# Ambiguity in English Quantifiers in Second Language Learning Context 

Oremire Judith Ehibor, PhD<br>Covenant University<br>Ota, Ogun State


#### Abstract

Language is a system of symbols, signs and vocal acts, randomly created but conventionally used in communication. Over time, English language in Nigeria, which is a multilingual country, has been characterized by certain features. One of them is the ability of English L2 learners/users to structure the language to meet their communication needs. Owing to ambiguity in some aspects of the language, many L2 learners/users of English have been faced with diverse challenges of correct usage. These difficulties are reflected in the language of secondary schools students which was examined to assess their understanding and correct usage of English quantifiers in an L2 learning context. Using Krashen's Second Language Acquisition/Learning theory, this study sets out to investigate ambiguity in quantifiers among L2 users of English. It also aims to highlight areas of difficulty for L2 users of English in order to draw the attention of teachers of the subject to these challenges.


Keywords: quantifiers, ambiguity, second language learners, second language acquisition/learning theory

## Introduction

Every natural language is structurally organized with rules and principles that guide its formation and characterization. Nigeria, a multilingual nation, has several factors that characterize its language systems. The variety of English bequeathed to Nigeria came about with colonization by the British Empire, especially as the colonizers could not communicate effectively with natives. English language was then introduced to breach the communication gap between the colonial masters and their subjects.
Over the years, English in Nigeria, both spoken and written has been characterized by certain features; one of which is the ability of English language users to structure the language to meet their communicative needs. English is used as a second language in Nigeria; thus, consciously or unconsciously, Nigerian users rely on their $\mathrm{L}_{1}$ in some cases to provide syntactic, semantic and pragmatic interpretations of English expressions. A second language refers to the language learnt after a first language has been acquired. It is the process by which other languages are learnt in addition to one's mother tongue or a language that was first acquired. The English language, for instance, is taught and learnt as a second language; so going by the fact that the world is growing into a global village, there has been a rise in migration of people from one part of the world to another, thus, necessitating cultural interaction. Subsequently, English began to play the role of medium of interaction. In Nigeria, the English language has acquired an official status in being the language of education, business, commerce, government, etc.
Despite the status of the English language in Nigeria, learners still encounter difficulties in effective learning and efficient usage. One of such areas where difficulty is
reflected is in Quantifiers. Quantifiers are words that are used to indicate quantities. In such expression: "Every man loves a woman"; the words "every" and "a" are quantifiers. Such expressions could pose a problem to a second language learner of the English language, since it has more than one meaning. It could mean that every man loves a particular woman or each man loves a particular woman; and the third meaning could be that, for every man, there is a woman that he loves. Other contextual problems could result or some other factors. Quantifiers generally pose a variety of problems to second language learners especially in Nigeria. This has resulted in incorrect usages. Going by the fact that very few research have been carried out on the use of quantifiers and its interpretations in Nigeria, this study examines quantifier ambiguity among second language learners in Nigeria.

## Concept of Quantification

Quantification is an integral part of a language system. The study of quantification began in logic, starting from the work of Aristotle (Haller, 1996). Logic studies patterns of coherent or consistent speech, but seeks to search for inconsistencies in writings or reports as well as identify valid and invalid forms of reasoning or argument. It is based on the assumption that there are statements that are necessarily true which cannot be falsified no matter what is or is not the case. From this viewpoint, quantification evolved as an approach to the study of speech patterns in logic. This study focuses on the meaning and inferential characteristics of quantifiers. Aristotle proposed that quantified sentences have the form XYZ where X is chosen from a set of general features (Peter \& Westherstal, 2006)
This thread of expansion is related to syllogism. Linguistics has borrowed heavily from logicians in semantically analyzing
what quantifiers mean. Some scholars like Frege and Montague (1989) came up with theories for quantifying sentences. Peirce (1885), in Peters \& Westhershal (2006), identified two fundamental kinds of quantification in predicate logic which are Universal and Existential Quantification. The traditional symbols for these types of quantification are:

1. An inverted ' A ', that is $\forall$ (meaning 'for all') universal quantification, and
2. A rotated ' $E$ ', that is $\exists$ (meaning 'there exists') for existential quantification.

Over time, the study of quantification has become relevant in linguistics since it is a strong feature for determining grammatically correct utterances.

