

A Study on the Collocation Relations of Orientation Preposition

"in" to Verbs

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Abstract

The study aims to find out why some verbs can collocate with preposition "in" in a fixed way while others can't, as well as the characteristics of the collocations by analyzing the fixed verbal phrases of verbs and preposition "in" which are included in the vocabulary of college English syllabus. The study includes the research into the prototype meaning and metaphorical meanings of preposition "in" from the perspective of cognitive linguistics, and the exploration of the original meaning of the verbs by etymological analysis. Through the analysis of the twenty-three fixed collocations formed by verbs and preposition "in", it is found that the prototype meaning of verbs and the prototype semantic characteristics of preposition "in" play an important role in the collocation of verbs and preposition "in".

Keywords: Collocation relations of prepositions to verbs; Etymological exploration; Prototypical sense; Metaphorical sense

1. Introduction

The study of spatial words provided a basic understanding of language, psychological representation and human experience (Tyler & Evans 2003, 117). Preposition is one of the most important space words, especially the position preposition which indicates the spatial relationship between objects. Hu Mingyang (1980,84) mentioned in his translation of a book concerning case grammar that Fillmore thought that English prepositions were used to describe case relations and reveal the transitive relationship between the body words (nouns, pronouns, etc.) and predicates (verbs, adjectives, etc.) in case grammar. Although the domestic research on English prepositions has been flourishing since the 1980s, the research on English prepositions has been extended from single preposition to prepositional phrase, which combines synchronic description with diachronic investigation. However, most of the researches focus on the meaning description and usage explanation of individual prepositions, and seldom involve the collocation structure formed between prepositions and other parts of speech. For most English learners, one of the difficulties in preposition learning is its collocation. Position prepositions are the most representative spatial words. This paper studied the fixed collocation of the position preposition "in" with verbs in order to find out the collocation rules of English verbs and prepositions.

2. Literature Review

As early as the 1950s, Firth, the British semantic scientist, first proposed the concept of collocation. Later Halliday and Sinclair, the representatives of the new Firth school, published two papers in commemoration of

Firth and proposed three closely related terms in linguistic research: lexical item, collocation and lexical set. Halliday (1976) held that collocation should be the co-occurrence of words. Qian Ai (1997:43-47) believed that collocation could be understood as the habitual collocation of words. Both the habitual collocation and the co-occurrence of lexical items in a sentence are important parts of mental lexicon in the human brain. The essence of collocation is the collocation between the meanings of words, mainly the collocation of lexical meaning and rhetorical meaning. Different parts of speech are collocated in different ways. For example, the collocation of adjective and noun is noun phrase with adjective modifying noun; the collocation of adverb and verb is verb phrase with adverb modifying verb; verb and preposition collocation constitute verb phrase. The study of collocation in a broad sense examines the continuum of "free combination - restrictive combination - lexicalized idiom". Zhu Yongsheng (1996:14-18) divided collocation into three categories: fixed collocation, conventional collocation and creative collocation. The fixed collocation proposed by Zhu Yongsheng belongs to the restrictive combination in the generalized collocation. The proportion of fixed collocation in expression is very high. The research by Altenberg (1998:68) showed that the proportion of fixed collocation phrases in spoken English was as high as 80%. However, the proportion of fixed collocations in written English was slightly lower, more than 50% according to the survey conducted in lob corpus. This study focused on the fixed collocation of verbs and prepositions.

Cognitive linguistics was born in the late 1970s. Cognitive linguistics based on experiential philosophy holds that language ability is a part of human cognitive ability, and cognitive linguistics interprets various factors of language including pronunciation, vocabulary, morphology and syntax by means of interactive experience, image, cognitive model, metaphor metonymy and iconicity principle. Lakoff and Johnson (1980:231) regarded metaphor as a cognitive mode, and divided conceptual metaphor into three categories, including structural metaphor, orientation metaphor and object metaphor. Among them, positional metaphor meant that the "orientation" in space could be mapped to other conceptual domains, such as time domain, abstract concept domain, etc.

3. Source of Corpus and Research Methods

3.1 Source of corpus

English prepositions have always been one of the difficulties in College English teaching. Based on the statistics of the usage and misuse of the locative prepositions "in", "on" and "at" in the CET-4 and CET-6 corpus of China English learners' corpus, it is found that these three prepositions rank in the top seven of the 14 prepositions most frequently used by college students in written English, and the error rate is more than 30%. Therefore, this study took the vocabulary of Comprehensive English (a compulsory course for non-English major students) as the scope of phrase retrieval, and queried the fixed collocation phrases formed by verbs and "in" as research samples.

3.2 Research methods

Langacker (1999) held that a typical word represented a complex category, which not only included one meaning, but also several meanings with different degrees of solidification. The most typical and representative meaning was equivalent to the prototype in general category. Prototype semantics derived non-prototype semantics through metaphor, metonymy and other cognitive mechanisms, forming a radial semantic network connected by similarity. The prototype semantics of most prepositions was their spatial meaning. Our perception of the objective relationship between objects was usually based on the perception of spatial structure and relationship. Based on the semantic network diagram of preposition "in", this study analyzed the collocation of preposition "in" from prototype semantics and metaphorical semantics, in order to find out the collocation rules

of verb and position preposition "in".

