The Search for Units of Meaning: The Case of Collocational Framework “the * of”*

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The concept of collocational framework has been put forward by Renouf and Sinclair in 1991, but few researchers have investigated on the construction of the units of meaning based on collocational framework. This study searched for the units of meaning of collocational framework “the * of” employing Sinclair’s lexical grammar model. The results show that collocational framework “the * of” has its own lexical grammar features and can construct its units of meaning. The units of meaning form “Existences/Activities + the + Activities/Essences + of + Social Lives/Persons” sequence and express the “exist the activities or essences of social life and person” or “act the activities or essences of social life and person”.

Keywords: units of meaning, collocational framework, general written English

Introduction

Sinclair, the forerunner of Corpus linguistics, claims lexical items as “units of meaning” (Sinclair 1996/2004) or “extended units of meaning” (Sinclair, 2007) and provides a model of the construction of meaning. Sinclair’s model is composed of five categories of co-selection, namely “the core”, “semantic prosody”, “semantic preference”, “collocation”, and “colligation”. The lexical item is taken to “realize an element of meaning which is the function of the item in its cotext and context” (Sinclair, 2004, p. 121).

It is relatively recently that an increasing number of studies have attempted to explore the extent of phraseology or to analyze the inner workings of the phraseological tendency in the English language. These include the studies of units of meaning (Sinclair, 1987, 1996, 2004, 2007); pattern grammar (Hunston & Francis, 2000), lexical bundles (Biber & Conrad, 1999; Biber et al., 1999; Biber, Conrad, & Cortes, 2004), n-grams (Stubbs, 2007), chains (Stubbs, 2002), recurrent word combinations (Altenberg, 1998), etc.

Most of the above researches are based on continuous word combinations or phrases. Some scholars such as Renouf and Sinclair (1991), Marco (2000), Eeg-Olofsson and Altenberg (1994) explored the discontinuous collocational frameworks in the past decade. Collocational frameworks is “a discontinuous sequence of two words, positioned at one word remove from each other; they are therefore not grammatically self standing; their

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well formedness is dependent on what intervenes” (Renouf & Sinclair, 1991, p. 128). However, considering that discontinuous word combinations or phrases are important integrating parts of phraseology; hence it needs further and deep researches.

Therefore, in the present study, the units of meaning based on collocational framework, a discontinuous structure, will be investigated in order to explore the construction of units of meaning. Therefore, the research questions are: (1) What are the lexical grammar profiles of units of meaning based on collocational framework? (2) How does collocational framework construct units of meaning?

Research Design

Corpus Used

In this study, the search of units of meaning will be conducted in general written English, the BNC-Written, which comprises the written part of the British National Corpus. The BNC is a balanced synchronic text corpus containing 100 million words, about 90 percent written and 10 percent spoken texts. The written part includes Applied Science, Arts, Belief and Thought, Commerce and Finance, Imaginative, Leisure, Natural and Pure Science, Social Science, and World Affairs.

In this study, the BNC-Written is used to extract middle, left, and right collocates of “the * of” in order to find the meaning construction of the units of meaning based on the collocational framework “the * of”, and to generalize typical patterns of units of meaning based on collocational framework.

Tool Used

The tool used in this study is WordSmith Tools 5.0. In this study, we use WordSmith 5.0 to extract Left 1, Middle, Right 1 collocates of collocational framework “the * of” in order to find the words exactly before, in the middle and after “the * of”.

Research Methods

In this study, the analytical unit is a five-word string “L1C + the + MidC + of + R1C” based on “the * of”. L1C stands for Left 1 collocate, MidC means Middle collocate, and R1C is Right 1 collocate. The first step is to use “the * of” as the core and retrieve collocates, and then manually weep out the lines broken by punctuation between the five-word strings. The second step is to analyze the collocation, parts of speech, semantic categories, etc. The third step is to discuss the construction of the units of meaning. It needs to point out that there are so many tokens and types to handle in each position, therefore, the collocates considered in this study are based on the top 300 types in Left 1, Middle and Right 1 position. What is more, due to the limitation of the space, the detailed description and the tables of the parts of speech of the collocates are omitted in this paper. For more data, please contact the author.

