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EXPLORING NOUN MODIFIERS: A SEMANTIC ANALYSIS OF SINGULAR AND PLURAL FORMS

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Abstract:

This study is an attempt to investigate the functional deployment of an English grammatical subsystem, the noun modifier. Underlying this study is a presumption that the rule on noun modifiers from the traditional approach has not been comprehensive enough. The rule states that noun modifiers should be in singular form. This needs verification and therefore it is necessary to find out whether the plural form exists. This study was carried out using the meaning-based framework proposed by two Columbia School advocates; Reid (2011) and Tobin (1990). The research objectives and questions in this study necessitated the use of a textual analysis format. The data were gathered from 100 journalistic articles from The Economist. Data were analysed by computing all occurrences of noun modifiers - both singular and plural - and were quantified using SPSS software (21.0). Simple descriptive statistics were used to carry out data analysis. The main concern of this study was to assess the validity of the conventional noun modifier rule, by examining its occurrence in actual context of English language use. The results reveal that noun modifiers are not always singular; in other words there are occurrences of plural nouns in actual language use. Based on Reid's Entity Number System, it was postulated that whenever the suffix -s is added to a noun modifier, the writer intended to signal MORE THAN ONE meaning. The findings point to an unassailable feature of the choice of the noun modifiers: each grammatical feature is chosen for its semantic value independently contributing to communication.

Keywords:

English Grammar; Traditional Rule; Noun Modifier; Semantic Analysis



Introduction

Language is seen as a system of communication in which people make use of different language signs to communicate their intended messages (Dirven & Verspoor, 2004). This foregrounds a philosophy that users should not only focus on the forms and structures used in a given language but also learn to decipher the multiplicity of messages that the forms encode. In other words, language users need to understand how a language works in all its essence. In the last two decades, semiotic functionalists such as Reid (1991), Tobin (1990) and Govindasamy (2005) analysed language using a quantitative methodology and helped in providing meaning-based explanations for the deployment of lexical/grammatical items for English and other languages in the world. This functional approach has helped to increase language users' understanding of the target language. This study is in a way a contribution to the insights on the functional deployment of an English grammatical subsystem, the noun modifier.

In grammar, the term 'modifier' connotes a change or an addition to the meaning of an entity (i.e. the noun). Very often to take on this function, they provide added information to the signifier in a particular context. Intelligent student, good teacher, lazy mother—the preceding words in these examples are called adjectives which provide description of quality to the accompanying entities. Adjectives may not be the only modifiers; a noun is also used as a modifier, for instance, office building, registration process, and mountain bike are among examples of compound words of which the modifiers are nouns but carrying the functions of the adjectives in noun phrases. In traditional grammar, there are rules regarding the structural contruction of noun phrases; one is that a noun modifier can never take a suffix –s: "When a noun is used as an adjective, it is in its singular form.... When a noun used as a modifier is combined with a number expression, the noun is singular and a hyphen is used" (Azar, et al., 1999: 105). A clear picture of this rule can be seen in the following sentence:

"They sell shoes at that store. It is a shoe store"

The word "shoes" is shifted to singular "shoe" when it takes the role of modifier in the next sentence. Hence, a phrase "flowers* garden" would be considered grammatically incorrect from this point of view though it would plausibly make sense to one's mind that there can never be only one flower in a garden. The rule of nouns made singular in the position of modifier is thus revealing in English grammar, particularly in the traditional array. However, there also exist such noun modifiers in plural form in current usage of grammar such as sports magazine and arts degree where the noun modifiers appear with suffix —s to denote plural form. Herein lies the problem; how prevalent is the alternate form? This issue needs to be resolved. If exceptions are minimal, then the rule is verified. However, if the alternatives are overwhelming, then grammarians need to be mindful of them. This constitutes a real problem to all the stakeholders — the learners, the teachers, and textbook writers.

This study is undertaken to assess the validity of this conventional noun modifier rule, by examining its occurrence in actual context of English language use. As stated earlier, the study would be based on the functional framework developed by analysts from the Columbia School of Linguistics.

Research Objectives

The proposed objectives of the study, then, are:

- 1. To verify if noun modifiers are singular all the time.
- 2. To find out the extent of the deployment of plural modifiers, if any.

Research Questions

Based on the above research objectives, this study is meant to throw some light on the following research questions:

- 1. Are noun modifiers always singular?
- 2. To what extent are plural noun modifiers in use in actual language contexts?

