An Analysis of Researches on Nominalization by Major Linguistics Schools

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This paper is Sponsored by the Seed Foundation of Innovation and Creation for Graduate Students in Northwestern Polytechnical University (Foundation number: ZZ2019046)

Published: 16 May 2019
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Abstract
As a kind of lexical and grammatical resource, nominalization exerts a crucial part in language activities and draws great attention in academic fields. This study reviewed theoretical researches on nominalization by major linguistic schools, which are structural school, transformational-generative school, cognitive school and systemic functional school. Through reviewing these studies, in terms of classification of nominalization, it is found that apart from systemic functional school, other three schools mainly focused on nouns which are derived from verbs and adjectives, therefore, neglecting other possibilities. Besides, to some extent, other schools’ studies on nominalization are still inadequate, and they mainly study the form or syntactic level, seldom investigating functions of nominalization in context. Therefore, compared with other schools, systemic functional school proposed that nominalization belongs to metaphorical language and the formation of nominalization undergoes a complicated process, instead of adding suffix. Thus, under the theoretical basis of systemic functional grammar, nominalization has profound meaning.

Keywords: nominalization; theoretical researches; limitations

Introduction

The first research on nominalization should be Jespersen’s research who (1924, 1937) proposed the definition of nominalization in his book Analytic Syntax, and he termed nominalization as “nexus substantives”, using this term to indicate nouns transferred from verbs and adjectives. His explanation to nominalization arouse many scholars’ interest in this special lexical grammatical resource, and they think nominalization plays an important role in scientific language. Hence, scholars analyzed nominalization from different perspectives, in which structural grammar, transformational-generative grammar, cognitive grammar and systemic functional grammar all discuss nominalization based on their theory (Liu & Lu 2004). The former three linguistic schools all focus on the formation of nominalization, while systemic functional grammar combines form and context, investigating nominalization in scientific discourses. Through reviewing their definition, classification and explanation of nominalization, features of their studies are discussed and limitations are offered.

1. Definitions of Nominalization

According to Bussmann (2000), nominalization refers to a creative formation process through which words of all parts of speech could be converted into nouns, in other words, nominalization is a transformation form other word-classes to nouns. Actually, in Bussmann’s opinion, nominalization is mainly transferred form verbs and adjectives, because this transformational process is relatively easier in comparison with other parts of speech, such as conjunctions or prepositions. Matthews holds the same opinion like Bussmann (2000: 244) who considered nominalization as any process by which either a noun or a syntactic unit functioning as a noun phrase, or any noun which is derived from any other kind of unit such as a verb or an adjective. Similarly, Biber (1998) believed that nominalization is nouns that are transformed from other word classes, mainly from verbs and adjectives, which means nominalized words are derived from adding suffixes to verbs and adjectives. As a whole, from the aforementioned definitions given by Bussmann, Matthews and Biber, it can be concluded that they all considered nominalization as a kind of transformational process which involves changes of word classes, especially transferred from verbs and adjectives (Biber et al 2000; Crystal 2002). However, these definitions still rest on lexical level, and the transformational process is restricted to verbs and adjectives, hence, these definitions are somewhat limited and superficial (Banks 2005).

Among all these definitions, Halliday is the one who offered a general and systematic theory of the phenomenon of nominalization. He states that “nominalization refers to the phenomenon that any element or groups of element, phrase or clause can function as a nominal structure” (Halliday, 2004: 358). His definition is a breakthrough in the field of nominalization research, emphasizing functions of language and language in use. Instead of equating nominalization with only a lexical item, Halliday defines nominalization as a grammatical expression which contains a complex transformational process. Hence, it can be concluded that except from Halliday, other researchers hold the same distinction that nominalization is mainly transformed from verb or adjective. However, Halliday used “any element or groups of element” in his definition to broaden the range of nominalization from merely the lexical level, and he analyzes nominalization from a higher level, which is syntactic level, because according to him,
nominalization functions as a noun or a nominal group in a clause (Hu 1989). Therefore, nominalization is not only a static word in a clause, and it represents a dynamic transformational process in a clause.

2. Classifications of Nominalization

Nominalization is a broad concept, and it contains a lot of detailed branches, and some scholars categorized it according to their theory, in which the most famous two classifications are proposed by Halliday.

