A Structural Analysis of Noun Phrases in English and Vietnamese: A Comparative Study

Chung T. T. Nguyen*
Faculty of English, Thuongmai University, Hanoi, Vietnam

Giang T. Pham
Faculty of English, Thuongmai University, Hanoi, Vietnam

Abstract—Noun phrases play a crucial role and appear in almost all sentences of any languages, including English and Vietnamese. Understanding the meaning of noun phrases therefore facilitates the understanding of sentences. The structures of noun phrases are usually complicated as they consist of many constituents and layers, especially for noun phrases used in research articles published in high-ranking business and economic journals. In this article, based on the theories of Greenbaum (1989) on the structures of noun phrases, the authors aim to analyze the constituents or the structures of noun phrases used in English and Vietnamese business and economic articles, compare these constituents to identify the similarities and differences between the two languages, then propose some implications for the study and translation of noun phrases from one language to another.

Index Terms—structural analysis, noun phrases, English, Vietnamese

I. INTRODUCTION

Noun phrases are a common linguistic component in all languages. They are one of the important constituents to sentences in languages in general and English as well as Vietnamese in particular. Since the early 1960s, the study of noun phrases has drawn attention of numerous scholars from different approaches. The first one is the renewed grammar approach, represented by prestigious linguists such as R. Quirk, S. Green Baum, G. Leech, P. Matheior, who developed the concept of noun phrases via the establishment of formulas for basic noun phrases and complex noun phrases (the main structural constituents of noun phrases are Head noun, Premodifiers, Postmodifiers), syntactic functions that noun phrases can perform and their semantic roles in English. Also in this period, linguists of the Transformational Generative Grammar (proposed by N. Chomsky in 1957) and Systemic Functional Grammar (theorized by M.A.K Halliday – 1985) also paid attention to the structures of noun phrases and their semantic roles based on the theories of case by Fillmore and significance of participants by Halliday.

Noun phrases are still a subject of concern to researchers today. In addition to traditional research directions of noun phrases, in recent years there has arisen a new research orientation that inherits the gains made in linguistic study in general and different languages in particular. There are more studies on noun phrases in specific circumstances (Febrian & Yuniar, 2020) as the correct usage of noun phrases as well as other kinds of phrases plays a decisive role to the success of a translation, writing or conversation in English.

Using a research sample consisting of noun phrases used in articles published in business and economic journals in English and Vietnamese, the study aims to analyze the constituents of noun phrases and the frequencies of the constituents. It also compares and contrasts the constituents to noun phrases in terms of their structures to identify the similarities and differences between the two languages.

II. LITERATURE REVIEW

Lots of studies have been carried out on the structures of noun phrases, including those on English noun phrases in football reports in The Jakarta Post Magazine, construction of noun phrases in academic research articles and analysis of noun phrase syntax in English (Angelia, 2007; Lau, 2017; Junaid, 2018).

A notable study on noun phrases from theoretical approach in recent years is the one by Wu (2021) on spherical noun phrases in English. The study analyzes the direct syntax of English noun phrases and presents some overall theoretical assessments. Upon analyzing 4 kinds of English noun phrases, Generic constructions, Referential metonymy, compound pronouns and free relatives, the author presents some contrary arguments to Huddleston and Geoffrey (2002) and Payne et al. (2007) that there is no single systematic solution to all noun phrases in English that include their functional combination. Although English noun phrases have the same surface structures, the modes of lacking central nouns and the mechanism of lacking central nouns are different. Therefore, each kind of English noun phrases needs a specific
explanation and should be considered in its own syntax and development history. This research finding creates a solid foundation for later studies to inherit and find more appropriate approaches.

The study by Febrian and Yuniar (2020) analyzes the structure of noun phrases used in brochures of 5 hotels in YogyaKarta. Upon analyzing 221 noun phrases used in the brochures, the authors construct 16 rules to create noun phrases, of which the most popular one in hotel brochures is $\text{Noun Phase} = \text{Noun} + \text{Noun}$.

Bahrami’s (2023) study seeks to investigate noun phrase structures and the order of their constituents in German. The aim of this study is to find out whether the order of the constituents on both sides of a noun phrase follows any rules or whether such order is arbitrary. The results indicate that the constituents which are placed on the left side of the head agree with it, while such agreement does not exist in the constituents on the right side of the head. Finally, the authors argue that the reason for some inconsistencies in adjective inflection in a noun phrase is the syntactic order of constituents in the noun phrase.

In general, earlier studies have looked into and analyzed the structures of noun phrases from both theoretical approach and practical corporal samples but they have not yet compared the source and target languages to identify the similarities and differences between the two languages. This is the gap for our research as in addition to analyzing the structures of noun phrases and measuring the frequencies of noun phrase constituents, we also aim to compare the constituents of noun phrases between English and Vietnamese.