Significance of the Study

It appears that most of the English language textbooks and even grammar books do not provide sufficient input for students to master the language, particularly its grammar features. Therefore, this study is meant to place attention on the functional explanation that can be developed to explain language use. This is not meant to disregard the traditional rule, but it attempts to give a functional explanation to cases where the traditional framework is less comprehensive.

It is anticipated that this study will enable English language teachers to adopt a functional way of looking at language. When a user is initiated into looking at language functionally, he or she notices different functions of language features (Rianto, 1999). This could be the first step to enable users to see how language really works. Lock (1996) and Lewis (2000) contend that language is best learnt when one is able to 'notice' the different features that exist in a particular language and the meaning each feature conveys. Hence, learners will be able to increase their understanding in the use of language when they are brought to 'notice' these different features and meanings in context. Therefore, the teaching and learning of language can be made more effective when meaning is emphasized.

It is also meant to make people become aware of the role of language as a means of communication. The users should realize that it is essential for them to know how a language works so that they are able to convey precise messages.

Literature Review

This section examines diverse perspective on language, traditional rule governing noun modifiers, and the structure of noun modifiers as N+N constructions. It expands upon previous discussions by incorporating recent research, particularly from Western contexts, to provide a more comprehensive and nuanced understanding of the evolving role of plural noun modifiers in contemporary English.

Different Perspective on Language Word)

Language serves as a complex communication system, necessitating the analysis of relationships between its components (Graddol, Cheshire, & Swann, 2003). Gauker (2003) highlights its primary function: enabling speakers to express thoughts to listeners through encoding and decoding meanings, a process subject to potential discrepancies (Malaikolunthu, 2007). Saussure (in Bertolo, 2003) posits that meaning originates from the language users, not from the language itself, aligning with Reid's (1991) assertion that "language under-determines meaning," underscoring the role of a speaker's knowledge and experience. Redi, Otheguv, and Stern (2002) argue that linguistic meaning explains the distribution of linguistic forms.



Fromkin et al. (2003) note he reliance on finite sounds or gestures to create meaningful expressions, portraying language as a problem-solving tool where speakers achieve communicative goals. This perspective suggests that speakers actively shape meaning based on their cognitive understanding of the world, which can influence grammatical choices such as the use of plural noun modifiers. Studies in variational pragmatics (Romero-Trillo, 2008) also highlight the importance of context, including the emergence of novel grammatical patterns. Furthermore, Relevance Theory emphasises how successful communication hinges on achieving relevance between speaker and listener (Sperber & Wilson, 1995). These contemporary perspectives complement earlier functionalist approaches by providing a more nuanced understanding of the cognitive and social factors that drive language change.

In summary, language facilitates the expression of thoughts and mutual understanding. Meaning is user-derived, relying on combined sounds and gestures. Language serves communicative, informative, and manipulative roles. Recent perspectives emphasise conceptualisation, construal, social factors, and relevance.

Traditional Rule of Noun Modifiers

Traditionally, noun modifiers are expected to be in the singular form when modifying another noun. This rule is deeply ingrained in English grammar, but there are growing instances where plural noun modifiers appear, particularly in contexts such as "sports magazine" or "arts degree". Quirk et al. (1985) note that the plural attributive construction is becoming more common, especially in British English.

There are several situations where the plural form of noun modifiers is used:

- 1. To avoid ambiguity, as in "an arts degree" versus "an art degree"
- 2. When no singular form exists, such as in "a customs officer."
- 3. To denote variety, such as "a soft drinks manufacturer."
- 4. In topical issues often found in news stories, for example "the Watergate tapes affair."

More recent research has explored the cognitive and processing implications of these constructions. For example, studies in psycholinguistics have investigated how readers and listeners process plural noun modifiers and whether they pose any additional cognitive load compared to singular forms. Work in corpus linguistics (Grief, 2017) has also examined the frequency and distribution of different types of noun-noun constructions, providing further empirical evidence of the increasing use of plural noun modifiers in various registers and genres. These studies suggest that the traditional rule may be overly prescriptive and that language users are increasingly willing to accept plural noun modifiers in certain contexts.

These exceptions prompt questions about the frequency and implications of plural noun modifiers, which this study investigates.

Noun Modifiers as N+N Structures

The study of noun modifiers has long been of interest to linguists, particularly in the form of noun + noun (N+N) structures. These constructions, which involve one modifying another, have been studied since the early 20th century. While early scholars like Lees (1960) viewed N=N structures as compounds, more recent research has examined their syntactic and semantic roles.



