

Realization of Nominalization Functions in Abstracts

Lei Yue, Yi Zhang

Northwestern Polytechnical University
China

Abstract

Abstract summarizes the main content of an academic paper, reflecting the essence of an research article, and its language needs to be concise, objective and coherent (Kang & Sun 2012). Based on Halliday's grammatical metaphor and classifications of nominalization, the current study investigates realization of nominalization functions in academic abstracts. Two separate corpora are constructed, which include 60 abstracts from Chinese journals (Foreign Language Teaching and Research and Modern Foreign Languages) and 60 abstracts from international journals (The Modern Language Journal and Applied Linguistics). Finally, it is found that both Chinese and Western scholars use nominalizations to increase the conciseness of abstracts through increasing lexical density, improving language economy and downgrading sentences to nominal groups; they use nominalization to improve objectivity by hiding the original actor, obscuring modality and objectifying the author's personal opinion; they also employ nominalization to promote textual cohesion by connecting sentence through anaphoric reference, reiterating lexical items and elaborating nominal group.

Keywords: nominalization; academic abstracts; functions

1. Introduction

With the globalization of the world, academic exchange becomes prevalent and attracts both Chinese scholars and foreign scholars, and they exchange their findings with each other to get inspiration. Thus academic paper becomes an important medium to present their academic achievements and major findings, in which abstract is an indispensable part of academic papers. Abstract summarizes the main content of an academic paper, reflecting the essence of an research article, and its language needs to be concise, objective and coherent (Kang & Sun 2012). Additionally, Halliday (1996) found that a lot of nominalization existing in scientific discourses, and using nominalization can make expressions become more concise, objective and formal. It can be seen that nominalization just meets the requirements of academic abstracts (Zhu & Dong 2001). As a result, based on the theory proposed by systemic functional linguistics, this paper aims to investigate the realization of nominalization functions in academic abstracts, analyzing how Chinese and Western scholars use different types of nominalization to achieve the conciseness, objectivity and coherence of abstracts.

2. Theoretical Framework

2.1 Grammatical Metaphor and Nominalization

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 (2000) propose a new perspective to analyze nominalization. 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 (Lakoff & Mark, 1980). 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 (Bloor, 1995; Raveli, 1988). 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. 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.

2.2 Classification of Nominalization

According to the classification of nominalization raised by Halliday, there are altogether five kinds of nominalization, namely, nominalization of process, nominalization of quality, nominalization of circumstance, nominalization of relator and nominalization of zero. Since nominalization not only involves the transformation of grammatical classes, more importantly, it also contains the change of function, so the current study should strictly follow the criteria of identifying these five types of nominalization.

Table 2.1 Classification of Nominalization

Semantic functions	Grammatical functions	Lexicogrammatical class
(1) quality → entity	epithet → thing	adjective → noun
(2) process → entity	i event → thing ii auxiliary → thing	verb → noun
(3) circumstance → entity	minor process → thing	preposition → noun
(4) relator → entity	conjunctive → thing	conjunction → noun
(5) entity (expansion)	head → modifier	noun → various

(Cited from Halliday, 1996)

As the table shows, there are altogether five types of nominalizations, 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.

2.3 Characteristics of Abstract

As a special genre, abstract draws a lot of attention among researchers. Day (1994) defined abstract as a “highly summarized discourse that enable readers to grasp the purpose, methodology and main results of a paper quickly and let readers evaluate whether this paper is worth reading”. Chinese scholar Xu (2013: 113) claimed that, “An abstract is a highly condensed form of a longer piece of writing so that readers can know the main contents and scope of the thesis and decide whether it is necessary to read the whole. It should be a high generalization and objective description without any subjective comments or explanation.” From these definitions, it can be seen that they all thought that abstract is very important since it can help readers to understand the overall content of a paper and get some useful points, so abstract has some essential characteristics. It is agreed that a well-written abstract is featured by conciseness, objectivity and coherence. First, because abstract is a highly condensed discourse and it summarizes the major points of a paper, thus its language should be precise and concise, which means using fewer words to convey more information (Brusaw, 1982). Second, due to the formality and scientificity of the academic papers, language in abstract should be objective, stating facts and data rather than subjective opinions. The expressions of abstract must conform to features of scientific and technical discourse (Kang & Sun 2012). Finally, as a complete discourse, abstract should be logical and coherent. In order to let readers understand the major points of the paper, expressions in abstract should be linked logically and coherently (Corson, 1997).