Research Results

In this section, the lexical grammar profiles of Middle, Left 1, Right 1 collocates of the collocational framework are displayed in terms of collocation and semantic categories.

Middle Collocates

The extracting results of the Middle collocates are 897,628 tokens and 8,390 types. This part shows the

results of the collocation and semantic categories of Middle collocates.

(1) Collocation.

Table 1 shows the ranking orders, raw frequencies, normalized frequencies of the top 30 Middle collocates in the BNC-Written. In Table 1, R, MidC, RF, and NF stand for Ranking, Middle collocates, Raw frequencies, and Normalized frequencies correspondingly. Words in bold belong to the first top categories in semantic category, and words in shadow are in the second top semantic category, words underlined to the third top semantic category. The subsequent tables will follow the same format.

Table 1

Top 30 MidC in the BNC-Written

R	MidC	RF	NF	R	MidC	RF	NF
1	end	18,966	210.73	16	secretary	3,836	42.62
2	<u>number</u>	9,188	102.09	17	top	3,831	42.57
3	use	8,889	98.77	18	role	3,711	41.23
4	rest	7,761	86.23	19	age	3,603	40.03
5	development	5,858	65.09	20	effect	3,564	39.6
6	case	5,443	60.48	21	importance	3,512	39.02
7	nature	4,622	51.36	22	middle	3,501	38.9
8	time	4,414	49.04	23	centre	3,478	38.64
9	basis	4,280	47.56	24	work	3,450	38.33
10	form	4,223	46.92	25	presence	3,384	37.6
11	idea	4,027	44.74	26	value	3,384	37.6
12	house	4,007	44.52	27	<u>amount</u>	3,305	36.72
13	back	4,006	44.51	28	<u>level</u>	3,285	36.5
14	cost	3,913	43.48	29	possibility	3,121	34.68
15	beginning	3,869	42.99	30	course	3,060	34

(2) Semantic categories.

The semantic categories of Middle collocates are Person, Activity, Quality, Quantity, Time, Space, Essence, Social life, natural phenomenon. However, the top three categories of the Middle collocates in the BNC-Written are: Activities (*use, development, cost, effect, work*) (see Table 1 the words in bold); Essence (*case, nature, basis, idea, role*) (see Table 1 the shadowed words); Quantities (*number, amount, level, possibility, majority*) (see Table 1 the underlined words). The semantic categories, frequencies, and percentage of Middle collocate are as follows:

Table 2

Semantic Categories, Frequencies, and Percentage of MidC

Semantic category	NF	%
Activities	1482	28.33
Essence	1467	28.04
Quantities	687	13.13

Table 2 shows that Middle collocates chiefly express the meaning of Activities, Essence, Quantities, etc. Activities (28.33%) are usually the nominalization of verbs. Nominalization here refers to the conversion of processes into nominals or verbs into nouns, which indicate movement from spoken language to written language or from the congruence to metaphorical form (Halliday & Matthiessen, 2004). Nominalization is the single most

powerful resource for creating grammatical metaphors. By this device, processes (congruently worded as verbs) and properties (congruently worded as adjectives) are rewarded metaphorically as nouns; instead of functioning in the clause as Process or Attribute, they function as Thing in the nominal group (Halliday & Matthiessen, 2004). It also illustrates that when people write something, they usually use nominalization, which makes their opinion more objectivity avoiding subjectivity, especially in academic writing.