2.1 Classifications of Nominalization by Simpson and Lester

Transformational-generative grammar focused on the form of nominalization, so according to the classification of nominalization raised by Simpson and Lester (1971, 1979), at least the following eight types belong to nominalization,

Table 1 Classification of Nominalization by Simpson and Lester

<table>
<thead>
<tr>
<th>Classification of nominalization</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factive “that”</td>
<td>That Queen Anne was dead alarmed the vicar.</td>
</tr>
<tr>
<td>Gerundial “-ing”</td>
<td>The nurse’s giggling annoyed him.</td>
</tr>
<tr>
<td>Action “-ion” etc.</td>
<td>The quick publication of the book surprises us.</td>
</tr>
<tr>
<td>Infinite “to”</td>
<td>To dream is quite normal.</td>
</tr>
<tr>
<td>“Abstract” noun</td>
<td>The linguist’s goodness is remarkable.</td>
</tr>
<tr>
<td>Agentive noun</td>
<td>Egbert is a giggler.</td>
</tr>
<tr>
<td>“State” noun</td>
<td>Manhood, etc.</td>
</tr>
<tr>
<td>Wh-clause</td>
<td>How John rebutted the speaker amused us.</td>
</tr>
</tbody>
</table>

From this classification, it can be found that this is to discuss the issue of nominalization in a broad sense, and nominalization is no longer a word-class. Under the framework of this classification, both lexical nouns and clause belong to nominalization. This classification is adopted by some scholars who want to investigate both lexical nominalization and clausal nominalization, and in fact, this classification is based on the syntax, so it is relatively easier for researchers to follow these eight standards to find the corresponding nominalization. However, the drawback of this classification is that it can not give out any general rules of nominalization. It includes 8 types, in which some examples are difficult to understand and identify. Therefore, this classification is not so widely adopted by many scholars.

2.2 Classifications of Nominalization by Halliday

Since the theoretical basis of nominalization is grammatical metaphor, more specifically, ideational metaphor, as a result, Halliday classified nominalization in agreement with ideational metaphor. He (1996) identified the following five types of nominalization which reflected in lexicogrammatical strata, as follows:
Table 2 Five types of nominalizations

<table>
<thead>
<tr>
<th>Semantic functions</th>
<th>Grammatical functions</th>
<th>Lexicogrammatical class</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) quality → entity</td>
<td>epithet → thing</td>
<td>adjective → noun</td>
</tr>
<tr>
<td>(2) process → entity</td>
<td>i event → thing</td>
<td>verb → noun</td>
</tr>
<tr>
<td></td>
<td>ii auxiliary → thing</td>
<td></td>
</tr>
<tr>
<td>(3) circumstance → entity</td>
<td>minor process → thing</td>
<td>preposition → noun</td>
</tr>
<tr>
<td>(4) relator → entity</td>
<td>conjunctive → thing</td>
<td>conjunction → noun</td>
</tr>
<tr>
<td>(5) entity (expansion)</td>
<td>head → modifier</td>
<td>noun → various</td>
</tr>
</tbody>
</table>

These five types all belong to nominalization, and they are transformed from quality, process, circumstance, relator, zero to entity respectively. Process nominalization is often realized by the transference of a verb to a noun. Quality nominalization refers to any nominalized word or word group derived from an adjective. Circumstance nominalization is often realized by the transference of a prepositional or a prepositional phrase to a noun. Relator nominalization refers to any nominalized word or word group derived from a conjunctive. Zero nominalization is often realized by the transference of zero to a noun. As a whole, these five types basically involve all the nominalizations under the framework of grammatical metaphor, and in the latter researches, a lot of scholars followed Halliday’s classification of nominalization and investigated these five types in detail.

3. Theoretical Researches on Nominalization

3.1 Structural Grammar

With the popularity of behaviorism, many scholars began to analyze nominalization under the framework of structural grammar, in which the most prominent scholar was Bloomfield. He (1914) regarded nominalization as endocentric construction and put forward a method of classifying words, which is “immediate constitute analysis”. He believed that the standard used to differentiate specific word class and grammatical category is their filling category in grammatical structure instead of word meaning (Liu & Lu 2004; Bauer 1983; Goatly 1997). For him, nominalization can be formed by the combination of derivative word or subordinate endo-centric construction adding head, but it all belongs to nouns (Fan & Wang 2003). So he used immediate constitute analysis to dissect words, for example, dependent can be divided into two parts: depend and ent, and they are considered as nouns which belong to same word class used to fill grammatical structure, the occurrence of them in the sentence is regarded as grammatical constitute, and only in syntactic system they are meaningful.

