# Case-Assignment and the Syntactic Distribution of the Adnominal Quantifier *paljon* in Finnish

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## 1. Introduction

Natural language expressions that serve to express quantificational meanings like 'a lot of', 'many' etc. can be sensitive to semantic properties of the restricting NPs. This is illustrated by the 'much'-'many'-alternation in the English pairs 'much sugar' vs. \*'many sugar' and \*'much cars' vs. 'many cars'. Here, the countability or uncountability of the NP following the quantifier determines the choice of quantifier.

The Finnish quantifying expression *paljon* ('a lot of of') is also restricted in its occurrence. It alternates with the expressions *moni* or *monta*, which also express the concept '(relatively) large quantity'. Unlike in English, however, the occurrence of *paljon* is not determined by the semantic properties of the following NP<sup>1</sup>, but by — what appears to be — syntactic restrictions: *paljon* (unlike *moni*) can only appear in particular syntactic positions. This will be shown in more detail in section 2. In section 3, I will discuss one (preliminary) syntactic, and one semantic approach to the phenomenon, and show their various shortcomings. In section 4, I will suggest that the occurrence of *paljon* is indeed restricted by syntactic factors, i.e. by Caseassigment. Before I conclude in 6, I will discuss some more predictions of the theory proposed, as well as one potential problem for the theory in section 5.

Before we turn to the syntactic distribution of *paljon*-NPs, however, it is necessary to consider their internal structure and the syntactic status of *paljon*.

### 1.1 The syntactic status of paljon ('a lot of')

Syntactically, the adnominal quantifying expression *paljon* differs from both attributive quantifiers as well as measure nouns.

Unlike attributive quantifiers (1a), *paljon* does not agree with its NP in Case or Num. Instead, it shows head-like behaviour in licensing PAR(titive Case) on its complement (1b), in analogy to numerals (1c):<sup>2</sup>

- (1) a. Lauloin monissa kapakoissa. sing-past-1SG many-PL-INE pub-PL-INE 'I sang in a lot of pubs.'
  - b. Minae ostin paljon autoja.
    I-NOM buy-past-1sG many car-PL-PAR 'I bought many cars.'
    Koira otti kaksi luuta lattialta. dog take-3sG two bone-PAR floor-ABL 'The/A dog took two bones off the floor.'

Secondly, although historically derived from a measure noun (*paljo* 'a lot'), *paljon* differs syntactically from other measure nouns like *joukko* ('crowd') which also assign PAR to their complements (cf. Karttunen 1975):

i.) *paljon* can be preceded by pre-adjectival modifiers (2a), *joukko* cannot (2b):

(2)	a.	Pariisissa on liian paljon turisteja.	(Karttunen's 4a&5a)
		Paris-INE is too a-lot-of tourist-PL-PAR	
		'There are too many tourists in Paris.'	
	b.	*Pariisissa on liian joukko turisteja.	
		Paris-INE is too group tourist-PL-PAR	

ii.) paljon cannot co-occur with adjective attributes (3a), but joukko can (3b):

- (3) a. \*Tapasin meluisan paljon turisteja. (Karttunen's 4c&5c) meet-PAST-1SG noisy-ACC a-lot-of tourist-PL-PAR
  - b. Tapasin meluisan joukon turisteja. meet-PAST-1SG noisy-ACC group tourist-PL-PAR 'I met a noisy group of tourists.'

Based on these differences, Karttunen (1975) concludes that *paljon* is an adjectival quantifier, functioning as a syntactic head. The NP-complement of this head carries PAR-Case. The structure of *paljon*-NPs is shown in (4):

(4)  $[_{OP} paljon [_{NP} noun-PAR]]$ 

## 2. Restrictions on the distribution of the adnominal quantifier paljon

Karttunen (1975) shows that the occurrence of *paljon*-NPs is restricted to only two syntactic surroundings. He gives the following descriptive generalizations.

