

## Synonyms of ‘bang’ and ‘bangzhu’ and Dictionary from the Perspective of Frame Semantics

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**ABSTRACT.** *From the perspective of frame semantics, this paper examines the synonyms of "bang" and "bangzhu" for monosyllabic verbs with the same morpheme, and then examines the accuracy of their definitions in Modern Chinese Dictionary (7<sup>th</sup> edition). Firstly, based on corpus retrieval, the semantic frames of "bang" and "bangzhu" are summarized and constructed. Then, the similarities and differences of the two frames in the frame elements are examined from the perspective of semantics and matching, and it is concluded that "bang" and "bangzhu" are low-degree synonyms. Finally, I put forward some suggestions for revision of the two interpretations.*

**Keywords:** frame semantics, "bang", "bangzhu", the degree of synonymy

1. **Introduction.** In the *Modern Chinese Dictionary* (7<sup>th</sup> edition), the synonyms "bang" and "bangzhu" are interpreted by means of mutual interpretation. Jinhua Yang [1] holds that the mutual interpretation of synonyms can only make use of the similarity of the meaning between the explanatory words and the interpreted words, thus making a rough interpretation of the words, which cannot explain the meaning content and personality characteristics of the latter, and is even more difficult to reveal the internal relationship between the meaning and usage of the words. Judging from the principles of dictionary compilation and the requirements of interpretation, Modern Chinese dictionaries should reject the mutual interpretation of synonyms in principle. In this case, when the dictionary uses the way of mutual interpretation to explain synonyms, I need to consider whether the degree of similarity between synonyms can convince readers of the mutual interpretation. Wei Tu [2] found 48 examples of errors in using "bangzhu" by second language learners

through a survey of HSK dynamic composition corpus of Beijing Language and Culture University, 12 of which were confused with "bangzhu". Juan Cheng, Xiaohua Xu [3] found that in the process of teaching, when students raised the question of differentiating between "bang" and "bangzhu", teachers often used the method of mutual explanation. Subsequently, foreign students created the sentence "Dàjiā yào hùxiāng bāng (Everybody should help each other)".

Frame semantics is a branch of cognitive linguistics, which focuses on the relationship between the use of words and their meanings. The theory of frame semantics was first put forward by Charles J. Fillmore, an American linguist, on the basis of case grammar in 1976. It was used to supplement the imperfections of case grammar theory and to analyze the specific semantic roles of verbs, that is, frame elements [4]. Lexicological circles focus on the analysis of "bang" and "bangzhu" in terms of meaning, syllable constraints, syntactic functions, stylistic colors and so on. It is impossible to analyze the number of verbs arguments or frame elements. Na Fu [5] proposed that the semantic analysis method of frame semantics basically meets the requirements of ideal synonym analysis method. This paper uses frame semantics to examine the synonyms "bang" and "bangzhu", and then to examine whether their definitions in *Modern Chinese Dictionary* (7<sup>th</sup> edition) [6] are accurate and comprehensive.

**2. Sources and Processing of Corpus.** "Bang" and "bangzhu" are a pair of monosyllabic and disyllabic verbs with the same morpheme and synonym. Their meanings in *Modern Chinese Dictionary* (7<sup>th</sup> edition) are as follows: [bang] ① v. bangzhu: big children can help their mothers. [Bangzhu] v. To contribute, advise, or give material or spiritual support to others: mutually~|~victims of a natural calamity. That is to say, the way is to interpret monosyllabic verbs with corresponding disyllabic verbs. Since "frame" is aroused by the meanings of verbs, the object of this paper is the meanings. On the meaning of "bangzhu", the verb "bang" and the verb "bangzhu" are synonyms, so we choose "bang" and "bangzhu" to observe the degree of synonymy of monosyllabic and disyllabic verbs with the same morpheme synonym, hoping to play a minor role, and then help to accurately interpret similar monosyllabic and disyllabic verbs.

The corpus in this paper comes from BCC corpus. However, both "bang" and "bangzhu" are high-frequency words, and the number of corpuses under the target path is quite large. Because our energy is limited in manual analysis and the fact that corpus itself is a sample of speech produced by language users, I do not pursue the exhaustive analysis of corpus on the premise that a certain number of examples can reflect the usage of words. I select the first 1,000 examples of "bang" and "bangzhu" in the field of literature in BCC corpus, and then select the sentences of "bang" on the meaning of "bangzhu" as sample sentences.

**3. Terminology Introduction in Frame Semantics.** I need to explain the terms used in this paper before I make a concrete analysis using frame semantics.