### III. THEORETICAL BACKGROUND

#### A. Noun Phrases in English

**(a). Concept of Noun Phrases**

A noun phrase functions as a subject, an object or a complement of a clause or can be considered as a modifier to a preposition. It is referred to as a noun phrase as its head is a noun. The head noun can be accompanied by a determiner like “a, the, his” or one or more modifiers, including premodifiers or postmodifiers (Leech & Jan, 1975).

According to Greenbaum (1989, p. 60), the structure of a typical noun phrase is as follows: (note that the square brackets imply that the constituents inside can be omitted and therefore do not need to appear in the structure).

$$\text{[Determiners]} + \text{[Premodifiers]} + \text{Noun} + \text{[Postmodifiers]}$$

**(b). Classification of Noun Phrases**

Within the structure of a noun phrase, Aarts and Aarts (1982) classify the constituents of a noun phrase into 3 main ones including head noun, determiners and modifiers. Based on these constituents, Greenbaum (1989) proposes 8 structures of noun phrases as follows:

- **Head noun**: Firms
- **Determiners + Head noun**: Almost all the + wineries
- **Premodifiers + Head noun**: Highly educated + personnel
- **Determiners + Premodifiers + Head noun**: The + export channel + strategy
- **Head noun + Postmodifiers**: Information + from other markets
- **Determiners + Head noun + Postmodifiers**: The + development + of customer satisfaction capabilities
- **Premodifiers + Head noun + Postmodifiers**: High customer + satisfaction + with digital services
- **Determiners + Premodifiers + Head noun + Postmodifiers**: A + meaningful + relationship + between different dimensions of service quality

#### B. Noun Phrases in Vietnamese

**(a). Concept of Noun Phrases**

In this study, we adopt the definition of noun phrases introduced by Dinh (2001), which defines a noun phrase as a grammatical structure, a free combination of a head that is a noun and a set of subordinate constituents which may be temporary and frequent.

A noun phrase in Vietnamese has a general structure made up from a main constituent (or central constituent) and subordinate constituents lying around the centre, creating the form of $\text{Subordinate constituents} + \text{Central constituent} + \text{Subordinate constituents}$. The relations between the central constituent and subordinate constituents reflect the syntactic features of the main-subordinate relations, so the number of subordinate constituents is limited and their positions in the noun phrases are fixed.

**(b). Classification of Noun Phrases**

Based on the theories of noun phrases proposed by Dinh (2001), the kinds of noun phrases in Vietnamese can be classified as follows:

- **Head noun**: văn [capital], doanh nghiệp [enterprise]
- **Premodifier + Head noun**: các nhà nghiên cứu [indicator of plural form in Vietnamese + researcher], một tổ chức [one + organization], các nhân tố [indicator of plural form in Vietnamese + factor]
The above theories are used as the foundations as well as indications for the authors to analyze the research subjects.

IV. METHODOLOGIES

A. Research Methods

The descriptive qualitative method and statistical method are employed to help us realize our research objectives. The former is used to analyze the grammatical structures of constituents of noun phrases in the corpus, give comments while the latter is used to calculate the frequencies of constituents of noun phrases.

The two-way contrastive method is also employed to compare the constituents of noun phrases in the two research samples from grammatical aspect.

B. Research Sample and Sample Collection

The research sample used for this study includes articles published in business and economic journals in both English and Vietnamese. 15 English and 15 Vietnamese articles are collected randomly from 6 reputable journals (3 in English and 3 in Vietnamese) with publication time ranging from January 2020 to January 2023. Reputable journals mean journals that are counted 1 point in Vietnam, which is the highest score for domestic journals by the council considering the position of associate professor.

Based on theories proposed by Greenbaum (1989) on structures and classification of noun phrases, the data collection procedures are taken as follows:

1. Reading articles published in the sample journals in both languages;
2. Identifying noun phrases in the articles and collecting them;
3. Analyzing noun phrases, based on the constituents of noun phrases, including head noun, premodifiers and postmodifiers. Then the main constituents are sub-categorized to identify their frequencies in noun phrases and compare between the two languages.