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## 2.1 Positions in which paljon can occur

The adnominal quantifier *paljon* is only licensed in object position of a number of transitive verbs (5a) and as the postverbal argument of so-called 'Existential Sentences (ESs)' (5b):

(5)	a.	Pekka	tuntee	paljon tyttöjä	ä.	(Karttunen's 14d)
		Pekka-NOM	t know-3sc	a-lot-of girl-P	L-PAR	
		'Pekka kno	ws a lot of			
	b.	Satamassa	näkyy	paljon l	laivoja.	(Karttunen's 27a)

b. Satamassa näkyy paljon laivoja. (Karttunen's 27a) harbour-INE to-be-seen-3SG a-lot-of ship-PL-PAR
'There are many ships to be seen in the harbour.'

I assume that ESs are a special case of locative inversion without number-agreement. ESs are introduced by a locative phrase which denotes the location of the entity denoted by the postverbal NP-argument:

(6)	Pihalla	juoks <b>i</b>	poik <b>ia</b> .	(Itkonen's 19)	
	yard-ADE run-PAST- <b>3sg</b> boy-PL-PAR				
	'In the yard, there were boys running.'				

Note that the verb in (6) (which belongs to the class of *presentational verbs*; cf. Kiparsky 1998) is invariably 3sG, even with a plural NP-argument.

## 2.2 Positions in which paljon cannot occur

The quantifier *paljon* can never occur in the subject position of any verb (7ab), nor inside adjuncts carrying semantic case in the sense of Nikanne 1993 (7c):

(7)	a.	*Paljon miehiä	pelaa	korttia.	(Karttunen's 13a)			
		a-lot-of man-PAR-I	PL play-3sG	card-PL-F	AR			
		'A lot of men are p	olaying cards	s.'				
	b.	*Paljon yleisöä	nauraa.		(Karttunen's 13b)			
		a-lot-of audience-I	PAR laugh-3-	-SG				
		'A lot of the audie	nce are laug	hing.'				
	c.	Minä lauloin	*paljon/	monissa	kapakoissa.			
		I-NOM sing-PAST-1SG a-lot-of/ many-INE pubs-PL-INE						
		'I sang in a lot of p	oubs.'					

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## 3. Steps towards a unifying analysis: Syntactic vs. semantic approaches

## 3.1 The VP-Internal Hypothesis (Syntactic restriction)

Looking at the distributional facts in 2.1, we see that *paljon* seems restricted to one syntactic position only: the postverbal, VP-internal complement position. As a unifying generalization, let us formulate (8):

(8) VP-Internal Hypothesis (VPIH): *paljon*-NPs only occur in VP-internal position, as sister to the verb

Naturally, the VPIH captures all cases with the *paljon*-NP functioning as the object of a transitive verb.

Also, the position that the postverbal NP-arguments in ESs are in complement position to the verb seems well-motivated: direct objects on the one hand, and NP-arguments of ESs on the other hand show a variety of similarities in their syntactic behaviour. These similarities have been discussed repeatedly in the literature (cf. e.g. Itkonen 1979, Vähämäki 1984, Vilkuna 1989, Vangsnes 1994, Nikanne 1994). Three of them are listed under (9) (cf. Itkonen 1979):

(9)	i.	Verb and NP-argument in ESs show no number-agreement (6), and
		neither do verb and direct object.

- ii. NP-arguments in ESs are assigned PAR under negation (10a), just like transitive objects. Intransitive subjects are not (10b).
- iii. In the possessive construction (which formally also belongs to the class of ESs), a pronominal argument has ACC (objective) Casemarking (11):
- (10) a. Kissalle ei syntynyt pentu**ja**. (Itkonen's 22) cat-ALL neg-3SG be\_born-ptc.perf.act kitten-PL-PAR 'The cat had no kittens.'
  - b. Pojat /\*Poikia eivät nuku. boy-PL-NOM /boy-PL-PAR neg-3pl sleep 'The boys do not sleep'
- (11) Niin kauan kuin [minulla on sinut], tunnen itseni onnelliseksi.
  as long as I-ADE is you-ACC-Sg ...
  'As long as I have you, I feel happy.' (Itkonen's 23)

Given these similarities, the assumption that the NP-argument of ESs is located in complement position to the verb seems well motivated. Hence, the VPIH covers the occurrence of *paljon* in ESs as well.

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## 3.2 Problems for the VPIH

The VPIH faces two major problems: for once, it is only a descriptive generalization of the phenomenon in question and gives no explanation as to *why paljon*-NPs have to be in complement position to the verb.