3. Methodology

3.1 Research Question

The objective of this research is to analyze how Chinese and Western scholars use different kinds of nominalization to achieve the conciseness, objectivity and coherence of abstract. Therefore, the current study tries to answer the following question: How do Chinese and Western scholars use nominalization to achieve the conciseness, objectivity and coherence of abstracts?

3.2 Data Collection

The current study randomly selected 120 English abstracts from four linguistic journals, in which 60 from two English journals, namely, *Applied Linguistics* and *The Modern Language Journal*, and 60 from two Chinese journals, which are *Foreign Language Teaching and Research* and *Modern Foreign Language*, and they were all published from 2014 to 2018. The following table presents the detailed information of the corpus used in this research,

Table 3.1 120 abstracts used in this research

Year of publication	Chinese journals		English journals		Total number
	Foreign Language Teaching and Research	Modern Foreign Languages	The Modern Language Journal	Applied Linguistics	
2014	6	6	6	6	24
2015	6	6	6	6	24
2016	6	6	6	6	24
2017	6	6	6	6	24
2018	6	6	6	6	24
Total	30	30	30	30	120

Table 3.1 shows all the 120 abstracts from four journals used in this study, and they are divided into two sub-corpus, namely abstracts written by Chinese scholars (ACS) and abstracts written by Western scholars (AWS). After choosing these abstracts, then, all 120 abstracts were transformed from PDF format to TXT format owing to the limitation of AntConc. Secondly, these abstracts were divided into two files, and labeled from No.1 to No.60, respectively. Moreover, some unnecessary information will be deleted, since the research subject is abstract, so the title, authors' name and keywords will be deleted. Finally, these abstracts will be put into AntConc one by one, then with the help of Halliday's classification of nominalization, all the nominalizations will be retrieved. For the sake of guaranteeing the results, Foxit reader will be used for manual coding, and five types of nominalization will be coded, respectively.

3.3 Research Instruments

Ant Conc and manual sorting are adopted in the present research for identifying all the nominalizations. File view tool in AntConc is used to check different use of five types of nominalization in original text, hence, the collocating patterns of each type of nominalization can be identified, besides, with the assistance of Concordance Tool, frequencies of those collocating patterns can be calculated as well. Since the accuracy of identification of nominalization can not be guaranteed by only using AntConc, so manual sorting will also be applied to identifying five types of nominalization.

3.4 Research Procedures

This research involves three procedures. First, two separate corpus are constructed, which includes 120 English abstracts from two Chinese journals (*Foreign Language Teaching and Research* and *Modern Foreign Languages*) and two international journals (*Applied Linguistics* and *The Modern Language Journal*). Second, Ant Conc and manual sorting are used to annotate all the nominalizations used in ACS and AWS. Finally, this study will use specific examples to analyze how Chinese and Western scholars use different methods to achieve features of abstracts. From this part, some useful suggestions about how to use nominalization properly and flexibly will be offered.

4. Results and Discussion

4.1 Increasing the Conciseness of Abstracts

As a highly concise summary of the full text, language used in abstracts should be concise and specific. Thompson (2008: 169) proposed that one important feature of written English is syntactic simplicity. Hence, abstracts undertake an important task, which is to express abundant information as much as possible within fewest words. Nominalization is one of the best methods to condense information and increase the conciseness of abstracts. After analyzing all the abstracts, it is found that both Chinese and Western scholars prefer to use process and quality nominalizations to increase the conciseness of abstracts.