Category Essence (28.04%) demonstrates that Middle collocates usually focus on the nature or concept of the things, which express the abstract features of persons, things, and events. The reason for that may be simply as Halliday and Matthiessen (2004) and Halliday (2009) claim when it is more formal and technical, the language becomes more abstract. Essence stated above is usually made up of abstract nouns. Furthermore, the BNC-Written comprises written texts and a large number of the texts are academic texts, which are comparatively formal and technical, hence a large amount of words expressing abstract concepts are dropped into the middle of collocational framework “the * of”.

Category Quantities (13.13%) display that the words in the middle of collocational framework in general written English usually express the quantity of the words which follow the framework “the * of”, just like the structure of “a * of”, in which many words in the middle positions are quantitative words, such as “a lot of”, “a number of”, “a couple of”, etc. (Renouf & Sinclair, 1991). The tentative explanation is that quantities before “of” is one of the usages of the preposition “of”.

In summary, the Middle collocates primarily express the meanings of Activities, Essence and Quantities through the methods of nominalization, abstraction, and quantification.

Left 1 Collocates

For Left 1 collocates, the total type is 6,149 times and the total token is 804,263 times. The top 300 types indicate a very typical patterns, on which the units of meaning based on collocational framework are constructed. This part shows the results of the collocation and semantic categories of Left 1 collocates.

(1) Collocation.

The top 30 Left 1 collocates in the BNC-Written are shown in Table 3.

Table 3

Top 30 LIC in the BNC-Written

R	LIC	RF	NF	R	LIC	RF	NF
1	in	84,950	943.89	16	into	6,514	72.38
2	of	53,954	599.49	17	under	5,222	58.02
3	to	49,645	551.61	18	over	4,948	54.98
4	at	39,131	434.79	19	through	4,500	50
5	on	39,019	433.54	20	but	4,496	49.96
6	and	33,142	368.24	21	be	3,827	42.52
7	for	30,737	341.52	22	after	3,800	42.22
8	with	26,306	292.29	23	between	3,092	34.36
9	by	24,646	273.84	24	all	3,067	34.08
10	that	17,838	198.2	25	within	3,045	33.83
11	from	17,328	192.53	26	or	3,020	33.56
12	is	13,632	151.47	27	against	2,882	32.02
13	as	9,891	109.9	28	are	2,641	29.34

14	was	8,726	96.96	29	before	2,579	28.66
15	about	8,689	96.54	30	since	2,517	27.97

Notes. The meanings of the marker are like Table 1.

Table 3 illustrates the top 30 Left 1 collocates, which show that most of the top 30 collocates are prepositions, verbs, and conjunctions, which is in line with our prediction that there are extreme prepositions in Left 1 position. As we look down the top 300 Left 1 collocates (As a result of limitations of space, it is not listed in the present paper), we find that following the high frequency collocates are adverbs, nouns, and so forth, but they are not in the top 30 Left 1 collocates in Table 3.

(2) Semantic categories.

It needs to point out that only the lexical words are considered in semantic classification. The top three most frequent semantic categories are Existence verbs (*is, was, be, are, has*); Activity verbs (*take, make, meet, reached, prevent*); Mental verbs (*see, saw, consider, understand, know*). It should be noted that the names of the categories are consisting of two parts, first part is the meaning of the categories, the second part is the parts of speech. The frequencies and percentage of the above semantic categories are listed as Table 4.

Table 4

Semantic Categories, Frequencies, and Percentage of LIC

Semantic category	NF	%
Existence verbs	479	37.78
Activity verbs	251	19.79
Mental verbs	152	11.99

Table 4 shows that Existence (37.78%), Activity (29.79%), and Mental verbs (11.99%) are the most frequent semantic categories in terms of frequency, which may be the characteristics of written texts. Biber et al.'s (1999, p. 366) results illustrate that in fiction, news, and academic prose, the rank of the frequency of verbs are activity verbs, existence verbs, and mental verbs. From fiction to academic, the existence verbs increase and activity verbs decrease respectively. "(I)n academic prose, existence verbs are almost as common as activity verbs" (ibid., p. 366). In fact, this study shows that Existence verbs in written text are much higher than Activity verbs. This phenomenon could be explained that the written texts in the BNC are more academic and formal. In addition, the third highest category in the present study is Mental verbs, which is similar to that in Biber et al.'s (1999) results.

