

# Coordinate and Subordinate Compounds in Chinese Morphology: A Cognitive Approach

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**Abstract**—Chinese compounds, particularly those categorized as subordinate and coordinate, hold considerable importance in Chinese morphology. The intricacies of these compound structures often pose challenges, even for native speakers, as their identification relies on an understanding of ancient Chinese semantics. This research endeavor aims to conduct a comprehensive analysis of abstract morphemes within these two types of Chinese compounds, with a particular focus on their semantic aspects. The cognitive approach proves to be highly effective in examining the internal structure of these compounds, as well as the diverse combinations of morphemes. Furthermore, this study offers valuable teaching implications pertaining to the morphological processes involved in Chinese characters.

**Keywords**—compound words, Chinese, subordinate, coordinate, modify, semantic relationship

## I. INTRODUCTION

Compounding words in Chinese, usually called “fù hé cí” or “hé chéng cí,” are words that combine two or more morphemes to generate a brand-new lexical item. These compound words are a cornerstone of the Chinese language and are essential to its vocabulary. According to Zhou and Marslen-Wilson [1], the total number of subordinates in the “Chinese Proficiency Vocabulary and Chinese Character Rating Syllabus” is 1411, making up around 79.81% of all subordinate compounds. Compounds have an important role in word creation in modern Chinese, and coordinate and subordinate are two main types. Some L2 learners are perplexed about distinguishing between these two sorts of compounds. Despite the fact that they can be combined by two or more characters, their usage, structure, and purposes differ. The article will provide a contrastive analysis of coordinate and subordinate compounds, as well as analyse the educational implications of the subject.

## II. LITERATURE REVIEW AND RESEARCH MEANING

According to Zhu [2], compounding is the creation of a compound word from two or more root elements. A compound word is one that was created in a compound manner. Chinese compound words have a structural relationship between their parts that is essentially the same as their syntactic relationship. Ge [3] points out that the term “coordinate compound word” describes when two similar grammatical root words are combined in juxtaposition to generate a word, such as “dào lù” “ài hào” “míng liàng” “shān shuǐ” “lì hài”. There is a group of idioms in English where the word “and” joins two words with the same lexical function. For example, “friend and foe (dí yǒu)”, “safe and sound (ān rán wú yāng)”, etc., are all full concepts when connected by the conjunction “and,” which Wang and Li [4]

refers to as pairs of words. As for the concept of subordinate compounds, The Great Dictionary (*Dacihai* 2020) explains that it formed by two roots, and the preceding root modifies and restricts the following root, such as “cǎo mào” “xīn fāng” “yáo lán”, “wǎ jiě” “qīng xìn” “màn tán”, “jú huáng” “nèn lǚ” “pèn xiāng”, etc.

Chinese coordinate compounds are highly productive, second only to subordinate compounds, which is relatively uncommon in other languages [5]. However, a great number of Chinese L2 learners and even native speakers often confused these two types of compounds when identifying. For instance, if we compare the compound words “guó jiā (country)” and “guó tǔ (homeland)”, it can be discovered that both the two words are compounded by two noun morphemes, and the structure of both words is similar, and the lexical nature is the same. However, it is still difficult to analyze their compound word composition. In the word “guó jiā”, the two roots “guó (country)” and “jiā (home)” are juxtaposed in grammar and have comparable meanings, but in the word “guó tǔ”, “guó (country)” and “tǔ (land)” are not. The original meaning is obviously altered if “and” or “with” are added between the two roots. Therefore, whereas “country” in Chinese is a coordinate compound word and “homeland” is subordinate compound. Coordinate and subordinate compounds are confusingly similar even though they are essentially distinct.

The characteristics of coordinate and subordinate compounds in Modern Chinese can be analyzed and compared, notably in terms of their syntactic structures, semantic attributes, and pragmatic purposes. Researchers can undertake a contrastive study to determine the similarities and differences between these two types of compounds and provide a more complete grasp of the Chinese language. Data from many sources, such as written texts, spoken language, and native speakers’ judgement of coordinate and subordinate compounds, may be collected as part of the research. This study’s conclusions can be applied to a variety of aspects of Chinese language and linguistics, including syntax, semantics, pragmatics, and language instruction.

## III. MORPHEME ANALYSIS

This paper chooses to adopt the fundamental viewpoints of Ge and Zhou [3], in order to give a morpheme analysis of the coordinate and the subordinate individually and compare the similarities and differences between them after contrasting numerous points of view.