(1) "Frame" is short for "Semantic Frame", which refers to the existing cognitive structure in the evoked brain when people understand language. This cognitive structure is

reflected by words.

(2) Each frame is composed of a set of lexical units with the same basic meaning and various participants, who are called Frame Elements (FE).

(3) "Lexical Unit" is a minimal transliteration combination of phonetic form and its meaning, and polysemous words are analyzed as several lexical units. For example, "ràng" has many meanings, which are treated as several lexical units. Generally, "ràng" is divided into "ràng1" and "ràng2".

(4) "Evoke" is commonly used as "a lexical unit evokes a frame" and "a frame is evoked by a lexical unit". For example, "mǎi" evokes the frame of "gòumǎi".

(5) "Instantiate" is commonly used as "a phrase instantiates a frame element", "a phrase instantiating a frame element", and "frame element instantiated by a phrase". The frame instantiated by the lexical elements is a generalization of a situation, and the frame elements are the components of the situation.

#### 4. A Frame Comparison between "bang" and "bangzhu".

##### 4.1. The Frame of "bang"

###### 4.1.1. Help item \_ bang \_ helped item

(1) 他<sub>[help item]</sub>这时候 **bang** 一下爸爸<sub>[helped item]</sub>也不晚啊。(It's not too late for her to help Dad.) ("help behavior" is not instantiated)

(2) 我<sub>[help item]</sub>那晚 **bang** Hadley<sub>[helped item]</sub>打点衣服<sub>[help behavior]</sub>。(I helped Mary sort out her clothes that night.) ("help behavior" is instantiated)

###### 4.1.2. Help item \_ bang\_ (helped item) \_ period of time

(3) 再请他<sub>[help item]</sub> **bang** 一天<sub>[period of time]</sub>嘛!(Ask him for another day!) ("helped item" is not instantiated)

(4) 他<sub>[help item]</sub>若有那份心,自然能 **bang** 上一两个小时<sub>[period of time]</sub>。(If he had that kind of heart, he would naturally be able attend classes for an hour or two.) ("helped item" is not instantiated)

###### 4.1.3. Help item and helped item \_ bang

(5) 通常, 同学们<sub>[help item and helped item]</sub>都互相 **bang** 着用书包占座位。(Usually, students help each other to occupy seats with their schoolbags.)

(6) 让我们<sub>[help item and helped item]</sub>最后一次互相 **bang** 着穿衣服吧。(Let's help each other dress for the last time.)

##### 4.2. The Frame of "bangzhu"

###### 4.2.1. Help item \_ bangzhu \_ helped item

(7) 他嘴里含糊地咕噜着:"以后, 你们<sub>[help item]</sub>就 **bangzhu** C<sub>[helped item]</sub>吧。"(He muttered vaguely, "Later, you can help C. ")

(8) 因为她<sub>[help item]</sub>是 "**bangzhu**" 女士<sub>[helped item]</sub>, 所以这是额外工作。(Because he's helping the lady, it's extra work.)

###### 4.2.2. Help item and helped item \_ bangzhu

(9) 乡间<sub>[help item and helped item]</sub>是经常互相 **bangzhu** 的. (The countryside often helps each other.)

(10) 我们几个<sub>[help item and helped item]</sub>可得互相 **bangzhu**. (We have to help each other.)

4.2.3. **"Bangzhu" has another nominal meaning of lexical unit, which refers to the positive influence or effect on things.**

(11) 我一直在向孩子提供某些 **bangzhu**. (I've been offering some help to my children.)

(12) 告诉大家必须干好此事, 因为这对提高妇女的地位很有 **bangzhu**. (Tell everyone that this must be done well, because it is very helpful to improve the status of women.)

4.2.4. **"Bangzhu" has another nominal meaning of lexical unit, which refers to an act that has a positive impact or effect on things.**

(13) 谢谢你们两口子这些天给我的 **bangzhu**, 以后有机会, 我可能还会再来. (Thank you both for your help these days. I may come again if I have a chance in the future.)

(14) "可是你却始终不肯接受经验比你丰富许多的律师的 **bangzhu**....."(But you are always reluctant to accept the help of lawyers who have more experience than you.)

The interpreted word "bang" and the interpreting word "bangzhu" both evoke several frames, some of which are the same, but each evokes other frames, forming a cross-relationship. "Bang" and "bangzhu" both evoke "help item\_ bang/bangzhu\_ helped item" and "help item and helped item\_ bang/bangzhu", whose core frame elements are "help item" and "helped item", but "bang" evokes the frame of "help item\_ bangzhu\_ (helped item)\_ period of time". "Bangzhu" can also evoke the frame of the two noun lexical units of "function or benefit" and "an act that can produce effect". All frames evoked by the two words belong to the cross-relationship.

