landing-site for the external argument. Let us consider the sentence shown below:

- (32) Kirja oste - ta - an huomenna
 Book.ACC buy-PASS-POL tomorrow
 "The book will be bought tomorrow."

As already mentioned it is *pro*, the external argument, which is the true subject of this sentence. It must therefore have moved to a subject position, and this subject position must be lower than the topic position, as the specifier of FocP, the only plausible candidate higher than the topic position, is not available for a null element. We must establish where this is. The topic position is of course already occupied. It has also been argued that AGRsP is not projected with passive forms of

the verb, so this is not an option. Nor can it be in (spec, T) as the verb moves to Polarity, which is higher than Tense. We are looking, therefore, for a subject position which is higher than Polarity, but lower than the projections which collectively make up CP.

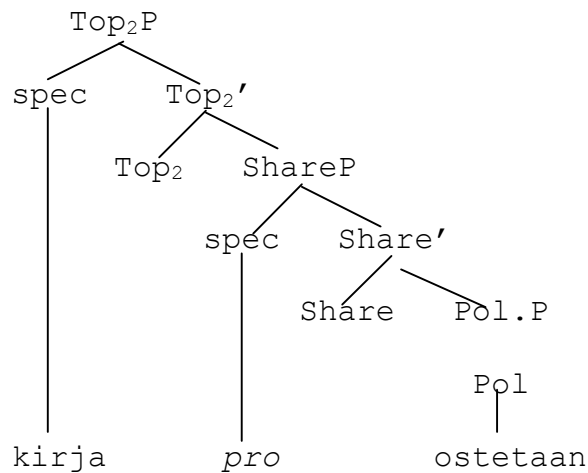
There is one candidate for such a subject position, and that is the specifier of Share Phrase, which was referred to in Chapter 2, section 2.3, and Chapter 5, section 5.3 as being projected above NEGP. Since NEGP is only a special case of PolP we can now locate ShareP above PolP. We have found a projection which is in the right position - but is it necessarily a subject position?

Although Beghelli & Stowell proposed the specifier of this projection as a scope position for indefinites, there is in fact evidence that it can also serve as a subject position for indefinites. This comes from Cantonese, and is presented by Chao & Mui (2000), on the basis of word-order considerations. Cantonese is a language with a much more rigid word order than Finnish, nonetheless, the absence of any other plausible position for the subject of a Finnish passive makes it likely

that in Finnish, too, the specifier of ShareP is available as a subject position.

Of course, only indefinites can move to such a position, and we have already seen that the external argument of a Finnish passive must have the features of an indefinite pronoun. We will assume then that *pro* does indeed move to (spec, Share) and that for sentence (32) above, we have the following structure:

(33)



Having established (spec, Share) as a subject position for indefinites, it is natural to assume that it could also be the subject position for Partitive subjects. It has already been mentioned that there is a great preference for keeping the indefinite Partitive logical

objects of passives post-verbal - this tendency is even more pronounced than the tendency to keep the subjects of unaccusative active verbs post-verbal⁷. This becomes understandable if in fact the position to which the Partitive would otherwise move is occupied by *pro*.

This seems to establish (spec, Share) as a subject position for Partitive indefinites, since all other possibilities are ruled out. Given that this is the case, it seems logical to assume that the Partitive subjects of unaccusatives can also move there. We will now turn to these. In particular, the question of why movement of topics to a topic position does not take place when a Partitive is pre-verbal needs to be addressed.

6.5 Partitive subjects of unaccusative verbs

We will consider the following two sentences, one of which has a pre-verbal Partitive, and the other a post-verbal Partitive.

- (34) a. Ihmis - i - ä saapu - i
 Person-pl-PART arrive-PAST.3SG
 "Some people arrived."
- b. Saapu - i ihmis - i -ä
 Arrive-PAST person-pl-PART
 "There arrived some people."

As already mentioned, the sentence with the post-verbal Partitive is likely to receive an existential interpretation. We will begin by considering this sentence.