In their point view, nominalization can be formed by adding suffixes, which is only a change in word form rather than word-class or function. Therefore, form is the centre of structuralism’s theory, and they did not care about meaning or function. Their analysis of nominalization is still on surface level, for this reason, they were not able to make a distinguish between nominalization and common noun group. In other words, their researches about nominalization are shallow and unreasonable.
3.2 Transformational-generative Grammar

After Bloomfield, formalism represented by Chomsky began to rise. Because syntax is the focus of Chomsky’s transformational-generative grammar, and he interpreted nominalization from syntactic perspective and held the idea that nominalization is transformed from the deep structure with the help of transformational rules. He (1968:107) pointed out in Language and Mind that, “nominalization must reflect the features of the deep structure”. Chomsky made sure that the deep structure expresses meaning and the surface structure expresses sound. The meaning of surface structure is revealed by deep structure, at the same time, embodying the difference between two structures (Lees 1960; Bouchard 1995; Croft 1991; Iannucci 1975). He hold the view that the process of nominalization means the process of mind change, and deep structure is transferred into surface structure through a series of mind operation, which expresses the meaning of deep structure and make structure more concise as well (Fan & Wang 2003).

According to Chomsky’s theory, nominalizations are variations in syntactic structures, but he ignored these changes in meanings or functions and did not take context into consideration. Under the guidance of transformation-generative grammar, the formation of nominalization can only be analyzed from syntactic level, and other aspects are neglected, so scholars seldom use this theory to deeply analyze nominalization.

3.3 Cognitive Grammar

As a new branch of linguistics, cognitive grammar made a totally new analysis to nominalization from the view of human cognition. Langacker (1987:49), the famous cognitive linguist, considered “nominalization as a process of prominence in conceptualization”. He (1991) classified nominalization into three types, namely lexical nominalization, factive nominalization and sentential nominalization. First, lexical nominalization means words transferred from verbs, indicating locomotion and action. Second, factive nominalization is derived from verbal phrase without the subjects. The last type is sentential nominalization, which is the process in which verb and its accompanying elements are nominalized into nouns (Croft & Cruse 2004; Ungerer & Schmid 2001; Lakoff & Mark 1980). In conclude, his categorization of nominalization are mainly about nouns derived from verbs.

In addition, there are three vital problems in Langacker’s researcher on nominalization: (1) the change of meaning; (2) periphrasis; (3) predictability. Different prominence governs different types of nominalizations, thus creating various meanings. Additionally, nominalization involves periphrasis. Such as “’s and of in nominalizations are not only grammatical markers but also reflections of semantic changes” (Lakoff, 1970). Last, he believed that formation of nominalization is predictable and systematic. From Langacker’s interpretation, it can be found that nominalization contains a lot of cognitive elements, which is not only formation of noun, so his researches inspire a lot of scholars and encourage them to use a novel way to investigate nominalization (Taylor 2003).

Chinese scholar Gao (2009) investigated nominalization from the perspective of cognitive grammar, pointing out that the use of nominalization is the result of people’s metonymic mode of thinking, and this kind of cognition has a great impact on the choice of language directly. Besides, Chang (2004) elaborated nominalization under the framework of cognitive grammar, and he believed the formation nominalization
is triggered by the change of relationship between grammatical metaphor and experience reconstruction, after nominalizing verbs or adjectives, the semantic meaning of words is broadened.

Nevertheless, nominalization is still in a separated side from concrete context in cognitive grammar, and it’s difficult for learners to associate nominalization with specific discourse. As a whole, analyzing nominalization from cognitive perspective is still abstract and unpractical.

### 3.4 Systemic Functional Grammar

With the development and improvement of linguistics theory, more and more linguists started to attach great importance to specific context or discourse when analyzing language phenomena. Under this circumstance, Halliday propose a new perspective to analyze nominalization. Compared with the previous school’s studies on nominalization, the study on nominalization done by systemic functional linguistics school is systematic and in-depth. In An Introduction to Functional Grammar, Halliday (1994: 323) raised an important theoretical framework, namely grammatical metaphor, which means “using one grammatical structure or grammatical category to replace another, instead of using a word to replace another”. In other words, for any given configuration, there are different realizations in the lexicogrammar. Halliday distinguishes them as congruent and incongruent (or metaphorical) forms. Congruent forms are the typical ways in which experience is construed. The “typical” is “the way it is commonly said or the way it is said in the absence of any special circumstances” (Halliday, 2000: 343). However, the metaphorical form adds further semantic features. This is a central resource for expanding the meaning potential of language, which is known as grammatical metaphor. In terms of classification of grammatical metaphor, ideational and interpersonal metaphor are two major types, in which the major patterns of manifestation of ideational metaphor is using nouns to convey the process or quality normally realized by verbs and adjectives. Thus many researches about nominalization were carried out by Halliday from the view of grammatical metaphor, more specifically, from the perspective ideational metaphor.

