

Chan, 195). The first three lines share a rhyme which sets them off from the rest.¹¹⁶ It is, moreover, difficult to see a continuity of ideas here.

Finally, text A of the Ma-wang-tui texts punctuates in the middle of 75, between the lines 'Therefore they are difficult to rule' (Chan, 232) and 'The people take death lightly because their ruler strives for life too vigorously' (Chan, 242).¹¹⁷ Kanaya Osamu considers this to be a proper break.¹¹⁸ I disagree. There is a difference in theme between the two parts of the chapter, that is, between the first section on the people being difficult to rule and the second on them taking death lightly. But the chapter is composed of three, syntactically parallel statements about the people (民之饑, 民之難治, 民之輕死) followed by a standard ending formula, *fu-wei* 夫唯.

III. Conclusions

Much that has been said in part II is speculative and inconclusive. One can hope for little else, given the nature of our materials. Other scholars, repeating the experiment of reading the text as it stands and searching for natural breaks, will see connexions where I have not and breaks in what I have left intact. There is a further problem in the fact that the compiler of the text seems to have brought together in single chapters sayings similar in theme and language, as well as stringing chapters together on the same principle,¹¹⁹ which makes it difficult to distinguish between 'chapters' and 'sayings'. Was 51 in the compiler's mind two 'chapters' on the Tao, or two similar 'passages' combined to make a chapter?

I have not solved the problem of where to divide the text correctly. None the less, taking the evidence reviewed here as a whole—the record of where others have divided the text, the Ma-wang-tui punctuation, and the results of a reading from the standpoint of the continuity and discontinuity of ideas and rhyme—it is difficult not to conclude at least that:

1. chapters 17, 18, 19, and the first line of 20, should be read as one,
2. chapters 67, 68, and 69 should also be read as one, though we might want to start in 67 with the line 'I have three treasures',
3. 30 and 31 might also be combined,
4. the last line of 78 should clearly be the first line of 79,
5. the Ma-wang-tui order of 21, 24, 22 is the correct order to follow, and,
6. I would also argue strongly in favour of combining the end of 28 with the beginning of 29.

Still to be sorted out are the connexions between chapters 40–43, 57–59, and 63–64. In the end, I come very close to affirming the sixty-eight chapter version of the text established by Wu Ch'eng and followed by Ming T'ai-tsu.

¹¹⁶ *ibid.*, 139. The rhyme words are *pa* 拔, *t'uo* 脫, and *cho* 輟.

¹¹⁷ See *MWTHMPS*, I, 112.

¹¹⁸ 'Hakusho Rōshi ni tsuite', 185.

¹¹⁹ I noted earlier the 'way of Heaven' chapters in 71–81; chapters 73–76 all deal in some way with death.

THE SYNTACTIC STATUS OF QUANTIFIERS IN SOMALI¹

By JOHN I. SAEED

1. Introduction

The study of quantifiers is an important area of language description. This is in part because their description has proved relevant to an issue of great theoretical interest, the relation between syntax and semantics. One question of interest is how far the unity of their semantic function is reflected in their syntactic behaviour. This raises questions like, is there a syntactic category 'quantifier' or 'quantifier phrase (QP)'?

Looking primarily at English, Jackendoff (1968, 1971) described quantifiers as belonging to the categories of determiner and noun, while G. Lakoff (1970) and Carden (1973) treated these elements as predicate items, i.e. adjectives and verbs. These and other approaches are discussed in Hogg (1977). The present article aims to add empirical support to this discussion by describing the syntactic status of quantifiers in Somali, a Cushitic language spoken by upwards of four million people in the Horn of Africa. The article describes the Common, or Northern, dialect, which is most widespread, but the arguments hold for other dialects. It will be argued that Somali quantifiers divide into two classes on the basis of their syntactic behaviour. The following quantifiers are taken as representative of their classes:

Class 1 *badan*² 'many, much'
 yar 'few, little'
 dhan 'all'

Class 2 *dhawr* 'several'
 the numerals, e.g. *hal* 'one', *laba* 'two'

There is no evidence yet to suggest that any of the other quantifiers act differently from those above.³ In making this binary division, the following claims are made:

1. Class 1 quantifiers are adjectives.⁴
2. Class 2 quantifiers are nouns.
3. All quantifying expressions are main or lower sentences involving the copula. In these the quantifier is either subject (if it belongs to Class 2) or adjectival complement (if it belongs to Class 1).

¹ I am grateful to Ismaciil Cali Faarax, Ibraahin Aadan Siciid, and Axmed Cabdirahman, on whose speech the present study is based, for their great patience and good humour in the difficult task of being language informants. I have also benefited from the kindness of Professor B. W. Andrzejewski, Ruth Kempson, Richard Hayward and Paul Newman who read and commented on earlier versions of this article. I also gratefully acknowledge the support of the University of London, the School of Oriental and African Studies, London, and the National University of Somalia.

² The Somali examples are given in the standard orthography, whose Roman characters have the usual interpretations, except for the following: *c* is a voiced pharyngeal fricative [ʕ], *z* is a voiceless pharyngeal fricative [ħ], *dh* is a voiced retroflex plosive [ɖ]. Long vowels are written as digraphs: *aa*, *uu*, etc.

³ Note that the quantifiers *kasta* 'each, any', and *walba* 'every' are adjectives but are members of that subgroup of adjectives which may occur attributively, and not predicatively, e.g. *hore* 'previous', *dambe* 'later, last'.

⁴ Note that Andrzejewski (1969) has argued that in Somali adjectives do not constitute a separate category, being a highly irregular subclass of verbs, which he termed 'hybrid verbs'. For the purposes of the present argument it makes no difference whether these Class 1 quantifiers are treated as adjectives or hybrid verbs: the point is that while sharing the semantic role of quantification with the numerals, they are of a different syntactic class.