4.1.1 Increasing lexical density

One of the powerful function of nominalization is to increase lexical density of the original congruent sentence, in this way, the length of the original sentence is shortened and more space are left for more valuable information (Vasylets, 2017). According to the statistical results, it can be seen that process nominalization is frequently used by Chinese and Western scholars to increase lexical density. The following table shows some frequently used process nominalizations

Table 4.1 Frequently used words in process nominalizations

Frequently used words in process nominalizations in AWS		Frequently used words in process nominalizations in ACS	
Item	Frequency	Item	Frequency
Analysis	33	Finding	30
Finding	21	Analysis	22
Interaction	21	Interaction	19
Development	19	Performance	16
Implication	16	Development	14
Discussion	11	Implication	11
Description	10	Judgement	10

Table 4.1 shows some process nominalizations used by Chinese and Western scholars, for example, both Chinese and Western scholars frequently use analysis, finding, interaction, development and implication in their abstracts, nominal phrases containing these process nominalizations are often used to connect sentences. When using these words, scholars omit the pronouns and use the+nominalization+of to replace subjects and lead the sentence. In this way, the information is condensed and the statement is presented directly, hence the length of original sentence is shortened, and lexical density increases. For example,

- 1) *Varied patterns of engagement and interaction were found, but most students had relatively few substantive academic discussions with peers or teachers. (Applied Linguistics, No.1)*
- 2) *Through the analysis of subjects' performance, it is found that the subjects in high proficiency and low proficiency groups utilize both lexical storage and morphological decomposition for regular past tense. (Foreign Language Teaching and Research, No.13)*

In the example (1), there are 14 lexical items and 2 clauses, the lexical density is 7. By means of nominalizations, such as engagement, interaction and discussions, writer can express his opinion within limited and condensed length. Such a long sentence with high lexical density is attained through the employment of nominalizations, in this way, the discourse is high condensed and at the same time informative. Similarly, Chinese scholars also use process nominalizations to increase the conciseness of their abstracts, in example (2), the lexical density is 9. Four process nominalizations are applied to shorten the sentence, instead of using verbal forms, writer chooses to use the nominal form like analysis and performance to connect two simple clauses, therefore, this sentence attains a high lexical density accompanied by a simple grammatical structure. From these two examples, it can be proved that nominalization is a vital device that allows writers express their ideas effectively.

4.1.2 Improving language economy

Apart from process nominalization, quality nominalization can achieve conciseness through improving economy. Owing to the written and formal style of abstracts (Aarts, 2011), both Chinese and Western scholars are under the pressure of making their language concise, meanwhile, informative. Nominalization is an effective tool which can help writers improving economy of language, moreover, increasing the conciseness of abstracts. The following table presents some frequently used quality nominalization by Chinese and Western scholars,

Table 4.2 Frequently used words in quality nominalizations

Frequently used words in quality nominalizations by Western scholars		Frequently used words in quality nominalizations by Chinese scholars	
Item	Frequency	Item	Frequency
Difference	20	Difference	16
Importance	14	Ability	11
Accuracy	11	Accuracy	9
Complexity	10	Complexity	7
Ability	9	Importance	6

As the table shows, Chinese and Western scholars often employ different quality nominalizations in their abstracts, the most frequently used word is difference since a lot of research focus on the comparison of different factors influencing learners' language acquisition. In addition, they often use nominal phrases containing quality nominalizations like importance, ability or complexity to replace the clause it is+adj+to, because these nominalizations can help them to compress the information within a highly summarized discourse, for instance,

- 3) *emphasized the importance of ... (The Modern Language Journal, No.10)*
- 4) *the accuracy of the sentences produced... (Modern Foreign Languages, No.36)*

Examples (3) and (4) present how clauses are packed into noun phrases and information are condensed by quality nominalizations. Chinese and Western scholars choose to use quality nominalization to transfer a clause to a nominal group, and the whole sentence becomes simpler. In this way, economy is enhanced, in such a limited space, a lot of information are conveyed. Expressions like it is accurate or it is important are redundant and unnecessary, by contrast, using quality nominalizations can shorten the sentence and improving language economy with high efficiency. In this way, sentences become more precise with abundant information. Thus, quality nominalization performs an outstanding role in enabling writers to making their abstracts more concise within limited space.