Furthermore, the VPIH predicts a number of transitive sentences like (12) to be grammatical, contrary to fact:<sup>3</sup>

(12) \*Pekka rakastaa paljon tyttöjä.
 Pekka love-3sG a-lot-of girl-PL-PAR
 'Pekka loves a lot of girls.'

Obviously, the VPIH is not restrictive enough in order to exclude sentences like (12). At best, it can be a necessary, but not a sufficient condition on the occurrence of adnominal *paljon* in Finnish. Let us therefore see if a semantic approach is empirically more adequate.

## 3.3 Karttunen's Resultativity Hypothesis (Semantic restriction)

Karttunen (1975) accounts for the ungrammaticality of (12) by introducing the aspectual notions of resultativity and irresultativity: He notices that the presence of *paljon* disambiguates transitive sentences whose verbs are in principle ambiguous between a resultative and an irresultative reading. If a *paljon*-NP is present, the sentence will necessarily have a resultative reading. This is illustrated in (13) involving the verb *ampua*, which can mean either 'to shoot (dead)' or 'to shoot at' with a PL-PAR-object:

(13)	a.	Metsästäjä	ampui	lintu <b>ja</b>		(Karttunen's 25)	
		hunter-NOM	shoot-past-3sg	birds- <b>PI</b>	L-PAR		
		'The/A hunt	ter shot birds.'				
	OR:	R: 'The/A hunter shot at (the) birds.'					
	b.	Metsästäjä	ampui	paljon	lintuja	(Karttunen's 26)	
		hunter-NOM shoot-PAST-3SG a-lot-of bird-PL-PAR					
		'The/A hunter shot a lot of birds'					

Karttunen further points out that *paljon* can always occur with verbs like those under (14), which he takes to be *inherently resultative*:

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(14) Resultative Verbs (according to Karttunen):

achievement verbs: *löytäa* 'to find', *kadottaa* 'to lose', *unohtaa* 'to forget', *voittaa* 'to win', *hävitä* 'to lose', *saavuttaa* 'to achieve'
verbs of cognitive states: *muistaa* 'to remember', *tietää* 'to know', *ymmärtää* 'to understand, *tuntea* 'to know'
perceptual verbs: *nähdä* 'see', *kuulla* 'to hear', *havaita* 'to perceive'
verbs of encompassment: *omistaa* 'to possess', *sisältää* 'to contain', *käsittää* 'to include'

On the other hand, adnominal *paljon* never occurs with *inherently irresultative* verbs like the ones listed under (15):

(15) Irresultative Verbs (according to Karttunen):

emotive verbs: *pelätä* 'to fear', *rakastaa* 'to love', *vihata* 'to hate'
verbs of judging: *haukkua* 'to abuse', *moittia* 'to criticize', *parjata* 'to slander'
psychological causatives: *harmittaa* 'to annoy', *miellyttää* 'to please', *havittaa* 'to amuse', *ärsyttää* 'to irritate'

From this, Karttunen concludes that it is in fact the resultativity of the verb, which licenses the occurrence of adnominal *paljon*. Let us state this as (16):

- (16) Resultativity Hypothesis:
  - (i) *paljon* only occurs with resultive verbs.
  - (ii) *paljon* never occurs with irresultative verbs.

#### 3.4 Problems for the Resultativity Hypothesis

There are two major problems with the Resultativity Hypothesis. The first is acknowledged by Karttunen himself: the verbs in (14) do not seem to form a homogenous class wrt. resultativity. In particular, it is not clear in which sense some of the verbs of cognition (e.g *tietää*) and encompassment (e.g. *sisältää*) are resultative.

Secondly, Karttunen's analysis seems empirically inadequate for existential sentences. It incorrectly predicts sentences like (17ab) to be ungrammatical:

- (17) a. Työmaalla työskentelee paljon miehiä. construction-site-ADE work-3SG a-lot-of man-PL-PAR 'There are a lot of men working on the construction site'
  b. Stadionilla itki paljon ihmisiä.
  - stadium-ADE cry-PAST-3SG a-lot-of people-PL-PAR 'There were a lot of people crying in the stadium.'

