

## On the Quantifying Sentence in the Finnish Language

Jun'ichi SAKUMA

In the Finnish language a sentence whose initial noun is marked in the partitive case and quantified by a post-verbal numerical expression is called a quantifying sentence. Although a considerable number of studies have been made on this type of sentence, there is little agreement as to its grammatical interpretation. In this paper I argue that a quantifying sentence can be regarded as a type of predicative sentence and its initial noun serves as the subject. The subject of a predicative sentence is usually marked in the nominative case indeed, but it can be indicated in the partitive case on condition that it refers to an entity that is indefinite in quantity. Also I show that the same observation applies to sentences whose initial noun is marked in the partitive case and qualified by a post-verbal adjective. Moreover, though a quantifying sentence whose initial noun serves as the object is not a predicative sentence, a predicative relation still holds between the initial noun and a post-verbal numerical expression.

### 1. Introduction

In the Finnish language it is usual that a noun and its adjectival modifier appear side by side making up a noun phrase. For example:

- (1) *Suomessa on huonojakin yhtiöitä.*  
Finland-iness.sg. be-3.sg.pr. bad-part.pl. company-part.pl.  
In Finland there are bad companies, too.

In this sentence the adjective *huonoja* modifies the nominal head *yhtiöitä* and directly precedes it. The nominal head is marked in the partitive plural case and its modifier agrees in case and number with it. There are some cases, however, where a noun phrase seems to split up. The following provides an example:

- (2) *Yhtiöitä on huonojakin.*  
company-part.pl. be-3.sg.pr. bad-part.pl.  
In fact, some companies are bad.

Also in this sentence the adjective *huonoja* agrees in case and number with the noun *yhtiöitä*. Then, it is indeed possible to say that the adjective *huonoja* is not a subjective complement but an attributive modifier. But we should take into consideration sentences like the following:

- (3) *Yhtiöt ovat huonoja.*  
 company-nom.pl. be-3.pl.pr. bad-part.pl.  
 Companies are bad.

This is a predicative sentence. What should be noticed here is that the noun *yhtiöt* is in the nominative plural case and the predicate *ovat* agrees in number with it. This means that the noun clearly functions as the subject of this sentence. It is also important to note that the adjective *huonoja* in the partitive plural case does not agree in case with the subject *yhtiöt*. These are indeed the differences between (2) and (3). Then, should we treat the sentence (2) as a type of sentence distinct from the sentence (3)? Had we better interpret the sentence (2) rather as a variant of the sentence (1)? What we treat in this paper is sentences like (2). Though the initial noun is in the plural in the sentence (2), sentences whose initial noun is marked in the partitive singular case are also to be considered.

In the sentence (2) the post-verbal element is an adjective. However, in sentences that have a noun in the partitive case at their initial position, not only an adjective but also a numerical expression can appear as a post-verbal element. The following serves as an example:

- (4) *Meitä on kaikkiaan kolmekymmentä.*  
 we-part.pl. be-3.sg.pr. in all thirty  
 We are thirty in all.

In this sentence the post-verbal element *kolmekymmentä* is a cardinal number. The initial pronoun *meitä* is quantified by this element. In the Finnish grammar, a sentence whose initial element is marked in the partitive case and quantified by a post-verbal numerical expression is called *kvanttorilause* (a quantifying sentence). There are indeed some similarities between (2) and (4), it is not certain whether they belong to the same type of sentence. Though a considerable number of studies have mentioned these questions, they are still in controversy<sup>1</sup>. The purpose of this paper is to show plausible answers to these questions.

## 2. Predicative or Not?

We will begin by comparing the sentence (2) with the following sentence:

- (5) *Paikkoja on vapaana.*  
 seat-part.pl. be-3.sg.pr. free-ess.sg.  
 Seats are available.

In this sentence the initial noun *paikkoja* is marked in the partitive plural case. There is no agreement in number between the initial noun and the predicate *on*. Just like the sentence (2), the sentence (5) can also be compared with a predicative sentence. That is:

- (6) *Paikat ovat vapaita.*  
 seat-nom.pl. be-3.pl.pr. free-part.pl.  
 Seats are not occupied.

