

A Comparative Study of Nominalisation in IELTS Writing Test Papers

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ABSTRACT

Adopting the Functional Grammar advanced by Halliday (1985a), this paper investigates the nominalisation of two IELTS writing test papers of candidates achieving band 7 and band 5. The study aims to identify the frequency of nominalisation employed in these texts and the distribution of verbal and adjectival nominalisations. The study also looks at the other aspects that contribute to the complexity of writing: lexical density and readability. The result shows that the numbers of nominalisation in the writing test paper at band 7 doubled the amount of the writing test paper at band 5. In the two texts, verbal nominalisation is mainly used while adjectival nominalisation is low. With reference to lexical density and readability, it is revealed that the text with higher marks was denser and more difficult to read whilst the lower-graded text was less dense and easier to comprehend. Two conclusions are drawn from the findings. Firstly, nominalisation packed the information in a text and made it denser and difficult to read. Secondly, marking tends to reflex the complexity of grammatical features.

Keywords: Nominalisation, IELTS writing tests, comparative study, lexical density, readability.

INTRODUCTION

As English has become an internationally used language, the need of learning English is essential. International English Language Testing System (IELTS) is widely used to assess English language ability of people who wants to study or work in countries where English is the main tool of instruction or communication (Jones, 2008). The tests consist of four modules: listening, reading, speaking and writing. Regarding writing, task 2 is required to justify an opinion or suggest a solution to a problem (McCabe, 1999). This study investigates the two writing test papers of candidates achieving band 7 and band 5 respectively in terms of their use of nominalisation. The study also compares the nominalisation with the lexical density and readability of the two writings to find out the relationship between them in terms of linguistic complexity.

THE CONCEPT “NOMINALISATION”

Nominalisation is an aspect of complexity in written language (Halliday & Matthiessen, 2004). It interprets or reconstructs “the world as a place where things relate to other things” (Halliday & Martin, 1993, p. 220). Bloor and Bloor (1995) note that nominalisation allows a process, in which a verb turns out to be realised as a noun and comes to be a participant in a further process. According to Eggins

(1994), nominalisation is the process of transferring things which are not normally nouns into nouns.

Francis (1990) states that

nominalisation is a synoptic interpretation of reality: it freezes the processes and makes them static so that they can be talked about and evaluated. In other words, they are no longer about *what is happening*, but what is being internalised and 'factualised' by society as to *the status of what has already happened*: the relationships *between events* rather than the events themselves. (p.54)

With reference to functions of nominalisation, Halliday and Martin (1993) point out that nominalisation is a typical feature in scientific texts. Scientific discourse demands high degree of nominalisation for two main reasons, the structure of scientific argument and the structure of scientific knowledge.

Nominalisation allows a process to be transformed into a more abstract phenomenon. That is to say, in languages, "the grammar packages what has gone before by nominalising the Process (attribute or event), and making the Medium of that Process a possessive modifier" (Halliday & Martin, 1993, p. 131).

For example:

The weather is constantly changing, but its changes have a definite pattern.

The great reactivity of fluorine in these reactions with on-metals [is explained].....

In terms of metaphor of nominalisation, Halliday and Matthiessen (2004, p. 656) argue that nominalisation "is the single most powerful resource for creating grammatical metaphor." Through this device, processes (linguistically realized as verbs) and properties (linguistically realised, in general, as adjectives) are reworded metaphorically as nouns, enabling an informational dense discourse. For example:

Is impaired by alcohol

alcohol impairment

They allocate an extra packer

the allocation of an extra packer

Some shorter, some longer

of varying length

They were able to reach the computer

their access to the computer

Technology is getting better

advances in technology

(Halliday & Matthiessen, 2004, p. 656)

With regards to classification of nominalisation, Halliday (1994) mentions two types of nominalisations, one verbal nominalisation (*press – pressure*) and one adjectival nominalisation (*hot – heat*). Additionally, Hartnett (1998) classifies five kinds of nominalisations based on morphological endings:

- (1) those where the verb and noun maintain the same form, also called non-zero derived de-verbal nouns (e.g., *to plan - plan*)
- (2) gerunds (e.g., *to run - running*),
- (3) adding a suffix to the verb (e.g., *to engage - engagement*),
- (4) those from adjectives (e.g., *beautiful - beauty*),
- (5) when the verb and noun have different meanings (e.g., *to birth - birthday*)

Carolyn (2004) distinguishes verb-change nominalisations into two sub-types: a nominalisation by changing a verb internally (*sell – sale; live - life*) or by adding an ending such as *-al (portrayal)*, *-ance (attendance)*, *-ee (payee)*, *-ment (achievement)*, *-tion (recommendation)*, *-ure (creature)*, *-y (mastery)* and *-yst (analyst)*.

This study investigates the two main types of nominalisation: verbal and adjectival realised by the following features:

- a. Changing verb internally;
- b. De-verbal nouns; and
- c. Adding suffixes to verbs and adjectives.