The verbs *työskentellä* and *itkeä* in (17ab) do not seem to be resultative at all. Nevertheless, the sentences are perfectly fine and Karttunen's analysis appears to be too restrictive. It is by no means clear how to weaken the Resultativity Hypothesis sufficiently so that it could also account for (17ab) without making the wrong predictions for transitive sentences in turn.

# 4. The ACC-Hypothesis

## 4.1 The hypothesis

Given the problems which arise from a semantic account, let us turn back to a syntactic approach. I would like to suggest the following syntactic restriction, not in terms of positions (as in the VPIH), but in terms of Case assignment:

- (18) The ACC-Hypothesis:
  - (i) *paljon* carries Accusative Case.
  - (ii) *paljon*-NPs can only occur in syntactic positions where ACC is licensed.

Note that the ACC-Hypothesis is stronger than the VPIH in restricting the occurrence of *paljon*-NPs to only those complement positions where ACC is licensed.<sup>4</sup> Note also that I crucially assume with De Hoop (1992) and Kiparsky (1998) that Finnish has two objective Cases, ACC and PAR, which are licensed in complementposition to the verb. Which case is licensed depends on aspectual properties of the verb and the complement-NP (cf. Kiparsky 1998).

# 4.2 Independent empirical evidence

The following facts can serve as independent evidence for the ACC-hypothesis: (i) Morphologically, *paljon* consists of the stem *paljo* + the regular ACC-marker -*n*: paljo + n > paljon.

(ii) We occasionally find the corresponding PAR-form *paljoa* as in (19):

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(19) Altaassa ei ole paljo**a** vettä. pool-INE NEG-3SG be a-lot-of-**PAR** water-PAR 'There was not much water in the pool.'

(iii) Toivainen (1993) observes that in transitive sentences *paljon* only occurs where ACC can be assigned independently (20, 21):

- (20) a. Rahapaja löi paljon kolikoita. (Toivainen's 54a) mint-NOM strike-PAST-3SG a-lot-of-ACC coin-PL-PAR 'The/A mint struck a lot of coins.'
  - b. Rahapaja löi kolikot. (Toivainen's 54b) mint-NOM strike-PAST-3SG coin-PL-ACC 'The/A mint struck the coins.'

(21)	a.	*Isä	löi	paljo <b>n</b>	lapsia.		
		father-1	NOM strike-PAS	ST-3SG a-lot-of-AC	C child-PL-PA	R	
		'Father	hit a lot of ch	Γ)	Coivainen's 55a)		
	b.	*Isä	löi	lapse <b>t</b> .	T)	oivainen's 55b)	
		father-1	СС				
		'Father hit the children'					

(iv) All the supposedly resultative verbs in (14), which can occur with a *paljon*-NP, obligatorily demand a complement in ACC-Case, unless the complement denotes an indefinite quantity (cf. Karttunen 1975):

(22)	a.	Saksa on hävinnyt	soda <b>n</b> /	*sota <b>a</b> .	(Karttunen's 22a)		
		G. is lose-ptc-peri	war-sg-ACC	war-sg-PAR			
		'Germany has lost the war.'					
	b.	Saksa on hävinnyt	sot <b>ia</b>				
		G. is lose-ptc-perf war-pl-par					
		'Germany has lost wars	,				

On the other hand, those verbs that were classified as irresultative in (15) never assign ACC to their complement not even if they denote a definite quantity:

(23) Hanna rakastaa Pekkaa/ \*Pekan. Hanna love-3sg Pekka-PAR Pekka-ACC 'Hanna loves Pekka.'

It appears, then, that the ACC-Hypothesis is well motivated on independent grounds. Let us now see how it accounts for the distribution of *paljon*-NPs in Finnish sentences.

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#### 4.3 Analysis

## 4.3.1 Transitive sentences

The ACC-Hypothesis neatly subsumes the VPIH: Given that ACC is a structural Case which is only licensed on the complement of the verb,<sup>5</sup> and given that *paljon* carries ACC, the *paljon*-NP must occur in the complement position of the verb. Furthermore, *paljon* can only occur with those transitive verbs that license ACC-complements. This correctly predicts that the adnominal quantifier *paljon* will never occur with verbs which obligatorily demand a PAR-complement.