V. RESULTS

A. Structural Characteristics of Noun Phrases in English

(a). Constituents of Noun Phrases in English

After a statistical analysis of the research corpus in English business and economic journals, it can be seen that many noun phrases appear in the form of countable nouns (services, strategies), uncountable nouns (information, development), and a few proper nouns (China). Additionally, many head nouns also combine with various words such as determiners, premodifiers, and postmodifiers. The determiners of these noun phrases are primarily definite articles: "the importance of human resources". Many premodifiers take the form of adjective phrases: "quite poor results". Prepositional phrases are frequently used in noun phrases with the role of postmodifiers: "most of the dimensions of digital service quality". The table below illustrates the constituents of noun phrases, including the head noun, determiner, premodifier, and postmodifier.
From the table above, it can be clearly seen that the constituents of noun phrases are quite diverse. In fact, besides the constituents listed in the table, there are other ones accompanying noun phrases that did not appear in the collected corpus, such as adverbial phrases serving as postmodifiers of noun phrases.

**Head Noun**: The head noun is the most prominent constituent of a noun phrase. It is a minimal requirement for the presence of a noun phrase. The table shows four constituents that help identify the head noun. Firstly, countable nouns appear most frequently as the head noun with a frequency of 378 occurrences, accounting for 26.58%: *foreign strategic partners, their products in international markets*. Next, uncountable nouns appear the second most frequently as the head noun with 123 occurrences, representing 8.64%: *the good reputation of the firm, a firm’s familiarity with foreign market environments*. Thirdly, another constituent of the head noun in English noun phrases is proper nouns, but their occurrence is very limited with only one instance, accounting for 0.07%: China. Finally, numerals (the last eight, the second...) serving as the head noun do not appear in the corpus. This can be explained by the fact that the data were collected from highly academic research articles, where authors use precise and comprehensive language, so numerals are not typically used as the head noun in noun phrases.

**Determiners**: In this study, determiners most frequently appearing in noun phrases are articles, especially definite articles which account for 10.54%: *the chosen export channel, the use of digital services*. Determiners precede the head noun to specify the object referred to earlier. The nouns *channel* and *use* in the examples above are determined by the definite article *the*. Indefinite articles are also frequently used as determiners, representing 5.97% of occurrences: *a digital environment, an important factor*. In addition, other constituents are also used as determiners in noun phrases but in negligible quantities, including quantifiers (2.25%) - *fewer growth opportunities, some production robots; possessive adjectives (1.54%) - *their firm’s export performance, our results; cardinal numbers (0.91%) - *two different levels, four major changes; demonstrative pronouns (0.84%) - *these four export barriers, this relationship, and notably, no ordinal numbers are chosen as determiners for noun phrases (0%).

**Premodifiers**: Premodifiers come after determiners but before the head noun. In this study, there are various types of premodifiers appearing in noun phrases. The first type serving as premodifiers in noun phrases is adjective phrases that appear most frequently with 165 occurrences, accounting for 11.6%: *a difficult decision, a direct and positive impact*. Adjective phrases such as *difficult, direct and positive* stand before the head nouns to provide detailed and specific information for them: *decision* and *impact*. The second most frequent type preceding the head noun is noun phrases (8.64%), whose presence is not mandatory but provides additional information for the text: *technology transfer, inflation rate, foreign direct investment process*. Noun phrases such as *technology*, *inflation*, *foreign direct investment* function as premodifiers for the head nouns *transfer*, *rate*, and *process*, respectively in order to provide specific information and restrict the head nouns: *technology transfer rather than other transfers or foreign direct investment process rather than other processes*. Participles are a less frequent type of premodifier of the head noun, appearing modestly with 1.47%. Participles functioning as premodifiers provide additional information and specific details for the head noun, making the head noun more specific when participles are present. There are two types of participles acting as premodifiers for the head noun: present participles (-ing participle) and past participles (-ed participle): *Highly educated personnel, changing processes and activities, a data-based culture*.

**Postmodifiers**: In the corpus, three constituents serve as postmodifiers for noun phrases, including prepositional phrases, defining clauses, and non-defining clauses. Postmodifiers appearing most frequently are prepositional phrases with 264 occurrences, representing 18.56%. Prepositional phrases are the most common type of postmodifiers in English, providing additional information for the head noun: *customer satisfaction with firms’ products and services, the cost of capital for such firms in the future*. Prepositional phrases in the examples above are used to supply additional information and restrict the head nouns. The second most frequent type of postmodifier is non-defining...
clauses, accounting for 1.26%. Non-defining clauses used as postmodifiers also provide additional information for the head noun, describing the action of the head noun: *costs related to warranties*, new information and knowledge gained from international markets, an important factor affecting the firm’s investment policy, firms choosing their export channels on the basis of their resources. In the first and second examples, the non-finite clauses are in the V-ed form: *related to warranties* and *gained from international markets*, and also known as reduced relative clauses conveying a passive meaning. Two examples with non-finite clauses in the V-ing form: *affecting the firm’s investment policy* and *choosing their export channels on the basis of their resources*, convey an active meaning, providing additional information for the head noun “factor” and describing the selection activities for the head noun “firms”. Defining clauses function as postmodifiers for the head nouns with relatively low frequency (1.05%): *those resources that are valuable*, the activities they need to carry out in foreign markets, the home and host environment within which the firm operates. Defining clauses can begin with “*that, who, which...*” or prepositions like “within which,” or pronouns may be omitted, as in the second example. These clauses serve the purpose of providing additional information to clarify or define the preceding head noun.