6.5.1 Expletive *pro* in existential sentences

Finnish is generally considered to be a *pro*-drop language, as there is sufficient agreement marking on the verb to license subject *pro*.

- (35) a. (Minä) mene - n
 (I) go-1SG
 "I am going"

- b. (Sinä) mene - t
 (You) go-2SG
 "You are going."

Many examples of this have been seen throughout the thesis. Finnish also appears to allow null expletives, as in:

- (36) a. Sata - a
 Rain -3SG
 "It's raining."

- b. Tuule - e
 Be windy -3SG
 "It's windy."

This should lead us to the conclusion that in a sentence such as (34a), above, there is a null expletive. However, Holmberg & Nikanne (2002) suggest that this is not actually the case. If a locative or directional expression is added to a sentence such as (34b), it undergoes obligatory movement to a sentence-initial position - their (spec, F).

- (37) a. Puutarha - ssa kasvo - i pu - i - ta
 Garden-INE grow-PAST tree-pl-PART
 "In the garden there grew some trees."
- b. *Kasvo - i pu - i -ta puutarha - ssa
 Grow-PAST tree-pl-PART garden-INE
 (same meaning as above)

Holmberg & Nikanne take sentences like (37b) to mean that Finnish cannot license non-referential *pro*, and that in sentences like (34b) no EPP feature is present on F.

However, apart from the arbitrariness of letting the EPP feature be optional, such sentences are only problematic if it is assumed that expletives are syntactic dummies. But let us consider the hypothesis proposed in Chapter 2, section 2.2, that existential sentences are sentences in which the Davidsonian event argument is made the subject of the sentence⁸. On this view, expletives are realizations of the event argument, and hence they are not non-referential, and have the role of Event. We can take this further, and claim that it is necessary that any sentence which is interpreted existentially must

have an event argument as its subject. This subject must be merged in the specifier of vP(eventive), as was also hypothesized in section 2.2, and must also move to a subject position. It follows from this that expletive *pro* must be present in the following:

(38) a. tul - i isku - j - a

come-PAST blow-pl-PART

"There came some blows"

b. ilmesty - i ongelm - i - a

appear-PAST problem-pl-PART

"There appeared some problems."

and likewise in the following, where topics are present

(39) a. Piha - lla leikk - i poik - i - a

Yard-ADE play-PAST boy-pl-PART

"There played some boys in the yard."

b. Huonee - ssa on ihmis - i - ä

Room-INE be.3SG person-pl-PART

"There are some people in the room."

Given that topics are present in (39a-b), *pro*, the event argument, must be in (spec, Share) as this is the only position available. This position is indeed a potential landing-site for event arguments (Beghelli & Stowell, 1997), and it will be recalled that the movement of event arguments to this position was discussed in Chapter 5, section 5.3.

Now let us turn to pre-verbal Partitive subjects.

6.5.2 Pre-verbal Partitive subjects

Finally, we are in a position to consider the movement of Partitive subjects to a pre-verbal position. We have proposed that (spec, Share) exists as a subject position in Finnish, and that it is possible for both *pro* and Partitive indefinites to move there. However, so far, no examples of Partitives in this position have been seen. It is now proposed that the Partitive subjects in the following sentences are in (spec, Share):

- (40) a. Ihmis - i - ä saapu - i
 Person-pl-PART arrive-PAST

"Some people arrived."

b. Pu - i - ta näky - y

Tree-pl- PART be visible-3SG

"Some trees are visible."

c. Nais - i - a seiso - i käytävä- ssä

Woman-pl-PART stand-PAST corridor-INE

"Some women stood in the corridor."

d. Mieh - i- ä tul - i kioski -lle

Man-pl- PART come-PAST kiosk -ALL

"Some men came to the kiosk."

