Structural Complexity and the Acquisition of the Hq Nominal Group Type in English

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ABSTRACT

The aim of this study was to find out whether our observations that secondary school students made more mistakes when they used the hq nominal group (NG) structures than when they used any other structure including the mhq is scientifically verifiable. The data used for the study were written English compositions by 250 students randomly selected from five secondary schools in the Ede Zone of Osun State. Having analysed their written tasks, it was found that the hq type, which is structurally less complex than the mhq type, was more difficult to acquire. The study therefore recommended that the mhq type of NG should be taught before the hq type as the hq type did not have to be acquired before the mhq type.

Keywords: nominal groups, hq type, grammatical structures

INTRODUCTION

The business of teaching and learning of the English Language in most Nigerian secondary schools, and perhaps in some of our higher institutions of learning, has been confronted with a myriad of methodological and socio-economic problems. These problems include, inter alia, the shortage of specialist teachers of English in our secondary schools, a lack of functional language laboratories, the inability of writers of English textbooks for Nigerian students to use contrastive analysis techniques in writing the books, and, of course, the incessant strike which has become a remarkable feature within the educational sector for some years (Etim, 1982; Seweje, 1998).

These problems definitely have adverse effects on how much of the English Language is taught and learnt in our schools, especially the secondary schools. Statistics show that the poor performance of secondary, and implicitly post-secondary, school students did not start yesterday. For instance, as far back as 1978 the Chief Examiner's Report in English Language for the West African School Certificate (WASC) said, concerning the examination of that year, that

> Performance this year has given cause for worry. Even some of the traditionally good schools performed below expectations. Reasons for this may be best left to the schools, but the general impression is that

teaching has not been as effective as in the previous years; this is evident from the students' performances.

As is evident from the quotation above, the poor performance of students has been a recurrent feature for almost two and a half decades. This canker has extended to the university level, as many undergraduates cannot write a page without grossly distorting the norms of grammar.

This paper sets out to investigate the acquisition of the postmodified nominal group type (the hq type) in relation to its structural complexity among the structural types of the English nominal group (ENG). The need for this study is predicated on the fact that as language teachers, if we are aware of the levels of difficulties of the various grammatical structures, we will be better equipped to plan the teaching of the content of an English syllabus in such a way that will facilitate learning. The awareness of the degrees of complexity of grammatical structures will also help us to develop good strategies to teach them. For instance, a teacher may prefer a holistic, natural approach over an isolationist one by creating a setting through which all the structures could be mastered gradually and naturally. On the other hand, another teacher may emphasize the explicit teaching of the structures one after the other. Whichever method a teacher decides to employ should, however, be determined by a number of factors such as the age of the pupils, their level of competence in English and so on. This study will also help secondary and post-secondary students to get over the grammatical problems they usually have with the use of the hq-type nominal group in English.

1. STUDIES ON LANGUAGE ACQUISITION

Language acquisition is very crucial in Applied Linguistics. Theories exist on how children learn a particular language, and among these theories are the imitation theory, reinforcement theory and natural order hypothesis. Most of these theories, however, unanimously support the view that children learn simple structures first before they acquire complex ones. There is also some agreement among scholars that the sequence of the acquisition of grammatical structures by adults (while learning a second language) is similar to that found for children (Dulay and Burt, 1973; Bailey, Madden and Krashen, 1974). The above claim is also supported by the natural order hypothesis. From Fromkin's and Rodman's (1974:322) point of view, "language acquisition is grammar construction" because a child "acquires the rules of the grammar in stages of increasing complexity". Krashen (1982:12) seems to be reiterating this when he says:

One of the most exciting discoveries in language acquisition research in recent years has been the finding that the acquisition of grammatical

structures proceeds in a predictable order. Acquirers of a given language tend to acquire certain grammatical structures early and others later.

The present study does not, however, confirm that Krashen's "predictable order" of the "acquisition of grammatical structures" is universal.

A lot of studies have been carried out in English to corroborate the basic thrust of the natural order hypothesis. Brown and Hanlon (1970) and Dulay and Burt (1974), among very many others, support the view that children acquire certain grammatical morphemes and function words earlier than others. For instance, the -ing (as in "I am going") and the plural marker s (as in "I have two pencils") are acquired before the concord marker s (as in "He goes everyday") and the possessive marker s (as in "that is Bola's pen"). In the same vein, declarative sentences such as "He comes everyday" are acquired before interrogative sentences such as "Does he come everyday?"