(b) Types of Noun Phrases in English

In the structure of noun phrases, there are three main constituents: the head noun, the determiner, and the modifier. According to Greenbaum (1989), there are eight types of noun phrase structures (as explained in the Theoretical Background). The following table illustrates the frequency of each noun phrase structure:

<table>
<thead>
<tr>
<th>No</th>
<th>Types of Noun phrases</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Head noun</td>
<td>13</td>
<td>2.6</td>
</tr>
<tr>
<td>2</td>
<td>Determiner + Head noun</td>
<td>11</td>
<td>2.2</td>
</tr>
<tr>
<td>3</td>
<td>Premodifier + Head noun</td>
<td>105</td>
<td>20.92</td>
</tr>
<tr>
<td>4</td>
<td>Determiner + Premodifier + Head noun</td>
<td>71</td>
<td>14.14</td>
</tr>
<tr>
<td>5</td>
<td>Head noun + Postmodifer</td>
<td>39</td>
<td>7.76</td>
</tr>
<tr>
<td>6</td>
<td>Determiner + Head noun + Postmodifer</td>
<td>126</td>
<td>25.1</td>
</tr>
<tr>
<td>7</td>
<td>Premodifier + Head noun + Postmodifer</td>
<td>39</td>
<td>7.76</td>
</tr>
<tr>
<td>8</td>
<td>Determiner + Premodifier + Head noun + Postmodifer</td>
<td>98</td>
<td>19.52</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>502</td>
<td>100</td>
</tr>
</tbody>
</table>

The most common type of English noun phrase in this study is type 6 (Determiner + Head noun + Postmodifier) with 126 occurrences: *the value of the available data, a tool to evaluate sentimental stock-price movement, their presence in international markets*. In these examples, central determiners like the definite article “*the*”, indefinite article “*a*”, and possessive adjective “*their*” precede the head nouns “value”, “tool,” and “presence”. The postmodifiers of the head nouns are prepositional phrases beginning with prepositions: “*of*” and “*in*”. The second most frequent type of noun phrase is type 3 (Premodifier + Head noun): *international markets, external management practices, exporting firms, highly educated personnel, and customer satisfaction*. The premodifiers of the head nouns “market”, “practices”, “firms”, “personnel” and “satisfaction” are diverse, including adjectival phrase: “*international*”, noun phrases: “*external management*”, “*customer*”, present participle: “*exporting*” and past participle: “*educated*”.

The next one is type 8 (Determiner + Premodifier + Head noun + Postmodifier): *the digital age in which the world enters, a competitive advantage that affects export performance, three major types of technology*. In these examples, determiners at the beginning of the noun phrases include the definite article “*the*”, indefinite article “*a*”, and the cardinal number “three”, followed by premodifiers: “*digital, competitive, major*”. Postmodifiers include defining relative clauses “*in which the world enters, that affects export performance*” and prepositional phrase “*of technology*”. The fourth is type 4 (Determiner + Premodifier + Head noun) with 71 occurrences: *these foreign direct investments, the added value, these four export barriers, its existing firm-specific resources, and some research questions*. In these examples, the head nouns appear in the last position, preceded by premodifiers: “*foreign direct, firm-specific*, past participle: “*added*”, nominal phrases: “*export, research*” and various determiners including demonstrative pronoun “*these*, definite article “*the*, numeral “*four*, possessive adjective “*its*”, and indefinite quantifier “*some*”.

Two types of noun phrases which occur with the same frequency of 39 times are type 5 (Head noun + Postmodifier) and type 7 (Premodifier + Head noun + Postmodifier). Examples of type 5 include *tasks or jobs that involve the leadership processes required during digital transformation, firms with less growth opportunities, attention from both public media and academics*. In these cases, the head nouns take up the initial position and followed by postmodifiers that are defining relative clauses with “*that*” or prepositional phrases with “*with*” and “*from*”. Examples of type 7 include: *key advantages of branding growth, effective marketing campaigns for their target audience, high customer satisfaction with digital services*. In these noun phrases, the head nouns are positioned between premodifiers and postmodifiers. Premodifiers are adjectival phrase “*key*” or noun phrases “*effective marketing*” and “*high customer*”, and postmodifiers are prepositional phrases “*for the target audience, with digital service*”. Then, it is type 1 (Head noun) with 13 occurrences such as “*China*, “*reputation*, “*advertising*”. From these examples, it can be seen that noun phrases in type 1 consist only of a head noun, which can be a proper noun: “*China*, a countable noun: “*limitations*”. 
and an uncountable noun: "advertising". Finally, type 2 (Determiner + Head noun) appears the least frequently with 11 occurrences: only a few researchers, 200 million people, this argument and Our results.