Levi (1978) proposed that complex nominals, or N+N structures, are derived from underlying sentence structures, often created by the deletion of predicates or through nominalisation. Others, like Gómez (2009), have identified various semantic relations within N+N structures, such as "A is part of B" (e.g., "board member") or "A indicates the purpose of N" (e.g., "pie tin").

Modern approaches to N+N structures emphasise the role of semantic and pragmatic factors in determining their interpretation. For example, Downing (1977) argues that the interpretation of N+N compounds is highly context-dependent and that language users rely on a variety of cues, such as background knowledge and discourse context, to infer the intended meaning. Ryder (1994) illustrates the interpretation of English noun-noun compounds. These contemporary theories provide a more nuanced understanding of the factors that influence the interpretation of N+N structures and how they contribute to the overall meaning of a sentence.

The rising use of plural noun modifiers in these structures, especially in British English, indicates a change in noun modifier function in modern grammar. This study aims to assess the validity of the conventional noun modifier rule by examining its occurrence in real-world English language use, using the functional framework developed by analysts from the Columbia School of Linguistics.

Research Methodology

This study adopts using a meaning-based framework, as proposed by Reid (2011) and Tobin (1990) which views language as a system of signs, with each sign carrying meaning that contributes to the overall communication of the message. Textual analysis and quantitative methods were employed to assess the occurrences of singular and plural noun modifiers in real-world contexts.

Research Design

A mixed-method approach was employed, combining quantitative and qualitative research methods. The quantitative analysis focused on counting the occurrences of singular and plural noun modifiers, while the qualitative analysis aimed to interpret these findings within the meaning-based framework. SPSS (version 21.0) was used to compute and analyse the data.

Sample Selection and Data Collection

The study employed a purposive sampling technique. The data source consisted of journalistic articles from The Economist published between 2014 and 2024. Articles were selected based on the following criteria:

- 1. Authored by native English speakers.
- 2. Expository style.
- 3. Exceeding 500 words to ensure sufficient data for analysis.

Justification for Data Source

The Economist was chosen as a data source due to its reputation for high-quality, edited English and its wide readership, representing a formal, yet accessible, register of the language. Its consistent style and focus on global issues provide a relatively controlled corpus for examining grammatical variation. While acknowledging the limitations of focusing on a single publication, this choice allowed for a focused on a single publication, this choice allowed for a

focused analysis of noun modifier usage within a specific context. While acknowledging the limitations of focusing on a single publication, this choice allowed for a focused analysis of noun modifier usage within a specific context.

Ethical Considerations

This study utilised publicly available journalistic articles. While journalistic texts are generally considered fair use, the following measure were taken to ensure ethical data handling.

- 1. **Attribution**: All sources were properly attributed, adhering to copyright regulations.
- 2. **Non-sensitive Data**: The analysis focused on grammatical structures and did not involve the collection or analysis of any personal or sensitive information.
- 3. **Purpose Limitation**: The data was used solely for the purpose of linguistics analysis, as outlined in this research.

Moving forward, future research should consider expanding the corpus to include a broader range of journalistic outlets and potentially incorporating academic or conversational English to enhance the generalisability of the findings.

Data Collection Process

The data collection process involved identifying all instances of noun modifiers—both singular and plural—within the articles. Each instance was recorded along with its immediate context (the sentence in which it appeared).

Data Analysis

The data analysed using simple descriptive statistics to quantify the occurrences of singular and plural noun modifiers. The following table shows the template used for analysis:

Table 1: Template for Analysing Noun Modifiers

Noun Modifiers	Singular	Plural
	(Without suffix –s)	(With suffix –s)
Total:		

Additionally, articles containing both singular and plural noun modifiers were categorised based on their word count (under or over 1000 words) to compare the distribution of plural noun modifiers in shorter versus longer articles.

Limitations

This study is limited by its focus on a single data source (The Economist) and its reliance on a relatively small sample size. The findings may not be generalisable to other registers of English or to other publications. Future research should consider expanding the corpus to include a broader range of data sources and employing more sophisticated statistical techniques.

Findings

Occurrences of Noun Modifiers

The first research question aimed to verify whether noun modifiers are always singular. To address this, a textual analysis was performed, identifying 514 noun modifiers across 100 journalistic articles. Out of these, 51 instances were plural noun modifiers, accounting for 9.9% of the total occurrences. The findings indicate that while singular noun modifiers remain predominant (90.1%), plural forms do exist, suggesting that the traditional rule is not absolute.

The following figures show the occurrences of noun modifiers.