## Quantifiers in English

Quantifiers are linguistic expressions that specify or quantify a set. They come in many syntactic categories in English, but determiners like "all", "each", "some", "many", "most", and "few" provide some of the most common examples of quantification. In linguistics, a quantifier is a type of determiner such as all, a, some, many, few, a few, a lot, etc., that indicate quantity. It is a word/phrase used before a noun. They modify nouns or pronouns to indicate amount or quantity. Quantifiers state precisely, the amount or number of a noun. They can be grouped by the noun types they qualify. Often, sentences with quantifiers could be ambiguous owing to interpretations constrained by structural or lexical information such as the active/passive voice, or an overt distributive operator such as 'each' or the presence of 'together' (Syrett \& Lidz, 2011). An illustration of how some of these quantifiers are used in sentences is presented below.
Some and Any: These are quantifiers or determiners that express an indefinite
quantity or number. They are used when it is not necessary or important to state precisely how many or how much of something referred to. They are both used with countable and uncountable nouns. The quantifier 'some' is usually used in affirmative statements, requests, or offers.
Examples with countable nouns:

1. There are some drinks in the refrigerator.
2. Please, give me some fruits.
3. Do you care for some apples?
4. I need some plates of rice.
5. There isn't any dirty plate in the kitchen.
6. The culprit could be any of her siblings.
7. Is there any leftover apple in the house?
8. Are there any housekeepers in the store?

Examples with uncountable Nouns:

1. I need some fresh air.
2. Please give Stella some water to drink.
3. She showed me some love, please.
4. I got some spice for cooking.
5. There isn't any water in the jar.
6. There isn't any salt in the store.
7. Any kind of rice would be good.
8. Any gas level will do.

Many and Much: Both words are used to express a large quantity. The word 'Much' is used with uncountable nouns to mean a large amount of something. It is also used after the word 'how' to ask about the amount of something, as well as used alongside 'as', 'so' and 'too'. "Many" is a determiner used with plural nouns and verbs to mean a large number of something. It is used in questions to enquire about the size of a number, and with 'as', 'so' and 'too'.

## Few/a Few and Little/a Little

'Few' is used to mean that something is not many (small number). It is a determiner used
with plural nouns and plural verbs. It indicates a small quantity of something. It connotes negation compared to 'a few'. 'A Few' almost like 'few', is used to mean some number of people, places or thing, but never enough or sufficient. It denotes positivity compared to 'few'. It is usually more than 'few'. 'Little' is another quantifier used to imply that something is not big, that is, something is small or smaller than an anticipated quantity (not much, not enough, or almost finished). 'A Little' is used with uncountable nouns to mean a small amount of something. The phrases almost have the same meaning as 'few' and 'a few'. The major difference between the two is that, while 'few' is used for countable nouns, 'little' is used for uncountable nouns. A Lot of: This is a determiner or quantifier used in informal speeches to mean a large number or amount of something. It can be used in almost all forms of propositions. It is not limited like 'much', 'many', 'few', 'a little', and many others. It can be used interchangeably with 'much' and 'many'. In place of 'a lot', we can use 'lots of', which is an informal realization of the former.
Other quantifiers can be grouped into:

1. Quantifiers that occur with singular count nouns: each, every, either, and neither.
2. Quantifiers used with plural count nouns: A few, fewer, many, great many, several, a number of, plenty of, a lot of/lots of, enough, any, and some.
3. Quantifiers used with non-count nouns: plenty of, enough, any, some, less/more, and a bit.

## Notion of Ambiguity

This term, drawn from the field of linguistics, is used to refer to uncertainty or inexactness of meaning in language. It is an attribute of any concept, idea,
statement or claim, whose meaning, intention or interpretation cannot be definitely resolved according to a rule or process consisting of a finite number of steps. Kess \& Hoppe (2000) view ambiguity as a feature that results in more than one interpretation or exactness. The concept is usually confused with vagueness, but ambiguity is concerned with specific and distinct interpretations, vagueness is concerned with difficulty encountered in forming any interpretation at the desired level of specificity. However, context may play a role in resolving ambiguity. Ambiguity refers to a choice between two different things. In the proper sense, it should mean 'two different meanings' because 'ambi’ comes from the Greek word for 'two'. It is the presence of two or more meanings in a single passage. There are two basic types of ambiguity in speech and writing, which are "lexical" and "structural" ambiguity. Lexical Ambiguity refers to the presence of two or more possible meanings in a single word. Structural Ambiguity refers to the presence of two or more possible meanings within a single sentence or sequence of words. Ambiguous words or statements lead to vagueness or confusion and leads to unintentional humor. For instance, the statement, "I rode a black horse in red pyjamas", could be interpreted that it is the horse that wore red pyjamas, or that it is the rider himself. So it becomes clearer when it is put this way: "Wearing a red pyjamas, I rode a black horse.