In this sentence the predicate agrees in number with the initial noun marked in the nominative plural case and the noun therefore serves as the subject. The point to observe is that the post-verbal adjective of this sentence is marked in the partitive plural case, while its counterpart in the sentence (5) is indicated in the essive singular case. This means that in the sentence (5) there is no agreement in case between the initial noun and the post-verbal adjective. In this respect, the sentence (5) differs from the sentence (2) indeed, but these sentences have still much in common with respect to syntactic properties. We should take into consideration the fact that each has a counterpart in which a predicate precedes a noun and the noun precedes an adjective. Compare the following sentences (7) and (8) with the sentences (2) and (5) respectively:

- (7) *Kylläpä on yhtiöitä huonojakin.*  
 surely be-3.sg.pr. company-part.pl. bad-part.pl.  
 In fact, some companies are bad.
- (8) *Tällä hetkellä on paikkoja vapaana.*  
 this-adess.sg. moment-adess.sg. be-3.sg.pr. seat-part.pl. free-ess.sg.  
 At this moment, seats are available.

In the sentence (7) the noun *yhtiöitä* in the partitive plural case precedes the adjective *huonoja* and the predicate *on* precedes the noun *yhtiöitä* in turn<sup>2</sup>. Also in the sentence (8) the noun *paikkoja* in the partitive plural case follows the predicate *on*, preceding the adjective *vapaana* in the essive singular case.

Let us now return to the sentence (4). Like (2) and (5), the sentence (4) can be compared with a sentence in which a quantified noun and a quantifier appear side by side. Take the following for example:

- (9) *On meitä taas kaksi.*  
 be-3.sg.pr. we-part.pl. again two  
 We have become two again.

Here, both a pronoun *meitä* and a cardinal number *kaksi* follow the predicate. Quantifying sentences differ from (2) and (5), however, in that they do not have a predicative sentence as their counterpart. For example, the following sentence is ungrammatical:

- (10)\**Me olemme kaikkiaan kolmekymmentä.*  
 we-nom.pl. be-1.pl.pr. in all thirty

This is indeed a difference, but it does not necessarily prevent us from comparing quantifying sentences with sentences like (2) and (5).

What is important to note is that (2) and (5) are not identical in meaning with (3) and (6) respectively. Not only in (3) and (6) but also in (2) and (5) the property of collective referents of the initial noun is described. Referents, however, are treated differently. In predicative sentences like (3) and (6) collective referents can be decomposed into individual referents. In other words, the property described by a post-verbal adjective can be attributed to an individual referent. On the other hand, in the sentences (2) and (5), the described

property should be attributed to collective referents as a whole. This can be proved by a particle *-kin* attached to the post-verbal adjective in the sentence (2). In this sentence the particle, meaning 'also', implicates that 'most of the companies are good indeed, but some are bad'. Then, 'badness' should be regarded as the property of 'companies' as a whole rather than that of an individual 'company'. The same is true of the sentence (5). What matters in this sentence is not individual 'seats' but 'seats' in question as a whole. This may be the reason the post-verbal adjective in (5) is not in the plural but in the singular. From these things it follows that the sentences (2) and (5) should be distinguished from their apparent correspondents, i.e. the predicative sentences (3) and (6). If this is the case, the fact that the sentence (4) does not have a predicative sentence as its counterpart does not count as a basis for the categorical distinction between the sentences (2) and (5) on one hand and the sentence (4) on the other hand. In fact, we cannot say that in the sentence (4) the property of an individual member of the referent 'we' is described, since an individual member cannot be 30 in number. This sentence means that the referent 'we' as a whole contains 30 members. Because of this semantic similarity, we will treat (4) as a sentence belonging to the same type of sentence as (2) and (5).

### 3. Dislocated or Not?

In previous studies it has been pointed out that the initial noun of quantifying sentences cannot be regarded as a dislocated element<sup>3</sup>. This is because the following sentence, for example, is ungrammatical:

- (11)\**On kaikkiaan kolmekymmentä meitä.*  
 be-3.sg.pr. in all thirty we-part.pl.

In this sentence corresponding to the sentence (4), the pronoun *meitä* follows a numeral. But a numeral cannot directly precede a personal pronoun. The following pair of sentences is another illustration of the same point:

- (12) *Huoneita on kaikkiaan kolmekymmentä.*  
 room-part.pl. be-3.sg.pr. in all thirty  
 Rooms are thirty in all.
- (13)\**On kaikkiaan kolmekymmentä huoneita.*  
 be-3.sg.pr. in all thirty room-part.pl.

