An Applied Linguistics Look at the Linguistic Comparison of Nominal Group Complexity between Two Samples of a Genre *

Yaser Hadidi **
Assistant Professor, University of Tabriz

Abstract
The roles and effects of changes in syntax on comprehension and processing effort, and the relationships between these two, comprise a large and separate field of inquiry, with the general belief now in place that such changes and variations bring about varied psycholinguistic and discursive implications for comprehension, manifesting themselves differently in different genres. The current study is a brief attempt at bringing out the differences in the complexity of the noun groups in two novels, one of which is a 19th century novel, Charlotte Bronte’s Jane Eyre, and the other is a 21st century one, Stephanie Meyer’s Twilight. Each novel was analyzed for the ten longest nominal groups used in them, representative also of the complexity inherently evidenced by a long nominal group. It turned out that there is little difference between the size of noun groups in the two novels. Thus, the added complexity and challenge in processing and comprehending 19th century prose fiction can be explained by the generic tendency in such genre towards the deployment of a higher rate of rank-shifted embedded structures in the noun groups and more varied qualifiers that employ more non-finite clauses as post-nominal qualification. There is need to look into processing difficulty and interpretation challenge posed by different literary genres for different groups of learners, because, in line with a now common SLA understanding, full and conscious comprehension, parsing and interpretation of syntactic components play a marked role in rich and native-like writing for learners.

Key Words: Syntax, processing effort, complexity, Noun Groups, Embedding, Qualification

* Received date: 2018/01/09 Accepted date: 2018/06/01
**Email: hadidiy@tabrizu.ac.ir
Introduction and Background

Literature-text, in its different forms, is worthy of linguistic and textual consideration on different levels. These levels are looked at in different ways which yield different results; and it is the different ‘layers’ of description and analysis that determines the outcome and the knowledge resulting from the research. What is important is specifying explicitly the main perspective of analysis, which is the layer of analysis from which one starts and hopes to draw conclusions, and is the unit and the demarcation of the analysis. This enters into natural relationship with the size and boundaries of the claims and the hypotheses of the research, with how realistic these claims are, and not any less so, with if and how the results are in line with the initial claims at the end of the research (Hadidi & Ghankaran-Shotorban, 2015).

Stylistics, as a branch of Applied Linguistics, is concerned with the study of style. Although this concept is widely known and used, it is difficult to define and has many different nuances and angles from which to conceptualize it. What is certain, however, is that its essence is ‘distinction’, ‘variation’, or ‘choice’. Therefore, stylistics can be defined as the analysis of distinctive expression in language, whether at the level of phonology, grammar, lexis, semantics, or discourse (Verdonk, 2002; Wales, 2006). Widdowson (1975) quite rightly shows that “stylistics can provide a way of mediating between two subjects of English language and literature”. From a practical point of view, an entryway is necessary to put any piece of literary text to stylistic analysis.

Blake (1990) believes that syntax is the best place to start the analysis with, mostly because exposing the structure of a text leads straight to its heart. In this regard, he categorizes three ways of approaching the structure: “the clause elements which go to make up each sentence; the presentation of the content in theme/rheme and topic/comment formats; and the wider organization of each sentence into declarative, interrogative or imperative patterns” (p. 11). He claims each sentence consists of clause elements, of which in English there are five: subject, predicator, object, complement and adjunct. Each of these
elements can be represented by a group of words, such as noun group, adjective group, verb group, adverb group or prepositional group.

Of these, the noun group is perhaps the most important because of its make-up and role. Blake claims that a noun group consists of up to five elements: pre-determiner, determiner, modifier, head and qualifier (also called post-modifier). It is crucial to note that the order of elements is important. This, however, does not mean that the presence of all the elements is needed to name a group of words a nominal group. Simply stated, one element cannot precede another. While Blake (1990) differentiates five elements, other scholars like Wright and Hope (1996) merge the pre-determiner and determiner, thereby identifying the structure of a noun group in terms of four predetermined slots that are: determiner (enumerator), pre-head modification, head noun and post-head modification. In the nominal group below, these are identified:

- Many jolly-looking boys running around the stream

In this noun group, many is the determiner; jolly-looking is an adjective that represents pre-modification; boys is the head noun, and running around the stream is the post-head modification (also known as qualification).

As Blake (1990) goes on to bring out, only one of the aforementioned elements, the head, is obligatory, while all the others are optional. A brief explanation of each element will be in order here. Pre-determiners, as the name suggests, precede determiners. The words indicating quantity such as all and half can act as pre-determiners. Determiners belong to a closed class of words which are in traditional grammar classified as articles, possessive adjectives, demonstrative adjectives or interrogative adjectives. It is also interesting to know that they are mutually incompatible, that is, you cannot have two words in the same class following each other. Modifiers, on the other hand, belong to an open class of words.

Wright and Hope (1996) show that modifiers are single words which are either adjectives or nouns with adjectival functions. In contrast, Blake (1990) points to the fact that some modifiers may be
preceded by intensifiers such as very. This, he believes, is one of the few instances in which a modifier consists of more than a single word. Qualifiers or post-modifiers are the units, mostly in Hallidayan perspective a phrase or a clause, which follow the head in a nominal group (e.g. Halliday, 1985, 1994; Halliday and Matthiessen, 2004; Halliday and Matthiessen, 2014).