## Theoretical Framework: Stephen Krashen's Theory of Second Lang uage Acquisition or Learning

The process of language acquisition apart from being physical is a psychological process humans go through. This process can be conscious or unconscious. However, linguists and psychologists have debated that the process of language acquisition does not require extensive use of conscious grammatical rules; neither does it require tedious drill. It rather requires meaningful interactions in the target language, in which speakers are concerned not with the form of their utterances, but with the messages they are conveying and understanding (Krashen, 1981). Due to the fact that they are surrounded by native speakers of the language they acquire, acquisition becomes easy and acquired unconsciously. In a second language setting like Nigeria, this is not the case as most of the learning process involves a tedious drill in the target language "English". It is done systematically, where there is usually a designated place for learning, a stipulated time and also teachers who teach the learners.
Krashen developed five essential hypotheses on language Acquisition. These were developed in 1970s and 80s. They are consistent with experimental data, putting primary importance on the comprehensive input that learners are exposed to. These are: Acquisition-Learning Hypothesis, Monitor Hypothesis, Natural Order Hypothesis, Input Hypothesis and Affective Filter Hypothesis.

## Acquisition-Learning Hypothesis

This hypothesis states that adults have two distinct independent ways of developing competence in second language situations. They are the acquired system (language acquisition) and the learned system (learned system). The acquired system is a process similar to the way children develop ability on the first language. This is a subconscious process. Language acquirers are not usually aware of the fact that they are acquiring language, but are only aware that they are using the language for communication purpose, thus are not concerned with the form of their utterances. The learned system or learning is the product of formal instruction and it comprises a conscious process which results in conscious knowledge about the language, that is, knowledge of grammar rules. They are therefore, concerned with getting right or mastering the rules of the grammar.

## Monitor Hypothesis

This hypothesis explains the relationship between acquisition and learning and defines the influence of the latter on the former. It posits that, acquisition and learning are used in very specific ways. The monitoring function is the practical result of the learned grammar. The acquisition system is the utterance initiator, while the learning system performs the role of the monitor or the editor. It is the learned competence that is usually the monitor. The monitor acts in planning, editing and correcting function when three specific conditions are met: time (a second language learner needs to have sufficient time at his/her
disposal in order to think about and use conscious rules effectively); focus on form (he/she focuses on form or thinks about correctness (Dalay \& Burt, 1978). Even though there is sufficient time, he/she may be so involved in what is being said, thereby, not attending to what is being said); and thirdly, knowing the rule ( the structure of language is very complex as seen in linguistics therefore, must know the rules for effective usage).

## Natural Order Hypothesis

This hypothesis suggests that the acquisition of grammatical structures follows a 'natural order' which is predicable. Findings have shown that English is the most studied language as far as natural order hypothesis is concerned; and of all structures of English, morphology is the most studied (Dulay \& Burt, 1978, Farthman, 1987).

## Input Hypothesis

The input hypothesis attempts to answer the most important question in this field (second language acquisition/learning), and gives an answer that has a potential impact on all areas of language teaching. The important question is 'how do we acquire/learn a second language?' this hypothesis has a claim that a necessary condition to move from stage to stage is that, the acquirer understands what each input contains, where understanding means, the acquirer focuses on the meaning and not the form. He improves and makes progress along 'natural order' when he receives second language input. This hypothesis stands out amongst all
others because it answers the crucial theoretical question of how language is acquired and learned.

## Affective Filter Hypothesis

This hypothesis represents Krashen's view that a number of 'affective variables' play a facilitative but noncasual role in second language learning. These variables are motivation, self-confidence and anxiety. He says learners with high motivation, self-confidence, a good self-image and low anxiety are better equipped for success in second language learning. Low motivation, low self-esteem and anxiety can combine to raise the affective filter and form a 'mental block' that prevents comprehensive input from being used for acquisition. In other words, when the filter is 'up', it impedes language acquisition. In summary, Krashen's hypotheses summarize the processes involved in second language acquisition/learning . This explains the essence of this study which centers on the level of knowledge of students on quantifiers in general.
Of the five hypotheses in Stephen Krashen's theory of second language acquisition/learning explained above, the Monitor hypothesis is the one of relevance to this study.