4.1.3 Downgrading sentences to nominal groups

Actually, the most powerful function of nominalization is to downgrade sentences to nominal groups through rank shift. Packing information into some noun phrases allows writers to expand semantic meaning of nominalization by adding modifiers or qualifiers. Moreover, through rank shift, noun phrases or clauses are replaced by clause complexes, therefore, writers can simplify the sentence structure, condense the textual space (Vyatkina, 2013). So when expressing the same content, in terms of conciseness, metaphorical expressions are superior to congruent expressions. Consequently, language will be more perspicuous and succinct. A better understanding of how this works can be gained from specific examples.

5) *On the basis of the findings, pedagogical implications are discussed. (Applied Linguistics, No.9)*

6) *The findings suggest that the development of L2 learners' processing pattern of the complex words is the transition from the decompositional processing route to the whole word processing one. (Modern Foreign Languages, No.32)*

From example (5), it can be found that there are two nominalizations, implications and findings. If the writer uses the congruent form to express this sentence, at least three clauses are needed, i.e., we find something, the findings implicate something, and we discuss the implications. Apparently, this kind of expression is too wordy and complex. Through nominalization, three clauses are rank shifted into a lower level, a nominal form; in this way, the sentence is predigested and information is condensed. As a result, expressions become more natural and easy to understand. By using nominalization, the whole expression becomes more concise, and the interrelationship between processes are clear. In example (6), this sentence is fairly long and contains a lot of lexical items. The writer uses three nominalization findings, development and transition to construct a very simple structure, and readers can easily grasp the relationship among three processes in this sentence. It can be seen that using nominalization makes sentence shorter and briefer. Through rank shift, noun phrases are employed to convey the same meaning that is otherwise congruently expressed in a more complex structure. In this way, scholars use the simplest and shortest expressions to convey the most important meaning, leaving more space for other points. On the whole, abstract are characterized by the use of the briefest words to express the richest content, and they contain a large amount of information. Nominalization can effectively improve the lexical density and conciseness of abstracts (Lorés, 2016). Using nominalization is conducive to the decrease of the number of clauses, accommodating more information within the same space.

4.2 Improving the Objectivity of Abstracts

Nominal forms usually possess the feature of static, by transforming a process or quality into a noun, writers can state a fact and eliminate the subjectivity of their expression. Through using of nominalization, the participant in the original action is deleted, weakened or hidden as modifiers of the nominalization. At the same time, nominalization usually is non-finite, and is therefore not forced to express tense and mood. Accordingly, nominalizations are on a higher level of abstraction and can enhance the objectivity of abstracts.

3.2.1 Anonymizing the original actor

Another function of process nominalization is to anonymize the original actor of the sentence, in this way, the sentence becomes a statement without any personal judgment, the whole expression seems more objective and formal (Hyland, 2017). In academic genre, subject is seldom mentioned in the sentence, because the writer intends to make every step of his research objective, readers can believe that his research does not involve any subjective factor. For the sake of avoiding using first person pronoun as the subject of the sentence, writers use nominalization to hide the original actor and obscure the time maker. Because when using nominalization of process, writers of abstracts need not to take tense into consideration, they only displays researches process and results, language becomes more objective to some extent. Specific examples are as follows,