From these research results, it is evident that the data collected from reputable business and economic journals such as the Journal of Economics and Business, Journal of Business Economics and Management, and Business Perspectives and Research ranging from the years 2020 to 2023 utilize both basic noun phrases and complex noun phrases. However, over half (300 out of 502) of the noun phrases in the study are complex, suggesting that due to the academic and formal nature of the language in research papers and journals, complex noun phrases are used more frequently than basic noun phrases. Additionally, the study results demonstrate that noun phrases are not only composed of the head nouns but also include other constituents such as determiners, premodifiers, and postmodifiers.

B. Structural Characteristics of Noun Phrases in Vietnamese

(a). Constituents of Noun Phrases in Vietnamese

The Vietnamese noun phrase is considered a group of words with a central/ head noun, which is the most essential constituent. In the corpus, noun phrases may appear in the form of common nouns (goods, customs duties) and proper nouns (Vietnam, Europe). However, the latter is relatively limited in quantity. Additionally, many head nouns also combine with various types of words or phrases in the preceding and following parts. The preceding part of the head noun is primarily determined by modifiers: các khoản vay (các + loan), một số hoạt động (a playing field + equal), một số mất hối loại thì (some items + advantageous), những chính sách thu hút FDI (những + policy attracting FDI). Various types of words such as nouns, adjectives, verbs, and internal modifiers are frequently used in the noun phrases, serving as the following part: sản xuất hàng hóa (production of goods), việc làm tại Việt Nam (employment in Vietnam), những yếu tố năng động khả (những + factor + the most dynamic). The table below illustrates the constituents of Vietnamese noun phrases used in business and economic journals, including the head noun, the preceding part (premodifier), and the following part (postmodifier):

<table>
<thead>
<tr>
<th>No</th>
<th>Constituents</th>
<th>Head noun</th>
<th>Premodifier</th>
<th>Postmodifier</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Proper noun</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>242</td>
<td>20.84</td>
</tr>
<tr>
<td>2</td>
<td>Countable noun</td>
<td>268</td>
<td>-</td>
<td>-</td>
<td>268</td>
<td>23.08</td>
</tr>
<tr>
<td>3</td>
<td>Uncountable noun</td>
<td>9</td>
<td>25</td>
<td>-</td>
<td>25</td>
<td>2.15</td>
</tr>
<tr>
<td>4</td>
<td>General modifier</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>Definite modifier</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>Special modifier</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>Indefinite modifier</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>Distributive modifier</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>Connotative modifier &quot;cái&quot;</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>Internal modifier</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>External modifier</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>Ordinal modifier</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>Demonstrative modifier</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>Possessive modifier</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>15</td>
<td>Clausal modifier</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>1161</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the table above, it can be observed that the constituents in Vietnamese noun phrases are also diverse. The head noun is the most important constituent and the minimal requirement of a noun phrase. The table indicates three constituents that help to identify the head noun. Firstly, uncountable nouns appear most frequently as the head nouns, occurring 268 times, accounting for 23.08% of the total: tình trạng kinh tế vĩ mô (condition + macroeconomic), làm phát (inflation), thu nhập thực tế từ việc cho vay (income + actual + from lending), khả năng trả nợ (ability + repayment + debt), số tăng trưởng tín dụng (growth + credit). Besides, countable nouns play a central role in the noun phrases, ranking second with 20.84%: các cọ quan giám sá (các + agency + supervisory), các sản phẩm lợi thế của Việt Nam (các + product + competitive + Vietnam’s), những cơ hối từ hiệu dịch RCEP (những + opportunity from the agreement RCEP), các biện pháp chống bán phá giá (các + measure + anti-dumping). Lastly, proper nouns appear with very small quantity, accounting for 0.43%: Việt Nam (Vietnam), Liên minh Châu Âu (Union European).