The notion of qualifiers is highly relevant to the one of embedding. According to Halliday (1985), all qualifiers, excluding some rare exceptions, are embedded. Halliday provides the definition of embedding:

…… position following the Thing [head of the nominal group] is reserved for those items which, in their own structure, are of a rank higher than or at least equivalent to that of the nominal group; on these grounds, therefore, they would not be expected to be constituents of a nominal group. Such constituents are said to be ‘embedded’, or, in earlier systemic terms, ‘rank-shifted’. (p.166)

Blake (1990) distinguishes different types of qualifiers, the most common types of which are prepositional phrases, relative clauses, appositions, and the adjectives used after the noun. Examples of these are offered below:

- Qualifier as Prepositional Phrase: The boys with black tattoos on their noses
- Qualifier as Relative clause: The boys who are my friends
- Qualifier as appositive: John, the postman,
- Qualifier as post-nominal adjective: A love blackened and tired

A final point to be made, in Blake’s terms, is that the nominal groups in most forms of literary writing carry the bulk of the linguistic embellishment. This is so because among other units of language, it is the noun group that can be expanded and adapted most, with many verb groups accompanied by both a noun group as subject and one as object.
In this respect, the modifying and post-modifying elements are used to add to the weight of noun groups.

**The Purpose and Scope of this Study**

In the spirit of the above, the current study is a brief attempt aimed at bringing out the differences in the complexity of the noun group in both subject and object positions (including objects of preposition) in two novels, one of which is a 19\textsuperscript{th} century novel, Charlotte Bronte’s Jane Eyre, and the other is a 21\textsuperscript{st} century one, Stephanie Meyer’s Twilight. Both of these novels are known to be one of the most established works of fiction in their respective sub-genres in terms of continued reception, reach and scope for their readership. His study aims at one conceptualization of complexity that involves only the number of words that are deployed in a certain linguistic device. There are other perspectives on complexity which involve various modes of syntactic analysis and evaluation, but it seems that the sheer size of the noun group as subject is, in and of itself, an important measure of the sentence composition in literary prose fiction and an important and foregrounded indicator of style in that genre. This is the initial purpose of this study. There will be brief comments at the end on the size and complexity of the nominal groups extracted from the novels, to do the syntactic play of embedding being at work, or various pieces of information that these styles pack in higher numbers into the noun phrase.

There hasn’t been much oriented research into comparative analyses of nominal group complexity in prose fiction. Such knowledge is necessary, though, for teachers and learners of English alike. Advanced and upper-intermediate EFL classroom scenarios stand to benefit hugely from deeper knowledge of the complexities involved in the structure of the sentence, within which the noun group is perhaps the most important player.

The finding expected here is for the 19\textsuperscript{th} century work of fiction to deploy longer and more complex nominal groups than a 21\textsuperscript{st} century one. If this hypothesis is confirmed, it means that complex noun groups like the invented one below are more likely to occur in 19\textsuperscript{th}-century novels than in 21\textsuperscript{st} century ones:
[Many jolly-looking boys tired of their rooms, running around the stream and shouting at each other in a foreign language] were passing in front of my house.

The noun group many jolly-looking boys is post-modified by many words comprising one adjectival group (tired of their rooms) and two non-finite participial clauses (running around the stream and shouting at each other in a foreign language). If one were to meticulously bring out the true measure of the amount of embedding in this complex post-modification scheme, that would amount to a noteworthy number, and would account for the complex nature of this post-modification; 2 in [(tired (of their rooms)], 1 in running around the stream, and 3 in [shouting (at each other)(in a foreign language)]. In other words, there being two measures for complexity (the size of the sentential constituent and the number of embedding), one usually accompanies the other, relatively speaking; it would be difficult to find many noun groups that are composed of many words but do not use many embedded elements, and vice versa.

The Longest Complex Nominal Groups in the Two Novels
In the following, ten instances of long and (therefore) complex nominal groups used in the well-known and well-received twenty-first century novel, Twilight, are provided. They are numbered so that they can be treated and discussed afterwards in terms of their complexity, embedding structures and so on. Note again that the following are nominal groups and not sentences or clauses:

1) The muted light of yet another cloudy day

2) The natural respect of a troop of predators as it encounters a larger, unfamiliar group of its own kind

3) The whole back side of the house

4) The wisps of silk and chiffon, the flowers he'd just pinned into my elaborately styled curls and my bulky walking cast

5) One of those solid iron affairs that never gets damaged—the kind you see at the scene of an accident, paint unscratched, surrounded by the pieces of the foreign car it had destroyed
6) *The constant whooshing of the rain across the roof*

7) *His small kitchen, with its dark paneled walls, bright yellow cabinets, and white linoleum floor*

8) *The small fireplace in the adjoining handkerchief-sized family room*

9) *The rapid change in direction our conversation had taken*

10) *No sound, no evidence that his feet touched the earth*

These are the longest and hence the most complex nominal groups we could find in this novel. Stylistically speaking, and in terms of their syntactic style, they pretty much represent some distinctive ways in which other nominal groups that are NOT bare simple noun groups are used.