A renowned linguist, Kessler, investigated the acquisition of syntax by some Italian/English bilingual learners in 1971. The study focusses on the "late-developing structures represented by a broad range of syntactic processes and selected features of the inflectional system" (Kessler, 1971:26). It is found that the structures common to the two languages (i.e. English and Italian) develop in the same sequential order and are also acquired earlier, while those features that are either Italian or English specific develop much later. In a related study, Okanlawon (1987) carried out a study on the acquisition of the article system of English by some Yoruba and Igbo secondary school pupils. As part of the elicitation instrument, he gives his subjects three passages in which articles having different linguistic features and environments are deleted. The subjects are then asked to fill the gaps with any of the articles a, an, the or ∅ article. The study reveals that the two groups of learners (Igbo and Yoruba) go through similar developmental sequences in the acquisition of the English articles. He suggests that teachers of English in Nigeria should use his findings as bases for the teaching of English and that the order of acquisition reported by him should be used for the arrangement and sequencing of teaching materials.

There is no doubt that the acquisition of various grammatical structures goes a long way in improving the communicative competence of learners. This concept of communicative competence is a broad idea which subsumes the grammatical competence, the sociolinguistic competence and the strategic competence (Yule, 1996). It is a little wonder then that Yule (1996:191) sees the acquisition of a language as "the gradual development of ability in a language by using it naturally in communicative situations".
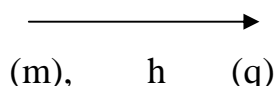
2. THE NOMINAL GROUP

The nominal group is one of the three major classes of groups recognised by systemic linguistics (Halliday, 1994). The systemic model which the present

author will use has as its basic thrust the idea that language cannot function in isolation. The apostles of this theory believe that, since languages exist in societies, the study of a particular language should be done within the sociolinguistic milieu of the society in which it is used. According to this model, there are three major functions of language, namely, the ideational function, the interpersonal function and the textual function (Halliday, 1970).

The nominal groups of interest to us in this paper are defined by Halliday (1977:7) as "…nouns plus their determiners and any other modifiers…". Most scholars like Berry (1977), Halliday (1994), Muir (1972) and Tomori (1977) agree that the components of the nominal group (NG) in English comprise the modifier (m), headword (h) and qualifier (q). They also agree that the modifier and the qualifier are optional elements while the headword is the only obligatory element in the structure of the ENG. On the structure of the English nominal group, Muir (1972:26) says:

> The elements m, h, q are the elements of structure whose particular configuration (h, mh, hq, mhq) will form the structure of any given nominal group. Such <u>h</u> is an obligatory element, but <u>m</u> and <u>q</u> are optional and dependent, we may list the primary elements of structure of the nominal group as:
>
> (m),   h   (q)

In Halliday (1994), the elements of ENG are accounted for in various types of structural organisation from the <u>Thing</u> to the Deixes. He claims that "the element we are calling 'Thing' is the semantic core of the nominal group. It may be common noun, proper noun or (personal) pronoun" (Halliday, 1994:189).

Since our subjects are Yorubas (second language users of English), it is pertinent to examine the works of some notable applied linguists who use Yoruba speakers of English as their informants. Although using the same linguistic theory, albeit different versions of the model, the structure of the NG in Yoruba has been described by different scholars in two different ways. Bamgbose (1966) believes that the structure of the Yoruba nominal group (YNG) is h(q) and that there is no modifier in the YNG's structure. Afolayan (1968) contends that the structure of the YNG is (m),h,(q). However, they both agree that the structure is endocentric with the 'thing' (i.e. head) as the obligatory element. They also admit that the qualifier is optional and it serves as a modifying element. With Bamgbose's recognition of the 'qualifier' as the only element of modification, there are two nominal group structural types in Yoruba, namely the h-type and the hq-type. On the other hand, we can recognise four structural types of YNG if we support Afolayan's view that, in addition to the <u>q</u> element, there is also the <u>m</u> element. The structural types proposed by Afolayan, which incidentally coincide with the structural types in English, are the <u>h</u>-type, the <u>mh</u>-type, the <u>hq</u>-type and the <u>mhq</u>-type.