The premodifiers in Vietnamese noun phrases also frequently appear before head nouns. According to the corpus survey results, modifiers appearing most frequently with the highest frequency are the special modifiers "các" (plural definite) and "những" (plural indefinite): các biện pháp cớ xuất khẩu (các + measure + subsidy for export), các công cụ chính sách (các + tool + policy), những cọ sóc thanh quản (những + shock + liquidity). In addition, the premodifiers also include definite modifiers indicating quantity "một, hai, ba, bốn, trăm,..." (one, two, three, four, a hundred) which appear with the second-highest frequency of 39 times (3.35%): hai cơ chế tác động (two + mechanism + impact), một khoản vốn bổ sung (an + injection capital + additional). Next, the indefinite modifiers appear 25 times before the head noun (2.15%): một số mất hối lo loại thì (some + item + advantageous), nhiều thí phần (a lot of +

© 2024 ACADEMY PUBLICATION
Two constituents in premodifier with limited occurrences, are the general modifier and the distributive modifier, accounting for 0.77% and 0.17% respectively: Tất cả doanh nghiệp (all + enterprise), mỗi doanh nghiệp (each + enterprise). The connotative modifier "cái" does not appear in the premodifier of Vietnamese noun phrases in the collected corpus. This may be due to the academic nature of the language used in the research, which requires clarity and high precision with no expression of attitudes or emotions from the writer. The connotative modifier "cái" is more informal and is commonly used in spoken contexts such as: cái thang cha dỗ (cái + that guy), cái ăn cái ngủ (cái + eating and cái + sleeping), cái ràng cái tắc (cái + teeth and cái + hair).

The postmodifier of the head noun is more diverse and complex than the premodifier. From the table, it can be seen that the external modifiers (free modifiers), which have the highest frequency with 370 occurrences, accounting for 31.86%, are often nouns, adjectives and verbs: doanh nghiệp nước sở tại (businesses + local), hiệu ứng cạnh tranh (effect + competitive), quyết định xuất khẩu (decision + export), vai trò quản trọng (role + important). The second ranking position belongs to the possessive modifier with 50 occurrences (4.30%): sự khác biệt của các kết quả (differences in results), sự tăng trưởng của nền kinh tế (growth + economic), tầm quan trọng của FDI đối với phát triển kinh tế Việt Nam (the importance of FDI for development economic Vietnam's). The next one is pronominal modifier, accounting for about 1.55%: văn đề mâu thuẫn khoa học và hoạch định chính sách quan trọng (issues that many scientists and policymakers are concerned about), hiệu quả những cơ hội mà EVFTA mang lại trong thời gian tới (the effectiveness of the opportunities that EVFTA brings in the future). Then, the internal modifier (fixed clusters) has quite a few occurrences (10 times) such as: nguyên liệu thô (materials + raw). Lastly, the two elements of the demonstrative modifier and the ordinal modifier, which have a few occurrences, 7 and 5 respectively: những số ép này (những + pressure + these), các chỉ số này (các + index + these), lần giao hàng thứ nhất (the delivery + first).

(b). Types of Noun Phrases in Vietnamese

In the structure of Vietnamese noun phrases, there are also three main constituents, including the head noun, premodifiers, and postmodifiers. According to Đinh (2001), there are four types of noun phrase structures. The following table shows the frequency of each type:

<table>
<thead>
<tr>
<th>No</th>
<th>Types of Noun phrases</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Head noun</td>
<td>11</td>
<td>2.14</td>
</tr>
<tr>
<td>2</td>
<td>Premodifier + Head noun</td>
<td>17</td>
<td>3.30</td>
</tr>
<tr>
<td>3</td>
<td>Head noun + Postmodifier</td>
<td>311</td>
<td>60.39</td>
</tr>
<tr>
<td>4</td>
<td>Premodifier + Head noun + Postmodifier</td>
<td>176</td>
<td>34.17</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>515</td>
<td>100</td>
</tr>
</tbody>
</table>

The most common type of Vietnamese noun phrases with the highest frequency in this study is type 3 (Head Noun + Postmodifier) with 311 out of 515 occurrences: đầu tư trực tiếp nước ngoài (investment + direct foreign), mục tiêu quan trọng hàng đầu (goal + priority top). In these examples, the postmodifiers including adjective phrases: "mức tiêu" "quan trọng hàng đầu" provide specifications for the head nouns “đầu tư” and “mục tiêu”. The second most frequently occurring one is type 4 (Premodifier + Head Noun + Postmodifier) as seen in the following examples: nhiều ăn hưởng tiêu cực của FDI (những + impact + negative of FDI), hơn 20% vốn đầu tư toàn xã hội (over 20% of + investment + total social), các cơ hội đến từ các tổ chức (các + opportunity + from each organization), những cái thiện về chất lượng lao động (những + improvement + in quality labor). Premodifiers of the head nouns include indefinite quantifiers: nhiều (many), special quantifiers: có (indicator of plural form), những (indicator of indefinite plural form) and definite modifier: hơn 20% (over 20%), etc. Premodifiers of head nouns consist of adjectives: tiêu cực (negative). The next one is noun phrase type 2 - (Premodifier + Head Noun) with quite low frequency of 17 occurrences, accounting for 3.30%: 27 thành viên (27 members), một số giải pháp (some solutions), toàn bộ nền kinh tế (all the economy), những mứ cabeça (những + item), các dòng thuế (các + categories tax). Premodifiers of the head nouns mainly consist of modifiers such as the definite numerals: 27, indefinite quantifiers: một số (some), những, các and general modifier: toàn bộ (all). In the last position is type 1 (Head Noun) with 11 occurrences: Việt Nam (Vietnam), Liên minh Châu Âu (Union European), hiệp định (agreement), thuế quan (customs duties). Thus, it can be seen that noun phrases in type 1 consist of a single head noun, which can be a proper noun: “Vietnam”, a common noun: “customs duties”, and a specific noun: “agreement”.