Section 2 (below) presents arguments for the first claim, section 3 for the second, and the third will emerge as a consequence of both sets of arguments.

2. Quantifying adjectives

2.1. In main sentences

2.1.1. Predicative occurrence

One of the strongest arguments for the adjective status of these class 1 quantifiers is that they occur in main sentence predicates as complements of the copula, and further, that there they display all the usual characteristics of adjectives. The sentences below show non-quantifying (1) and quantifying adjectives (2-4) sharing the same surface structure, that shown (simplified) in Fig. 1:

1. *dadku way oomman yihiin*
people+the FOCUS+they thirsty are⁵
'the people are thirsty'
2. *dadku way badan yihiin*
people+the FOC+they many are
'the people are many'
3. *dadku way yar yihiin*
people+the FOC+they few are
'the people are few'
4. *dadku way dhan yihiin*
people+the FOC+they all are (lit. 'the people are all/are a full set')
'the people are all here/the people are all accounted for'

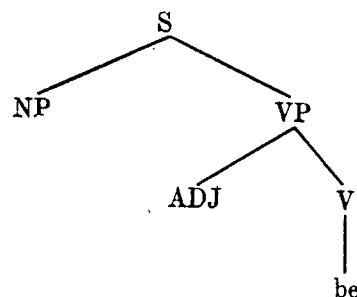


FIG. 1

2.1.2. Word order

An interesting characteristic of Somali sentences is the occurrence of 'double subjects', that is, both a full NP subject and a co-referential pronoun occur as subject of the same verb, as can be seen from examples 1-4 above.⁶ The important fact here is that while adjectives must occupy the surface position between this subject pronoun and the verb, nouns may not. This can be seen from sentences 5 and 6 below:

⁵ The items glossed as FOCUS or FOC are particles which mark constituents as focused. See Andrzejewski (1975) and Hetzron (1965) for discussion. For present purposes it is enough to state that the particle *waa* precedes and marks a verb as focused while *baa* immediately follows and focuses an NP. The particle *ayaa* is equivalent to *baa*.

⁶ These might be treated as topic structures, i.e. being of the form TOPIC — S, with the full NP being outside the sentence. This does not affect the present argument, concerned as it is with the word order within what would be the sentence proper.

5. (a) *dadkani way wanaagsan yihiin*
people+these FOC+they good are
ADJ
'these people are good'
- (b) **dadkani wanaagsan way yihiin*
people+these good FOC+they are
ADJ
- (c) **dadkani way yihiin wanaagsan*
people+these FOC+they are good
ADJ
6. (a) *dadkani askar way yihiin*
people+these soldiers FOC+they are
N
'these people are soldiers'
- (b) *dadkani way yihiin askar*
people+these FOC+they are soldiers
N
- (c) **dadkani way askar yihiin*
people+these FOC+they soldiers are
N

Thus adjectives and nouns cannot occupy the same positions: nouns must occur before the pronoun (6a) or after the verb (6b), but not between the two (6c); adjectives may occur between the pronoun and the verb (5a), but nowhere else (5b and 5c). As sentences 7 and 8 below show, Class 1 quantifiers are treated as adjectives by this word order constraint:

7. (a) *dadkani way badan yihiin*
people+these FOC+they many are
'these people are many'
- (b) **dadkani badan way yihiin*
people+these many FOC+they are
- (c) **dadkani way yihiin badan*
people+these FOC+they are many
8. (a) *dadkani way yar yihiin*
people+these FOC+they few are
'these people are few'
- (b) **dadkani yar way yihiin*
people+these few FOC+they are
- (c) **dadkani way yihiin yar*
people+these FOC+they are few

2.1.3. Comparative and superlative

A strong argument that these quantifiers are adjectives is that they occur in the comparative and superlative forms usual for other adjectives. In fact they do with the exception of *dhan* 'all', but this fact I take to be due to

semantic rather than syntactic factors since expressions like 'more all' and 'most all' would be semantically anomalous. Sentence 9 below shows both quantifying and non-quantifying adjectives in comparative forms:

9. (a) *ardadii sannadkan way ka wanaagsan tahay kuwii sannadka hore*
students+the year+this FOC+they more good are those year+the last
'This year's students are better than last year's'
- (b) *ardadii sannadkan way ka badan tahay kuwii sannadka hore*
students+the year+the FOC+they more many are those year+the last
'This year's students are more than last year's'
- (c) *ardadii sannadkan way ka yar tahay kuwii sannadka hore*
students+the year+this FOC+they more few are those year+the last
'This year's students are fewer than last year's'

These quantifying adjectives also share with other adjectives the same superlative constructions, as 10 below shows:

10. (a) *ardadii sannadkan way ugu wanaagsan tahay*
students+the year+this FOC+they most good are
'This year's students are the best'
- (b) *ardadii sannadkan way ugu badan tahay*
students+the year+this FOC+they most many are
'This year's students are the most numerous (lit. "the most many")'
- (c) *ardadii sannadkan way ugu yar tahay*
students+the year+the FOC+they most few are
'This year's students are the fewest'

2.1.4. Cleft constructions

Somali cleft constructions, like 11 below, have the constraint that only a NP may be focused by occurring as the complement. This can be seen by comparing 11 with 12, which is ungrammatical because an adjective occurs as the focused element:

11. *waxay yihiin waa askar*
thing+the+they are FOC(is) soldiers
NP
'What they are is soldiers'
12. **waxay yihiin waa xun*
thing+the+they are FOC(is) bad
ADJ
'What they are is bad'

This constraint provides another indication, albeit a negative one, that Class I quantifiers pattern like adjectives rather than nouns for, as 13 below shows, these quantifiers may not be focused by a cleft:

13. **waxay yihiin waa badan*
thing+the+they are FOC(is) many
'What they are is many'