It is Halliday's treatment of the structural types of ENG that we shall adopt in this paper. The structural types are:

(a) <u>The unmodified head type</u> (the <u>h</u> type):

This is the type of nominal group that is neither premodified nor postmodified by any element. The items that can operate as the headwords of the h-type are mostly plural count nouns. It must be noted that singular count nouns cannot operate as the headword here. Examples of items that can operate as the headwords here are used and underlined in the sentences below:

    i.   Plural Count Nouns:
        <u>Books</u> are costly
        <u>Geese</u> are beautiful
    ii.   Pronouns:
        He/She/They/We/You came
    iii.   Proper Nouns:
        <u>Amos </u>is dying
        <u>Lagos</u> is a metropolitan city
    iv.   Abstract Nouns:
        <u>Death</u> is a thief
        <u>Happiness</u> will elude him.
    v.   Deverbalized nouns:
        <u>Swimming</u> is good.
        My hobby is <u>dancing</u>.

(b) <u>The Premodified head type</u> (the <u>mh</u> type)

These are the nominal groups that have modifiers before them but have no postmodifying element. Most of the nouns that function as the h-type except proper nouns can also function as the headwords in the mh-type. In addition, adjectives can also function as the headwords here but when they do, they must be preceded by <u>the</u>. These de-adjectival nominals are always plural in meaning and so they are followed by plural verbs. Examples of the mh-type nominal groups are underlined below:

                    m   h
    i.   <u>The beautiful expensive Brazilian/chairs </u>are expensive.

                     m   h
    ii.   <u>The Ibadan University Bookshop/manager</u> died yesterday.

       m   h
    iii.   <u>The/poor</u> are loyal.

(c) <u>The Postmodified head type</u> (the <u>hq</u> type):

This type of NG has no element before the head but it has at least one element after it. The items that can function as the qualifier are of different types here and these include:

i.   Reflexive pronouns such as:

   h   q
You/<u>yourself</u> should go.

   h   q
They/<u>themselves</u> can do it.

ii.   Adjectives such as:

     h   q
Something/<u>sweet</u> is what I need.
Somebody/<u>nasty</u> did this.

iii.   Prepositional groups such as:

    h   q
Somebody/<u>in the class</u> stole my pen.

    h   q
Lawyers/<u>of our time</u> are bold.

iv.   Rankshifted clauses such as:

   h   q
Doctors/<u>who came yesterday</u> will come today.

   h   q
Cars/<u>which are expensive</u> are not easy to come by.

v.   Pronouns postmodified by rankshifted clause such as:

   h q
He/<u>who laughs last</u> laughs best.

   h   q
Those/<u>living in glass houses</u> must not throw stones.

(d) <u>The pre and postmodified head type (the mhq type):</u>

The mhq type is the type of NG that usually has at least one element before and after the headword. The examples below illustrate this.

      m   h   q
i.   <u>The old/boy/in the class</u> came.

      m   h   q
ii.   <u>The</u>/<u>woman</u>/<u>who came here</u> must be stupid.

Proper nouns which do not normally function as h in <u>hq</u> structures occur in <u>mhq</u> structures. For instance, we can have:

    m   h   q
   "<u>The</u>/<u>John</u>/<u>I know</u> never smokes"

As these four structural types obviously vary in degree of complexity, one would expect that the <u>mhq</u> structural type, which seems to be the most complex type because it has both the pre- and postmodifying item(s), would be the most difficult type to learn. As hinted earlier in this study, the reverse is the case. This study will, therefore, place in question the erroneous assumption that the <u>mhq</u> NG type is more complex than the <u>hq</u> NG type for language acquisition purposes. This is because the subjects for this study showed that they acquired the <u>mhq</u> type more readily than the <u>hq</u> type and, when they used the <u>mhq</u> type, they did not make mistakes compared with when they used the <u>hq</u> type.