For coordinate compounds, Ge [3] believes that it can be classified according to two criteria. When classified according to the nature of the morpheme, they can be divided into these nine combinations:

(1) Noun 1+noun 2, such as *shēng yīn, dào lù, jiāng hé, shān chuān, qín qí shū huà, chī mèi wǎng liǎng, chūn xià qiū dōng, méi lán zhú jú, cháí mǐ yóu yán* etc. In this category, each morpheme is noun morpheme.

(2) Verb 1+verb 2: *zhì zào, zhòng zhí, bēn chí, xiāo chú, tíng liú, tīng wén, diào zhuó, zuó mo, jīng yíng*, etc.

(3) Adjective 1+adjective 2: *shàn liáng, āo tū, hēi bái, xū shí, pín qióng, míng liàng, suān kǔ, xīn jiù, duō shǎo* , etc.

(4) Adverb 1+adverb 2: *gāng cái, zǒng gòng, shàng qiè, yuán běn*

(5) Pronoun 1+pronoun 2: *nǐ wǒ, bǐ cǐ, zì jǐ*

(6) Conjunction 1+conjunction 2: *tǎng ruò, jiǎ rú, rú tóng, lián tóng*

(7) Preposition 1+preposition 2: *zì cóng, àn zhào, yī zhào*

(8) Numeral 1+numeral 2: *qiān wàn, bǎi wàn, zài sān*

(9) Measurement 1+measurement 2: *chǐ cùn, jīn liǎng*

According to this standard, the morphemes in each Chinese coordinate compound are the same. It is important to note, however, that Chinese has a very open word order, and the order of the morphemes in a coordinate compound might vary depending on the speaker's taste or the context of the phrase. For instance, the Chinese coordinate compound “*suān tián kǔ là*” (sour, sweet, bitter and spicy), which belongs to the structure of “adjective 1+adjective 2” [6].

The second classification method is with reference to the semantic relationships, which can be divided as: morphemes with similar semantic meaning, such as *biān yuán, péng yǒu, shàn liáng, zuì è, jǔ jué, wéi rào, guān kàn*, etc. “*biān*” and “*yuán*” can both represent the meaning of margin, “*guān*” and “*kàn*” can both indicate the action of watch or see; morphemes are semantically related in the semantic field, such as *qī zǐ* (wife), *sui yuè* (ages and months), *méi mù* (eyebrows and eyes), etc. Although “*qī*” (wife) and “*zǐ*” (son) does not refer to the same thing, they both belong to the semantic field of family members; the third type of combination is morphemes are semantically relative or opposite, such as *lái wǎng* (come and go), *róng rǔ* (honor and shame), *shēng sǐ* (live and death). Whatever the nature of the morpheme or the type of semantic relationships, it is easy to see the different morphemes are parallel and they can be connected by the word “and” or “with.” There's no central morpheme in the coordinate compounds and their partnership is a juxtaposition.

Zhou [7] conducted an analysis of morpheme structures of compound words, and he divided subordinate compounds into four subcategories: noun morpheme+central morpheme; verbal morpheme+central morpheme; adjectival morpheme+central morpheme, and central morpheme+sub-morpheme. Each subcategory can be subdivided into specific semantic categories according to their meanings, such as material, function, quantity range, dynamic property, mode of action, reason, instrument, etc. In the structure of a subordinate compound, a core morpheme is always present, and the other morphemes serve to modify this central morpheme, which is the most distinctive difference from the coordinate compounds [8]. Specifically, the core morphemes are mainly composed of noun, verbal and adjective. Based on the classification by Zhou [7], this paper focus on analyzing the structure of noun, verbal and adjective act as central morpheme, respectively.

When analyzing the internal structures of subordinates in

which nouns act as the central morpheme, there are three main combinations. In the following descriptions, N represents the noun morpheme, V represents the verbal morpheme, A represents the adjective morpheme and Ad represents the adverb morpheme.

(1) N1+N2, where N1 stands for the modifying qualifier and N2 stands for the thing being modified; For example, “homeland” is “land at home”, which means the territory of the country; “*shū bāo*” intends that a bag used for books.

(2) V+N, where V stands for the act of acting and N stands for the thesis element associated to the action; Such as “*mù chǎng*” (gazing land) is a field used for grazing, the noun “*chǎng*” (land) is the central morpheme and the verb “*mù*” (gazing) is used for modifying this defined area; “*liú shuǐ* (flowing water)”, which emphasizes water as an object and flowing is the state of the object. Obviously, “water” is the central morpheme in this subordinate.

(3) A+N, where A stands for the natural state and N stands for the subject of the natural state. Such as “*lěng yǐn* (cold drinks)” “*hēi bǎn* (blackboard)” and “*rè dài* (tropical, which represents a specific zone).”