English verbs can be divided into verbs indicating action and those for state. Verbs indicating actions are used to show the state of motion of people / things / objects, and can be subdivided into verbs for continuous actions (e.g., listen, write), verbs for short actions (e.g., hit, jump), and verbs for changes and movements (e.g., arrive, change). The verbs expressing state can be divided into four categories: verbs for thinking activities (such as believe, know), verbs for emotions (such as like, have, like), verbs for ownership and existence (such as have, been) and sensory verbs (such as hear, taste). This study classified the verbs that formed a fixed collocation with the preposition "in", and explored the original meaning of these verbs by using the method of etymology analysis, so as to better find out the reasons for the formation of the collocation and the factors affecting the collocation structure.

4. Findings and Discussion

4.1 Findings

Random House Webster's College Dictionary gives seven basic meanings of "in". The prototype semantics of "in" in its semantic network is "being contained in a certain container". This kind of inclusion in three-dimensional space is mapped to different target domains, forming other forms of "contained". For example, when it is mapped to the target domain of situation, state and other aspects, the metaphorical meaning is "(contained) in the domain or scope of abstract or intangible things", such as "in good condition", "in politics". When mapped to the time domain, the metaphorical meaning is "(included) within a certain period of time", such as "in summer", "in an hour". When it is mapped to the target domain of an event or activity, the metaphorical meaning is "(contained) in the influence scope of an event or activity", such as "in the car accident". When it is mapped to the target domain of motion, the metaphorical meaning is "(included) the movement or direction in the range from the outside to the inside somewhere", such as "go in the house".

In the vocabulary of the syllabus of Comprehensive English, the authors have retrieved 23 fixed collocations of verbs with "in". Among them, there are 8 verbs for continuous action (deal, engage, induce, instrument, join, participate, persist, specialize), 2 verbs for short-term action (interfere, invest), and 5 verbs for change and movement (arrive, end, They are origin, result, success, 2 affective verbs (believe, delay), 3 verbs for ownership and existence (believe, share, lie), and 3 verbs for thinking activities (believe, deliberate, trust).

Table 1: 23 Verbs Forming Fixed Collocation with "In"; Phrase Meaning and Metaphorical Meaning of "In" in Phrases

Verb Types		Verbal Phrases	Metaphorical meaning of "in" in phrases
For action	For continuous action	deal in (operate) engage in (participate in; work in) indulge in (be addicted to) instruct in (guide) join in (participate in) participate in (take part in) persist in (insist on) specialize in (focus on one single aspect)	Contained in (a scope of activity, field)
	For short action	interfere in (intervene) invest in (put money into)	Contained in or constraint in (a field)
	For change and	arrive in (reach some place)	Contained in or constraint

	movements	end in (the result is) originate in ... (the origin is) result in ... (the result is) succeed in ... (make a success in certain things)	in (a region, state, or domain)
For state	For emotion	confide in (tell the secret to) delight in (feel happy for)	(Emotion is) contained / constraint in (a scope)
	For ownership and existence	consist in (because of or originate from) share in (share something together) lie in (exist in)	Contained in or constraint in (a aspect, domain, or scope)
	For thinking activity	believe in (trust) deliberate in (being cautious) trust in (be conceived)	(Emotion or thinking activity is) contained / constraint in (a scope)

4.2 Discussion

The inclusion relations emphasized by the prototype semantics (contained in the container) of the preposition "in" are mapped to different target domains, forming various forms of included meanings. From the table above, we notice that among the 23 verbs forming a fixed collocation with "in", there are both verbs for actions and verbs for state, among which the number of verbs for action is far more than those for state. Among the verbs expressing actions, most of the actions involve the scope of their activities or areas according to our life experience, such as deal, engage, indulge, instruct, join, participate, specialize, invest, interfere, originate, succeed, which has thus formed a collocation naturally with "in" to indicate the limitation. Some verbs that express action, such as "persist", do not seem to directly involve the field or scope of activity from the perspective of word meaning, but if we analyze it from the perspective of etymology, it is not difficult to find that the verb is related to the metaphorical meaning of "in" reflecting the limited scope. From the perspective of etymology, "persist" is composed of per (meaning penetration) and sist (standing). According to the life experience, the action of "standing" involves a certain spatial position in a certain range. Therefore, it is reasonable that "persist" and "in" reflect the scope.

The phrase "end in" means "end something with a certain result or in a certain way". With the meaning examined, the phrase has nothing to do with the metaphorical meaning of "in", which embodies the limited scope. However, the prototype meaning of "in" not only indicates the limited scope on the plane when it is mapped to the target domain of the plane form, such as "in aspect" and "in a range", it is also mapped to straight lines, forming some metaphorical meanings such as "within a certain period of time" and "in a certain way". According to our life experience, the action represented by the verb "end" refers to the way or state, such as "end completely", "end partially" and other specific meaning. The metaphorical meaning of "in" mapped to a straight line, "in a way", can be matched with the verb "end" and express the way of "ending", for example, end in failure, which means end in the way of failure.

The phrase has nothing to do with the metaphorical meaning of "in". However, from the etymological point of view, we can divide "result" into two parts: the "re" for the direction (backward) and the "sult" for the action (jump). According to life experience, the action of "jump" involves a certain spatial position in a certain range, so "result" can naturally form a collocation with "in" reflecting the limited range. The archetypal meaning of "in" can also be mapped to the three-dimensional space in which the abstract meaning is stated, forming metaphorical semantics such as "in the state of" and "in the event", such as "in good condition" and "in a car accident". The metaphorical meaning of preposition "in" in the phrase "result in" is "in "In state", such as "result

in death" and "result in failure".

Among the eight verbs that indicate state, it is easy for us to judge according to our life experience that the three verbs "consist", "share" and "lie" are related to the scope, so they can naturally form a collocation with "in" which reflects the limited scope. The two verbs expressing emotion and "in" form the phrases "believe in" and "delight in" respectively. We analyze the etymology of "believe" and find the relationship between "believe" and the metaphorical meaning of "in". "Confide" can be divided into three parts: the "con" used to emphasize the meaning, "fid" meaning "trust" and the silent letter "e". According to the life experience, any kind of emotion has its scope of existence. For example, "being interested in music" means that interest only exists in the field of music. Therefore, the collocation of "confide" and "in" is easy to understand. "Delight in" is equivalent to the phrase "take delight in". Therefore, the "in" is used to indicate the scope of happiness. The metaphorical meaning of "in" with two emotional verbs is "contained / limited in a certain range".

Among the three verbs expressing thinking activities, we can easily associate the verb meaning with the collocation of deliberate and trust with "in". "Deliberate in" means to be cautious in some aspect, while "trust in" means to trust something or someone (trust in a certain field). The other verb "believe" can be divided into two parts according to its etymology: "Be" is used to emphasize the meaning and "lie" means "love". "In" with "believe" indicates the scope of "love". The preposition "in" in the phrase "trust in" indicates the scope of the emotion of "trust". The metaphorical meaning of the preposition "in" in these three phrases is "contained / restricted in a certain scope".

But not all the verbs involving the scope of action must be used with "in". For example, "in" and "at" both can be matched with the verb "arrive". Whether using "arrive at" or "arrive in" depends on whether the destination belongs to a spatial "point" or a spatial "surface". The phrase "arrive in" indicates that the scope of the destination is a spatial "plane", such as a country or city, while the phrase "arrive at" indicates that the destination is a spatial "point", such as a station, school, airport, etc. "In" can be used with some verbs expressing emotion or thinking activities in the form of collocation to indicate the scope of emotional / thinking activities. However, there are some verbs that express thinking activities, which are not used with "in", but with another preposition "on". After analyzing these verbs from the perspective of etymology, we find that the etymological meaning of some of these words involves tangible substances or actions that need support. For example:

calculate on fine weather
ponder on the current situation

According to the etymology, "calculate" can be divided into two parts: the "calculate" meaning "lime, calcium salt" and the ending "ate" of the sign verb. "On" here means its prototype meaning, "be or remain supported by". The etymological meaning of the phrase "calculate on" means that a substance such as "lime, calcium salt" is supported or placed on something. The verb "ponder" comes from the Latin "ponderare", which means "hang or weigh". Obviously, both "hanging" and "weighing" need supports. Therefore, we can understand the collocation of the verb and "on". There are some verbs that express thinking activities also form fixed collocations with "on", for example:

count on one's coming
meditate on the problem

However, it is difficult to find out the relationship between the original meaning of these verbs and the prototype semantics and metaphorical meaning of "on" whether from the perspective of verb semantics or etymology.

5. Conclusion

This study has taken the fixed collocation of verbs and "in" in the vocabulary of Comprehensive English syllabus as the research object, and explored the collocation rules of verbs and "in". It is found that all the 23 verbs which form a fixed collocation with "in" are collocated with "in" because they involve the scope of action or emotional or thinking activities. The semantic features of verbs and the prototype features of prepositions play an important role in the collocation of verbs and prepositions. In English vocabulary teaching, when explaining the collocation of verbs and prepositions, the teachers can guide students to analyze phrases from the perspective of the prototype meaning of verbs and the prototype characteristics of prepositions, so as to help the students understand the formation characteristics of phrases and deepen their mastery and memory of phrases. The deficiency of this study is that we only study the fixed collocation of 23 groups of verbs with "in". The number of research samples is small, which is not enough to summarize the collocation rules of all verbs and prepositions. In addition, the collocations formed by some verbs and prepositions can not be explained from the perspective of verb semantics and prepositional semantics. In the following research, we will extract more fixed collocations of verbs and prepositions from corpus, and further study and analyze the cognitive schema and rules of English verb-preposition collocation by using metaphor theory in cognitive linguistics.

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