However, the question must be asked, why should such indefinite Partitives occur in any pre-verbal position, as there is no reason why they should undergo movement either for reasons of case, or reasons of scope. The answer here has to be that movement must occur to satisfy the EPP principle. It has been proposed that Finnish allows two subject positions⁹, (spec, Top₂) for Nominatives and other topics, and (spec, Share) for indefinite *pro*, and other indefinites. The EPP principle can be satisfied by movement to either of them, and of

course, the nearest will be preferred - for an indefinite, this is (spec, Share). Now, for an unaccusative verb, two options for subject exist. The first is that the event argument can be explicitly made the subject of the sentence¹⁰. In this case, there is an expletive with the role of Event, and this will move to whatever is the nearest subject position. The internal argument remains post-verbal. This is the type of sentence which we have so far considered. The second option is that the event argument remains covert. In this case, the verb's internal argument is the only possible candidate for subject, and hence must move to a subject position to satisfy the EPP. In the case of Finnish, and probably all other languages which allow Partitive subjects, such as the Slavic languages, an indefinite internal argument can move to (spec, Share).

If the above hypothesis is correct, and (spec, Share) exists as a subject position in Finnish, then the following word order ought to be possible: Topic-Partitive-Verb. That is, it should be possible to have such word orders as:

(41) Kadu - lla laps - i - a leikk - i

Street-ADE child-pl-PART play-PAST

"In the street, children played."

An informant tells me that this word order is indeed possible, though it is rare, and has a rather literary feel¹¹. The order *lapsia leikki kadulla* is preferred. It remains to consider why this is so, given that the locative is an obvious topic. If Finnish is indeed a topic-prominent language, there should be obligatory movement of a topic to a topic position. Indeed, when the Partitive remains post-verbal, this does appear to be the case, as in:

(42) Puutarha - ssa kasvo - i ruusu - j - a

Garden-INE grow-PAST rose-pl-PART

"In the garden, there grew some roses."

Let us look at this sentence from a different point of view. The topicalisation of the locative is an example of *locative inversion*, which occurs in many languages, including English (Bresnan, 1994), and which has the effect of putting the post-verbal element in *presentational focus*, that is, the locative is setting

the scene against which the post-verbal element is introduced or re-introduced. Obviously, such elements are almost always new information, hence foci (it is possible for definites to be in presentational focus, although even here their referents are generally items being introduced, or re-introduced, into the discourse). However, when an indefinite is pre-verbal, although it is still new information, it is not in presentational focus, and hence the movement of a locative to a topic position, while not forbidden, gives the sentence a rather "odd" feel. It should be pointed out that this is also true of English:

(43) ?In the garden, roses grew

This is basically acceptable, but does have an odd feel to it. Such a word order is distinctly marked. To return to Finnish, it may be that a locative topic will not move to a topic position when an indefinite Partitive subject is preverbal, because the semantic oddness of such a structure overrides syntactic considerations.

6. 6 Some outstanding problems

While the hypothesis outlined above does give a plausible account of Partitive subjects, there are some problems associated with it, which will now be considered.

The first is that, according to Beghelli & Stowell (1997), (spec, Share) is a scope position for specific indefinites, while the Partitive subjects we have been looking at are non-specific. This is, however, only a problem if we look at specificity in terms of scope, that is, if we assume an indefinite is specific if it has scope over operators such as the negative operator, in sentences such as the following:

(44) Sarah didn't see a stick on the floor, and she tripped and fell.

Here the indefinite takes scope over the negation. This is why Beghelli & Stowell propose that ShareP must be above NEGP (or rather, PolP, as NEGP is a special case of this). However, Enç (1991) suggests a different view of specificity, which separates it from scope relations.

Rather, Enç suggests that specificity be linked to the concept of *inclusion*, and that a specific NP is one whose discourse referents are included in some previously established discourse referent. Thus, "five children" is specific, when it refers to, for example, "five of the children in this class", where the existence of the class has already been established. When it is used solely as a cardinality expression, however, it is not. Thus, specific indefinites presuppose the existence of their referents, while non-specifics do not.