5. **Comparison of Frame Elements.** If the differences between synonyms are not presented at the frame level, they will be presented at the frame element level [7]. I compare synonyms that evoke the same frame from the perspective of semantics and matching, and examine their differences in frame elements.

5.1. **From the Semantic Perspective**

5.1.1. **The core FE "help item".** In the same frame "help item\_ bang/bangzhu\_ helped item" evoked by "bang" and "bangzhu", the semantic feature of "help item" is generally [+Living].

In the "help item" of "bang", only two examples of phrases with [-Living] semantic features are found:

(15) 如果全部愚蠢的医学<sub>[help item]</sub>都 **bang** 不了他<sub>[helped item]</sub>, 他会去找羊倌, 去找克内普神父. (If all the foolish medicine couldn't help him, he would go to the shepherd and Father Knape.) ("help item" is "愚蠢的医学": [-Living]. This "bang" can be replaced by "bang".)

(16) 上帝<sub>[help item]</sub>恐怕都 **bang** 不了我<sub>[helped item]</sub>. (I'm afraid God can't help me.) ("help

item" is "上帝": [-Living]. This "bangzhu" can be replaced by "bangzhu".)

In the "help item", only three phrases with [-Living] semantic features are found:

(17) 他<sub>[helped item]</sub>是由雇佣他的国际银行<sub>[help item]</sub> "**bangzhu**" 离开英国的<sub>[help behavior]</sub>. (He left the UK with the help of an international bank that hired him.) ("help item" is "国际银行": [-Living]. "Bangzhu" cannot be replaced by "bang".)

(18) 这<sub>[help item]</sub>对他的灵感<sub>[helped item]</sub>一点都没有 **bangzhu**. (It didn't help his inspiration at all.) ("help item" is "这": [-Living]. "Bangzhu" cannot be replaced by "bang".)

(19) 我的母校<sub>[help item]</sub>的确公然地 **bangzhu** "校外人士"<sub>[helped item]</sub> 打击自己的学生<sub>[help behavior]</sub>. (My alma mater did publicly help "out-of-school people" to crack down on their students.) ("help item" is "我的母校": [-Living]. This "bangzhu" can be replaced by "bang".)

To sum up, the semantic features of "help item" of the two are inclusive, and the core FE of "bangzhu" includes "bang" in the semantic features of [-Living].

**5.1.2. The core FE "helped item".** Within the scope of the terms studied, in the same semantic frame evoked by "bang" and "bangzhu", the "help item" is generally a phrase with the semantic characteristics of [+Living].

In the frame activated by "bang", the "help item" is a phrase with [-Living] semantic features. Three examples are found:

(19) 我有些朋友<sub>[help item]</sub>, **bang** 一个扶贫组织<sub>[helped item]</sub> 工作<sub>[help behavior]</sub>. (Some of my friends work for a poverty alleviation organization.)

(20) 他和小强<sub>[help item]</sub> 上午 **bang** 盐栈<sub>[helped item]</sub> 扛盐袋<sub>[help behavior]</sub>. (He and Xiaoqiang carried salt bags for the salt store in the morning.)

(21) 她<sub>[help item]</sub> 一天 **bang** 三家<sub>[helped item]</sub>, 赚的钱全供家用开销. (He helps three families a day and makes all his money for household expenses.)

However, in the frame evoked by "bangzhu", it is not found that "helped item" is a phrase with [-Living] semantic characteristics. That is to say, the "helped item" in the frame of "help item\_ bangzhu\_ helped item" evoked by "bangzhu" has the semantic characteristics of [+Living]. This study just verifies the interpretation of "bangzhu" in *Modern Chinese Dictionary* (7<sup>th</sup> edition) – "support people" rather than "support things".

To sum up, the semantic features of "helped item" of the two are inclusive, and the semantic features of "bang" the core FE include "bangzhu".

**5.1.3. Non-core FE "help behavior".** In the limited corpus, I find that in the frame "help item\_ bang\_ helped item", when "help behavior" is instantiated, it is positive in most cases and negative in only one case:

(22) 他居然找了个代理<sub>[help item]</sub> **bang** 他<sub>[helped item]</sub> 杀人<sub>[help behavior]</sub>. (He actually found an agent to help him kill.)

However, in the frame "help item\_ bangzhu\_ helped item", "help behavior" is negative in only two cases.