These ten nominal groups, the longest found in this novel, amount to 140 words overall. The following ten instances of long and (therefore) complex nominal groups used in the well-known and well-received nineteenth-century novel, *Jane Eyre*, amount to 160 words. Again, as in the above case, that the following are nominal groups and not sentences or clauses:

1) *That reservoir of frost and snow, where firm fields of ice, the accumulation of centuries of winters, glazed in Alpine heights above heights, surround the pole, and concentrate the multiplied rigours of extreme cold.*

2) *A bed supported on massive pillars of mahogany, hung with curtains of deep red damask*

3) *My seat, to which Bessie and the bitter Miss Abbot had left me riveted*

4) *The high, dark wardrobe, with subdued, broken reflections varying the gloss of its panels*

5) *Her details of certain accomplishments attained by these same young ladies*

6) *An abrupt command from Georgiana to let her playthings alone*
7) Bessie, having pressed me in vain to take a few spoonfuls of the boiled milk and bread she had prepared for me

8) Brown eyes with a benignant light in their irids, and a fine pencilling of long lashes round

9) The black horned thing seated aloof on a rock, surveying a distant crowd surrounding a gallows

10) My habitual mood of humiliation, self-doubt, forlorn depression

Comments on the Textual Samples and Conclusions

We set out to compare the size (length) and complexity of long and complex nominal groups used in an established nineteenth-century novel and a twenty-first century modern one. The finding hereby arrived at is an interesting one. Each novel was analyzed for the ten longest nominal groups used in them, representative also of the complexity inherently evidenced by a long nominal group. The number of words comprising the total of these ten nominal groups in Twilight, the modern novel, amounted to 140 words overall. The same measure in Jane Eyre was 160 words.

In this way, there appears to be little difference between the size of noun groups in the two novels, at least less than we expected to find. So where does the added complexity and challenge, when parsing and piecing together the complex noun groups of most 19th century fictional prose, originate from?

The answer is the generic tendency in such genre towards the deployment of a higher rate of rank-shifted embedded structures in the noun groups (and other syntactic levels), as opposed to the tendency in modern fictional prose. The noun groups in a 19th century work of prose fiction tend to use more varied qualifiers that employ more non-finite clauses as post-nominal qualification. In this genre, the pioneers of the English novel, these qualifying elements (following the head noun) will, by their very nature, be more likely embedded one under the other in a subsumptive sense (higher number of rank-shifting instances). This is a chief difference between the fictional prose in 19th and modern styles.
For instance, take these two noun groups, the first one from Twilight and the second one from Jane Eyre. Both are long nominal groups, expected to be complex and place demands on comprehension:

- The natural respect of a troop of predators as it encounters a larger, unfamiliar group of its own kind (noun group taken from Twilight, an established 21st century work of modern fiction)

- The black horned thing seated aloof on a rock, surveying a distant crowd surrounding a gallows (noun group taken from Jane Eyre, an established 19th century work of fiction)

These two noun groups from two eras of fictional prose in English literature at least two centuries removed from each other employ relatively the same number of words (in line with Hadidi & Ghankaran-Shotorban, 2015), and must, therefore, exact the same amount of processing effort on the part of the reader. But as discussed in the literature, this is usually not the case. The example from Jane Eyre can be readily seen to read with more processing difficulty. This can be provisionally explained by arguing that the embedding in the Twilight example is mostly of a Noun + of + Noun kind, and only one non-elliptical adverbial (as it encounters) (Hadidi, 2016) that does not pose too much processing effort, but the example from Jane Eyre employs embedding in at least three rank-shifted non-finite adverbials subsumed one under the other, placing added processing burden on comprehension.

The roles and effects of changes in syntax on comprehension and processing effort, and the relationships between these two, comprise a large and separate field of inquiry, with the general belief now in place that such changes and variations bring about varied psycholinguistic and discursive implications for comprehension, manifesting themselves differently in different genres. (see, for example, Afflerbach and Byeong-Young, 2009; Duchowski, 2007 and 2003; Göpferich, 2007; Malchukov, 2004; Rayner and Pollatsek, 1989; Rayner and Sereno, 1994; Thibault, 1991, among others). This issue has also been argued extensively to have links with reading in a second language, as well as
in translation by a non-native speaker (e.g. Göpferich, Lykke Jakobsen, and Mees, 2008).

We found that Pastor (2008) argues along similar lines to ours, looking into English complex noun phrase interpretation by Spanish learners of English as a second language. Pastor argued for what we have frequently witnessed in advanced classes with advanced readers of challenging English texts, the fact that complex noun phrases place more processing load on the cognitive powers of readers, with instruction reducing this effort and speeding things up in the long term. This frequent evidence witnessed in actual teaching was, in fact, what provided the impetus for this comparative study. But we reckon there is need to look into processing difficulty and interpretation challenge posed by different literary genres for different groups of learners, because, in line with a now common SLA understanding, full and conscious comprehension, parsing and interpretation of syntactic components play a marked role in rich and native-like writing for learners.
References