C. Comparing Structures of Noun Phrases in English and Vietnamese

From the analysis of the structure, constituents, and types of noun phrases in English and Vietnamese on the data of business and economic journals, some similarities and differences can be drawn as follows:

(a). Regarding the Constituents of Noun Phrases

1. Head Noun
Concerning the head noun, both languages have types of proper nouns, countable nouns, and uncountable nouns that play the role of the head noun. Countable and uncountable nouns appear with high frequency, while proper nouns make up a very small proportion. In both languages, there is no occurrence of numerals serving as the head noun. This similarity may be due to nouns and noun phrases being universal elements in languages.

Data analysis reveals that both languages exhibit the phenomenon of verbalization, transforming verbs into head nouns within noun phrases (meaning that verbs are converted into nouns through various methods). In English, two common methods are gerundive nominalization (verbalization by adding “-ing” to a verb to create a gerund): a better understanding of export channel performance differences, the gradual strengthening of the global economy, and derived nominalization where the verb "develop" becomes the noun "development" by adding the suffix “-ment”: the development of customer satisfaction capabilities. However, in Vietnamese, the transformation of verbs into nouns is influenced by external elements (specialized elements, elements of grammatical tools). These external elements include the words like sự, việc, cuộc, nơi, niệm, etc. added before the verb to form a noun: phát triển (develop) => sự phát triển (development), ban hành (issue) => việc ban hành (issuing).

- "sự phát triển" nhanh chóng cả yếu tố và cấu trúc (rapid development in both scale and structure);
- "việc ban hành" các công cụ vốn nhằm nâng cao năng lực chống đỡ rủi ro (issuing tools on capital to enhance risk resilience capabilities).

The reason for this difference is that English and Vietnamese belong to different language types: English is a synthetic and inflective language, so words undergo morphological changes, while Vietnamese is an analytical and isolating language, relying on external elements to transform word types.

2. Pre-Modifiers

From the table, it can be observed that both English and Vietnamese noun phrases have premodifiers for the head noun with various elements. The premodifiers in English noun phrases begin with determiners such as definite and indefinite articles, demonstrative pronouns, possessive pronouns, quantifiers, numerals, and ordinal numbers. Similarly, in Vietnamese, premodifiers for the head noun start with general, special, definite, indefinite, and distributive modifiers. Specifically, premodifiers for English head nouns include elements like quantifiers and numerals: “all”, “both”, “half”, “many”, “much”, “some”, “every”, “each”, “one”, “two”, “three”, etc. corresponding to general modifiers in premodifiers of the head noun in Vietnamese: “cả”, “tất cả”, “tất bố”; distributive modifiers: “mỗi”, “từng”; definite modifiers: “mở”, “hai”, “ba” and indefinite modifiers: “nhiều”, “một số”, “một vài”. However, the frequency of using quantifiers and numerals in the premodifier of the head noun in English is much lower than that of modifiers before the head noun in Vietnamese.

Although there are some similarities in the structure of noun phrases, there are also prominent differences between English and Vietnamese. English noun phrases have determiners such as definite and indefinite articles in the premodifier, while Vietnamese does not have this element. Additionally, demonstrative pronouns, possessive adjectives, and ordinal numbers in English are part of the premodifier of the head noun, whereas in Vietnamese, these elements, including definite modifiers, possessive modifiers, and ordinal modifiers, are part of the postmodifier of the head noun:
"these strategies" and "níh chúng họa này"; "their products in international markets" and "sản phẩm của họ đưa ra thị trường quốc tế". Another significant difference in the structural constituents of noun phrases in the two languages is that in English, premodifiers of the head noun include adjectives, nouns, and participles, whereas in Vietnamese, these elements are entirely in the postmodifiers after the head noun: "inflation rate" and "ty lệ làm phát"; "real income of the lending" and "thu nhập thực tế của việc cho vay". These differences may contribute to difficulties for both English and Vietnamese learners, especially in the process of translating from Vietnamese into English and vice versa.