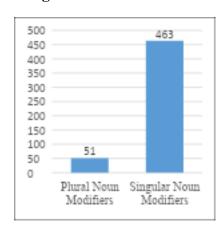
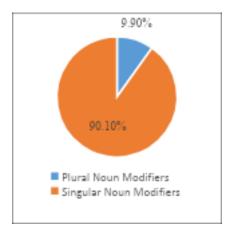


Figure 1: Noun Modifiers

Figure 2: The Percentage of Noun Modifiers



The following excerpts illustrates an example of plural noun modifiers usage:

"The economy, jobs, and steel: Hard decisions. The labour market is improving, but the White House is still worried." (The Economist, November 13th, 2017)

In this example, the plural noun "jobs" modifies "market," violating the traditional rule that noun modifiers should always be singular. This example, along with many others, demonstrates that plural noun modifiers are indeed present in actual language use.

Extent of Plural Noun Modifier Usage

The second research question sought to determine the extent of plural noun modifier usage in actual language contexts. A more detailed analysis was conducted on 31 articles that contained both singular and plural noun modifiers. Of the 223 noun modifiers found in the articles, 51 were plural (22.9%) and 172 were singular (77.1%).

Figure 3: Plural and Singular Noun Modifiers in 31 Articles

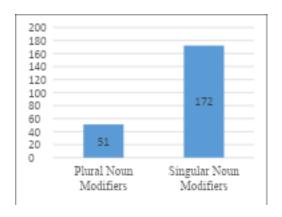
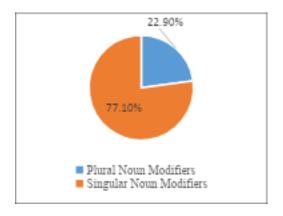


Figure 4: The Percentage of Plural and Singular Noun Modifiers in 31 Articles



Interestingly, a comparison between shorter (under 1000 words) and longer (over 1000 words) articles revealed no clear correlation between article length and the frequency of plural noun modifiers.

In articles with fewer than 1000 words, there were 32.1 plural noun modifiers per 1000 words, whereas longer articles had 22.3 plural noun modifiers per 1000 words. This suggests that the use of plural noun modifiers does not necessarily increase with article length, but rather depends on the context and communicative needs of the writer.

Discussion

Re-examining the Traditional Rule of Noun Modifiers

The traditional grammar rule that noun modifiers should always be singular has long been accepted in English language teaching. However, the findings of this study challenge this rule by demonstrating that plural noun modifiers do, in fact, occur in real-world language contexts. While singular noun modifiers are still more common, the presence of plural noun modifiers in nearly a quarter of the analysed articles indicates that they are not merely exceptions.

The traditional rule may not need to be entirely discarded, but it clearly requires reconsideration. If plural noun modifiers are prevalent in actual usage, grammar instruction should reflect this reality. The results of this study suggest that a more flexible approach is needed, one that allows for both singular and plural noun modifiers depending on the communicative context.

The Issue of Ambiguity

It has been suggested that plural noun modifiers are used to avoid ambiguity. However, the analysis of the 51 plural noun modifiers in this study does not provide strong evidence for this claim. In most cases, plural noun modifiers were used simply because they reflected the plurality of the entity being described, not because of any potential ambiguity. For example, in the sentence:

"In 2018, the value of goods-and-services exports will run to 31.7% of global GDP." (The Economist, October 12th, 2018).

The plural noun "goods" is used not to avoid confusion with "good," but because there is no singular form for "goods" in this context. While ambiguity may be a factor in some cases, it is not the primary reason for the use of plural noun modifiers in the data analysed.

Conclusion

This study has demonstrated that the traditional rule requiring noun modifiers to be singular is not fully representative of actual language use. The findings show that plural noun modifiers do occur, albeit less frequently than singular ones, and they play an important role in conveying precise meanings in various contexts. Therefore, the traditional rule, while still largely applicable, cannot be seen as absolute.

The study's results align with functional approaches to grammar, which emphasize the role of language in communication rather than strict adherence to prescriptive rules. In practice, language users select grammatical features, including noun modifiers, based on their communicative needs, and the presence or absence of the -s suffix plays a crucial role in signalling whether the modifier refers to one entity or more than one.

For educators and learners, these findings underscore the importance of a meaning-based approach to grammar instruction. Rather than focusing exclusively on rules, students should be encouraged to notice how different forms of noun modifiers—singular or plural—function in real-world texts to convey specific meanings. By incorporating examples from authentic language use, teachers can help students develop a more flexible and nuanced understanding of grammar that reflects the realities of communication

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