Now, the indefinite in (44) does not presuppose the existence of its referent, even though it takes scope over negation. Therefore, by Enç's criterion, it is non-specific. It follows from this then, that the scope position above Pol.P, ShareP, must be available for non-specific indefinites¹², and hence there is no problem with Partitive subjects moving there (Chao & Mui (2000) also propose that non-specific indefinites are to be found in this position in Cantonese). As for the feature which they check against the head of Share, it seems most likely that this is a feature [+asserts existence], rather than [+group reference] as Beghelli & Stowell

suggest. This second feature has no particular link with non-specific indefinites, whereas the property of asserting existence is very characteristic of them.

This leads us to another problem. The head of ShareP is an existential quantifier, and according to the ideas developed in Chapters 1-5, ought to have a Partitive case feature to be checked. However, Partitive subjects are already cased, and, we assume, move to this position solely to satisfy the EPP. Thus the question of what happens to the head of ShareP's case feature must be left open at present.

The movement of Partitive subjects to a pre-verbal position also raises questions about the Mapping Hypothesis (Diesing, 1992a, 1992b). According to this, Partitives, which introduce variables, should not leave the nuclear scope. Nonetheless, it is clear that Partitive subjects do leave the nuclear scope. This is also a problem with English non-specific indefinite subjects, which, like all English subjects, end up in (spec, AGRs), and Diesing suggests that such subjects may in fact reconstruct to a position within the nuclear scope. This is plausible, and it seems likely that this

also occurs with Finnish Partitive subjects, although once again the matter must be left open¹³.

Finally, the projection AGRsP raises a serious problem. There are sound reasons for believing it exists, and yet it appears to have no purpose beyond checking Nominative case. Certainly, as Chomsky (1995) points out, it is not necessary because of any LF considerations. It is not wholly satisfactory to propose that a projection occurs just to check a case, and yet it is difficult to find any other justification for the existence of AGRsP. Again, I must leave this matter for future research.

Notes to Chapter Six

1. Intuitively, the subjects of verbs of manner of motion are agentive, and should be merged in a position above the operator of existential closure, and hence should not have Partitive case. Such verbs can, however, show either unaccusative or unergative characteristics in many languages. Why this is so is unclear, but it is possible that the arguments of such verbs are neither wholly agents nor wholly themes, but have the characteristics of both. This accords with Dowty's (1991) suggestion that proto-roles, such as proto-Agent and proto-Theme, exist, and that arguments take on particular roles according to how many of the characteristics of a particular proto-role they have. Bresnan (1994) suggests that the subjects of verbs of manner of motion, like the subjects of unaccusatives, can have locations or directions predicated of them, and this is something that is characteristic of the Theme role. It is possible, then, that languages can merge the arguments of verbs of manner of motion as either Agents or Themes, or even choose to merge them wholly as one or the other. It may be that in Finnish, the arguments of such verbs are always merged in the Theme position (i.e. VP-internal), and hence can have Partitive case.

2. There may be another reason for excluding (spec, T) as a Nominative checking position, and indeed as a subject position in general, and that is Cinque's (1999) suggestion that the specifier of TenseP may be occupied by temporal adverbs, such as "now", "then", etc. However, it is also possible that these adverbs may be located in the specifier of a Finiteness Phrase (Chao & Mui, 2000), which would dominate AGRsP. Thus I will remain neutral on whether (Spec, T) is in general available as a subject position.

3. Henry (1995) suggests that in Belfast English, Accusative subjects are in (spec, T).

4. Rizzi makes his Finiteness Phrase part of CP, as finiteness is shown as part of the complementizer system in Italian. Holmberg et al.'s (1993) FP is not part of CP, as in Finnish, finiteness is not shown as part of the complementizer system.