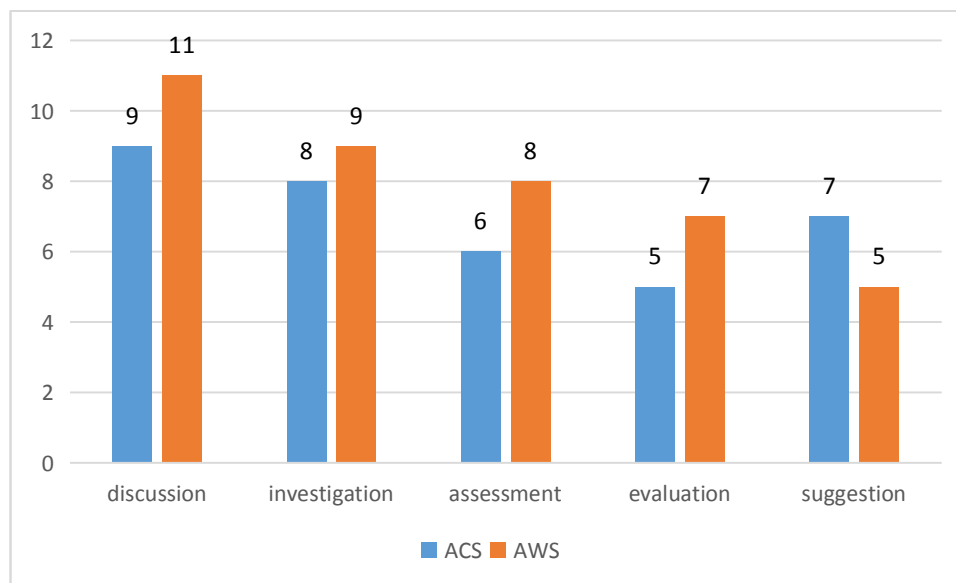


Figure 4.1 Frequently used words to anonymize the original actor

Results show that both Chinese and Western scholars prefer to use nominalizations that describe research processes and methodologies to hide the original actor. Such as evaluation, if the writer uses sb evaluate sth, it seems too subjective, and such expression is seldom used in academic genre. So evaluation is in conformity with the requirement of academic writing. When the action is taken by writers themselves, they will choose to use nominal form to hide their identity for the purpose of being objective. More examples are given to explain how to achieve objectivity through the use of nominalization of process.

7) *Discussion focuses on the important roles of different dimensions of vocabulary knowledge for different types of second language reading. (Applied Linguistics, No.22)*

8) *The present study carries out the investigation of... (Modern Foreign Languages, No.28)*

All the nominalizations used in these sentences are transferred from their verbal form, and they originally describe the research methodology or procedure, if writers use the congruent form, an actor must exist, thus the expression will contain subjective factor. By using nominalizations, functions of original actor were weakened, and only facts are presented. The focus of the sentence are shift from the people who undertaken the research to the researches. Moreover, process nominalization is detached from the limitation of tense and mood, thus the descriptions can be used under any conditions. Process nominalization fulfills the task of enhancing the objectivity of abstracts. Therefore, both Chinese and Western scholars frequently employ process nominalization to weaken their influence on expressions, presenting a statement.

4.2.2 Obscuring modality

Modality can express speaker's proposition and attitude effectively, for it not only can express speaker's own willing, but also can state the speaker's judgment and evaluation toward an event. It can be found that through the analysis of modality, researchers can basically know the speaker's judgment and attitude toward an event. For example,

9) *This article reports on a provisional framework of evaluation/assessment capacity for university foreign language (FL) programs. (Applied Linguistics, No. 43)*

10) *enlarging the capacity of working memory and activating the meaning network. (Modern Foreign Languages, No. 14)*

The word capacity is the nominal form of the modal word can, it transfers the modal meaning into "thing" which is hard to question. Thus it possesses the property of nouns, which is "thingness". Writers does not use expression like sb can do something, it sounds too subjective, and readers may have doubts about its validity. On the contrary, they applied a process nominalization, decorating their opinion as a objective statement to highlight their statement. Thus it's difficult for readers to judge the origin of the modality, they have to take the modal meaning conveyed by this process nominalization as a relatively neutral opinion, actually, the speaker's subjective inclination is hidden behind the process nominalization. Moreover, process nominalization are always used to hide the modality and decrease the interpersonal function of a sentence. Through this way, the origin and meaning of modality are omitted, make the audience lose the ability of evaluating and they can not question the validity of the information.