(23) 要是你们<sub>[help item]</sub> **bangzhu** 一个王族中人<sub>[helped item]</sub> 倾覆他的同族的君王<sub>[help behavior]</sub>

of negative attribute], 结果将会造成这被咒诅的世界上最不幸的分裂. (If you help a king to overthrow his kindred's king, the result will be the most unfortunate division in the cursed world.)

(24) 我的母校<sub>[help item]</sub>的确公然地在 **bangzhu** "校外人士"<sub>[helped item]</sub> 打击自己学生<sub>[help behavior of negative attribute]</sub>. (My alma mater did publicly help "out-of-school people" to crack down on their students.)

There is no significant difference between them in the term of "help behavior".

## 5.2. From the perspective of allocation

5.2.1. **That FE instantiated is different.** The same frames evoked by "bang" and "bangzhu" have the same frames elements, but the frames elements are not always instantiated. Both "bang" and "bangzhu" are not interactive verbs, but they can have interactive meanings by adding the adverb "mutually" in front of them. In the same frame evoked by "bang" and "bangzhu", the core FE "help item and helped item" are instantiated. However, although the scenarios described by "bang" and "bangzhu" all contain "help behavior", "help behavior" is exemplified only in the interactive frame evoked by "bang", and "help behavior" is not exemplified in the interactive frame evoked by "bangzhu". For example:

1) The interactive frame evoked by "bang":

(25) 通常, 同学们<sub>[help item and helped item]</sub> 都 mutually **bang** 着用书包占座位<sub>[help behavior]</sub>. ("help behavior" is instantiated)

2) The interactive frame evoked by "bangzhu":

(26) 乡间<sub>[help item and helped item]</sub> 是经常 mutually **bangzhu**, 互通有无的. ("help behavior" is not instantiated)

In addition, 114 examples of the interactive frame activated by "bangzhu" and only 4 examples of the cross-meaning frame activated by "bang" are found in this paper. I believe that this may be related to the prosodic limitations of monosyllabic and disyllabic words. According to the theory of prosodic word formation, Feng Shengli [8] regards disyllabic feet as the smallest and most basic "standard feet" and other feet forms as variants of standard feet: monosyllabic feet are "degenerated feet". "bang" is a monosyllabic word with less than one foot and belongs to "metamorphosed foot". The metamorphosed foot formed by pausing or lengthening vowels is restricted by strict contexts, but only temporarily [9]. Therefore, the sentences of the interactive frame of "bang" are obviously less than that of "bangzhu".

5.2.1.2. **The frame "help item\_ bang/bangzhu\_ helped item" evoked by "bang" and "bangzhu".** I find that in the frame "help item\_ bang/bangzhu\_ helped item", whether "bang" is used in positive or negative contexts, all "help behavior" are instantiated. However, when "bangzhu" is used in positive or negative contexts, "help behavior" is instantiated. When "bangzhu" is used in a positive context, "help behavior" is not instantiated. For example:

5.2.1.2.1. **The frame "help item\_ bang/bangzhu \_ helped item" evoked by "bang":**

(27) 他<sub>[help item]</sub>这时候 **bang** 一下爸爸<sub>[helped item]</sub>也不晚啊. ("help behavior" is not instantiated)

(28) 我<sub>[help item]</sub>那晚<sub>[time]</sub> **bang** Hadley<sub>[helped item]</sub>打点衣服. <sub>[help behavior]</sub>. ("help behavior" is instantiated)

#### 5.2.1.2.2. The frame "help item\_bang/bangzhu\_helped item" evoked by "bangzhu":

(29) 想要找一份工作, 通常可以去求牧师<sub>[help item]</sub>举荐和 **bangzhu**. (If you want to find a job, you can usually ask for the priest's recommendation and help.) ("help behavior" is not instantiated)

(30) 假若我<sub>[help item]</sub>愿意 **bangzhu** 妈妈<sub>[helped item]</sub>呢, 由我代替她挣钱. (If I am willing to help my mother, I will make money instead of her.) ("help behavior" is not instantiated)

When the meaning of "bangzhu" is positive, it coincides with the interpretation "To contribute, advise, or give material or spiritual support" in the *Modern Chinese Dictionary* (7<sup>th</sup> edition) and "help behavior" is not instantiated. When the meaning of "bang" is negative, the FE "help behavior" is instantiated. According to the theory of dictionary communication [10], the use of dictionaries by users is also a communicative process. Dictionary users by using dictionary find relevance and construct cognitive context. According to the concept of contextual effect in Relevance Theory [11], contextual effect is related to cognitive effect, that is, new information changes the speaker's cognition by strengthening or weakening the current contextual hypothesis. Context conflict refers to the contradiction or conflict between new information and current contextual assumptions. I believe that glossemes of verbs describe a complete action event in a typical situation and form a cognitive frame, which is the specific psychological representation of a world scene fragment outside the language system. When expressing positive meaning, the rational meaning of "bangzhu" can represent the speaker's psychological picture. The context does not conflict. The assumptions of context are consistent between the speaker and the listener. The "help behavior" is not instantiated. When expressing negative meanings, the rational meaning of "bangzhu" is not enough to represent the speaker's psychological picture. To achieve "contextual conflict", the "help behavior" must be instantiated.