The sentence (12) is a quantifying sentence. Compare the sentence (13), in which the noun *huoneita* follows the numeral *kolmekymmentä*, with the following:

- (14) *On kaikkiaan kolmekymmentä huonetta.*  
 be-3.sg.pr. in all thirty room-part.sg.  
 There are thirty rooms in all.

While (14) is grammatical, (13) is not. This is because in the Finnish language a noun should be in the singular after a numeral.

Now let us consider the sentences (2) and (5) again, repeated here for convenience as (15) and (16) respectively:

- (15) *Yhtiötä on huonojakin.*  
 company-part.pl. be-3.sg.pr. bad-part.pl.  
 In fact, some companies are bad. (=2)
- (16) *Paikkoja on vapaana.*  
 seat-part.pl. be-3.sg.pr. free-ess.sg.  
 Seats are available. (=5)

With regard to the initial noun *yhtiötä* in the sentence (15), it is indeed possible to assume a leftward movement. If this is the case, the initial noun in question is the head of a noun phrase and the post-verbal adjective *huonoja* is its modifier. In a noun phrase an adjectival modifier must agree in case and number with the nominal head. In fact, both the initial noun and the post-verbal adjective in the sentence (15) are marked in the partitive plural case. Then, the initial noun *yhtiötä* may be originally located after the post-verbal adjective. This is not true, however, of the initial noun in the sentence (16). In this sentence there is no agreement between the initial noun *paikkoja* and the post-verbal adjective *vapaana*. Then, the initial noun and the post-verbal adjective in the sentence (16) do not form a noun phrase. This means that the movement analysis is not applicable to this sentence.

The movement analysis is also problematic from the semantic viewpoint. In the sentences we are now considering, the initial noun marked in the partitive case is either qualified by an adjective or quantified by a numerical expression. In other words, the sentences in question involve a kind of predication. As we have seen before, we should not overlook that a predication described in these sentences is not the same as that described in typical predicative sentences like (3) and (6). But a kind of predication is anyway relevant to the sentences in question. Contrary, if the initial noun is the nominal head of a noun phrase modified by an adjective or a numerical expression, a predicative relation is irrelevant. Thus, we can safely state that the initial noun marked in the partitive case is not a dislocated element.

#### 4. Subject or Not?

If what is described in the sentences in question, including the sentence (15), is a kind of predication, and therefore they belong to a minor type of predicative sentence, the initial noun may be regarded as the subject. The question is why the initial noun is indicated in the partitive case. In the Finnish language the subject of a predicative sentence is usually marked in the nominative case. This does not mean, however, that the partitive marking is precluded, since the partitive has the widest distribution of all the grammatical cases<sup>4</sup>. The nominative is a default case for the subject of a predicative sentence indeed, but it is possible to assume that the partitive is also available under a specific condition. To consider this condition, it may be useful to compare the following sentences:

- (17) *Vesi on lämmitä.*  
 water-nom.sg. be-3.sg.pr. warm-part.sg.  
 Water is warm.
- (18) *Vettä on kaksi metriä.*  
 water-part.sg. be-3.sg.pr. two meter-part.sg.  
 Water is two meters in depth.

The initial noun of the sentence (18) is marked in the partitive case, while that of the sentence (17) is indicated in the nominative case. The initial noun of the sentence (17) is clearly the subject. It is highly probable that the initial noun of the sentence (18) also functions as the subject. In order to identify it as the subject, however, it is necessary to explain the partitive marking in a principled way.

It is a well-known fact that the definiteness in quantity is relevant to the case marking in the Finnish language. What is marked in the partitive case is a noun whose referent is indefinite in quantity. For such a noun the nominative and the genitive are not available. In other words, being indefinite is a prerequisite for the partitive marking. The sentence (17) describes the qualitative property of the initial noun 'water'. On the other hand, what is described in the sentence (18) is the quantity of 'water'. The quantity is delimited by a numerical expression *kaksi metriä* indeed, but 'water' itself is indefinite in quantity<sup>5</sup>.