5. In the case of *että*, it is plausible that it is the head of a projection. However, the matter is rather more complicated in the case of *-kO* and *-hAn*. These particles often occur suffixed to verbs, and here it is plausible to regard them as heads of phrases, with the verbs adjoined to them. However, they can also occur suffixed to nominal and even adverbial elements, and here it is more natural to imagine such elements moving to specifiers. It may be that items marked with these particles are taken from the lexicon with the particles already suffixed, and simply check them against the appropriate projection, a verb moving to the head of that projection, and a nominal/adverbial to its specifier.

6. FP may still exist to encode finiteness, but may not provide a topic position.

7. In an informal survey of Finnish texts (not a rigorous statistical survey), I found that definite Partitives occurred pre-verbally with Passives as often as Accusatives did. This is to be expected since definite Partitives are as likely to be topics as Accusatives are. Indefinite Partitives, however, rarely occurred pre-verbally, in accordance with their non-topic status.

8. The expletive "it" in a sentence such as "it's raining" may also be an event argument.

9. There is of course nothing odd in a language having more than one subject position. Jonas & Bobaljik (1993) suggest (spec, AGRs) and (spec, T) as subject positions for Icelandic. However, I feel that (spec, T) can be ruled out as a subject position for Finnish, as TP is dominated by PolP in Finnish.

10. There is no reason why this should not also be possible for transitive sentences, and indeed seems to occur in languages which allow Transitive Expletive Constructions, e.g. Icelandic (Jonas & Bobaljik, 1993).

11. It is suggested (Holmberg, personal communication) that this sentence may only be acceptable if the locative is a focus. If this is the case, then the

locative would presumably be in the specifier of a Focus Phrase (whether this is a distinct Focus Phrase or the specifier of CP can be left open) and this would not preclude *lapsia* from being in the same position as a Nominative subject (although its indefinite nature argues against it being in a topic position.)

12. Beghelli & Stowell's RefP is a more likely scope position for specific indefinites, as this is also a scope position for definites, and definites and specific indefinites share the property of presupposing their domain of quantification.

13. This links into another question, namely, the question of whether pre-verbal Partitive subjects are true subjects in the sense of satisfying classical subject diagnostics such as the ability to bind anaphora. Since, in Finnish, Partitive subjects can only occur with intransitives, such a criterion cannot be applied. It should not, however, be possible if Partitive subjects are themselves variables which reconstruct to the nuclear scope (and this should also be true of English bare plural subjects with weak interpretation). I will leave this matter for future research.

Conclusion

We have now achieved the aim which was expressed at the beginning of this thesis, that of giving a unifying theoretical account of the three main occurrences of the Partitive case in Finnish - quantificational, aspectual, and negative. It has become clear that Partitive case is fundamentally an object case and always occurs in circumstances where a weak quantifier is present. It may be present either overtly in the direct object itself, or as a null quantifier which is the head of a Quantifier Phrase dominating the predicate. In the second case, this null quantifier is Heim's operator of existential closure, closing off the nuclear scope.

Since, whenever Partitive case occurs, a quantifier is always the nearest functional head to the direct object, being either part of it, or, in the case of the null quantifier, being the head of the phrase which immediately dominates VP, it is reasonable to conclude that Partitive case is indeed licensed by the quantifier itself. If this is so, and the evidence indicates that it is, then the weak quantifiers must be included amongst those functional heads which can license case.

The occurrence of Partitive subjects raises no questions about how Partitive case is licensed, as it is clear that such "subjects" are almost always underlyingly objects (it is only the occurrence of Partitive subjects with verbs of manner of motion which raises a problem here, and even in this case, it appears that the subjects of such verbs can take on the role of Theme, and thus be merged as objects). There is, however, a problem about where such subjects are moved to, and it has become clear, from the evidence of the Finnish passive that there is a lower subject position available in Finnish, that is used exclusively for indefinites. It has been concluded that this position is Beghelli & Stowell's Share Phrase, which is a position reserved for indefinites.

The conclusion that the weak quantifiers can license case is somewhat unexpected, although a reason why this should be so has been suggested in Chapter Four.