2.1.5. Copula reduction

There is a rule of Copula Reduction which in main sentences allows a stylistic reduction of the present tense of the copula. This rule applies obligatorily for

the copula's past tense. This rule provides a good category test because it only applies when the complement of the copula is an adjective, to which the reduced copula is attached as a clitic.⁷ To see how this rule operates compare 14 below, adjective complement, with 15 below, noun complement:

14. (a) *wuu wanaagsan yahay*
FOC+he good is
'He is good'
- (b) *wuu wanaagsanyay*
FOC+he good+is
'He is good'
15. (a) *dhakhtar wuu yahay*
doctor FOC+he is
'He is a doctor'
- (b) **dhakhtar wuu-yay*
'He is a doctor'

Example 14 above shows that Copula Reduction is optional with adjectives when the copula is present tense, while 15 shows that it is impossible with a noun complement in the same conditions. Sentences 16 and 17 below show that the reduction rule is obligatory for the past tense copula with an adjective complement but again impossible with a noun complement:

16. (a) **wuu wanaagsan ahaa*
FOC+he good was
'He was good'
- (b) *wuu wanaagsanaa*
FOC+he good+is
'He was good'
17. (a) *dhakhtar wuu ahaa*
doctor FOC+he was
'He was a doctor'
- (b) **dhakhtar wuu-aa*
'He was a doctor'

Example 16(a) is ungrammatical because the reduction rule has failed to operate with an adjectival complement, while 17(b) is ungrammatical because the same rule has applied with a noun complement. Thus this rule clearly specifies in its operation the category adjective.

⁷ It might appear from the examples given here that this rule could be stated just as well simply in terms of a non-pronoun constituent preceding the copula and therefore being available for cliticization. Since only adjectives can occur in this position (see 2.1.2), this would make the correct predictions but would of course weaken the present argument. That the reduction rule refers specifically to adjectives is apparent from its application in relative clauses where both nouns and adjectives directly precede the copula. Only adjectives trigger the reduction rule, as can be seen by comparing 1 below (NP-NP-be) with 2 (NP-ADJ-be):

1. (a) *ninkii dhakhtarka ahaa*
man+the doctor+the was
'the man who was the doctor'
- (b) **ninkii dhakhtarka-aa*
man+the doctor+the+was
'the man who was the doctor'
2. (a) *ninkii wanaagsanaa*
man+the good+was
'the man who was good'
- (b) **ninkii wanaagsan ahaa*
man+the good was
'the man who was good'

If one examines the interaction of this rule with Class 1 quantifiers, it is clear that the latter are treated as adjectives by this rule. Example 18 below shows that Copula Reduction is optional when a present tense copula has one of these quantifiers as complement; example 19 below shows that the rule is obligatory when the same copula is in the past tense:

18. (a) *way badan yihiin*
FOC+they many are
'They are many'
- (b) *way badanyiin*
FOC+they many+are
'They are many'
19. (a) **way badan ahaayeen*
FOC+they many were
'They were many'
- (b) *way badnaayeen* (from **badanaayeen* by phonological rule)
FOC+they many+were
'They were many'

In short, the rule of Copula Reduction treats these quantifiers as adjectives.

2.1.6. Verb selection

Adjectives in Somali, unlike nouns, can occur as the complement of no other verb than the copula. It is of course possible to make a similar claim for the underlying syntax of English, if one assumes that sentences like 'He seemed stupid', 'He grew stupid' have had an occurrence of 'be' deleted. The situation is clearer in Somali where even on the surface adjectives may not occur as complements of verbs other than 'be'. Sentence 20 below shows this: 20(b) is ungrammatical because the adjective *faraxsan* 'happy' is the complement of *noqon* 'become'; 20(c) is the grammatical version where *noqon* has an NP complement, and the adjective *faraxsan* is the relative clause complement of the copula (which is here deleted by Copula Reduction; it happens that the basic root deleted by this rule—see the examples above—is the present tense relative clause form):

20. (a) *wuu faraxsan yahay*
FOC+he happy is
'He is happy'
- (b) **wuu faraxsan noqday*
FOC+he happy became
'He grew happy'
- (c) *wuu noqday nin faraxsan*
FOC+he became man happy(is)
'He grew happy' literally 'He became a happy man'

In this verb selection, Class 1 quantifiers behave like adjectives, being restricted to complements of the copula and having therefore to occur in relative clauses to appear with other verbs. See sentence 21 below where *yar* 'few' is used as the example:

21. (a) *way yar yihiin*
FOC+they few are
'They are few'
- (b) **way yar noqdeen*
FOC+they few became
'They became few, their numbers dwindled'
- (c) *way noqdeen dad yar*
FOC+they became people few(are)
'They became few, their numbers dwindled'
lit. 'They became a people who are few'

The best way to account for the ungrammaticality of 21(b) is, clearly, to relate it to that of 20(b) and to say that *yar*, as an adjective, is subject to the general constraint that adjectives must occur as complements of the copula.