4.2.3 Hiding personal opinion

In abstracts, all the statements should be objective, expressions involving subjective judgment should be avoided. Under most circumstances, adjectives are used to modify things and add author's evaluations, however, in formal text, adjectives should be transferred to nouns. With the help of quality nominalization, personal judgments are replaced by objective illustration (Van Dijk, 2008). Some frequently used quality nominalizations are presented in the following figure,

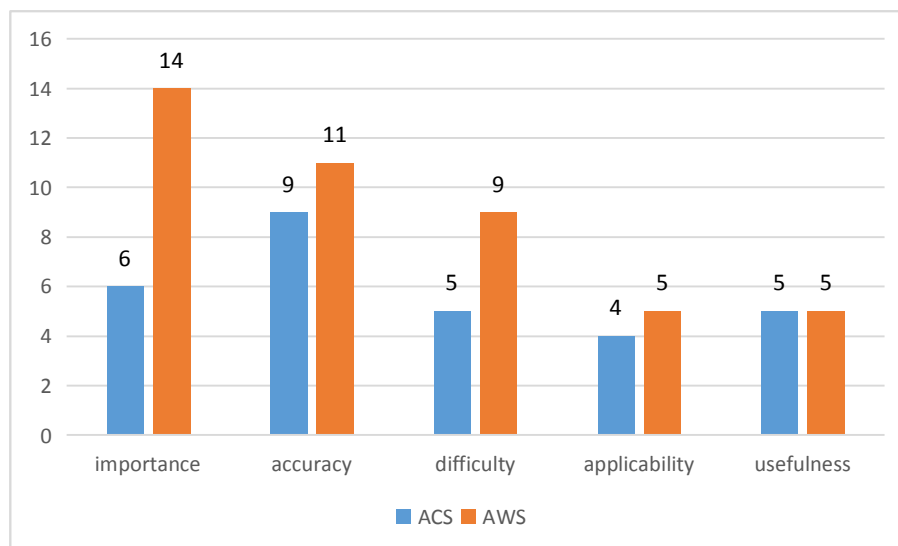


Figure 4.2 Frequently used words to hide personal opinion

Aforementioned quality nominalizations are adopted in abstracts to enhance objectivity, convert personal opinions into facts. These words often contain the meaning of evaluation or modification, for instance, importance, accuracy or difficulty, in order to delete personal judgments, quality nominalization is used to strengthen the objectivity of the expression. Writers will not straightly express their judgment or opinion, and they usually employ quality nominalization to transfer the adjectives which contains the subjective mood to entities, hence, a dynamic modifier becomes a static noun. More importantly, for the sake of illustrating how to achieve objectivity through nominalization of quality, detailed examples are as follows,

11) *Although researchers often acknowledge the importance of linguistically rich... (The Modern Language Journal, No.48)*

12) *their potential difficulties in acquiring English... (Foreign Language Teaching and Research, No.4)*

From these two examples, it can be seen that “the importance of” is a nominalized structure, it is similar to “it is important...”, however, their focus is different. The congruent form focuses on the depiction of condition or quality of the whole process. But the metaphorical form emphasizes on the statement itself. In this way, readers will pay more attention to the statement instead of how or why sth is important. In the second example, difficulties equates with it is difficult that, in the process of transformation, adjective involving the sense of modifying is transformed into an objective entity, which is a crucial factor in a salient place to determine the validity of the results. After nominalization, it's harder for readers to question its reliability. Hence, writers use quality nominalization to present their stances in an objective way and reduce the moral responsibility. Moreover, the objectification of opinion makes it easy for the readers to accept it.

4.3 Promoting the Coherence of Abstracts

According to Halliday (2000: 309), “there are four ways by which cohesion is created in English: by reference, ellipsis, conjunction, and lexical cohesion.” Nominalization belongs to lexical cohesion, it can promote textual coherence through anaphoric reference, lexical reiteration and elaborated nominal group. Both Chinese and Western scholars adopt these three methods to construct their abstracts, making expressions more coherent.

4.3.1 Connecting sentences through anaphoric reference

The most powerful function of nominalization is to achieve discourse cohesion through anaphoric reference. In academic discourses, when writers intend to establish a statement, they always conclude or restate the previous information (Potts, 2015).

They expand every new sentence based on the information involved in the previous sentence. Schleppegrell (2001) stated that, academic discourses often use nominalizations as anaphor to refer back to the old information, then adding new information in a new sentence.