The ACC-Hypothesis also shows that the apparent relation between resultativity and the occurrence of *paljon* is only indirect. In Finnish *transitive sentences*, resultativity of the verb is marked by an ACC-complement, given that the complement denotes a set of specified quantity. Hence resultative verbs (both inherent and optional) will always license a *paljon*-NP as their complement.<sup>6</sup>

The conditions on ACC-assignment in Finnish allow for yet another prediction: We have seen that the complement will only be marked with ACC, if it denotes a definite or *bounded* quantity. Since *paljon*-NPs are assumed to carry ACC, we expect them to always denote a bounded quantity, too. This prediction is borne out, as shown in (24a-c):

(24)	a.	*Juon	maitoa	tunnissa.	(Karlsso	n/Hakulinen's 52a)
		drink-1	SG milk-PA	r hour-ine		
*'I drink milk in an hour.'						
	h	Iuon	nalion	maitoa	tunnissa	(ex 52b)

- b. Juon paljon maitoa tunnissa. (ex. 52b) drink-1sG a-lot-of-ACC milk-PAR hour-INE 'I drink a lot of milk in an hour.'
- c. \*Juon paljon maitoa tunnin. drink-1SG a-lot-of-ACC milk-PAR hour-ACC 'I drink a lot of milk for an hour.'

The expression *tunnissa* ('in an hour') requires an NP-argument denoting a bounded quantity. Such an argument serves to *measure out* the event described. If there is no such argument, the sentence will be ungrammatical (24a). The same sentence becomes grammatical with a *paljon*-NP (24b). Hence, we can conclude that *paljon*-NPs denote bounded quantities. This assumption is supported by the ungrammaticality of (24c), where the *paljon*-NP cannot occur together with *tunnin* ('for an hour'), which measures out the event by itself and hence requires an argument denoting an indefinite (or *unbounded*) quantity.

## 4.3.2 Existential sentences

We have already seen under (9) that there are good reasons to believe that the sole NP-argument in an ES is located in complement position to the verb. In this position, ACC is licensed in principle. What we still need to show is that the sole NP-argument in ESs can carry ACC. Otherwise, we would not expect ACC-marked *paljon*-NPs as arguments of ESs. In effect, the ACC-Hypothesis forces us to assume that ESs are NOM-less, or quasi-ergative structures.

There are a number of both conceptual and empirical arguments for this view:

(i) We have already seen in (6) that NOM need not necessarily be present in Finnish ESs. Let us then assume that NOM only appears in connection with agreement between subject and verb.<sup>7</sup> Since there is no such agreement in ESs, NOM is never assigned in these structures.

(ii) Instead of an ACC-PAR-alternation in the object position of transitive sentences (25) and an NOM-PAR-alternation in the argument position of ESs (26ab), we only have to assume an ACC-PAR-alternation for all cases, thereby achieving a greater degree of generality:

- (25) Minä näen auton/ autoja. I-NOM see-1SG car-ACC car-PL-PAR 'I see a/the car. / I see cars.'
- (26) a. Kadulla on auto-ø/ \*auto-n. street-ADE is car-ACC/ car-ACC 'There is a car in the street.'
  - b. Kadulla on autoja.
    street-ADE is car-PL-PAR
    'There are cars in the street.'

Note that this position requires us to assume that the NP-argument *auto* in (26a) is marked for ACC by a  $\emptyset$ -suffix (since it is formally identical to the NOM-form), i.e. that ACC-marking in Finnish involves an allomorphy between  $a-\emptyset$ , and an-n-suffix.

(iii) The allomorphy-position adopted in (ii) is supported by the existence of a variety of constructions in Finnish that also exhibit the ø-allomorph of ACC (cf. Reime 1993). The following sentence-pairs illustrate this point:

(27) a. Kirja-ø/\*kirjan ostettiin. book-ACC buy-pass-PAST 'The/A book was bought.' (PASSIVE)

- b. Hänet/\*hän valittiin he-ACC/he-NOM elect-pass-PAST 'He was elected.'
- (28) a. Minun täytyy lukea tämä kirja-ø/\*tämän kirjan. (NECESSIVE)
   I-GEN must-3sG read this-book-ACC
   'I must read this book.'
  - b. Minun täytyy löytää hänet/\*hän
     I-GEN must-3SG find he-ACC/he-NOM
     'I must find him.'