2.1.7. Subjecthood

Another feature which classifies these quantifiers with adjectives and not nouns is that while both nouns and adjectives may be complements of the copula, only the former may be its subject. That nouns but not adjectives can act as subjects is a basic distinguishing feature between these categories. Sentences 22 below exemplify this:

22. (a) *intani way igu filan tahay*
amount+this FOC+it me+for enough is
'This amount is enough for me'
- (b) **faraxsan way igu filan tahay*
happy FOC+it me+for enough is
'*Happy is enough for me'

Class 1 quantifiers are also unable to act as subjects, as 23 below shows, and this fact is naturally accounted for by recognizing them as adjectives:

23. (a) **yar way igu filan yihiin*
few FOC+they me+for enough are
'Few are enough for me'
- (b) **badan way faraxsan yihiin*
many FOC+they happy are
'Many are happy'
- (c) **dhan way oomman yihiin*
all FOC+they thirsty are
'All are thirsty'

Each of the above would be rendered grammatical by the addition of a noun to support the quantifying adjective; for example, the grammatical equivalent of 23(b) above would be 24 below:

24. *dad badan way faraxsan yihiin*
people many (are) FOC+they happy are
'Many people are happy'

2.2. In lower sentences

2.2.1. Introduction

The previous section presented several arguments that Class 1 quantifiers are adjectives, and occur in main sentence predicates in the normal fashion for adjectives. These quantifiers also occur within noun phrases, again perfectly regularly for adjectives, as complements of 'be' in restrictive and non-restrictive relative clauses. The following examples, 25, which contain both quantifying (25c and 25d) and non-quantifying adjectives (25a and 25b), are restrictive relatives and share the structure shown (simplified) in Fig. 2; note that the Copula Reduction rule operates obligatorily with adjectives in relative clauses. As in main sentences (see 2.1.5 above) it deletes the copula's root *-ah-*; this has the effect in relative clauses of leaving \emptyset , i.e. of deletion, for the present tense form *ah*, and of leaving *-aa/-aayeen* for the past tense forms *ahaa/ahaayeen*. This effect can be seen below :⁸

25. (a) *dadka wanaagsan*
people+the good(are)
'The people who are good, the good people'
- (b) *dadkii wanaagsanaa*
people+the good+were
'The people who were good, the good people'
- (c) *dadka badan*
people+the many(are)
'The people who are many, the many people'
- (d) *dadkii badnaa* (from **badanaa* by phonological rule)
people+the many+were
'The people who were many, the many people'

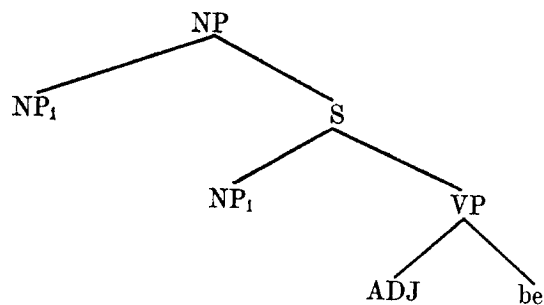


FIG. 2

The particular analysis given restrictives in Fig. 2 is not crucial here; what is important is that both quantifying and non-quantifying adjectives occur as lower sentence complements of the copula. The same parallel between quantifying and non-quantifying adjectives is found in appositive relative clauses, as can be seen from the following:

26. (a) *dadka oo wanaagsan* . . .
people+the and good(are)
'The people, who are good . . .'
- (b) *dadkii oo wanaagsanaa* . . .
people+the and good+were
'The people, who were good . . .'
- (c) *dadka oo dhan* . . .
people+the and all(are)
'The people, who are all . . .', 'All the people'
- (d) *dadkii oo dhammaa* . . .⁹
people+the and all+were
'The people, who were all . . .', 'All the people'

All the arguments forwarded to prove these quantifiers in main sentence predicates are adjectives are equally valid when they occur in relative clause predicates. For example, they occur in comparative and superlative forms in relative clauses, e.g.

27. (a) *askarta oo ka badan* . . .
soldiers+the and more many(are)
'The soldiers, who are more numerous . . .'
- (b) *askarta oo ugu badan* . . .
soldiers+the and most many(are)
'The soldiers, who are the most numerous . . .'

Similarly the constraint about verb selection still holds in relative clauses; quantifying adjectives are restricted to complements of the copula, e.g.

28. (a) **dadkii badan noqday*
people+the many became
'The people who became numerous'
- (b) *dadkii dad badan noqday*
people+the people many(are) became
'The people who became numerous'
lit. 'The people who became a numerous people'

It is of course hardly surprising that the same arguments hold since both main sentences and relative clauses are sentences, and since the behaviour of adjectives is the same in both in Somali. One interesting fact, however, is that while *badan* 'many' and *yar* 'few' seem like all adjectives to occur in both restrictive and appositive relative clauses, *dhan* 'all' only appears in appositive relatives. The rest of this section seeks to account for this irregularity, i.e. to explain why *dhan* fails to occur in restrictive relative clauses.

2.2.2. Dhan

The question here is: since the evidence points to *dhan* being an adjective, why is there this idiosyncratic absence from restrictive relative clauses, a normal environment for adjectives? Hitherto I have been glossing *dhan* as 'all', but a more exact description would recognize that it has two possible interpretations, as follows:

⁸ Note that in 25 and 26 the choice of definite article reflects tense: *-kii* 'the' (remote) being used with past tense, and *-ka* 'the' (non-remote) with present tense.

⁹ The Common Somali phonological constraint that word-final nasals must be alveolar nasals explains the alternation *dhan* ~ *dham-* in 26.

- (i) when referring to a single entity :
'complete', or figuratively of a person, 'accomplished'
- (ii) when the reference is plural :
 - (a) 'complete', 'accomplished'
 - (b) 'a full set, all'

Examples of the two interpretations follow in 29 below :

29. (a) *shugulkii wuu dhan yahay*
work+the FOC+it complete is
'The work is complete'
- (b) *gabadhii way dhan tahay*
girl+the FOC+she complete is
'The girl is accomplished'
- (c) *dadkii way dhan yihiin*
people+the FOC+they complete/a full set are
either 'The people are all accounted for/are all here'
or 'The people are accomplished'

In relative clauses *dhan* in the sense of 'complete, accomplished' can occur in both restrictives and appositives, see 30 below, while *dhan* meaning 'a full set, all' only occurs in appositives, as 31 below shows :

30. (a) *gabadhii dhan*
girl+the complete(is)
'The girl who is accomplished'
- (b) *gabadhii oo dhan*
girl+the and complete(is)
'The girl, who is accomplished . . .'
31. (a) **dadkii dhan*
people+the all(are)
'The people who are all', 'all the people'
- (b) *dadkii oo dhan*
people+the and all(are)
'The people, who are all . . .', 'all the people'

In fact 31(a) above is interpreted as meaning 'the accomplished people', emphasizing that the 'full set, all' interpretation is not possible in restrictive relatives.