3. Post-Modifiers

The table shows that the postmodifier of the head noun in both English and Vietnamese has a fairly diverse structure, including various elements. The postmodifier of the head noun in English consists of components such as prepositional phrases, defining clauses, and non-defining clauses, while in Vietnamese, there are internal modifiers (fixed expressions), external modifiers (free expressions such as nouns, adjectives, and verbs), ordinal modifiers, demonstrative modifiers, possessive modifiers, and clausal modifiers. The most notable similarity in the postmodifier of the head noun is that they both include clauses or clausal modifiers, meaning that there is a defining clause, non-defining clause, or clausal modifier after the head noun in the noun phrase. Furthermore, compared to English, the postmodifier of the head noun in Vietnamese has twice the number of modifiers for the head noun. This is because some premodifiers before the head noun in Vietnamese are moved to the postmodifier (as mentioned earlier).

(b). Regarding the Structure of Noun Phrases

Based on data analysis, the structure of noun phrases in English and Vietnamese shows a fairly clear similarity. In both English and Vietnamese, the structure of a noun phrase consists of three parts: the premodifier, the head noun, and the postmodifier. The head noun is the main and essential element of a noun phrase. Both the premodifier and the postmodifier have diverse elements that provide additional information for the head noun. However, there are also differences between the premodifier and postmodifier of the head noun. In English, in addition to determiners, which have a similar function to premodifiers in Vietnamese, there is also a premodifier. The premodifier for the head noun in English is placed right after the position of the determiner and includes adjective phrases, noun phrases, and participles. In contrast, in Vietnamese, there is no similar element, there are only premodifiers which are used as the determiners in English. The premodifier of the head noun in Vietnamese corresponds only to determiners in English. This difference is illustrated in the following table:

(c). Regarding the Types of Noun Phrases

In terms of classifying noun phrases, both languages overlap in four types of noun phrases, including noun phrases with only a head noun, noun phrases with the structure of premodifier + head noun, head noun + postmodifier, and premodifier + head noun + postmodifier. However, it is evident that there is a significant difference in the number of noun phrases in two languages (see table 2 and 4). There are 8 types of noun phrase structures in English, twice as many as that in Vietnamese. As mentioned earlier, as premodifiers in Vietnamese serve the same function of determiners as in English, in fact, there are no premodifiers for the head noun in Vietnamese, so the classification of noun phrases is limited and not diverse.

VI. IMPLICATIONS

The research has provided a deeper understanding of noun phrase construction in both English and Vietnamese. It is the study that investigates the structure of noun phrases in highly academic research articles in business and economic journals in the hope to be particularly useful for the development of foreign language writing and translation performance among learners, young translators and scholars. The understanding of structure, constituents, similarities and differences of noun phrases in academic research articles of the two languages may potentially help learners and
translators pay more attention to the syntactic complexity and variety of sentence patterns in learning academic writing and translation. Moreover, this understanding may also enable young scholars to better their writing performance for the target journals.

VII. CONCLUSION

The research results indicate both similarities and certain differences in the structure of noun phrases in English and Vietnamese. There are numerous similarities in the constituent elements and classification of noun phrases in both languages, providing a favorable foundation for language learners. However, alongside these inherent similarities, there are clear differences that can pose challenges in the process of learning both languages. These distinctions and similarities originate from the inherent characteristics of the two languages, making it essential to equip users with fundamental and advanced knowledge of grammar in both languages and help them recognize the differences between them to minimize errors.

ACKNOWLEDGEMENTS

The authors wish to thank all the reviewers for their helpful comments and suggestions. This work is supported financially by Thuangmai University, Hanoi, Vietnam.

REFERENCES

[8] Business Perspectives and Research: https://journals.sagepub.com/home/bpr

**THEORY AND PRACTICE IN LANGUAGE STUDIES**

© 2024 ACADEMY PUBLICATION
Chung, T. T. Nguyen was born in Bac Giang, Vietnam, in 1980. She got her PhD in Contrastive Linguistics from Graduate Academy of Social Sciences in 2021. Currently, she is a lecturer of English and also Deputy Head of English Faculty, Thuongmai University. She is responsible for teaching general English, ESP and linguistics at her educational institution. She pursues research interests in ELT, pragmatics, semantics and contrastive linguistics.

Giang T. Pham was born in Hanoi, Vietnam, in 1981. She earned her PhD in Contrastive Linguistics from Graduate Academy of Social Sciences in 2023. She is a lecturer of English and also Head of Department of English Theory, English Faculty, Thuongmai University, where she has been teaching general English, ESP and linguistics for 19 years. Her main research interests include ELT, linguistics and applied linguistics.