13) *However, little research on this or other OPIs has quantitatively compared test takers' speech with the target domains of the test, such a comparison could be used as evidence for the validity argument (Kane, 2013) for the MELAB. (Applied Linguistics, No.50)*

14) *This study analyze, via the lexical decision task, Chinese EFL learners' online processing of English derived words and the influence of relative familiarity on their processing, through analysis of statistical results, it is revealed that... (Modern Foreign Languages, No. 38)*

In this example, *analyze* which stands for verb is reconstructed as nominalization analysis. The function of *analyze* in the first sentence is to introduce new information, then this new information is transferred into a nominal entity comparison, promoting the development of statement and leading to new information. This kind of cohesive pattern is called anaphoric reference, writer uses a nominalization as an anaphor to refer back to something previously mentioned in discourse and establishes cohesive relationship between two sentences, thus promoting discourse cohesion. Similar to the second example, in the first sentence, Western scholars adopt this method as well to connect sentences, transferring compare to comparison, hence, the logical relationship between two sentences are clear.

4.3.2 Reiterating lexical items

Lexical reiteration refers to repeating same nominalizations for several times. In discourses, reiterating same words again and again can help writers analyze and discuss same thing from different perspectives. At the same time, writers can emphasize this nominalization and arouse readers' attention.

15) *as they interacted with German-speaking professionals in Germany via synchronous Web conferences. Drawing on quantitative and qualitative methods, the study investigated the effect of interaction with expert speakers and the implementation of focused interaction on learners' pragmatic development. (The Modern Language Journal. No.45)*

16) *The interviews focused on whether students were motivated to transfer learning from the EAP course to their other courses, and what factors influenced this motivation. Results indicated that true motivation to transfer was rare. The factors that influenced these students' motivation to transfer learning from the EAP course to their other courses fell into eight categories. (Foreign Language Teaching and Research. No.57)*

In these two sentences, both Chinese and Western scholars use the way of reiterating the same nominalization to promote the coherence of abstracts. The first step is transferring a verb into nominalization, such as *interact-interaction*, then in the following sentences, repeating interaction again and again, in this way, link among sentences becomes tighter. Additionally, writers explain reasons influencing motivation from different aspects. Through this cohesive pattern of nominalization, writers promote the development of argument step by step, providing supplementary instruction and elaborating new information.

4.3.3 Elaborating nominal group

Based on the previous sentence, writers further explain or specify nominal group through adding modifier or qualifier, and this cohesive pattern is called elaborated nominal group. Under this circumstance, aforementioned information is condensed as a nominal group, writers will further elaborate new information or make evaluation.

17) *In the process of interact with other learners, this study collected the conversational interactions over the course of a Spanish language learner's academic year abroad and analyzed these conversations, then this article explores the development of interactional resources related to alignment activity in order to promote the learner's capacity of international interactions. (Applied Linguistics, No. 18)*

18) *This study investigates how cultural background and Chinese proficiency affect the use of OCSs by EFL learners, through the investigation of learners' cultural background and Chinese proficiency, it is found that cultural background had a greater influence than Chinese proficiency on the use of OCSs, as for the reasons, detailed investigation will be carried out. (Modern Foreign Languages, No.23)*

The third way of promoting coherence is to elaborate the nominal group, to be specific, writer firstly transfers interact into interaction and uses anaphoric reference to establish cohesion between the first and the second sentence. Then writer adds modifier and enriches information, elaborating nominal group investigation-detailed investigation. It can be found that through this cohesive pattern of nominalization, from *interact* to *interaction* or *investigate* to *investigation*, then comes to *international interaction/detailed investigation*, structure of the whole discourse is reflected and semantic is developed, thus discourse becomes cohesive (Liardét, 2013).

5. Conclusion

After explaining some specific examples, it can be found that both Chinese and Western scholars use lots of different nominalizations to construct their abstracts, making the whole discourse more coherent, objective and coherent. First, Chinese and Western scholars prefer to use nominalization to increase the lexical density, improve language economy and downgrade sentences to nominal groups, thus improving conciseness of abstracts. Second, three ways are adopted by both Chinese and Western scholars to improve the objectivity of abstracts, namely hiding the original actor, obscuring modality and objectifying the author's personal opinion. Third, nominalization can realize textual cohesion by connecting sentence through anaphoric reference, reiterating lexical items and elaborating nominal group. Moreover, it is hoped that when using nominalizations, learners can take functions of these nominalization into consideration and use them appropriately, thus constructing a more academic abstract. Sponsoring Information This Article is sponsored by the Seed Foundation of Innovation and Creation for Graduate Students in Northwestern Polytechnic University.