The reason for this gap seems to me to be due to semantic rather than syntactic factors, and to result from a clash between this meaning of *dhan* and the semantic function of restrictive relatives. I take the latter to be that of picking out or identifying a certain subset of a larger set. So, for example, the interpretation of the restrictive 'The people who are accomplished' (as 31(a) is interpreted) involves an assumption that there exist some people who are not accomplished. To use *dhan* meaning 'full set, all' restrictively like this, i.e. 'the people who are all (the people)' would assume that some of the people referred to are not included in the full set of themselves. In other words, the

result would be semantically anomalous.¹⁰ In order to avoid such an anomaly speakers associate a single interpretation, that of 'complete, accomplished', with sentences like 31(a) above, as opposed to the two interpretations possible for *dhan* in the full sentence counterpart, sentence 29(c) above.

Such a semantic explanation of this gap allows the simplest statement of these Class 1 quantifiers as adjectives.

2.3. Word derivation

There are further arguments for the identification of these Class 1 quantifiers as adjectives which are based on the rules of word derivation. This is because all such rules which apply to adjectives also apply to these quantifiers, and there are no rules which can apply to these quantifiers and not to adjectives. For example, there is a rule which derives nouns from adjectives and which may be schematically represented thus :

ADJ + *aan* → NOUN

This is very similar to the English rule ADJ + *ness* → NOUN, and its operation can be demonstrated as follows :

32. <i>cas</i>	'red'	<i>casaan</i>	'redness'
<i>cad</i>	'white'	<i>cadaan</i>	'whiteness'
<i>og</i>	'aware'	<i>ogaan</i>	'awareness'
<i>xun</i>	'bad'	<i>xumaan</i>	'badness, evil'

The crucial point here is that this process can apply to no other category : for example, it cannot apply to nouns, as the following shows :

33. <i>dogon</i>	'a fool'	<i>*dogonaan</i>	
		but <i>dogonnimo</i>	'foolishness'
<i>naay</i>	'a woman'	<i>*naagaan</i>	
		but <i>naagnimo</i>	'womanliness'

The importance of this rule for the present argument is that it selects as possible inputs the Class 1 set of quantifiers. The following examples show this, and also that the quantifiers cannot undergo the NOUN → NOUN rule shown in 33 above :

34. <i>yar</i>	'few'	<i>yaraan</i>	'fewness, paucity'
		<i>*yarnimo</i>	
<i>badan</i>	'many'	<i>badnaan</i>	'plenty' (from <i>*badanaan</i>)
		<i>*badannimo/*badnimo</i>	
<i>dhan</i>	'full set, all'	<i>dhammaan</i>	'being a full set, entirety'
		<i>*dhannimo</i>	

This rule, then, reinforces all the syntactic evidence that we have seen for an analysis of these Class 1 quantifiers as adjectives.

3. Quantifying nouns

This section presents a number of arguments to demonstrate that the second class of quantifiers, including *dhawr* 'several' and the numerals, are quite straightforwardly nouns, and that they display the syntax of noun phrases. Section 3.1 discusses their role in main sentences and 3.2 their behaviour in relative clauses.

¹⁰ This may be tautology rather than anomaly. One might claim that if the restrictive relative does not subdivide the set of the head noun, but delimits a set co-extensive with the head set, then the clause is not serving any purpose. Thus 'the people who are a full set (of themselves)' might be unacceptable for the same reasons as 'the people who are human', i.e. they are tautologous.

3.1. In main sentences

The following are several arguments that Class 2 quantifiers function as NPs in main sentences.

3.1.1. Subjects and objects

Perhaps the most basic function of NPs is that they occur as arguments of a verb, i.e. they can occur as subjects and objects. As described in 2.1.7 above, quantifying adjectives cannot fulfil this role; Class 2 quantifiers, however, can, as examples 35 and 36 below demonstrate:

35. (a) *dhawr baa keenay*
several FOC(them) brought
'Several brought them'

(b) *labadii way dhinteen*
two+the FOC+they died
'The two died'

36. (a) *dhawr ii keen!*
several me+for bring
'Bring several for me!'

(b) *laba qaado!*
two take
'Take two!'

3.1.2. Relative clause heads

Another basic syntactic fact about NPs is that they may be qualified by a restricting sentence, i.e. they may be the head of a relative clause. In this these Class 2 quantifiers pattern like NPs; in the following examples the quantifiers are relative clause heads:

37. (a) *labadii dhimatay*
two+the died
'The two who died'

(b) *saddezdii aad aragtay*
three+the you saw
'The three which you saw'

(c) *dhawr aan keenay*
several I brought
'Several which I brought'

3.1.3. Clefts

As described in 2.1.4 above, only NPs may be focused by occurring as the complement of a cleft structure, and it was shown that adjectival quantifiers may not so occur. Class 2 quantifiers, however, occur freely in such cases:

38. (a) *waxaan doonayaa waa laba*
thing+the+I want FOC(is) two
'What I want is two'

(b) *wuxuu waayey waa afar*
thing+the+he missed is four
'What he needs is four'

3.1.4. Determiners

A morphological argument that these quantifiers are nouns is the fact that they occur with the full range of NP determiner suffixes. The examples below compare a non-quantifying and a quantifying noun:

- | | |
|----------------------|--------------------|
| 39. (a) <i>ninka</i> | <i>sagaalka</i> |
| man+the | nine+the |
| 'the man' | 'the nine' |
| (b) <i>ninkan</i> | <i>sagaalkan</i> |
| man+this | nine+this |
| 'this man' | 'these nine' |
| (c) <i>ninkaas</i> | <i>sagaalkaas</i> |
| man+that | nine+that |
| 'that man' | 'those nine' |
| (d) <i>ninkayga</i> | <i>sagaalkayga</i> |
| man+my | nine+my |
| 'my man' | 'my nine' |

This parallel means that these quantifiers may be wh-questioned by the interrogative determiner *-kee/-tee*, and when questioned, they occur, like all NPs, leftmost in the sentence:

40. *sagaalkee baad xadday?*
nine+Q FOC+you stole
'Which nine did you steal?'