Nonetheless, such a conclusion should be supported by further data, involving investigation of a wider range of languages than those used in the thesis. Although the cross-linguistic evidence presented in the main body of

the thesis provides strong support for the conclusion,
there is also clearly much scope for further research.

Appendix 1

The historical development of the Partitive

A brief outline of the historical development of the Partitive is given below. It is based on historical accounts given in Hadju (1975), Abondolo (1998), and Kiparsky (1996), and also includes some speculation of my own.

The Partitive is ultimately derived from the proto-Uralic Separative case, which was indicated by the ending **-ta*, and which had the meaning "from". This ending is recognisable in the modern Finnish Elative (*-stA*) and Ablative (*-ltA*) cases. The way in which these cases, as well as the modern Partitive, developed from the Separative case, is believed to have been as follows. At some point during the Finno-Permian period, the morphemes *-s-* and *-l-* came to be inserted before the case-ending, to indicate movement from a source that could be regarded as in some way "internal" (indicated by *-s-*), eg., a house, while the insertion of the morpheme *-l-* before the case-ending indicated movement from a source which could be regarded as external, e.g,

a floor. Thus, the Elative (-s-tA) and Ablative (-l-tA) cases, which do indeed respectively indicate movement from internal and external sources, developed.

After this development, the spatial meaning of the old Separative case was taken over by the Elative and Ablative cases. Nonetheless, the original suffix *-ta survived, to become the Finnish Partitive.

The following is hypothetical, but it seems likely that at some point, which may even have been before the development of the Elative and Ablative cases, the Separative suffix had begun to be used to indicate some quantity taken "from" another quantity. That is, we can imagine sentences of the form, "I ate from the meat", "I drank from the water", where "from" indicates "a part of". (This is similar to the use of "of" in archaic forms of English: "Thou hast eaten of the fruit.." etc.) The Separative would still have its basic meaning of "from" here. We may here see part of the reason why Partitives cannot occur on the subjects of transitive and unergative verbs in Finnish, as it can easily be imagined that such expressions would not be very likely

to be used as subjects. They would almost certainly occur only as sisters of the verb.

Thus, we can hypothesise the following process occurring: as the spatial functions of the separative are taken over by the Elative and Ablative cases, the old Separative suffix gradually acquires a quantificational meaning. It can, however, only occur on objects.

By the time we reach the Finno-Volgaic period, the Partitive has emerged as an object case, used in the same way as it is now, i.e to indicate an unbounded quantity. The modern Volgaic language Mordvin, uses its Ablative case with Partitive function, but only as an object case. Thus, we must surmise that this was the situation which obtained in the Finno-Volgaic period, i.e, the Partitive was at that time only an object case. Some examples from Mordvin will illustrate the Partitive in this language.

- (1) a. Jarsa - n kal - do , sima - n vet - te
 Eat-1SG fish-PART drink-1SG water-PART
 "I'm eating fish, I'm drinking water."

b. Tasa lama penga - da

Here a lot of firewood-PART

"There's a lot of firewood here."