**6. Synonymy Classification of "bang" and "bangzhu" Based on the Comparison of Frames and Frame Elements.** This paper explores the differences between "bang" and "bangzhu" at the level of frame elements from the perspectives of semantic features and matching. Different aspects reflect the different differences between "bang" and "bangzhu".

To sum up, I summarize the similarities and differences of "bang" and "bangzhu":

(1) "Bang" evokes three frames. "Bangzhu" evokes two frames and has another two nominal meanings of lexical unit. From this point of view, the frames evoked by the two are different and cross-related.

(2) In the same frame "help item\_bang/bangzhu\_helped item" evoked by "bang" and "bangzhu", the core FE "helped item" is inclusive relationship in the semantic characteristics of [-Living].

(3) In the frames of interactive meaning evoked by the two, the FE instantiations of the two are quite different.

This paper intends to use Na Fu [12] to classify synonyms:

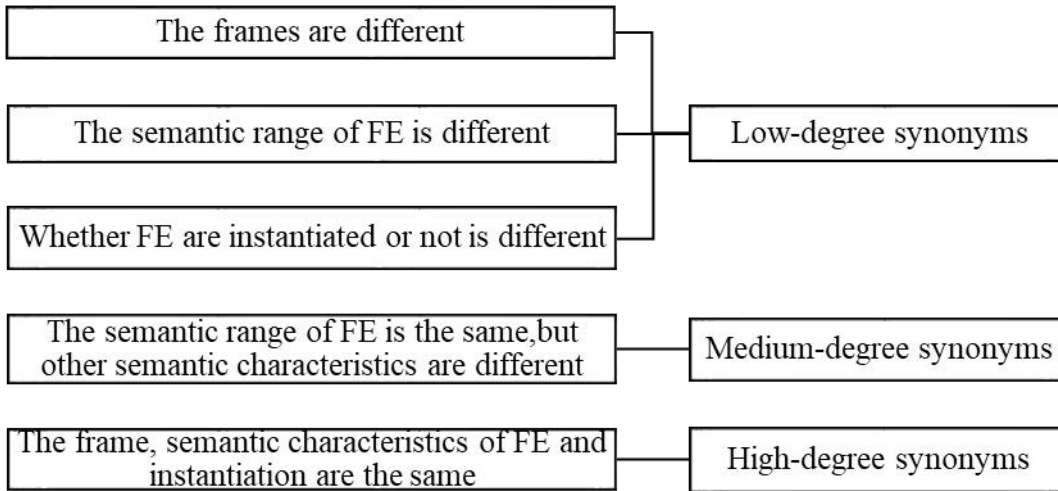


FIGURE 1. DIFFERENCES OF SYNONYMS AND CLASSIFICATION OF SYNONYMS

According to this scheme, I come to the conclusion that "bang" and "bangzhu" are synonyms of low-degree synonyms.

**7. Revision Opinions and Prospects of Dictionary Interpretation.** The use of explanatory forms in a single interpretation is closely related to the degree to which synonyms have similar meanings [13]. I come to the conclusion that "bang" and "bangzhu" are low-degree synonyms. Whether we can use a single interpretation to interpret "bang" and "bangzhu" is a question that needs rethinking. According to the results of this study, this paper preliminarily believes that the more accurate and comprehensive definition of "bangzhu" is: ❶ v. To contribute, advise, or give material or spiritual support to others: mutually~|~victims of a natural calamity. ❷ n. the positive influence or effect on things: you were a great help to me. ❸ n. an act that has a positive impact or effect on thing: get ~ form peers, the more accurate and comprehensive interpretation of "bang" being low-degree synonyms with "bangzhu" is as follows: v. Contribute, advise, spend time or give support to someone or something. In *Modern Chinese Dictionary* (7<sup>th</sup> edition), there are many synonymous monosyllabic and disyllabic verbs with the same morpheme, such as "kǎo" and "kǎoshì", "dú" and "yuèdú", "tuī" and "tuīchí" and so on. According to the conclusion of this study, whether the single interpretation method is comprehensive and accurate remains to be further verified.

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