The arguments presented thus far that these quantifiers act as NPs in main sentences could be augmented by many more of the same type, but all would be subject to the same drawback. This is that, given the formal powers of transformational syntactic models, it is possible to accept the data given above but not the conclusions. Analyses involving empty nodes, feature copying rules etc. could be used to argue that the quantifiers in the above examples only 'appear' to be full NPs. For example, sentence 41 below could be described as being of the structure represented in Fig. 3, in which case *laba* 'two' is treated as an NP, or of the structure in Fig. 4, in which it is some form of noun specifier:

41. *laba ayaa timi*
two FOC came
'Two came'

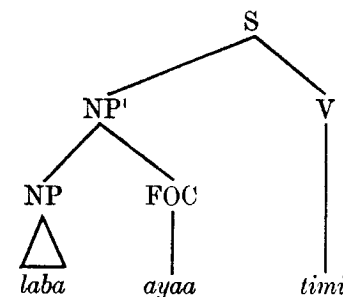


FIG. 3

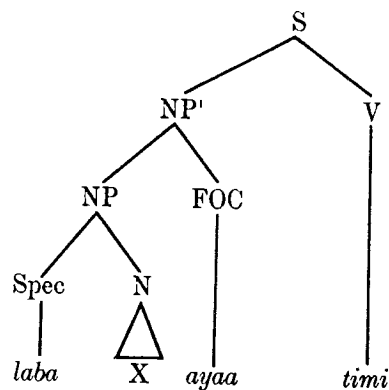


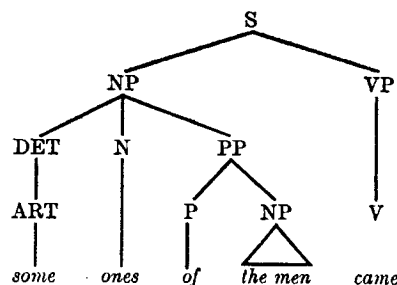
FIG. 4

The basic assumption of any analysis, such as underlying Fig. 4, which would describe a solitary quantifier as specifier of an empty NP is that when the NP is lexically filled, the roles of specifier (the quantifier) and head (the NP) are clear.¹¹ In fact, as section 3.2 will demonstrate, for Somali there are strong arguments to suggest that in quantifying expressions like 'several animals', 'two men', etc., it is the quantifier which is the head NP.¹² If this is so then a solitary quantifier will clearly be able to function as a main sentence NP and analyses which include dummy nodes to preserve a specifier status for quantifiers will be invalidated. Hence the arguments which have been presented in this section crucially depend on those to be given in the next, 3.2.

¹¹ For such an approach see Jackendoff's treatment of English quantifiers (Jackendoff, 1968), where *some* is treated as a determiner in sentences like 1 and 2 below:

1. *Some men came.* 2. *Some of the men came.*

To do this, 2 is given an underlying structure where *some* is the specifier of a noun (*ones*) which does not occur on the surface:



A transformation enables *some ones* to become *some*. Compare this structure with Fig. 4.

¹² There are suggestions in Moreno (1955) that the author considered numerals as possible heads, for example:

'infatti "tre uomini = una terna di uomini" ... *affar nin*, una quaterna di uomini = 4 uomini' (p. 43)

and more explicitly, of numerals functioning as relative clause heads:

'Il numerato può anche, mediante la copula relativa *ék, ah*, essere concepito come il costituente del numeratore, in costruzioni come *labalan lo'-ah*, una ventina che è [di] bovini = 20 bovini' (p. 134)

but these suggestions are not developed.

3.2. In lower sentences

In noun phrases this second class of quantifiers occurs to the left of the quantified noun, as shown below:

42. (a) *dhawr nin*
several man
'several men'
- (b) *laba nin*
two man
'two men'

In this they are unusual, viewed as noun modifiers, for all other modifying elements like determiners and relative clauses occur to the right of the head noun. What structure is attributable to these Quant + N noun phrases? There is strong evidence that they are relative clauses, and perhaps the clearest argument for this concerns their behaviour under co-ordination.¹³

3.2.1. Co-ordination

If a restrictive relative clause is added to one of these Quant + N structures, the co-ordinator *oo* is triggered, as shown below:

43. (a) *laba dhakhtar*
two doctor
'two doctors'
- (b) *laba dhakhtar oo ingriis ah*
two doctor and English are
'Two doctors who are English', 'Two English doctors'

Now *oo* is strictly a sentence co-ordinator, only occurring between main sentences or between relative clauses, while NPs are conjoined by *iyoo*. This can be seen from the following:

44. (a) *nin yimi oo halkan joogay*
man came and place+this stayed
'A man who came and stayed here'
- (b) **nin yimi iyo halkan joogay*
man came and place+this stayed
'A man who came and stayed here'
45. (a) *waxaan arkay nin iyo naag*
thing+the+I saw man and woman
'It was a man and woman I saw', 'I saw a man and a woman'
- (b) **waxaan arkay nin oo naag*
thing+the+I saw man and woman
'It was a man and a woman I saw', 'I saw a man and a woman'

¹³ Note that the absence of an overt verb in examples like 42(a) and 42(b) is not in itself evidence to the contrary. The Copula Reduction rule described earlier operates obligatorily in relative clauses with adjectives, with the result that in certain situations the already reduced clausal form of 'be' is deleted altogether, cf. 25(a), 25(c), 26(a), 26(c), with 25(b), 25(d), 26(b), 26(d). Thus relative clauses without a surface verb are independently generated by the grammar, provided that the verb involved is the copula. Note that the traditional analysis of these structures as genitival constructions, i.e. *laba dhakhtar* = 'two of doctor', still provides an argument that the numeral is a noun. Such an approach would simply argue that the numeral is operating as the head of a nominal construction rather than that of a relative clause.