It is attested that the subject can be marked in the partitive case, if it refers to an entity that is indefinite in quantity. Take the following for example:

- (19) *Lapset leikkivät pihalla.*  
 child-nom.pl. play-3.pl.pr. yard-adess.sg.  
 Children are playing in the yard.
- (20) *Pihalla leikkii lapsia.*  
 yard-adess.sg. play-3.sg.pr. child-part.pl.  
 In the yard some children are playing.

The initial noun of the sentence (19) undoubtedly functions as the subject. Considering the meaning conveyed, we can say that the post-verbal noun of the sentence (20) also serves as the subject<sup>6</sup>. This noun *lapsia* is marked in the partitive plural case. This is because the number of 'children playing in the yard' is indefinite. If this is the case, it seems reasonable to suppose that the initial noun of the sentence (18) is also the subject. As we have seen, it refers to an indefinite amount of 'water'. This is the reason the initial noun functioning as the subject is marked in the partitive case.

The same observation applies to the sentences (4) and (12). Compare the sentence (12), repeated here as (21), with the sentence (22). That is:

- (21) *Huoneita on kaikkiaan kolmekymmentä.*  
 room-part.pl. be-3.sg.pr. in all thirty  
 Rooms are thirty in all. (=12))
- (22) *Huoneet ovat siistejä.*

room-nom.pl. be-3.sg.pl. clean-part.pl.  
Rooms are clean.

The initial noun of the sentence (21) corresponds to that of the sentence (22) and the latter is clearly the subject. Then, the initial noun of the sentence (21) can also be the subject, atypical one as it may. This noun *huoneita* is marked in the partitive case, since its referent is indefinite in quantity.

Moreover, the initial noun of the sentences (2) and (5), which corresponds to that of the sentences (3) and (6) respectively, can be considered to be the subject for the same reason. What is described in these sentences, however, is not the quantity of referents of the subject. Then, what is the reason for the partitive marking of the subject? As we noted earlier, what matters in the sentences (2) and (5) is collective referents as a whole. In these sentences a set of ‘companies’ or ‘seats’ is predicated respectively. The important point to note is that ‘companies’ or ‘seats’ in these sentences does not form a closed set. In other words, the number of ‘companies’ or ‘seats’ is not definite. The sentence (2), for example, means that ‘most of the companies are good indeed, but some are bad’. Then, what is implied about the subject of this sentence is merely the existence of a considerable number of ‘companies’. This is even more true of the following sentence:

(23) *Omenoita on kolme eri tyyppiä.*  
apple-part.pl. be-3.sg.pr. three different type-part.sg.  
There are three types of apples.

This sentence means that ‘apples can be classified into three types’. A considerable number of apples should exist indeed, but the exact number of apples is irrelevant. From these things it follows that the subject of the sentences (2), (5) and (23) refers to an entity that is indefinite in quantity. Thus, we can say this is the reason for the partitive marking of the subject of these sentences.

## 5. Topicalized or Not?

As we have mentioned before, the sentences we are now considering has a variant in which a noun marked in the partitive plural case does not precede but follows the predicate. Examples are repeated here as (24)–(26):

- (24) *Kylläpä on yhtiöitä huonojakin.*  
surely be-3.sg.pr. company-part.pl. bad-part.pl.  
In fact, some companies are bad. (=7)
- (25) *Tällä hetkellä on paikkoja vapaana.*  
this-adess.sg. moment-adess.sg. be-3.sg.pr. seat-part.pl. free-ess.sg.  
At this moment, seats are available. (=8)
- (26) *On meitä taas kaksi.*  
be-3.sg.pr. we-part.pl. again two

We have become two again. (= (9))

In these sentences, what kind of function does the noun in the partitive plural case carry out? What should be noticed here is that a partitive subject whose referent is indefinite in quantity often follows the predicate. For example, it is not impossible indeed that *lapsia* in (20) occupies the initial position, but it sounds unnatural. If this is the case, the noun in question can be regarded as the subject postposed to the post-verbal position.

By the way, in the Finnish language, it is the topic that usually occupies the initial position of a sentence. Then, the other way around, it may be possible to say that the initial noun marked in the partitive case is the topicalized subject. The beginning of a sentence is, however, an unmarked position for the subject to occupy at the same time. As a matter of fact, it is more usual for the partitive subject predicated by an adjective or a numerical expression to appear in the initial position of a sentence. This may be because the subject in question is topicalized, but it is equally possible that this is due to a tendency to avoid a sequence 'a noun directly followed by an adjective or a numerical expression'.