Various nominalisation types and their applications have been studied (Billig, 2008; Carolyn, 2004; Janelle, 2011; Jeremy & Timothy, 2008; Matthias, 2012; Wenyan, 2012). Carolyn (2004) studied nominalisations as nouns that are made by transforming a verb, either internally or by adding a suffix. She names this type of grammatical metaphor *verb-change nominalisations* whilst other linguists call them *non-zero derived deverbal nouns* or *stativation*. According to Carolyn (2004), “nominalisation is most frequent in writing, less common in standard speech, and least often in non-standard varieties; heavy nominalisation makes a text sound authoritative, formal, impersonal and prestigious” (pp. 79-84). Jeremy and Timothy (2008) referred to a dataset for use in identifying and interpreting compound nominalisations. In their view, a compound noun is a sequence of two or more nouns comprising a noun, for example *cat house* means ‘a house for a cat’ or *house cat* means ‘a cat which lives in a house’. Therefore, compound nominalisations, which are one of the significant subclass of compound noun occurring when the head noun is deverbal, need taking into account. In addition, Billig (2008) mentioned about nominalisation, passivisation and some ideological features associated with these notions as well as some potential problems of nominalisation analysis. Most recently, Wenyan (2012) carried out a formal comparative analysis of medical papers written by native English writers and those by Chinese academic writers in terms of three aspects of nominalisations, lexical density and thematic progression. The result reveals that the Chinese writers do not often use nominalisation in medical papers while native writers of English use a high proportion of nominalisation which greatly enhances the fluency and coherence of their papers.

What is evident from the studies that nominalisations are of the utmost importance since nominalisations shorten explanations and effectively organise known information, building on it to develop new knowledge. Nominalisations help to reorganise much expository writing rhetorically instead of in the real-world’s time and location sequence. Nominalisation construct abstracts and generalisations in humanities, interpret changes in social sciences and name processes, classifications and measurements in physical sciences (Carolyn, 2004, p. 185). Halliday and Martin (1993) emphasises the importance of nominalisation in science: “the social sciences used nominalisations to develop generalisations” and “whoever controls the language controls the science” (pp. 16-21). As far as the studies on nominalisation and its importance are concerned, a criticism of nominalisations has been proposed. Yaser (2012) argues that in several circumstances, nominalisations are necessary since full clauses would hinder the flow of information in the discourse, but in others separate clauses without nominalisation are crucial to provide poignancy. Carolyn (2004) also proclaims that verbs are essential for narratives, action stories and news reports of events because before spectators concentrate on descriptions of something, they need verbs to tell what happens to make it deserve describing. Nominalisations, nevertheless, are insufficient to perform that.

METHODOLOGY

This is a comparative study with the aim of investigating the nominalisation in two IELTS writing tests in comparison with their lexical density and readability. Quantitative research is employed and three research questions are recognised as follows:

- Question 1: How are nominalisations presented in the two IELTS writing tests?

- Question 2: Do the nominalisations make the reading texts lexically dense and difficult to read across levels?
- Question 3: What are the pedagogical implications for English writing teaching and learning?

Data analysis procedure

- Nominal groups are determined to point out the nominalisations in the corpus;
- All nominalisations are categorised by two common types: verbal nominalisation and adjectival nominalisation;
- The number of nominalisations among these are manually calculated and put in percentage;
- The total sentences are counted based on the full stop; and
- The frequency of nominalisation is obtained through the division of nominalisation by the total words in the texts.

FINDINGS AND DISCUSSION

Nominalisation and its frequency in the two IELTS test papers

As seen in Table 1 below, the amount of nominalisations used in IELTS writing test paper 1 (band 7) was twice higher than in test paper 2 (band 5). Specifically, with reference to the frequency of nominalisation, one nominalisation is used per 23 words by the good candidate and one per 38 words by the modest user. Overall, verbal nominalisation with suffixes adding or de-verbal nouns are frequently used by IELTS candidate with 89% in the two tests while only two adjectival nominalisation are employed. The result indicates that nominalisation increases across levels of writing. The higher mark the test is, the more nominalisations are used by the candidates. In other words, the finding indicates that successful candidates in IELTS tests demonstrate higher language ability in using nominalisations compared with the modest ones.