## Methodology

This work employed the survey design format, a study model where a smaller group is deemed validly representative of a larger study population that is the target of a research exercise. Data was collected from 30 students considered representative of the target S.S.S 1-3 students of Federal

| No of Students who <br> can write in their <br> language | Unable to <br> write | Not <br> Certain | No <br> Attempt |
| :--- | :--- | :--- | :--- |
| 2 | 1 | 7 | 6 |

Government College, Port Harcourt, in Obio/Akpor Local Government Area of Rivers State. A Test made up of three sections on quantifiers was administered to them. To calculate the percentage of the result of our data, we employed simple percentage method.

## Data Analysis

Data collated was analyzed to investigate students' knowledge on the equivalence of some quantifiers in their $\mathrm{L}_{1}$, general knowledge of quantifiers and also knowledge on ambiguity of quantifiers. The questions are found in the appendix. The tables below show results of tests on different sections via the simple percentage method.

Test 1


1. Do you have the following words in your language?
2. If 'Yes', write out the words in your language
(16 students whose answers were 'Yes' are displayed in the table below)
3. Is there any difference between the following quantifiers? (Here, we sought to ascertain respondents' knowledge of the differences among some quantifiers)
The response of the respondents is reflected in the table below.

| Qu <br> anti <br> fier <br> s | YES |  | NO |  | $\begin{aligned} & \hline \text { UNCERTAI } \\ & \mathrm{N} \end{aligned}$ |  | $\begin{gathered} \text { NO } \\ \text { ATTEM } \\ \text { PT } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No of Re sp on de nts | \% | No of Resp onde nts | \% | No of Respo ndent s | \% | No of Stu den ts | \% |
| Eve ry/ Eac h | 5 | 16.67 | 12 | 40 | 1 | 3.33 | 12 | 40 |
| Mu <br> ch/ <br> Ma <br> ny | 4 | 13.33 | 10 | $\begin{aligned} & 33.3 \\ & 3 \end{aligned}$ | 2 | 6.67 | 14 | $\begin{aligned} & 46 \\ & .6 \\ & 7 \end{aligned}$ |
| A <br> Fe <br> w/F <br> ew | 4 | 13.33 | 11 | $\begin{aligned} & 36.6 \\ & 7 \end{aligned}$ | 1 | 3.33 | 14 | 46 .6 7 |
| A <br> Litt <br> le/L <br> ittle | 4 | 13.33 | 11 | $\begin{aligned} & 36.6 \\ & 7 \end{aligned}$ | 2 | 6.67 | 13 | 43 .3 3 |

Test 2 - General Knowledge of Quantifiers
Students were asked to fill in the blank spaces with the most appropriate option (quantifier) from a list lettered $\mathrm{A}-\mathrm{E}$.


Test 3 - Ambiguity Test
The questions used for this section are presented in the appendix. The table below shows students' ability to interpret the sentences sampled.

| No. of <br> Students <br> who had <br> one | $\%$ | No. of <br> Students <br> who had <br> Interpretat <br> ore than <br> one to each <br> Sentence | $\%$ | No | $\%$ |
| :---: | :--- | :---: | :---: | :---: | :---: |
| 22 | 73.33 | 2 | Attem <br> Interpretat <br> ion to <br> each <br> Sentence | 6.67 | 6 |

Based on the data retrieved from the exercise, it was discovered that the students did not have a clear understanding of quantifiers, as the number of incorrect answers and number of 'no attempt' from the test were higher than the number of correct answers. Quantifiers like few/a few, little/a little, each and most/much were all difficult for them to comprehend. On differences among these quantifiers, most of the students could not identify any. For every/each, only 5 students could indicate the difference, 12 could not, 12 were uncertain and 1 did not provide an answer. For 'much/many', 4 students could identify the difference between them, 10 could not, 2 were uncertain and 14 had no response. For 'a few/few', 4 students answered 'Yes', 11 responded 'No', 1 was uncertain and 14 did not attempt the question. Finally, for ' $a$ little/little' 4 students could tell the difference between them, 11 could not, 2 were uncertain and 13 offered no response. The overall result got from those whose answers were 'No', 'Uncertain' and 'No attempt", surpassed those with 'yes'. This shows that even though students make use
of these quantifiers in daily conversations, they do not fully understand their meanings, their differences and their correct usage.
After the ambiguity test was conducted, it was discovered that some quantifiers had more than one meaning or interpretation when they appeared in certain situations/context. For the ambiguity test, we sought to know if students are aware that a sentence could have more than one meaning. The result gathered revealed that, almost all the students could produce only one meaning to each sentence. Out of the 30 students examined, 22 had only one interpretation to each sentence, 2 students had more than one interpretation/meaning to each sentence; and 6 students could not attempt an interpretation.