## 6. Initial Object Marked in the Partitive Case

So far, we have seen that sentences can take a partitive subject on condition that its referent is indefinite in quantity. Then, the initial noun of quantifying sentences like (4) can be regarded as the subject. We cannot say, however, this is true of all the quantifying sentences. Take the following for example:

(27) *Joutsenia voi nähdä jopa viisi.*  
 swan-part.pl. can-3.sg.pr. see-1.inf. as many as five  
 As many as five swans can be seen.

(28) *Näitä minä löysin vain viisi.*  
 this-part.pl. I-nom.sg. find-1.sg.p. only five  
 As for this, I found only five.

These are in fact quantifying sentences, since the numeral *viisi* in the final position describes the number of referents of the initial noun. Also in these sentences the initial noun is marked in the partitive plural case. However, it seems that the initial noun is the object rather than the subject.

If the initial noun is the object, is it possible to regard it as a nominal head preposed to the initial position from behind a numeral? If the initial noun *joutsenia* is the head of a noun phrase, however, it should be in the singular after the numeral *viisi*. Also the initial pronoun *näitä* cannot be regarded as the head of a noun phrase, since a demonstrative pronoun cannot be modified by a numeral. From these things it follows that the initial (pro)noun in (27) and (28) cannot be an element dislocated from the inside of a noun phrase containing a numeral.

Each of the sentences has a counterpart in which the (pro)noun in question follows the predicate. That is:



- (29) *Siellä voi nähdä joutsenia jopa viisi.*  
 there can-3.sg.pr. see-1.inf. swan-part.pl. as many as five  
 As many as five swans can be seen there.
- (30) *Minä löysin näitä vain viisi.*  
 I-nom.sg. find-1.sg.p. this-part.pl. only five  
 As for this, I found only five.

We may recall that predicative sentences whose subject is marked in the partitive case have also a counterpart in which the subject is postposed to the post-verbal position. Then, in this respect the sentences (27) and (28) are similar to the type of predicative sentence we have discussed above. The question which we must consider next is to interpret them properly in relation to this type of predicative sentence. To answer this question, it would be useful to take the following sentence into consideration:

- (31) *Hän veisti puikon liian lyhyen.*  
 (s)he-nom.sg. cut-3.sg.p. stick-gen.sg. too short-gen.sg.<sup>7</sup>  
 (S)he cut the stick too short.

In this sentence *puikon* clearly functions as the object. At the same time, a predicative relation holds between *puikon* and *lyhyen*<sup>8</sup>. In the Finnish grammar *lyhyen* in (31) is called an objective complement<sup>9</sup>. Although the noun and the adjective in (31) are not marked in the partitive case, the syntactic relation between them is the same as that between the noun in the partitive plural case and the numeral *viisi* in (27)–(30). In other words, the sentences (27)–(30), which are not predicative sentences themselves, contain a predicative relation. Then, it seems reasonable to suppose that *viisi* in these sentences is also an objective complement<sup>10</sup>. If this is the case, the partitive marking of the object can be explained in the same way as that of the subject of the type of predicative sentence discussed above. Referents of the object in question are indefinite in quantity. The object is therefore marked in the partitive case. It is indeed possible to assume that the object is topicalized in (27) and (28), but a tendency to avoid a sequence ‘a noun directly followed by a numerical expression’ may be also relevant.

## 7. Concluding Remarks

From what has been said above, it should be concluded as follows:

- (1) Sentences whose initial noun marked in the partitive case is qualified by an adjective belong to a minor type of predicative sentence. The initial noun is the subject, atypical one as it may.
- (2) Part of quantifying sentences whose initial noun marked in the partitive case is quantified by a numerical expression belongs to the same minor type of predicative sentence. The initial noun is also the subject, a typical one as it may.
- (3) The initial noun, i.e. the subject, of this type of predicative sentence refers to an entity that is indefinite in quantity. This is the reason it is marked in the partitive case.
- (4) Quantifying sentences whose initial noun serves as the object are not predicative

sentences themselves, but they contain a predicative relation that holds between the initial noun and a numerical expression. The initial noun is marked in the partitive case, since it refers to an entity that is indefinite in quantity.