Halliday (2000) claimed that nominalization is a process in which any elements or group of elements are made to function as a nominal group in the clause. He noted that nominalization is the single most powerful resource for creating grammatical metaphor. By this device, processes (congruently worded as verbs) and properties (congruently worded as adjectives) are reworded metaphorically as nouns; instead of functioning in the clause, as Process or Attribute, they function as Thing in the nominal group (Halliday 2000:352). By nominalizing, the nominalized necessarily goes through lexical-grammatical and semantic change. So Halliday not only created a new theory to interpret nominalization, and the biggest contribution he made was applying nominalizing metaphor into the study of scientific discourses, which paves the way for the latter researches of the phenomenon of nominalization used in various discourses (Bloor 1995; Raveli 1988). He found that nominalization are frequently used in scientific discourses, improving the formality of discourse. Generally speaking, nominalization is the major resource producing high lexical density, it possesses the features of condensed information, concise expression, compact structure and strong logic (Martin 1991, 1992).
Obviously, systemic-functional grammar provide a more comprehensive and detailed analysis on nominalization, the significant reason is that Halliday had realized when analyzing nominalization, context and communicative function must be concerned. His study offered a innovative approach to researchers. Many Chinese scholars also pay attention to the study of the phenomenon of nominalization, in which most of them study nominalization based on systemic functional linguistics, and they acquire great achievements. Fan (1999) pointed out that nominalizing metaphor possesses textual cohesive function, and it can link theme and rhyme, thus realizing textual cohesion. Zhu (2006) made a comprehensive and systematic description of different types and functions of nominalization. In addition, he tried to put forward the basic criteria for grammatical metaphor.

4. Comments on researches of nominalization by four major schools

4.1 Features of Theoretical Studies on Nominalization

As a kind of grammatical resource, nominalization has been analyzed from different perspective, and many scholars intended to interpret its structure and meaning. Such as Jespersen firstly considered nominalization as nexus substantives and divided it into two types, which is commonly known as verbal nominalization and predicative nominalization. Then structural school raised the concept of immediate constitute analysis, proposing that nominalization can be formed by adding suffixes. In addition, Chomsky interpreted nominalization from deep structure level, and thought that nominalizations are variations in syntactic structures. While cognitive grammar held the idea that nominalization is a process of prominence in conceptualization, which means nominalization entails cognitive elements. Finally, Halliday raised a more comprehensive theory, and analyzed nominalization on the basis of grammatical metaphor, claiming that nominalization functions as grammatical structure in a clause. So it can be concluded that structural school, transformational-generative school and cognitive school focus on the syntactic level and format of nominalization. Systemic functional school has already combined nominalization with context, starting to carry out empirical studies on nominalization, especially in academic writing (Hyland 2017).

4.2 Limitations of Theoretical Studies on Nominalization

Reviewing these studies, it can be found that apart from Halliday, other schools’ studies on nominalization are still oversimplified and inadequate, because they only emphasize the form or syntactic level, ignoring functions of nominalization in context. In terms of classification of nominalization, they mainly focused on nouns which are derived from verbs and adjectives, therefore, neglecting other possibilities. In their point of view, formation of nominalization is a kind of change of word-classes. According to their theory, the identification of nominalization is solely based on grammatical change, which is the change of suffix. So it is easy to annotate all the nominalization. Contrary to their opinions, Halliday (2000) stated that nominalization belongs to metaphorical language and the formation of nominalization undergoes a complicated process, instead of adding suffix. Adopting Halliday’s theory, the identification of nominalization should take both grammatical transformation and context into consideration. Thus, under the theoretical basis of systemic functional grammar, nominalization has
profound meaning.

More importantly, explanations to nominalization given by structural school, transformational-generative school and cognitive school are still limited within theoretical level, and they can only interpret nominalization from grammatical perspective. In this way, the specific use of nominalization in context or discourse is ignored. Compared with these three school, systemic functional school give a deeper explanation to nominalization, further elaborating the formation of nominalization from grammatical and functional perspective. Therefore, the breakthrough of Halliday’s study is that he established a comprehensive framework for future researchers to carry out more empirical studies on nominalization to investigate its practical usage, and the theory can be fully applied and understood (Moreno 2003).

Conclusion

In this paper, theoretical researches on nominalization by major linguistics schools are reviewed, in which structural school, transformational-generative school and cognitive school belong to one type because they all stress the formation of nominalization and take it as the grammatical change. Different from them, systemic functional grammar interprets the grammatical change of nominalization, more importantly, they also explain the functional transformation of nominalization in the clause, taking context into consideration. Thus they inspire many researchers and encourage them to carry out more empirical studies on nominalization. As a whole, theoretical researches is the basis for more empirical studies, and linguistics should make their theories more meaningful and practical, so it can be employed by more researchers.

References:


