การศึกษาการใช้คำพหุกริยาภาษาอังกฤษในกลุ่มคำศัพท์ทางวิชาการ โดยใช้คลังข้อมูลคำ A Corpus-Based Study on the Use of English Multi-word Verbs in the

Academic Word List สุวนันทน์ อินมณี* Suwanan Inmanee พยุง ซีดาร์** Payung Cedar

บทคัดย่อ

กลุ่มคำศัพท์ทางวิชาการที่เสนอโดย Coxhead (2000) แม้มีการใช้อย่างแพร่หลายในการเรียนการสอน ภาษาอังกฤษก็ยังมีจุดอ่อนในการนำเสนอ โดยเฉพาะอย่างยิ่งการมองข้ามความสำคัญของคำปรากฏร่วม (Collocations) ซึ่งเป็นส่วนประกอบที่สำคัญของงานเขียนที่ใช้ในสถานการณ์จริง งานวิจัยชิ้นนี้มุ่งศึกษาคำ ปรากฏร่วมของคำกริยาชนิดคำบุพบท หรือเรียกโดยรวมว่า คำพหุกริยา รวมถึงรูปแบบการใช้คำกริยาดังกล่าวใน ประโยค ในการดึงชุดคำกริยาดังกล่าวจากกลุ่มคำศัพท์ทางวิชาการของ Coxhead ผู้วิจัยได้พจนานุกรมคำ ปรากฏร่วมและคลังข้อมูลคำ (Corpus) ร่วมกับการหาค่า T-score ซึ่งเป็นตัวชี้วัดความถี่ที่แน่นอนของคำปรากฏ ร่วม ผลการวิเคราะห์พบคำพหุกริยา 32 คำ แบ่งเป็นคำบุพบทกริยา 30 คำ คำกริยาวลี 1คำได้แก่ sum up และจำแนกไม่ได้ 1 คำ คือ dispose of นอกจากนี้ จากการศึกษารูปแบบการใช้คำพหุกริยาจากคลังข้อมูลคำ พบว่า คำกริยากลุ่มนี้มีแนวโน้มที่จะปรากฏในรูปแบบประธานวาจก (active voice) มากกว่ากรรมวาจก (Passive Voice)

คำสำคัญ : คำปรากฏร่วม / คลังข้อมูลคำ / คำพหุกริยา / กริยาวลี

ABSTRACT

Despite being widely used in English language education, Coxhead's academic word list still lacks important dimensions on collocations which largely account for authentic English texts. This study aimed at adding collocational knowledge of verbs in the list by exploring verb + preposition collocations, or in the other comparable term, multi-word verbs (Henceforth: MWVs). A collocational dictionary, corpus use, and T-score calculations were combined to extract the MWVs. With the procedures involved, thirty-two multi-word verbs were extracted. While thirty of them are prepositional verbs, one of them, *sum up*, is a phrasal verb, and one verb, *dispose of*, cannot be categorized. The results also showed that academic MWVs in this study were less likely to be used as the passive voice when compared with the active voice.

Keywords: Collocations / Corpus / Multi-word Verbs / Phrasal Verbs

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Statement of the Problem

With the rise of computational research technology in 1980s, evidence from authentic language examples gathered from a wide variety of English texts known as corpora (plof a corpus) hashighlighted two important areas which have fostered the development of vocabulary study and the field of English language teaching as a whole. One area is the discovery of collocations, and the other is the development of vocabulary lists.

Based on corpus data, more than a few linguists (e.g. Hunston, 2002; Lewis, 1997; Nation, 2001; Nattinger&DeCarrico, 1992; Sinclair, 1991; Wray, 2000) have increasingly questioned Chomskyan views of language description that usually see language systems or grammars as a milestone of language competence. Instead of seeing grammatical structures as language frames for individual words to fill in, corpus evidence shows that vocabulary is central to language patterns as words tend to occur with preferred syntactic sequences (Sinclair, 1991). Based on Sinclair's (1991) discoveries, individual words are not chosen to form a sentence in a random manner. In fact, the chances of words to be mentioned together are "greater than random frequency" (Lewis, 1997, p. 44). For example, the verb *commit* does not occur with every type of actions, but it occurs with an illegal or immoral action such as *commit a crime, commit a murder,* and *commit suicide*. Therefore, unlike free combinations, collocations' constituents cannot be easily substituted by other words.

The fact that a relatively small number of words account for authentic written and spoken English (Nation, 2001) is another crucial discovery that corpus studies provided for the field of English language teaching as a whole. Due to this fact, researchers have elicited lists of word families which are significantly used in English in different contexts from corpora. Particularly, three major lists have been subsequently used by numerous researchers, dictionary developers, as well as coursebook writers. These lists include West's (1953) General Service List of English Words (GSL), Xue and Nation's (1984) University Word List (UWL), and Coxhead's (2000) Academic Word List (AWL).

As discussed above, collocations and the initiations of different word lists are the important offspring of corpus use. However, despite the significant contributions to the field of vocabulary study and English language teaching, these two areas have beenseparately presented. The important instances are word lists as mentioned earlier. They were not initiated with the realization that collocations greatly account for 70% of authentic spoken and written English (Hill, 2000). Moreover, while these word lists contain words ranked by frequency of occurrences in a corpus, other specifications are not provided, for example, parts of speech and patterns in which these words are likely to occur.

Due to these crucial limitations of pioneer word listings, the current study attempted to expand Coxhead's AWL, one of themost accepted word lists, with a part of

collocational knowledge by means of corpus-based research. Criticizing Xue and Nation's (1984) UWL for its lacks of coverage of words due to a small size of corpora used, Coxhead proposed the academic word list (AWL) in the year 2000. The AWL consists of 570 academic word families developed from a corpus of 3.5 million words of written academic texts compiled from academic articles, university coursebooks, laboratory manuals, book chapters as well as other academic corpora from various academic fields.

Meanwhile, verb + preposition collocations of Coxhead's AWL will be the target type of collocations to be extracted due to two important reasons.

- 1. Verb + preposition collocations have been reported to be one of the most problematic language features to all learners of English as a foreign language (Henceforth: EFL) (Bhumadhana, 2010; Chen, 2002; Hama, 2010; Hong et al., 2011; Li, 2005; Liu, 1999; Miyakoshi, 2009; Nesselhauf, 2003; Phoochareonsil, 2011; Phoochareonsil, 2013). Especially for Thai students, they usually omit prepositions due to the lack of use of the same features in Thai language. As Phoochareonsil (2013) exemplified, Thai students often omitted the preposition after verb + preposition collocations such as omitting *to* after *listen* andomitting *of* after *take care*.
- 2. Coxhead's AWL consists of the greatest number of verbs(389 verbs [Bhumadhana, 2010]) which account for approximately 68 percent of the list.

However, since characteristics of collocations are differently conceived by different researchers, to avoid this theoretical inconsistency, the current study investigated and analyzed "verb + preposition collocations" in Coxhead's AWL using the classifications and definitions of "multi-word verbs" (MWVs) proposed by Biber, Conrad, and Leech (2002) and Cowan (2010). Like verb + preposition collocations, MWVs are composed of a verb and a certain preposition. According to Biber et al. (2002) and Cowan (2010), three major classes of MWVs include: (1) phrasal verbs, (2) prepositional verbs, and (3) phrasal-prepositional verbs. Nevertheless, since phrasal-prepositional verbs have a very thin chance to appear in academic written English (Biber et al., 2002), they were not mentioned and investigated in the current study. Hence, phrasal verbs and prepositional verbs are two types of MWVs which were focused in the current study.

Research Objectives

This study was administered in order to find MWVs out of word combinations in Coxhead's AWL. It also explored the voicing patterns in which these MWVs recur. The results from this study were expected to provide an expansion of collocational knowledge which is rarely offered by vocabulary lists. These include the preposition collocates of verbs. Even though this kind of knowledge may be provided by typical English dictionaries, most of them usually generalize verb + preposition collocations as phrasal verbs, but overlook the existence

of prepositional verbs. Additionally, although dictionaries provide variations of verb forms including regular/irregular verb forms in different tenses and aspects, as well as examples of use, their recurring verb forms and uses in authentic written English are not well emphasized. These limitations are particularly important since it is a central concept of collocations that words tend to occur with preferred syntactic sequences or structures (Sinclair, 1991). In response to this, two research questions helped guide the current study as follows.

- 1. Of Coxhead's AWL, which multi-word verbs are considered phrasal verbs, which ones are considered prepositional verbs based on dictionary consultation, manual corpus analysis, and a collocation formula?
- 2. In what voicing patterns do these phrasal verbs and prepositional verbs in Coxhead's AWL recur?

Theoretical Framework

According to well-known English grammar manuals including Student Grammar of Spoken and Written English written by Biber et al. (2002) and the Teacher's Grammar of English written by Cowan (2010), the two classes of multi-word verbs, phrasal verbs and prepositional verbs, have the same construction with a verb followed by a particle or preposition. However, there are three distinctive features which characterize these two types of verbs, that is, idiomatic meanings, particle movement, and adverb insertion.

To begin with, most phrasal verbs have idiomatic meanings, whereasprepositional verbscan be literally translated. That is, the meanings of the phrasal verbs' parts (either a verb or a preposition) cannot predict the meaning of the whole. Especially, as a part of phrasal verbs, the preposition does not have a literal meaning which usually signifies places and directions. Examples include set up, hand in, and give up. The original meanings of up in set up and in in hand in is notretrievable because as a whole, they mean to begin or to construct and to return or submit respectively. Meanwhile, the original meanings of both give and up in give up are not conveyed since give up is considered as another combination of words which altogether means "to surrender". On the other hand, prepositional verbs such as ask for and listen to have literal meanings, not at all idiomatic.

Secondly, even though both types of MWVs can appear in this same pattern NP + V + prep + NP(or a MWV followed by one direct object), the particle of a transitive phrasal verb can be moved after a direct object (DO) if that DO is a pronoun or a short phrase. Examples include look it up, take your shows off, and pick a few up. Prepositional verbs, on the other hand, do not allow particle movement after a DO. For instance, apply for the job and depend on him are correct, but apply the job for and depend him on are incorrect. However, in case of two objects (a direct object and an indirect object), a preposition can be separated from a verb by a DO, such as remind me of it and said something to me.

Finally, phrasal verbs cannot be separated by an adverb, but an adverb insertion is allowed in prepositional verbs, For example, *depend largely on him* and *look exactly like her mom* are proper since they are prepositional verbs, but for phrasal verbs, *shut suddenly up* and *get early up* are improper phrases.

The table below summarizes distinctive characteristics which differentiate prepositional verbs and phrasal verbs. This table was used in the study for classifying MWVs into phrasal verbs and prepositional verbs.

Table 1: Distinctive Characteristics of Phrasal Verbs and Prepositional Verbs

| | Characteristics of MWVs | | | | | | |
|-----------------------|-------------------------|---|------------------|--|--|--|--|
| Types of MWVs | Idiomatic meaning | Particle movement after one DO (NP + V + prep + NP) | Adverb insertion | | | | |
| 1 Phrasal verbs | + | + | - | | | | |
| 2 Prepositional verbs | - | - | + | | | | |

Additionally, when compared by the frequency of occurrences in different text types, according to Biber et al. (2002), prepositional verbs are the most frequently used multiword verbs in English conversations, fictions, news, and academic texts, whereas phrasal verbs come the second with far less frequent occurrence. Especially, the proportion of prepositional verbs in academic English exceeds the proportion of other types of MWVs. Some prepositional verbs commonly appear as past participles in the passive voice (Biber et al., 2006) such as be accused of and be based ondue to the likeliness of some academic verbs to recur in the passive voice, usually without a by-phrase (Coxhead& Byrd, 2007).

Research Methodology

The current study iscorpus-based research which employs a top-down research approachas the basis. This approachattempts to elaborate existing language features via corpus evidence as it studies how those features occur in a corpus (Conrad, 2000). For this study, the existing language features were verbs in Coxhead's (2000) academic word list. There werethree stages involved in the extraction of multi-word verbs: dictionary consultation, concordancing and corpus analysis, and T-score calculation. Then, two additional stages were conducted toanswer two research questions: the identification of phrasal verbs and prepositional verbs and the identification of voicing patterns.

1. *Dictionary consultation*—The Oxford Collocations Dictionary software (2009) for Windows, which includes the information from both American English and British English, was

used. By adding keywords in the search box, if the searched words appeared with a preposition and were listed as *phr verb* (phrasal verb), which, in fact, is meant to be any verb phrases, those wordswere selected in the first place.

2.Concordancing and corpus analysis were conducted to extractMWVs including phrasal verbs and prepositional verbs from Coxhead's AWL. Developed by Tom Cobb in 1997, the CompleatLextutorversion 6.5 was the concordancing programwhich the study used. The program isfreely available online at website http://www.lextutor.ca/concordancers/concord_e.html and has been recently updated in July, 2014. Among different corpora provided by the program, Brown corpus and BNC (Sampler version) written corpus, which consist of 2,000,000 wordsin total, were selected as the sources of data.

As the processes of corpus analysis, tagging and parsing were done manually due to two purposes of grammatical analysis: (1) to differentiate verbs from other parts of speech when a keyword had more than one part of speech and (2) to reveal the voicing patterns in which the multi-word verbs recur. Although manual tagging and parsing are time-consuming, the outputs are usually more accurate than an automatic approach (Hunston, 2002). Despite manual corpus tagging and parsing, the researcher fostered the reliability of the results by means of intra-coder data analysis, which involves two occasions of analyses of the same set of data by one researcher (the first author). The first analysis and the final analysis were conducted with a two-week interval.

3.T-score calculationswere conducted to extract the final list of MWVs and to reveal voicing patterns in which these verbs recurred. Developed by Church, Gale, Hanks, and Hindle (1991, cited in Stubbs, 1995), the T-score formula was used as "a measure of the absolute frequency of collocations" (Stubbs, 1995, p. 10). This formula is appropriate for extracting grammatical collocations such as verb + preposition collocations.

T-score formula: $T = [f(n,c) - f(n)f(c)/N] / \sqrt{f(n,c)}$

The values represent different things as follows: n as node or the keyword(verb), c as collocate(preposition), N as the size or the number of words stored in a corpus. Meanwhile, f(n,c) is the joint frequency of node and collocate, and f(n) and f(c): are their independent frequencies. The following criteria based on Stubbs (1995) were used in selecting the collocations:

- (1) All cases of which their joint frequency equals 1 or lowerwere discarded because being a collocation, a node and a collocate must appear together with a frequency, at least larger than a single co-occurrence.
- (2) All cases where T is less than 2 were discarded. This number confirms a strong association between a node and a collocate in a corpus and, hence, is an indicator of being a collocation.

After all, the MWVsextracted by the three procedures above were further analyzed and classified into phrasal verbs and prepositional verbs based on three criteria guided byBiber et al. (2002), Cowan (2010), and *Longman Dictionary of Contemporary English of Advanced Learners* 2009 edition.

Conclusion and Discussion

Research question 1: Of Coxhead's AWL, which multi-word verbs are considered phrasal verbs, which ones are considered prepositional verbs based on dictionary consultation, manual corpus analysis, and a collocation formula?

The initial list of multi-word verbs from Coxhead's AWL obtained from the consultation of *Oxford Collocations Dictionary software (2009) for Windows* includes forty-sixverb phrases. These verbs were then concordanced via the CompleatLextutor version 6.5 to obtain frequency information for T-score calculation. The table below reports the f(n,c) values and the T-score values in rank order.

Table 2: The Joint Frequency of a Verb and a Preposition, and the T-score

| Rank | \ | £() | т | Rank | \ | f(n s) | т | |
|-------|----------------|--------|-------|-------|----------------------|--------|------|--|
| order | Verbs | f(n,c) | Т | order | Verbs | f(n,c) | T | |
| 1 | consist of | 173 | 13.12 | 24 | restore to | 16 | 3.96 | |
| 2 | contribute to | 143 | 11.92 | 25 | reside in | 15 | 3.85 | |
| 3 | remove from | 81 | 8.93 | 26 | quote as | 14 | 3.68 | |
| 4 | derive from | 78 | 8.80 | 27 | intervene in | 12 | 3.44 | |
| 5 | concentrate on | 76 | 8.68 | 28 | shift to | 11 | 3.25 | |
| 6 | participate in | 63 | 7.91 | 29 | file for | 10 | 3.08 | |
| 7 | rely on | 52 | 7.19 | 30 | release from | 8 | 2.75 | |
| 8 | focus on | 42 | 6.46 | 31 | submit for | 6 | 2.37 | |
| 9 | attribute to | 36 | 5.98 | 32 | shift into | 5 | 2.20 | |
| 10 | submit to | 36 | 5.97 | 33 | conflict with | 4 | 1.98 | |
| 11 | adapt to | 34 | 5.80 | 34 | suspend from | 4 | 1.92 | |
| 12 | benefit from | 34 | 5.80 | 35 | channel into | 3 | 1.73 | |
| 13 | coincide with | 32 | 5.64 | 36 | offset against | 3 | 1.73 | |
| 14 | expose to | 32 | 5.61 | 37 | deviate from | 3 | 1.72 | |
| 15 | transform into | 28 | 5.27 | 38 | volunteer for | 3 | 1.70 | |
| 16 | dispose of | 28 | 5.27 | 39 | abandon to | 3 | 1.60 | |
| 17 | occur to | 28 | 5.16 | 40 | survive on | 3 | 1.47 | |
| 18 | link to | 25 | 4.95 | 41 | impact on | 1 | 0.99 | |
| 19 | conform to | 21 | 4.57 | 42 | discriminate against | 1 | 0.99 | |
| 20 | recover from | 19 | 4.32 | 43 | channel to | 1 | 0.97 | |
| 21 | sum up | 18 | 4.24 | 44 | register at | 0 | 0.44 | |
| 22 | exclude from | 18 | 4.20 | 45 | trigger of | 0 | 0.12 | |
| 23 | compensate for | 17 | 4.11 | 46 | prospect for | 0 | 0.00 | |

Based on Stubbs' (1995) first criterion, six cases of which their joint frequency equals 1 or lower were discarded. These include: *impact on, discriminate against, channel to, register at, trigger of,* and *prospect for.* Meanwhile, the other eight cases were discarded due to the second criteria, discarding all cases of which the T-score values are less than 2. These were: *conflict with, suspend from, channel to, offset against, deviate from, volunteer for, abandon to,* and *survive on.* Thus, despite being mentioned in the collocation dictionary fourteen verb phraseswere not qualified collocations based the two criteria.

Thirty-two multi-word verbs extracted were further analyzed and classified into phrasal verbs and prepositional verbs based on Biber et al. (2002) and Cowan (2010). The results showed that only *sum up* was found to meet three criteria, while *dispose of* meets two criteria. This is consistent to Biber et al.'s (2002) report in that prepositional verbs have far more chances to appear in all text types, especially in academic texts. Table 3 displays how *sum up* and *dispose of* meet the three criteria of being phrasal verbs.

Table 3:Phrasal verbs found in Coxhead's AWL

| | | Characteristics of phrasal verbs | | | | | |
|---|---------------|----------------------------------|-----------------------------|------------------|--|--|--|
| | | Idiomatic meaning | Particle movement after one | Adverb insertion | | | |
| | Phrasal verbs | | DO | | | | |
| | | (+) | (+) | (-) | | | |
| 1 | Sum up | + | + | - | | | |
| 2 | Dispose of | + | + | + | | | |

As illustrated in Table 3, sum upis the only one MWV in Coxhead's academic word list which meets all the three criteria. That is,(1) sum uphas an idiomatic meaning since up does not actually tell the direction, (2) itallows particle movement after one direct object such as sum it up, and (3) it does not allow an adverb insertion. However, dispose of, despite having an idiomatic meaning like a phrasal verb, allows an adverb insertion just like a prepositional verb. Whilethe original meaning based on LDCE(p. 488) of dispose refers to to arrange them or put in their places, the combination dispose of provides various meanings different from the original's including: to get rid of something, to sell something, to deal with a problem or a question successfully, and to defeat an opponent. One of these examples includes: The Secretary may dispose of waterand byproducts resulting fromhisoperation. In this context, dispose of meansto get rid of something. However, based on corpus data, this verb allows an adverb insertion like an ordinary prepositional verb, as shown in one language sample from the corpus data: the Government's

most embarrassingproblem is howtodispose inconspicuouslyof 100million tons of surplus far

m. This kind of use, despiteappearing once in the 2-million-word Brown and BNC written corpus, was also found in the other corpuswhich was not used in the study, such as to dispose safely of andto dispose subsequently of BYU-BNC: British National Corpus. As a result, based on the three criteria proposed by Biber et al. (2002) and Cowan (2010), only sum-upcan be categorized as a phrasal verb, whereas dispose of cannot be categorized.

Research question 2: In what voicing patterns do these phrasal verbs and prepositional verbs in Coxhead's AWL recur?

After T-score calculations, the rest thirty-twoMWVs werefurther analyzed for their recurring voicing patterns. As academic English verbs are likely to be used as the passive voice (Coxhead& Byrd, 2007), the results willbe presented with the focus on this characteristic as a priority.

The findings showed that six MWVs including *link to, expose to, transform into, exclude from, attribute to,* and *derive from*were reported to be used more frequently in the passive voice than in the active voice. As illustrated in Table 4, the proportions of the active voice per the passive voice occurring with the six MWVs compared by percentages were: 24:76, 25:75, 36:64, 44:56, 39:61, and 45:55 respectively. Meanwhile, the proportion of two voicing patterns of *release from* was 50:50 percent.

Table 4: The Proportions of the Active Voice per the Passive Voice per MWVs

| No. | MWVs | f | Act | ive | Pass | sive | No. | MWVs | f | Act | ive | Pass | sive |
|-----|----------------|-------|-----|-----|------|------|------|----------------|-------|-----|-----|------|------|
| NO. | 10100.02 | (n,c) | f | % | f | % | INO. | | (n,c) | f | % | f | % |
| 1 | Link to | 25 | 6 | 24 | 19 | 76 | 17 | File for | 10 | 9 | 90 | 1 | 10 |
| 2 | Expose to | 32 | 8 | 25 | 24 | 75 | 18 | Conform to | 21 | 19 | 90 | 2 | 10 |
| 3 | Transform into | 28 | 10 | 36 | 18 | 64 | 19 | Recover from | 19 | 18 | 95 | 1 | 5 |
| 4 | Exclude from | 18 | 8 | 44 | 10 | 56 | 20 | Rely on | 52 | 50 | 96 | 2 | 4 |
| 5 | Attribute to | 36 | 14 | 39 | 22 | 61 | 21 | Consist of | 173 | 172 | 99 | 1 | 1 |
| 6 | Derive from | 78 | 35 | 45 | 43 | 55 | 22 | Contribute to | 143 | 143 | 100 | 0 | 0 |
| 7 | Release from | 8 | 4 | 50 | 4 | 50 | 23 | concentrate on | 76 | 76 | 100 | 0 | 0 |
| 8 | Adapt to | 34 | 19 | 56 | 15 | 44 | 24 | participate in | 63 | 63 | 100 | 0 | 0 |
| 9 | Remove from | 81 | 48 | 59 | 33 | 41 | 25 | benefit from | 34 | 34 | 100 | 0 | 0 |
| 10 | Dispose of | 28 | 18 | 64 | 10 | 36 | 26 | coincide with | 32 | 32 | 100 | 0 | 0 |
| 11 | Quote as | 14 | 10 | 71 | 4 | 29 | 27 | Occur to | 28 | 28 | 100 | 0 | 0 |
| 12 | Restore to | 16 | 12 | 75 | 4 | 25 | 28 | Compensate for | 17 | 17 | 100 | 0 | 0 |
| 13 | Submit to | 36 | 28 | 78 | 8 | 22 | 29 | Reside in | 15 | 15 | 100 | 0 | 0 |
| 14 | Sum up | 18 | 14 | 78 | 4 | 22 | 30 | intervene in | 12 | 12 | 100 | 0 | 0 |
| 15 | Focus on | 42 | 34 | 81 | 8 | 19 | 31 | shift to | 11 | 11 | 100 | 0 | 0 |
| 16 | Submit for | 7 | 6 | 86 | 1 | 14 | 32 | Shift into | 5 | 5 | 100 | 0 | 0 |

Despite being regularly used as the passive voice, these verbs could be also used as the active voice, but usually in a pattern of prepositional verbs in the case of two objects separated by a preposition (Biber et al., 2002) as exemplified below.

| The active voice | The passive voice | | | | |
|---|--|--|--|--|--|
| The gangplank that <i>linked</i> the slipway to the | The name of Brazenose, which was linked to the | | | | |
| boat | "brazen head" and | | | | |
| I consider it to be my job to expose the public to | But millions of human beings were exposed toLueger's | | | | |
| what is being written today. | propaganda | | | | |

In spite of being found more frequently as the active voice, there were other six MWVswhich could be used with the same patterns as these six verbs. That is, when they were foundfrequently in the passive voice, their active voice pattern needs two objects with a preposition in the middle. These verbs are: adapt to, remove from, quote as, restore to, submit for, and file for.

Meanwhile, the restnineteenverbs including conform to, recover from, rely on, consist of, contribute to, concentrate on, participate in, benefit from, coincide with, occur to, compensate for, reside in, intervene in, shift to, shift into, submit to, sum up, focus on, and dispose ofwere found to be used as the active voice with one direct object. Eleven of them were 100 percent occurring in the active voice including contribute to, concentrate on, participate in, benefit from, coincide with, occur to, compensate for, reside in, intervene in, shift to, and shift into. Some of the language samples of these MWVs provided by Brown and BNC written corpus are demonstrated as the following.

- a. The beer's name was also changed to conform to its traditional image.
- b.The current government's reluctance to intervene in the workings of...
- c. It wouldn't occur to the participants for one second that...

The results illustrates that the MWVs in Coxhead's AWL are more likely to be used as the active voice. A number of them only occur in the active voice. Meanwhile, some of them are used as the passive voice or have an alternative pattern to be written in the passive voice, and these verbs are prepositional verbs. This finding is somewhat consistent with Biber et al. (2002) and Coxhead and Byrd (2007) that some (not most) academic verbs and some prepositional verbs frequently appear as past participles in the passive voice, usually without a *by*-phrase.

To conclude, based on a collocation dictionary, corpus data, and T-score calculations, thirty-two MWVswere extracted from Coxhead's (2000) AWL. Of this number, only one is a qualified phrasal verb based on a theoretical framework guided by Biber et al. (2002) and Cowan (2010), whereas the other thirty are prepositional verbs. The results also show that words and patterns.correlated as certain verbs only recur with either the active voice or the passive voice. They were not freely composed with random patterns. This

provides evidence to support what Sinclair (1991) claimed before, that vocabulary is central to language patterns as words tend to occur with preferred syntactic sequences.

Implications of the Study

This study has provided a further insight intocollocational knowledge and language descriptions of multi-word verbs in Coxhead's (2000) AWL. Not only does the study reveal the prepositions which are used with the verbs in the list and the patterns of use, it also provides further considerations on classifications of multi-word verbs by attempting to test theoretical perspectives proposed by Biber et al. (2002) and Cowan (2010). Especially, as phrasal verbs are dominantly mentioned in commercial English instructional materials which the authors have been used, the finding that there are more prepositional verbs than phrasal verbs in usual English texts leads totwo important questions. Are Thai learners appropriately exposed to these two types of multiword verbs? If not, should this knowledge be recognized more by English language education stakeholders?

Additionally, the result that the verb *dispose of* cannot be categorized based on the classificationshows that using the theoretical perspectives proposed byBiber et al.'s (2002) and Cowan's (2010) may be limited. Due to this limitation, further research may test other related theories alongside in order to perfectly answer the research questions and find the best framework for classifying multi-word verbs.

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