## Analysis of Sentences in Ambiguity Test

1. Each child has a father.

## Interpretations

a. Every child has a particular father different from one another.
b. Of all the children referred to, there is a father for each.
c. In a group of children, each has a father.
2. Some men danced with every girl.
a. More than one man danced with every girl.
b. Some men took turns to dance with each of the girls individually.
c. The use of 'some' in other context could mean 'unknown'; meaning the men that danced with the girls are unknown (strangers).
3. I rode a black horse in red pajamas.
a. I rode a black horse that wore red pajamas.
b. I wore red pajamas and rode on a black horse.
4. All the lecturers did not come to school today.
a. Some lecturers were present in school today, while some were absent.
b. The school did not record the complete number of lecturers in school today.
c. The lecturers in school were less in number today.
5. Every girl wears makeup.
a. Every human that is a girl wears makeup.
b. Every girl wears a particular makeup.
c. No two/more girls wears a makeup.
6. My sister likes every teacher.
a. My sister likes everyone (known or unknown) that is a teacher.
b. My sister likes anyone (male or female) who teaches.
c. My sister likes every teacher she has come across.
7. Someone gets flogged in school every day.
a. A human being (male or female) gets flogged every day.
b. The act of flogging is carried out on someone on daily basis.
c. An unknown person gets flogged in school everyday.
8. The teacher did not teach all the students.
a. The teacher taught an incomplete number of students.
b. The teacher taught some students in school.
c. A particular teacher taught some available students.
9. A Youth Corps member addressed all the students in class.
a. A Youth Corps member addressed all the students in class.
b. Every student in class was addressed by a Youth Corps member.
c. A Youth Corps member, who may not be a teacher in that school, addressed all the students in class.
10. The teacher punished all the students by asking each to weed the school farm.
a. The entire students of the school weeded the school farm as punishment from their teacher.
b. The students collectively weeded the school farm as punishment from their teacher.
c. The punishment the teacher gave each student was to weed the school farm.

## Conclusion

Language learning is a conscious process, which accounts for its constant emphasis on rules and need to attain proficiency that would enhance efficient and effective usage. Findings of this paper showed that second language learners of English in FGC Port Harcourt found it difficult to properly use and interpret quantifiers. Their inability to understand and use these items stemmed from various reasons such as: ambiguity in some quantifiers, absence of some quantifiers in their $\mathrm{L}_{1}$, transfer of $\mathrm{L}_{1}$ knowledge into the $L_{2}$, and ignorance of differences that exist between certain quantifiers. It is for this reason this paper adopted Stephen Krashen's theory on second language learning with focus on the Monitor Hypothesis. From Krashen's point of view, language learning does not necessarily need conscious extensive use of grammatical rules or tedious drills, but
requires meaningful interaction in the target language in which speakers are less concerned with their utterances but more focused on the message they can convey and understand. More so, ambiguity can be explained in class as they occur in students' write-ups. It would provide students opportunity to explore meaning. Many writers use ambiguity as a technique to enable readers understand their works from diverse perspectives, and creating depth and complexity.

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## Appendix

(Data)
Test 1

1. Do you have the following words in your language?
Every, each, many, much, few, a
few, little, a little
2. If your answer to question (2) is yes, write out the words in your language.
3. Is there any difference between the following?
Every and Each; Many and Much;
Few and A few; Little and A little.

Test 2 (General Knowledge of Quantifiers) Students were asked to fill in the blank spaces with the most appropriate option (quantifier) from a list lettered $\mathrm{A}-\mathrm{E}$.

Test 3 (Ambiguity Test)
What do the sentences below mean to you?

1. Each child has a father.
2. Some men danced with every girl.
3. I rode a black horse in red pyjamas.
4. All the lecturers did not come to school today.
5. Every girl wears makeup.
6. My sister likes every teacher.
7. Someone gets flogged in school every day.
8. The teacher did not teach all the students.
9. The corps member addressed all the students in class.
10. The teacher punished all the students by asking each to weed the school farm.