3. THE OBJECTIVE OF THE STUDY

The objective of this research is to find out whether our suspicion that secondary school students made more mistakes when they used the <u>hq</u> NG structures than when they used any other structure including the <u>mhq</u> can be supported by data. If this could be established, it would imply that the <u>hq</u> structures are more complex than the <u>mhq</u> and other structural types. This would further imply that in a second language environment the teaching of the grammatical correctness of the q elements in the <u>hq</u> structural type should be emphasized and that this structural grammatical correctness must enter into the list of relevant factors to be considered at every stage of language acquisition. In order to test our observation, a study was conducted between 1998 and 1999 on the nominal group in the written English of Senior Secondary School II (SSS 2) pupils in the Ede Zone of Osun State, Nigeria.

4. RESEARCH METHODOLOGY

The data used for this study consisted of the written English compositions of 250 SSS II students drawn from five randomly selected secondary schools in four Local Government Areas (LGA) which made up the Ede Zone of Osun State. Fifty subjects were selected from each of these schools.
  The subjects were asked to write a composition on any one of the following topics:

(1) One good turn deserves another
(2) How I celebrated my last birthday
(3) The best football match I have ever watched.

The scripts collected from our subjects were scored for occurrences of the various structural types of nominal group. Two methods are employed in the analysis of the data collected. First, the relative frequency percentage (RFP) was used to determine the percentage of the occurrences of each of the structural types of ENG in each school. The formula used to find the RFP is:

$$\frac{\text{Total Number of the Nominal Group type Y used}}{\text{Total Number of all Nominal Group types}} \times \frac{100}{1}$$

Second, we used a t-test to determine whether or not the difference between the usage of the hq type and the mhq type is significant.

Table 1. Occurrences of the Nominal group types.

School	Total No Of Subjects	Total No of NG	H type		Mh type		Hq type		Mhq type	
			No	%	No	%	No	%	No	%
A	50	2487	1450	58.30	838	33.70	74	2.98	125	5.03
B	50	1914	977	51.04	775	40.49	49	2.56	113	5.90
C	50	1832	981	53.55	734	40.07	37	2.02	80	4.37
D	50	3406	1832	53.79	1379	40.49	57	1.67	138	4.05
E	50	1902	975	51.26	841	44.22	27	1.42	59	3.10
Total	250	11541	6215	53.85	4567	39.57	244	2.11	515	4.46

As shown above, the total number of nominal groups used by the 250 subjects was 11,541. The NGs were divided into four in terms of their degrees of complexity. Out of the four structural types, the simplest form, which is therefore the earliest one to acquire, is the h-type, since 6,215 (53.85%) examples were found in the data. This structure is followed by the mh-type in terms of complexity. A total of 4567 (39.57%) cases of the mh-type were used. While 515 (4.46%) instances of the mhq-type were used, only 244 (2.11%) examples of the hq-type were used by the subjects. It is not difficult to conclude that out of the four structural types of NG the h-type and the mh type are the simplest structures, especially when we consider the fact that out of 11541 examples of all the NG used, the h-type and the mh type accounted for 93.42% (10,782 examples).

Table 2. Difference in mean acquaintance with hq and mhq structures.

Structure	No	$\bar{x}$	SD	Df	t_c	t_t	P
Hq	5	48.8	18.1				
Mhq	5	103.0	32.7	4	3.0	2.8	0.05

It could be observed from the table above that with the calculated t-value (3.0), there was a significant difference in the usage of the hq and mhq types. The mean ($\bar{x} = 48.8$ and $\bar{x} = 103.0$) for the hq and the mhq types respectively also showed that the subjects had a greater mastery of the mhq than the hq type.

It would appear from the data that the subjects always found it difficult to construct nominal groups with qualifiers and even when they did, they made mistakes. It is interesting to note that, contrary to common sense belief, while the subjects did not have any problem with the correct usage of the qualifier in mhq structures, they had problems with the qualifier in hq structures. All these are pointers to the fact that the hq structure is more difficult to learn than the mhq structure in English. The table below shows the number of errors made in each of the structural types:

Table 3. Error Frequency as a Determinant of Complexity.