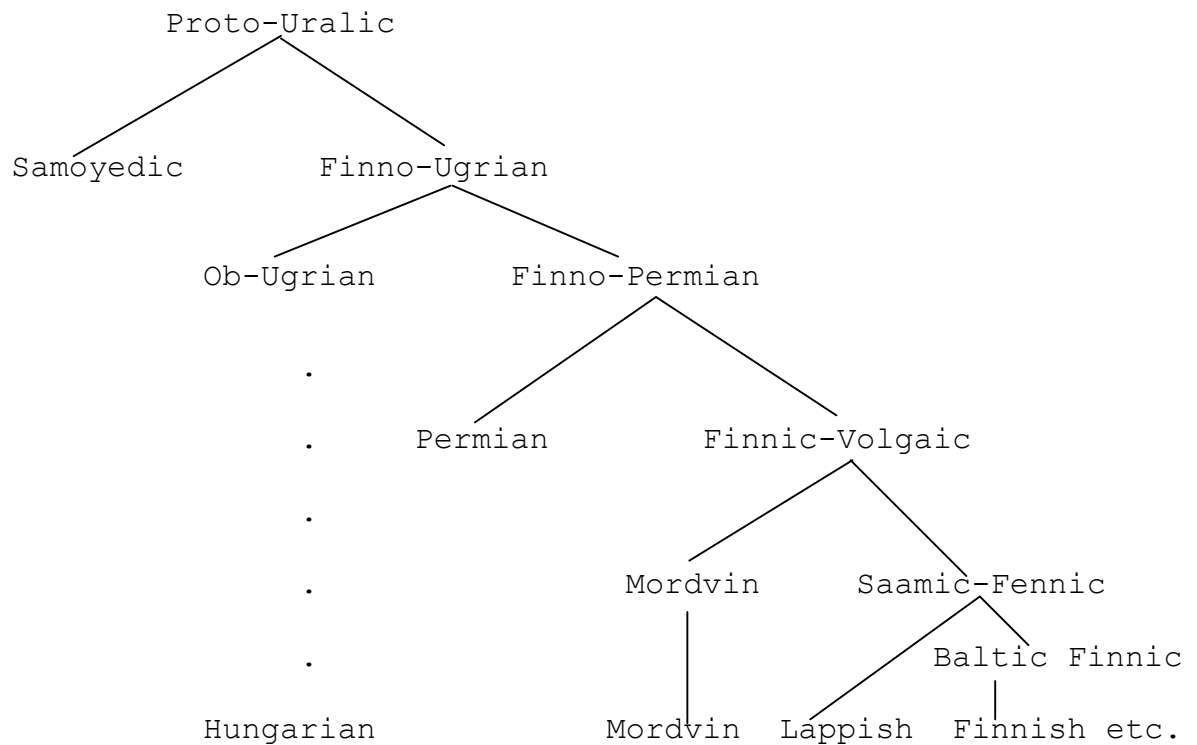
(Examples adapted from Kiparsky, 1996. The case ending has been glossed as Partitive, as this is the function it is fulfilling here, although traditional grammars use the term Ablative.)

The quantificational uses of the Partitive may also have their origin during the Finno-Volgaic period (cf. (1b), above), though Mordvin does not routinely use the Partitive in this way (Denison, 1957). Denison considers that this usage has its roots in the Saamic-Fennic period.

At some point during the Baltic Finnic period this object case was generalised to the subjects of unaccusative verbs, and probably thence to the subjects of all verbs of motion/location at a place. The Partitive of negation, and the Aspectual Partitive are both late developments, occurring only in the Baltic Finnic languages (they do not occur in the Lapp languages or Mordvin). They may have developed under

influence from the Baltic branch of Indo-European (Latvian and Lithuanian), in which Partitive Genitives are used for such purposes (Larsson, 1984).

Shown below, is a standard view of the main divisions of the Uralic languages, and their historical relationship (see Abondolo (1998) for an alternative view).



Appendix 2

The "short" Accusative

As mentioned in Chapter One, section 1.1, the Finnish Accusative has two forms, one of which, the so-called "short" Accusative, is identical with the Nominative. This form of the Accusative occurs on the objects of Imperatives, the logical objects of passives, and in general, in structures where there is no Nominative subject, and no possibility of one, for example, as the object of an infinitive with a Genitive subject:

- (1) Käske hänen tuo - da kirja minu - lle
 Tell.IMP s/he.GEN bring-INF1 book.ACC I-ALL
 "Tell him/her to bring the book to me"

There is a view that the short Accusative should be regarded as actually being Nominative. This is the view of Maling (1993), based on the "case-in tiers" hypothesis of Yip, Maling & Jackendoff (1987). In this hypothesis, as developed by Maling, Nominative case is assigned to the highest available grammatical function (here, "available" means not already marked by

morphological case), Accusative to the next highest, and so on. Thus, in this hypothesis, when a grammatical subject is available, it will receive Nominative case, and the object will receive Accusative case. If, however, there is no subject, or it is already case-marked, as in (1), above, then the object will receive Nominative case. Toivainen (1993) also regards short Accusatives as Nominative. However, there is an argument against this - the personal pronouns do not have short Accusative forms, and always appear in the regular Accusative form, even where there would otherwise be a Nominative-like object:

(2) Tottele minut!