Both the passive and the necessive construction in (27) and (28) show no agreement (Note that the necessive verb *täytyä* 'must' always occurs in 3SG and with a GEN-'subject'). In the a-sentences, the full NP-arguments appear in their unmarked (NOM-) form. However, if we substitute a [+human] personal pronoun for the full NPs (as in the b-sentences), these pronouns appear in their ACC-form (which is clearly distinguishable from their ungrammatical NOM-form). Given this, it makes sense to conclude with Reime (1993) that we deal with ACC-arguments in all cases, only that full NPs are marked for ACC by a ø-suffix in agreementless-structures.<sup>8</sup> Also along these lines, we have already seen in (11) that [+human] personal pronouns in possessive constructions, which formally belong to the class of ESs, can appear in their ACC-form.<sup>9</sup> Given the evidence in (11) and (27, 28), I will treat ESs as formally analogous to passives, necessives and imperatives: The sole NP-argument of ESs is located in complement position to the (non-agreeing) verb. Hence it will be marked for either of the two objective Cases, i.e. PAR or ACC (in its ø-variant).<sup>10</sup>

Given that the NP-argument of ESs can carry ACC in principle, the ACC-Hypothesis can account for the occurrence of *paljon*-NPs in these constructions. Furthermore, objective Case-assignment in ESs (as opposed to transitive sentences!) is never dependent on aspectual properties of the verb, but solely on aspectual properties of the NP-argument (cf. Kiparsky 1998). Hence, we can account for the fact that *paljon*-NPs in ESs can occur with irresultative verbs as well (cf. (17ab)). In ESs, the NP-argument is marked for ACC, if it denotes a bounded quantity. This requirement is satisfied by *paljon*-NPs:

- (29) a. \*Talosta tuli miehiä tunnissa. house-ELA come-3SG-PAST man-PL-PAR hour-INE 'Out of the house came men in an hour.'
  - b. Talosta tuli paljon miehiä tunnissa. house-ELA come-3SG-PAST a-lot-of-ACC man-PL-PAR hour-INE 'Out of the house came a lot of men in an hour.'

## 5. Further predictions and a problem with negation

The ACC-Hypothesis more generally predicts *paljon*-NPs as possible in all those positions where ACC-Case is licensed. Thus, they should also be grammatical as arguments of passives, necessives, and imperatives. This prediction is borne out:

a.	Paljo <b>n</b>	taloja	rakeni	nettiin.	(PASSIVE)
	a-lot-of-	-ACC house-	PL-PAR build-	pass-past	
	'A lot o	f houses we	re built.'		
b.	Osta	paljo <b>n</b>	kirjoja!		(IMPERATIVE)
	buy-imp a-lot-of-ACC book-PL-PAR				
	'Buy a l	lot of books	!'		
		a-lot-of 'A lot o b. Osta buy-im	a-lot-of-ACC house- 'A lot of houses we b. Osta paljon buy-imp a-lot-of-AC	a-lot-of-ACC house-PL-PAR build- 'A lot of houses were built.' b. Osta paljo <b>n</b> kirjoja!	<ul> <li>a-lot-of-ACC house-PL-PAR build-pass-PAST</li> <li>'A lot of houses were built.'</li> <li>b. Osta paljon kirjoja!</li> <li>buy-imp a-lot-of-ACC book-PL-PAR</li> </ul>

A potential problem for the ACC-Hypothesis arises from the existence of *paljon*-NPs in negated contexts, though. Under negation, the object must normally appear with PAR-Case. Thus, the grammaticality of (31ab) comes unexpected, since ACC should not be licensed here:

(31)	a.	Minä en	ostanut	paljo <b>n</b>	kirjoja.			
		I-NOM not-1	ISG buy-PTC.PERF.ACT	r a-lot-of-ACC	C book-pl-par			
		'I didn't bu	y a lot of books.'					
	b.	Kadulla e	ei ole paljo <b>n</b>	autoja.				
		street-ADE not-3SG be a-lot-of-ACC car-PL-PAR						
		'There are n	street.'					