When it comes to the structures in which verbal act as the central morpheme, it can be divided as the following:

(1) V1+V2, in which a verb modifies another one, such as “*yóu xíng*” (parade) is composed of the two verbs “swim” and “move”; “*hé chàng*” (chorus) is the combination of “join together” and “sing.”

(2) A+V, such as “*wù jiě*” (misunderstand) “*shēn xìn*” (convince). In this structure, the adjective “*wù* (wrong)” and “*shēn* (deep)” modify the verb “*jiě* (understand)” and “*信* (believe)”, which represents a wrong understanding and a firm belief.

(3) N+V, such as “*dōng mián*” “*bǐ shì*” “*qián jìn*”, in which the verb “*mián* (sleep)” “*shì* (test)” and “*jìn* (move)” are the central. The nouns “*dōng* (winter)” “*bǐ* (pen)” and “*qián* (front) only qualifies the actions above.

(4) Ad+V, such as “*wēi xiào*” (smile slightly) “*zhòng fá*” (punish heavily) “*zhuān yòng*” (Specialized use) intends to emphasize the action of smile, punish and use. With the modifying of the adverbs, these actions tend to smile slightly, punish heavily and used specially.

The structures in the adjective combinations are AN , AV and A1+A2.

AN: such as “*chū jí*”, which means a preliminary level; “*xīn kuǎn*” emphasizes a version that is new.

AV: “*hǎo chī*”, which consisting of “good” and “eat” expresses the meaning of delicious; “*xīn xīng*” contains the adjective “new” and the verb “emerge,” in which the action of emerge is the main information.

A1+A2: in the two examples of “*yán hán*” (heavily cold) and “*fēi kuài*” (extremely fast), the second adjectives “cold” and “fast” are both the semantically central, with the modifying of the first morpheme, the degree becomes deeper.

Overall, subordinate compounds are formed by combining a head morpheme with a dependent modifier. The dependent modifier can be a single morpheme or a group of morphemes that modify the meaning of the head. By modifying the head noun, the morpheme in a Chinese subordinate compound contributes to the overall meaning of the compound. The morpheme “little” in “little dog” (puppy) modifies the meaning of the central morpheme “dog” and means “small

dog.” Furthermore, the morpheme frequently serves as a grammatical marker in Chinese subordinate compounds, indicating the grammatical relationship between the central morpheme and the dependent modifier. The morpheme “de” (‘s), for example, is a possessive marker that implies possession or attribution, as in fù qīn (father) “de” (‘s) shū(book)”, which means “father’s book.”

#### IV. TEACHING IMPLICATIONS

Understanding Chinese compound words is critical for language learners, and teaching implications and techniques will be examined in the next paragraph. According to Su [9], learning compound words is ultimately a process of gaining word meaning. The semantic meaning of words serves as the foundation for interpreting their meaning. Morpheme is the smallest semantic unit in Chinese, and it has the potential to be a game changer in understanding and interpreting the meaning of Chinese words, particularly compound ones. As a result, providing a morpheme analysis is effective. Teachers can guide students through the process of breaking down compound words into their constituent morphemes and analyzing their distinct meanings [10]. This can assist students to expand their vocabulary and improve their comprehension of new compound terms. The difference between coordinate and subordinate will then be obvious and straightforward to determine based on the structural analysis above.

Furthermore, thorough instruction on the various types of compound words and their formation processes can help learners understand the underlying structure and logic of Chinese compound words, making it easier for them to discover and create new compound words they have never encountered before. Students will gain a more comprehensive comprehension of the difference if the underlying mechanism is clarified [11].

Moreover, context-based learning can enable students to assess compound words in context and understand how to use them. As a result, it can assist learners in becoming more skilled at distinguishing the semantic meaning of the term and the primary morpheme in subordinate compounds [12]. Teachers can then provide abundant opportunities for students to practice finding, analyzing, and applying compound words in a variety of contexts. Activities such as word puzzles, complex word games, and phrase-creation exercises can help with this.

#### V. CONCLUSION

Compound words are an essential feature of the Chinese language and play an important function in its vocabulary. Coordinate and subordinate are two key branches of compounds, and even native Chinese speakers can get them wrong. This study investigated how coordinate and

subordinate compounds are formed using a morpheme-based contrastive analysis of diverse structures. Given the parallels and differences between the two types of compounds when analyzing Chinese compounds, it is critical to investigate the context and morpheme boundaries [13].

Morpheme analysis, context-based learning, practice, and reinforcement can all be used to identify these two types of compounds more accurately [14]. Learners can increase their overall language competency and prepare for Chinese language mastery by using these tactics and grasping the intrinsic logic of compound word.

#### CONFLICT OF INTEREST

The author declares no conflict of interest.

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