Obey.IMP I.ACC

"Obey me!"

This seems to argue against the short Accusative being a genuine Nominative.

A more likely view of the short Accusative comes from Reime (1993), following on from an idea of Timberlake (1975a), who suggested that when the short Accusative (which he also calls a "Nominative object") occurs on an

object, the verb-form generated is an impersonal form, which cannot have a subject, and hence the Nominative is assigned to the object instead. Again, we can see that Timberlake considers the short Accusative to be a genuine Nominative. Reime (1993), considers it to be an Accusative, however, on the basis of the pronouns, and has adapted Timberlake's idea to a more modern framework. In Reime's proposal, the short/ *-n* Accusative alternation is linked to the presence or absence of the feature (-N) in the composition of verbs. In verbs which agree with their subjects, which are the forms that require the *-n* Accusative on their objects, the presence of Agreement morphemes, which are themselves nominal, may make the verb lose its (-N) feature. In impersonal verb-forms, however, the feature may not be lost, and its presence alone may be enough to make the object visible for PF-interpretation. If the feature is lost, however, the *-n* Accusative is required on the object to make it visible for PF-interpretation.

Adapting this suggestion to the ideas proposed in Chapter Four, where it was suggested that AGRsP may not be projected with impersonal verb-forms, we can propose that a verb loses its (-N) if it raises to AGRs. If, on the other hand AGRsP is never projected, as was

suggested in Chapter Four for the Passive, the verb cannot raise to it, and hence maintains its (-N) feature.

Reime's view makes it possible to maintain that the short Accusative is a genuine Accusative which just happens to have a form identical with the Nominative under certain circumstances.

It may be that when a singular indefinite count noun occurs as the associate in a Finnish existential sentence, such as

- (3) Huonee - ssa on mies
 Room -INE be.3SG man
 "There is a man in the room".

it is in the short Accusative, rather than Nominative. Of course, it is Partitive when the associate is a number of count nouns, or a mass noun.

- (4) a. Huonee - ssa on mieh - i - ä
 Room - INE be.3SG man - pl - PART
 "There are some men in the room"

b. Lattia - lla on vet - tä

Floor-ADE be.3SG water-PART

"There's water on the floor"

Evidence for the presence of the short Accusative on a singular indefinite associate comes from habitative constructions, which are identical in Finnish to existential constructions. That is, if we want to say "I have a large house" in Finnish, a construction is used which, literally translated, is "there is at me a large house".

(5) Minu- lla on iso talo

I- ADE be.SG large house

"I have a large house"

Now, if one of the personal pronouns is used in such a construction, then it occurs in the Accusative, as shown below (recall that the pronouns have no short Accusative form):

- (6) Olen iloinen, että minu -lla on sinut
 Be.1SG glad that I-ADE be.3SG you.ACC
 minun kanssa
 I.GEN with
 "I am glad that I have you with me".

This indicates that in structures such as (3) and (5), the associate is in the short Accusative. This is somewhat surprising. "Be" is unaccusative, and there should not be any kind of Accusative case on its complement. However, this may be a default use of Accusative case in circumstances where the Partitive cannot be used, similar to the use of a default Accusative in the "list" reading of a definite associate in English existentials:

- (7) No-one is suitable for this job - well, there's him
 in accounts.

If the associate is in the short Accusative in sentences such as (3), then once again we see the phenomenon, mentioned in Chapter 3, section 3.2.3, whereby a singular indefinite count noun is the only type of

weakly quantified phrase not to have Partitive case, but to have Accusative case instead.

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