Sentence 44(b) is ungrammatical because the NP co-ordinator *igo* is used to concatenate relative clauses, while 45(b) is ungrammatical because the sentence co-ordinator *oo* is used to join NPs. Hence the presence of *oo* in 43(b) above suggests that the phrase *laba dhakhtar* is a relative clause. The best approach seems to be to assume that the reduction of the copula seen in earlier examples (see 2.1.5 above) applies here too, deriving 43(b) from 46 below:

46. *laba dhakhtar ah oo ingriis ah*
two doctor are and English are

↓
o

Note that the predicted copula form in such a relative clause would be *ah*, i.e. the bare root form, and that, as described earlier, Copula Reduction normally deletes the root when it applies.

Given that these quantified phrases are relative clauses, the question which arises is: what is the role of the quantifier in these clauses? The rest of this section presents arguments that the quantifier is the head of the clause and that the quantified noun is in the clause predicate. First, though, in case it may be considered implausible that the quantifier be a head and the quantified noun part of the predicate, it may be useful to present the very common structure found in 47 below, in which precisely this occurs:

47. *in yar oo sonkor ah i sii*
amount small(is) and sugar is me give
'Give me a little sugar'
lit. 'Give me an amount which is small and which is sugar'

Here the noun which in English might be considered the head, 'sugar', occurs in the predicate of its relative clause.

3.2.2. Choice of co-ordinator

One good argument that it is the quantifier which is head and not the quantified noun, concerns the form of co-ordinator that is triggered, as described earlier, when another restrictive relative clause is added. When two relative clauses are attached to a head noun there is a choice of co-ordinator depending on whether the head noun is defined. Head nouns which have the definite article trigger the co-ordinator *ee* while undefined headwords take *oo*. This can be seen from the following:

48. (a) *koodh cusub oo cagaaran*
coat new(is) and green(is)
'a coat which is new and which is green', 'a new green coat'
(b) **koodh cusub ee cagaaran*
coat new(is) and green(is)
'a coat which is new and which is green', 'a new green coat'
49. (a) *koodhka cusub ee cagaaran*
coat+the new(is) and green(is)
'the coat which is new and which is green', 'the new green coat'
(b) **koodh cusub oo cagaaran*
coat+the new(is) and green(is)
'the coat which is new and which is green', 'the new green coat'

Sentence 48(b) is ungrammatical because *ee* 'and' is used with an undefined head noun, while 49(b) is impossible because *oo* 'and' occurs with a defined head noun. The definiteness or otherwise of NPs other than the head is irrelevant to this constraint.

When Quant + N sequences are defined the determiner is attached to the quantifier but not to the noun; hence the relative clause contains two nouns, a defined noun (the quantifier) and an undefined noun (the quantified noun). Adding another relative clause allows us to see, by the choice of co-ordinator, which of these nouns is head:

50. (a) *labadii nin ee lacag keenay*
two+the man and money brought
'the two men who brought some money'
(b) **labadii nin oo lacag keenay*
two+the man and money brought
'the two men who brought some money'

The choice of co-ordinator in 50 above accords only with a defined head, arguing that the quantifier is the head. The only alternative is to state that *nin* 'man' is the headword in 50(a) and does have the determiner associated with it—thereby triggering *ee*—but that for some reason the determiner is attached elsewhere. This means making these quantifier relative clauses exceptions to the general rule that the determiner must be attached to the head. Further, we also have to find an explanation for the idiosyncratic word order: the quantifier, as well as usurping the determiner, occupies the position which everywhere else is restricted to, and obligatory for, head nouns. This is already suspiciously complicated and becomes even more so when the following arguments are also considered.

3.2.3. Adjectival agreement

This argument is based on the fact that the quantified noun in the clause is always singular; for examples see the literal glosses to 42, 43, 50 above.

There is a subset of adjectives that are morphologically marked for the singular and plural distinction: their plurals are marked by reduplication. See, for example, the following:

51. (a) *waxaan arkay nin dheer*
what+I saw man tall(is)
'What I saw was a tall man'
(b) **waxaan arkay nin dhadheer*
what+I saw man tall(is)(is)
'What I saw was a tall man'
52. (a) *waxaan arkay niman dhadheer*
what+I saw men tall(are)
'What I saw was some tall men'
(b) **waxaan arkay niman dheer*
what+I saw men tall(are)
'What I saw was some tall men'

In the above examples, *nin* being singular takes *dheer* while *niman* as plural takes *dhadheer*, the reduplicative form.

The agreement pattern of numerals with adjectives is as we might expect: *mid* 'one'¹⁴ takes singular adjectives while *laba* 'two', *saddex* 'three', etc., occur with plural adjectives. Thus:

53. (a) *i sii mid dheer*
me give one tall(is)
'Give me a tall one', 'Give me one which is tall'
- (b) **i sii mid dhadheer*
me give one tall(is)
'Give me a tall one', 'Give me one which is tall'
54. (a) *i sii laba dhadheer*
me give two tall(are)
'Give me two tall ones', 'Give me two which are tall'
- (b) **i sii laba dheer*
me give two tall(are)
'Give me two tall ones', 'Give me two which are tall'

Sentences 53(b) and 54(b) are ungrammatical because the adjectives do not agree in number with the head nouns.