I do not have a completely satisfying answer to this problem. I suspect that (31ab) are not ruled out because the negation takes narrow scope over the quantifier only. Hence, it is not the whole proposition which is negated, but only the quantity of books bought.<sup>11</sup>

## 6. Conclusion

The adjectival quantifier *paljon* takes a PAR-complement and is Case-marked (for ACC) itself. Hence it can appear (at S-Structure) only in one syntactic position (complement of V) and (in transitive sentences) only with those verbs which license ACC-assignment. The ACC-hypothesis accounts for all the distributional facts mentioned, given that the single NP-argument in existential sentences is

assigned objective Case (i.e. ACC or PAR), and given that *paljon*-NPs always denote a bounded quantity.

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#### Notes

- 1. Note that in positive contexts *monta* seems sensitive to semantic properties of the NP: it can only modify count nouns. Hence, (i) can only have a meaning like 'I drank many glasses/ kinds/ units of beer.', but not 'I drank a lot of beer.'.
  - (i) Join monta olutta. drink-PAST-1SG many beer-PAR 'I drank many (glasses/ kinds/ units) beer.'
- 2. Occasionally, we also find an attributive variant of *paljon*, which agrees with an NP marked by semantic Case in the sense of Nikanne as in (i). Numerals also turn into agreeing attributes as soon as a Case-suffix attaches to them as in (ii) (cf. Vainikka (1993) for discussion):
  - (i) En välitä paljosta rahasta. NEG-1SG concern a-lot-of-ELA money-ELA 'I am not concerned about a lot of money.'
     (ii) kahdella kirjalla
    - two-ADE book-ADE 'with many books'
- 3. Like French *beaucoup*, Dutch *veel*, German *viel*, English *much*, *paljon* can also function as an adverb, modifying VPs (cf. also Doetjes 1997). Under this reading, (12) is a well-formed sentence, meaning 'Pekka is very much in love with girls.' (cf. Karttunen 1975). In what follows, I will neglect the adverbial reading of *paljon*.
- 4. Under this analysis, the two elements of the *paljon*-NP are marked for two different Cases, i.e. ACC (*paljon*) and PAR (NP) respectively. In this respect, they are similar to the Russion measure noun- NP in the following example provided by Olga Borik (p.c.):
  - (i) On uvidel tolpu studentov. he saw crowd-ACC students-GEN 'He saw a crowd of students.'

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- 5. In a GB-framework, Case on the complement would be licensed by the verb under government. Under minimalist assumptions, licensing would be achieved by raising of the complement to SpecAgrO where it can check off its Case-feature.
- 6. The ACC-Hypothesis explains why seemingly non-resultative verbs such as *tietää* ('to know') or *sisältää* ('to contain') occur with adnominal *paljon*: they belong to the class of ACC-assigning verbs. This still leaves us with the problem, if Case-properties of Finnish verbs are always predictable from the verbs' aspectual properties, or if verbs like *tietää* and *sisältää* are simply irregular exceptions to the general rule. Cf. Kiparsky (1998), who treats Case-properties of verbs as fully predictable on the base of the aspectual notions *boundedness* vs. *unboundedness*.
- 7. Cf. Nelson (1998), who also links the occurrence of NOM to a property of IP, i.e. to *finite tense*.
- 8. But see Maling (1993:52, fn.5), who assumes that Finnish uses different Case systems for pronouns and full NPs respectively. Consequently, the pronouns in (27) and (28) carry ACC, while the full NPs carry NOM, according to her analysis.
- 9. Unfortunately, personal pronouns do not occur in non-possessive ESs (cf. Vangsnes 1994, who ascribes this fact to the 'Definiteness Effect'). As a consequence, we cannot test their Case properties in ESs in a systematic fashion. Vangsnes also points out other structural differences (e.g. binding facts) between 'Possessives' and ESs proper.
- 10. Note that this analysis of ESs singles out those intransitive sentences in which subject and verb agree in number as the only sentences with one NP-argument in Finnish which show NOM. In all other 'intransitive' sentences, one of the objective Cases PAR or ACC will be assigned. In this connection, Itkonen (1979) as well as Nelson (1998) speak of Finnish as containing an 'ergative subsystem'.
- 11. Whatever the exact reason, my informants were much happier, when *paljon* in (31ab) was substituted by *montaa* (many-PAR), which shows the expected PAR-marking.

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