Table 1. *Nominalisation in two IELTS writing test papers*

Tests		Paper 1	Paper 2	Two tests
Total sentences		15	11	26
Total words		271	232	503
Total nominalisations		12	6	18
Frequency		1/23	1/38	1/28
Types of nominalisation and percentage	Verbal nominalisation	11	5	16
		61%	28%	89%
	Adjectival nominalisation	1	1	2
		5.5%	5.5%	11%

Lexical density and readability in the two investigated IELTS writing test papers

Lexical density is a common feature of complexity in written language (Halliday, 1985b, p. 62). It refers to the concept of lexico-grammar with respect to the level of wording. "This is a measure of the density

of information in any passage of text, according to how tightly the lexical items have been packed into the grammatical structure” (Halliday & Martin, 1993, p. 76). Lexical density is measured by the proportion of the number of lexical items per the number of running words (Ure, 1971) or by the ratio of lexical items per ranking clauses (Halliday, 1985b). As for readability proposed by (Flesch, 1948), it is measured based the total number of syllables of the words in the passage and the average number of words per sentence. As far as the analysis of lexical density is concerned, writing test paper 1 and test paper 2, both demonstrate a common lexical index in written language. However, the test papers written by the good user was much denser compared with the one by modest candidate, 5.3 and 2.8 respectively. The lexical density in these test papers corresponds to their readability. That is to say, nominalisation makes the texts lexically dense, thus difficult to read across levels.

Table 2. Lexical density and readability in two IELTS writing test papers

Tests	Paper 1	Paper 2
Total words	271	232
Lexical words	126	99
Ranking clauses	24	28
Lexical density (Halliday’s method)	5.3	2.8
Readability (Flesch’s method)	42.9	49.7

The relationship between nominalisation, lexical density and readability in the IELTS writing test papers

As stated earlier, nominalisation allows a process, particularly, with a verb or adjective turning out to be realised as a noun (Bloor & Bloor, 1995). In other words, actions have been nominalised and turned into things (Christie, 1990). Therefore, it codes much of the content of texts. The use of nominal groups, which is “the grammatical unit which allows the widest range of meanings to be expressed” (Thompson, 1996, p. 197) increases the lexical density of text (Christie, 1990). That is to say, nominalisation is the distinctive characteristic of lexical density in academic writing. This can be seen from the analysis of nominalisation and lexical density in the IELTS test papers shown in Table 1 and Table 2. The lexical density index strongly corresponds to the number of nominalisation. More specifically, verbal nominalisation (Table 1) and lexical density (Table 2) in the IELTS test of band 7 are much higher than the ones in the test of band 5, 61% and 5.3 in comparison with 28% and 2.8 respectively. Regarding the relationship between nominalisation and readability, the finding shows that nominalisation is not only a common grammatical feature in academic writing but also a strong factor contributing to text comprehension. The test paper written by the good candidate is more difficult to read than the test by the modest user with reference to Flesch Reading Ease Scale. It can be concluded that nominalisation and lexical density are the representative features of linguistic complexity in writing. They are the indicators of test formality and the increase of nominalisation results in the increase of lexical density and readability. The result of this study confirms what Halliday (1994, p. 200) states “the nominal group is the primary source used by the grammar for packing in lexical items at high density.”

Enhancing students' awareness of nominalisation in academic writing – A pedagogical implication

Of the two productive skills, writing is considered more complicated and difficult for learners to acquire since it is a complex process of using grammar structures in order to convey the writers' ideas effectively (Byrne, 1988). Moreover, people acquire the spoken language (at least their own mother tongue) intuitively whereas the written form is in most cases deliberately taught and learned. In writing, the content is presented much more densely while the information in speech tends to be sparser (Byrne, 1988). The result of the analysis proves that nominalisation packs the information in the test papers and made them denser. The findings also suggest that IELTS candidates can achieve higher mark if they use more nominalisation in their writing. Thus, developing students' awareness of nominalisation in academic writing is crucial in English teaching. Wang (2008) who carried out a pilot teaching process about nominalisation to her students of English at the tertiary level stated that their writing was full of shortcomings in three aspects. Firstly, the writing was less compact but more redundant and repetition. Secondly, the content of writing texts were less lexically dense, less informative but presented in more clauses. Thirdly, students' writing was characterised by hedge-like expressions, colloquial words, and contractions. Therefore, teaching nominalisation to students who learn English as a second language or foreign language is of utmost importance. It helps students to be aware of the grammatical complexity of language and how the language works to pack meanings in sentences. As recognised in academic writing and scientific discourse, nominalisation heavily affects the register of text, so teaching this concept to students will help them adjust their writing style Wang (2008). Furthermore, students who are able to use nominalisation will make their writing more coherent, concise, and formal and it benefits them in different ways in academic writing and tests. Thus, teaching nominalisation should receive greater attention in English teaching curriculum.

CONCLUSION

This comparative analysis examines two IELTS writing test papers of band 7 and band 5 in terms of nominalisation. The analysis reveals that there is a strong relationship between nominalisation, lexical density and readability. Specifically, the more nominalisation is present in the test papers, the denser and more complex the test papers were. It also proves that the good user of English demonstrated higher ability in using nominalisation and achieving higher marks in the IELTS test. In relation to nominalisation classification, verbal nominalisation with adding suffixes to a verb was frequently used. The outcome of this analysis supports the theoretical view that high lexical density is present in nominality (Halliday, 1994). These findings confirm that nominalisation and lexical density express linguistic complexity in writing, which greatly contributes to the ability of writers.

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