Thus in a Quant + N structure like *laba nin* 'two men' where the numeral is plural and the quantified noun singular, the two elements can be predicted to trigger different adjectival forms. This allows the use of an additional adjectival relative clause to identify the head: since the new clause will be attached to, and agree in number with, the original headword, the form of the adjective will identify which noun is head word. Compare sentences 55(a) and 55(b) below:

55. (a) *waxaan arkay laba nin oo dhadheer*
what+I saw two man(are) and tall(are)
'What I saw was two tall men'
- (b) **waxaan arkay laba nin oo dheer*
what+I saw two man(are) and tall
'What I saw was two tall men'

As 55 above shows the adjective must be plural in form, which means that the headword must be a plural noun. If *laba* is the head, then this is perfectly regular; but an analysis of *nin* as the head would mean complicating either the rules for marking plural on these adjectives or the rules of agreement between nouns and adjectives. Again, the cost of not treating these quantifiers as heads is additional irregularity in the grammar.

¹⁴ Note that all Somali dialects make a distinction between the cardinal number 'one' which is *kow*, only used in counting, and the quantifier *hal* 'one'. The present study is only concerned with the latter. In addition Common Somali, unlike Central Somali, distinguishes between this quantifier when it occurs alone, where it is *mid*, and when it occurs with NPs, where it is *hal*. This is not so of any other numeral and so will be an idiosyncratic fact in any description of the numerals.

3.2.4. Verb agreement

A very similar argument can be made about verbal concord. Normally, when a relative clause is subject of its main sentence there is concord between the head of the clause and the main sentence verb, e.g.

56. (a) *ninkii lacagtii keenay wuu tegay*
man+the money+the brought FOC+he went
'The man who brought the money has gone'
- (b) *gabadhii lacagtii keentay way tagtay*
girl+the money+the brought FOC+she went
'The girl who brought the money has gone'

Now as with adjectives the numeral *laba* 'two' takes plural concord with verbs and the noun *nin* 'man' singular concord, as witness the following:

57. (a) *ninkii wuu tegay*
man+the FOC+he went
'The man went'
- (b) **ninkii way tageen*
man+the FOC+they went
'The man went'
58. (a) *labadii way tageen*
two+the FOC+they went
'The two went'
- (b) **labadii wuu tegay*
two+the FOC+he went
'The two went'

So, as is clear from the above, the concord pattern of the relative clause *labadii nin* 'the two men' within a main sentence will show the number of its headword:

59. (a) *labadii nin way tageen*
two+the man (be) FOC+they went
'The two men went'
- (b) **labadii nin wuu tegay*
two+the man FOC+he went
'The two men went'

The examples above show that the main sentence verb is selecting as head a plural noun, and of the two relative clause nouns, only the quantifier takes plural verb concord. The alternative to recognizing *laba* as the head in 59(a) above is to say that here *nin*, unlike *nin* everywhere else in the grammar, takes plural verb concord. Whether this is said to be a plural noun appearing as morphologically singular, or a singular noun taking plural verb concord, it is clear that there is considerable irregularity involved. In an analysis of the quantifier as head, however, these structures are perfectly regular.

3.5. Deletion

The structure assigned to restrictive relative clauses, for example that in Fig. 5 below, correctly predicts that deleting the restricting sentence from the head NP will result in a grammatical sentence, as 60 below shows:

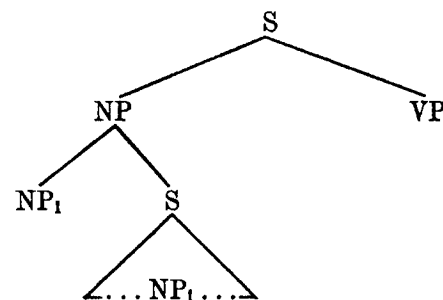


FIG. 5

60. (a) *ninkii lacagtii keenay wuu tegay*
 man+the money+the brought FOC+he went
 'The man who brought the money has gone'
 deletion

- (b) *ninkii wuu tegay*
 'The man has gone'

But, of course, deleting the head NP and leaving the rest of the relative clause will result in an ungrammatical sentence; for example, the following would be produced from 60(a) above:

61. **lacagtii keenay wuu tegay*
 '*who brought the money died'

Now in the Quant-N-(be) relatives under discussion, it is the quantified noun, not the quantifier, which can be deleted to leave a grammatical sentence as 62 below shows:

62. (a) *labadii nin way tageen*
 two+the man FOC+they went
 'The two men have gone'

- (b) **nin way tageen* (Quantifier deleted)
 man FOC+they went
 '* (who)man(are) have gone'

- (c) *labadii way tageen* (Quantified noun deleted)
 two+the FOC+they went
 'The two have gone'

The simplest way to account for the facts of 62 above is to recognize the quantifier as head of the relative clause.

4. Conclusion

There is then considerable syntactic evidence that quantifiers belong to two distinct syntactic classes, adjectives and nouns, and that in quantifying expressions they perform syntactic roles usual for these classes everywhere in the grammar. Class 1 quantifiers must occur as complements of the copula in main sentences and relative clauses since this is a constraint governing all adjectives. Class 2 quantifiers occur wherever nouns may do so, and in

This regularity would be disguised by any attempt to identify a single syntactic class of quantifiers: such an approach would mean complicating, for just this area, descriptions of many of the basic processes of the grammar, including relativization, verb and adjective agreement, word order, number marking and word derivation. This is scarcely surprising when one considers that the task of such an approach would be to explain why, of a proposed syntactic class, some members act like adjectives and others like nouns.

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