Right 1 Collocates

In this section, the collocation and semantic categories of Right 1 collocates in the BNC-Written will be explored, and the aim of it is to find the lexical grammar profiles of Right 1 collocates. For Right 1 collocates, the total types are 11,374 times and the total tokens are 835,891 times, and the top 300 types are investigated.

(1) Collocation.

This part discuss collocates in Right 1 position, the data of collocates in Right 1 position are shown in Table 5.

Table 5

Top 30 RIC in the BNC-Written

R	RIC	RF	NF	R	RIC	RF	NF
1	the	246,146	2734.96	16	it	3,182	35.36
2	a	53,657	596.19	17	my	3,070	34.11
3	his	16,193	179.92	18	one	3,061	34.01
4	this	11,602	128.91	19	your	3,047	33.86
5	an	9,730	108.11	20	those	2,895	32.17
6	their	9,259	102.88	21	England	2,769	30.77
7	her	7,391	82.12	22	some	2,477	27.52
8	its	5,028	55.87	23	which	2,440	27.11
9	these	4,904	54.49	24	new	2,177	24.19
10	state	4,519	50.21	25	being	2,168	24.09
11	all	3,981	44.23	26	what	2,135	23.72
12	our	3,834	42.6	27	each	2,032	22.58
13	such	3,300	36.67	28	two	1,949	21.66
14	that	3,282	36.47	29	life	1,843	20.48
15	any	3,247	36.08	30	people	1,722	19.13

Table 5 shows that Right 1 collocates are most modifiers or nouns. The detail will be discussed in the following semantic categories.

(2) Semantic categories.

The semantic categories in Right 1 position are divided into different categories in light of Nouns, Adjectives, Verbs, and Adverbs. The top three semantic categories are Social life nouns (*state, England, life, god, commons*); Person nouns (*people, lords, human, man, children*) and Activity nouns (*appeal, education, work, production, employment*). The semantic categories, frequencies, and percentages of semantic sequence of Right 1 collocates are shown in the following Table 6.

Table 6

Semantic Categories, Frequencies, and Percentages of RIC

Semantic categories	NF	%
Social life nouns	365	27.32
Person nouns	171	12.8
Activity nouns	132	9.88

Table 6 shows that the top three semantic categories in the Right 1 position often occupied by the words express social life, person and activities.

Construction of Units of Meaning

From the above analysis of the semantic categories of collocational framework in the Left 1, Middle, and Right 1 collocates, the semantic categories and their percentages are as follows:

Left 1: Existence verbs (37.78%)/Activity verbs (19.79%)/Mental verbs (11.99%)

Middle: Activity nouns (28.33%)/Essence nouns (28.04%)/Quantity nouns (13.13%)

Right 1: Social Life nouns (27.32%)/Person nouns (12.8%)/Topical (9.66%)

Hence based on the above percentage of semantic categories in each position, and we choose the top two percentages of each category, therefore, the most typical semantic sequences can be parsed as:

Existences/Activities + the + Activities/Essences + of + Social Lives/Persons

These sequences construct the typical semantic sequences of five-word string “L1C + the + MidC + of + R1C”. These semantic sequences express either “exist the activities or essences of social life and person” or “act the activities or essences of social life and person”.

Conclusion

This study investigates the lexical grammatical features of collocational framework and the construction of units of meaning based on collocational framework. It embodies Sinclair’s lexical grammar model. The research results show that the collocational framework only consisting of two functional words can build up units of meaning in a huge amount of cases in meaningful context. The construction process initiated by collocation and ended with semantic patterns reflects the nature of units of meaning based on collocational framework, which consists of form, meaning and function in general English.

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