Structural Types	Structural occurrences		Error frequency	
	N	%	N	%
H	6215	53.85	105	1.69
Mh	4567	39.57	211	4.62
Hq	244	2.11	163	66.80
Mhq	515	4.46	109	21.17

As has been explained earlier, the table above (i.e. Table 3) shows that the **hq** type is the most difficult to master by our subjects. In the first place, it is the least used of the four types. Secondly, it is the only structure in which we recorded the highest percentage of errors. While there was no structural type in which we recorded up to 25% error frequency, the error frequency recorded for the **hq** structure was 66.80%. Apart from the figures shown in the data above, we would like to justify the point that we are making by comparing the mhq constructions and the hq constructions in the sentences used by some of the subjects.

The mhq Constructions	The hq Construction
m h q (i) "an/accident /on the road"	h q (i) "One/ of his mate
m h q (ii) "the/ capital /of Nigeria	h q (ii) "One /of his cousin's brother
m h q (iii) "the /price/ of goods	h q (iii) "Ten /out of it"
m h q (iv) "the /planting/ of sweet potato"	h q (iv) "Two/of our teacher"

As shown above, when the subjects used <u>mhq</u> structures there were no grammatical errors, but when they used the <u>hq</u> type there were grammatical errors; specifically errors of numbers. For example, instead of "one of his mates", they wrote "one of his mate". They were, therefore, ignorant of the rule that any noun or noun phrase that follows a "one of" construction must be in its plural form.

We also observe that out of the six different <u>hq</u> permissible constructions discussed earlier in this paper, the only one they knew how to use was the headword plus the prepositional group type. This made the <u>hq</u> structures in the compositions unnecessarily drab, severely monotonous and limited.

4.1 PROBLEMS WITH THE USE OF HQ CONSTRUCTION

There are limitations which serve as constraints and therefore do not allow for the free use of the <u>hq</u> constructions. The first of these limitations is that it is not all types of nouns that can operate as the headwords in <u>hq</u> constructions. For instance, singular count nouns cannot function as the headwords of the <u>hq</u> constructions. So it will be wrong to have:
    *Boy who came yesterday is around.
    *Pencil on the table are to be sold.

Also, the subjects do not seem to know that items such as adjectives, adverbs, reflexive pronouns and rankshifted clauses can come after the headwords in <u>hq</u> constructions; hence, they did not use such constructions as:

              h   q
    (i)   <u>Somebody /stupid</u> did this.

              h   q
    (ii)   <u>He/himself</u> came then.

        h   q

(iii)   <u>Those/who came</u> did it.

In view of the foregoing, we can reasonably conclude that the postmodified head type (<u>hq</u> type), though structurally less complex, is more difficult to acquire than the pre- and postmodified head type (the <u>mhq</u> type). Given this conclusion, we would like to recommend that all the structural types of the NG should be carefully taught by the teachers. And following the natural order hypothesis, since it has been discovered that the <u>mhq</u> type is simpler than the <u>hq</u> type, for pedagogical efficacy the <u>mhq</u> type should be taught before the <u>hq</u> type.

Furthermore, we would like work to be done on the <u>mhq</u> and <u>hq</u> aspects of nominal groups in English and other languages with mother-tongue speakers in order to apply the principle of scientific verifiability to our hypothesis and inferences. In fact, Ekundayo (1999) has devised a set of Yoruba nouns labelled "defective nouns" because they do not constitute single element nominal groups, that is, they must be premodified before they can be grammatical in structure. English singular count nouns, when not used in generic structures, were also mentioned there as defective noun equivalents for English. Examples of such English singular count nouns are <u>man</u>, <u>woman</u>, <u>boy</u>, etc.

In addition, we would also suggest that even though syntactic complexity provides a natural order explanation to language acquisition, structural grammatical correctness is a more potent factor for the qualitative aspects of the language learnt or acquired. This suggestion does not contradict the view of Fromkin and Rodman (1974:322) that language "acquisition is grammar construction" because it only implies that the grammar of English <u>mhq</u> constructions is acquired independently of <u>hq</u> constructions. Since not all the <u>heads</u> that function in <u>mhq</u> constructions can operate correctly in their <u>hq</u> counterparts, <u>hq</u> does not necessarily have to be acquired before <u>mhq</u> in the English nominal group.

Finally, we would like to appeal to writers of English textbooks and curriculum planners to use the findings of this study for improvement in the writing of textbooks and syllabus development. Teachers of English in Nigeria should also use the findings in teaching their students.

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