### Notes

- 1 See, for example, Hakulinen & Karlsson (1979: 99, 148–149) and Vilkuna (1996: 223–225).
- 2 In the following sentence the noun *yhtiöitä* precedes the adjectives *hyviä* and *huonoja*:  
 i) *Tätä järjestelmää käyttää useita kansainvälisiä*  
 this-part.sg. system-part.sg. use-3.sg.pr. many-part.pl. international-part.pl.  
*yhtiöitä niin hyviä kuin huonojakin.*  
 company-part.pl. both good-part.pl. and bad-part.pl.  
 This system is used by many international companies, not only good ones but also bad ones.  
 The noun follows the predicate indeed, but the predicate is not *on* but a transitive predicate *käyttää*.
- 3 See, in particular, Hakulinen & Karlsson (1979: 99, 148–149) and Vilkuna (1996: 223–225)
- 4 For a discussion of the case marking in the Finnish language, see, for example, Sakuma (2003a, 2003b).
- 5 In fact, ‘water’ in (17) is indefinite in quantity, since it is uncountable. In predicative sentences their subjective complement is marked either in the nominative case or in the partitive case. The latter is used when the subject refers to an entity that is indefinite in quantity. This is why the complement *lämmintä* in (17) is marked in the partitive case. The subject itself, however, is not marked in the partitive case but in the nominative case.
- 6 Compare the sentence (20) with the following sentence:  
 i) *Pihalla on lapsia.*  
 yard-adess.sg. be-3.sg.pr. child-part.pl.  
 There are children in the yard.  
 This is an existential sentence. It is important to note that in both of the sentences the noun following the predicate is marked in the partitive plural case. The noun in i) cannot be regarded either as the subject or as the object. Then, it is at least difficult to say that the noun in (20) is a typical subject.
- 7 According to the traditional grammar, the morphological case assigned to *puikon* and *lyhyen* in (31) is called the accusative. The accusative case is, however, identical in form with the genitive case in the singular and the nominative case in the plural. Then, we do not use the term ‘accusative’ in this paper.
- 8 Also the status construction contains a predicative relation. Take the following for example:  
 i) *Isäntä astelee päätä pystyssä.*  
 master-nom.sg. walk-3.sg.pr. head-nom.sg. erect  
 The master walks with his head erect. (Ikola 1978: 52)  
 In this sentence a predicative relation holds between *pää* and *pystyssä*. For further details of the status construction, see, for example, Ikola (1978: 50–55) and Sakuma (2002).
- 9 On the objective complement, see, for example, Ikola (1991: 146).
- 10 In my previous study (1992), I have treated quantifying sentences like (27) and (28) in a different way. I argued that the initial noun is the theme of the sentence and it has an appositional relation with a numerical expression. It is not clear, however, what is the theme of a sentence. Also, to posit an appositional relation seems to be an ad hoc explanation.

### Abbreviations

sg.—singular	pl.—plural	nom.—nominative	gen.—genitive
part.—partitive	ess.—essive	iness.—inessive	adess.—adessive
pr.—present	p.—past	inf.—infinitive	

### References

- Hakulinen, Auli & Fred Karlsson. 1979. *Nyky-suomen lauseoppia*. Jyväskylä: Suomalaisen Kirjallisuuden Seura.  
 Ikola, Osmo. 1978. *Lauseenvastikeoppia*. Helsinki: Suomalaisen Kirjallisuuden Seura.  
 Ikola, Osmo. 1991. *Nyky-suomen käsikirja*. Jyväskylä: Weilin+Göös.  
 Sakuma, Jun'ichi. 1992. On the Grammatical Interpretation of the Quantifying Sentence in the Finnish language (In Japanese). *Journal of the Linguistic Society of Japan* 102: 121–147.

- Sakuma, Jun'ichi. 2002. On the So-called Status Construction in the Finnish Language. *The Journal of the Faculty of Letters Nagoya University* 142: 1–10.
- Sakuma, Jun'ichi. 2003a. Non-lexical Case Assignment in the Finnish Language. *The Journal of the Faculty of Letters Nagoya University* 145: 1–11.
- Sakuma, Jun'ichi. 2003b. Semantic Macroroles and Case Marking in the Finnish Language. *Nagoya Working Papers in Linguistics* 18: 111–124.
- Vilkuna, Maria. 1996. *Suomen lauseopin perusteet*. Helsinki: Edita.