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References

- Aarts, Rian. (2011). Characteristics of Academic Language Register Occurring in Caretaker-Child Interaction: Development and Validation of a Coding Scheme [J]. *Language Learning*, 4: 1173- 1221.
- Bloor, Thomas and Merial Bloor. (1995). *The Functional Analysis of English: A Hallidayan Approach* [M]. London: Arnold.
- Brusaw, C. T. (1982). *Handbook of technical writing* [M]. New York: St. Martin's Press.
- Corson, D. (1997). The Learning and Use of Academic English Words [J]. *Language Learning*, Volume 47, Issue 4, 671-718.
- Day, R. A. (1994). *How to write & publish a scientific paper* (4th ed.) [M]. Phoenix: Oryx Press.
- Halliday M A K. (1994). *An Introduction to Functional Grammar*(2nd edition)[M]. London: Edward Arnold.
- Halliday, M.A.K. (1996). Things and Relations: Regrammatizing Experience as Technical Knowledge. In J.R. Martin & R.Veel (eds.). *Reading Science: Critical and Functional Perspectives on Discourses of Science*. London: Edward Arnold.
- Halliday M A K. (2000). *An Introduction to Functional Grammar* [M]. Bei Jing: Foreign Language Teaching and Research Press.
- Hyland, Ken. (2017). Is academic writing becoming more informal?[J]. *English for Specific Purposes*, (1): 40-51.
- Kang Qin, Sun Ping. (2012). A Genre Analysis of English Abstracts for Research Articles-A Corpus-based Study [J]. *Foreign Language Education*, (5): 28-31.
- Lakoff, George & Mark, Johnson. (1980). *Metaphors We Live By* [M]. Chicago: University of Chicago Press.
- Liardét, C. L. (2013). An exploration of Chinese EFL learners' deployment of grammatical metaphor: learning to make academically valued meanings[J]. *Journal of Second Language Writing*, 22, 161-178.
- Lorés-Sanz, R. (2016). ELF in the making? simplification and hybridity in abstract writing[J]. *Journal of English as a Lingua Franca*, 53-81.
- Potts, Diane. (2015). A LANGUAGE AS SOCIAL SEMIOTIC-BASED APPROACH TO TEACHING AND LEARNING IN HIGHER EDUCATION[J]. *Applied Linguistics*, Volume 36, Issue 5, 607-624.
- Raveli, L J. (1988). Grammatical metaphor:an initial analysis [A]. in Erich H. Steiner and Robert Vetman (eds.) *Pragmatics, Discourse and Text* [C]. New Jersey: Abbox.
- Schleppegrell, M. J. (2001). Linguistic features of the language of schooling[J]. *Linguistics and Education*, 12, 431-459.
- Thompson, G. (1996). *Introducing Functional Grammar* [M].Beijing: Foreign Language Teaching and Research Press.
- Van Dijk, T A. (2008). CDA and Nominalization: Problem or Pseudo-problem *Discourse & society*, 19(6) : 821-828.
- Vasylets, Olena. (2017). The Effects of Mode and Task Complexity on Second Language Production[J]. *Language Learning*, (2): 394-430.
- Vyatkina, Nina. (2013). Specific Syntactic Complexity: Developmental Profiling of Individuals Based on an Annotated Learner Corpus[J]. *The Modern Language Journal*, (S1): 11-30.
- Xu Yuchen. (2013). *Writing for Academic Purposes*[M]. Shang Hai: Shang Hai Foreign Language Education Press.
- Zhu Yongsheng & Dong Hongle. (2001). Lexical Metaphor, Grammatical Metaphor and Their Complementarity in Technical Discourses[J]. *Shandong Foreign Language Teaching*, (4): 5-8.