Study on the Prosodic Patterns of “YÒU... YÒU...” in Modern Chinese

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Abstract—Prosodic syntax is a new subject based on prosody and established on the basis of Chinese, which has played a very positive role in the study of Chinese grammar. In modern Chinese, the use cases of "yòu... yòu..." combination in language communication are very extensive, and the elements that can be matched with words or phrases. The number of syllables shows certain regularity, that is, the number of syllables in the front component is not more than it in the latter components. And then the combination form is grammatically correct. It is thought that this law is played by prosody rules other than semantics and syntax. Specifically, the Nuclear Stress Rule of Chinese restricts their combination forms. This analysis provides a new perspective for the study of Chinese grammar, enriching the theory of Chinese research to a certain extent, and has certain theoretical value.

Keywords—prosody; foot; coordinating conjunction; theoretical significance

I. INTRODUCTION

Prosodic syntax is a new subject based on prosody and established on the basis of Chinese. The concept of "Syntax being constrained by prosody" has not been widely recognized in western linguistic theory. In modern Chinese, language phenomena that prosody restricts syntax can be found everywhere. For example, "you... you..." is frequently used in modern Chinese, which can connect two words or two phrases in a sentence. And the two connected components are coordinating. In the investigation of these two words, it is found that, the adjectives or adjectives used between "you... you..." show certain regularity in syllables. That is, after "not only", the number of syllables of adjectives or verbs needs to be consistent, forming prosodic combination patterns of [yòu 1 yòu 1], [yòu 2 yòu 2], [yòu 1 yòu 2], [yòu 1 yòu more]. At present, no scholar has discussed its usage law and internal mechanism from the perspective of prosody. 298 articles are randomly selected from BCC corpus. This paper investigates the example sentence and hopes to analyze its formation mechanism from the perspective of Chinese Nuclear Stress Rule.

II. INVESTIGATION OF THE USAGE OF "YÒU... YÒU...

In modern Chinese, yòu...yòu... is often used to form sentences, in the view of native Chinese users; there is nothing special about their usage, because our language sense does not go wrong. And it is difficult for native speakers to say [yòu 2 yòu 1] combined sentences such as "*yòu piao liang yòu hao (*又漂亮又好 / not only beautiful but also kind)". However, in the process of learning Chinese, it is difficult for non-native speakers to feel this "language sense". And it is very easy to say sentences like "*Sichuan de cai yòu hao chi yòu la (*四川的菜又好吃又辣, Sichuan food is not only delicious but also spicy)". However, if the adjectives "spicy" and "delicious" in this sentence are changed, and the sentence is changed into "Sichuan de cai yòu hao chi yòu la (*四川的菜又好吃又辣 / Sichuan food is not only spicy but also delicious)"; it seems to be more literate. If you do not change the position of the two adjectives, but replace the first adjective "delicious" with the "goluptious", the sentence becomes "Sichuan de cai yòu xiang yòu la (*四川的菜又香又辣 / Sichuan food is not goluptious but also spicy)". It is also grammatically correct. Here it is asked: the same adjectives, the same syntactic structure (you+ adjective +you +adjective), why the legitimacy is opposite, when placed in different positions? Why do you change the first two-syllable adjective into a synonymous monosyllabic adjective, and the sentence is grammatically correct? Here, it is neither a matter of semantics nor a problem of syntax. It is believed that beyond the syntactic and semantic levels, the prosodic rules of Chinese control the matching patterns of this set of conjunctions with subsequent components.

The first 4000 corpus of newspapers in BCC corpus are investigated, from which a total of 298 pieces of usage yòu...yòu... are used. The corpus of the prosodic pattern is analyzed which shows certain regularity.

In the investigation, the 298 articles used yòu...yòu... with total five types of collocation patterns.

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1. "You" is understood as an adverb in all kinds of dictionaries in modern Chinese. But you...you...is often used together, not an independent word. Therefore, it will be called adverb combination temporarily.

2. There are also examples of verbs or verb phrases between them. But here we do not discuss, only the situation of adjectives.

3. The words “1” and “2” here denote the number of syllables, which are the same below.

4. The sentence comes from the composition of foreign student.

5. Because the author searches and extracts one by one manually, the missed example sentences are unavoidable, and the data may be slightly
The combination pattern [yòu 1 yòu 1] has the largest number of corpus, accounting for 60% of the total number of examples investigated, with 180 groups, such as:

1. *Dai shang zhe ding cao mao, ta de lian xian de sheng huo si.* (1)
2. *Xia bei zi zan ye tuo sheng cheng chen li ren, ye zao ge you bai you nen de chen li ninv ren zuo lao po.* (2)
3. *Yue liang gang cong tiye hou mian shang sheng, o an ye hou mian shang sheng.* (3)
4. *She got all this money, surprised and excited.* (4)
5. *He was jealous and aggrieved, and his head was hot.* (5)
6. *The sky is different clouds on different levels, some of which are thick and opaque.* (13)
7. *The patient felt hot and uncomfortable in the bedroom.* (11)
8. *On the tablecloth lay the big and strange letter containing life or death.* (8)
9. *Xiao Shuner’s mother is not unattractive with medium build, round face and two big and watery eyes.* (9)
10. *The combination pattern [yòu 1 yòu 1 multisyllable] accounts for 2% of the total number of examples, and there are five groups as follows:* (10)

The combination pattern [yòu 1 yòu 2] in the corpus is only second to that pattern [yòu 1 yòu 1], accounting for 28% of all the sample sentences, with 83 groups, such as:

1. *Dai shang zhe ding cao mao, ta de lian xian de sheng huo si.* (1)
2. *Wearing this straw hat, her face looks small and white.* (1)
3. *Yue liang gang cong tiye hou mian shang sheng, o an ye hou mian shang sheng.* (3)
4. *She got all this money, surprised and excited.* (4)
5. *He was jealous and aggrieved, and his head was hot.* (5)
6. *The sky is different clouds on different levels, some of which are thick and opaque.* (13)
7. *The combination pattern [yòu 2 yòu 2] combined pattern was the least, 28% of the total number of examples, with 28 groups, such as:* (6)

The combination pattern [yòu 2 yòu 2] accounts for 9% of the total number of examples, with 28 groups, such as:

1. *Dai shang zhe ding cao mao, ta de lian xian de sheng huo si.* (1)
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7. *The combination pattern [yòu 2 yòu 2] accounts for 9% of the total number of examples, with 28 groups, such as:* (6)

The combination pattern [yòu 2 yòu 1] accounts for 28% of all the sample sentences, with 83 groups, such as:

1. *Dai shang zhe ding cao mao, ta de lian xian de sheng huo si.* (1)
2. *Wearing this straw hat, her face looks small and white.* (1)
3. *Yue liang gang cong tiye hou mian shang sheng, o an ye hou mian shang sheng.* (3)
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The combination pattern [yòu 1 yòu 2] in the corpus is only second to that pattern [yòu 1 yòu 1], accounting for 28% of all the sample sentences, with 83 groups, such as:

1. *Dai shang zhe ding cao mao, ta de lian xian de sheng huo si.* (1)
2. *Wearing this straw hat, her face looks small and white.* (1)
3. *Yue liang gang cong tiye hou mian shang sheng, o an ye hou mian shang sheng.* (3)
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7. *The combination pattern [yòu 2 yòu 1] accounts for 9% of the total number of examples, with 28 groups, such as:* (6)

The combination pattern [yòu 1 yòu 2] has the largest number of corpus, accounting for 60% of the total number of examples investigated, with 180 groups, such as:

1. *Dai shang zhe ding cao mao, ta de lian xian de sheng huo si.* (1)
2. *Xia bei zi zan ye tuo sheng cheng chen li ren, ye zao ge you bai you nen de chen li ninv ren zuo lao po.* (2)
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7. *The combination pattern [yòu 2 yòu 1] accounts for 9% of the total number of examples, with 28 groups, such as:* (6)
She was just young and stupid, and attracted by you. (16)

Although it exists in the corpus, the two example sentences here do not conform to the rules of Chinese rhyme. If the adjectives in the two sentences are changed into "you...you..." and "you...you..." respectively, the two sentences will be even easier to say.

Therefore, the two examples here are exceptional, and their overall stock can also reflect this fact.

The above are 298 cases of investigation including you...you... In order to reflect the linguistic facts more intuitively, the overall situation of conjunctions is listed as follows ("Table I"):

| Composite Mode | Number | Proportion | Examples |
|----------------|--------|------------|----------|
| [you 1 you 1] | 180 | 60% | Ta de bi zi you bian you ta. (His nose is flat and collapsed.) |
|                 |       |            | [you 2 you 2] | 83 | 28% | Ta gan dao you qi fen you huang tang. (He felt angry and absurd.) |
| [you 1 you 2] | 28 | 9% | Zhe xie sheng yin ting qi lai you xiang you ci er. (These sounds sound again and harsh.) |
| [you 1 you more] | 5 | 2% | Bin ren jue de wo shi li you re you bu bang bian. (病人觉得卧室里又热又不方便。) |
| [you 2 you 1] | 2 | 1% | 1. Ta zhi shi you nian qing you sha, gei ni mi zhu le. (She was just young and stupid, and attracted by you.) |
|                 |       |            | 2. Zan jia pang bian you bi zhe tao you pian you hao de. (咱家旁边有比这套又便宜又好的。) |

From the comparison of the data in the table above, it is also clear that:

First, [you 1 you 1] and [you 2 you 2] should be the typical usage of conjunctions. While [you 2 you 1] is the "illegal" pattern, which does not conform to the prosodic rules of Chinese.

Second, in all the "legal" patterns, the number of syllables in front is not less than the number of syllables in the latter. That is, the number of syllables before and after is the same, or the number of syllables in the front is less than it behind, such as "you da you yu (又大又圆 / big and round)", "you qi fen you huang tang (又气愤又荒唐 / angry and absurd)", "you xiang you ci er (又响又刺耳 / loud and harsh)", "you re you bu bang bian (又热又不方便 / hot and inconvenient)". All these "legal" patterns follow this rule.

Thirdly, according to the above conclusions, it is further rationalized that all illegal correct combination patterns should be that the number of preceding syllables is more than the number of syllables in the latter. In addition to the 2 cases [you 2 you 1] combination pattern sentences obtained from the corpus, the "illegal" patterns can also be made according to reasoning. For example:

* 可以略知事件的全貌，但文章又不尽又短。 (17)

Ke yi lue zhi shi jian de quan mao, dan wen zhang you bu xiang jin you duan. (17)

The full picture of the incident can be obtained, but the article is not detailed and short. (17)

* 病人觉得卧室又不方便又热。 (18)

Bing ren jue de wo shi li you bu bang bian you re. (18)

The patient felt uncomfortable and hot in the bedroom. (18)

* 全班合影里她的脸又不自然又小。 (19)

Quan ban he ying li ta de lian yubu zi ran you xiao. (19)

Her face is unnatural and small in the whole class photo. (19)

* 天空是不同层次的不同云朵，有些又不透明又厚。 (20)

Tian kong shi bu tong ceng mian de bu tong yun yun duo, you xie you bu tou ming you hou. (20)

The sky is different clouds on different levels, some of which are opaque and thick. (20)

* 虽说错又无特色可言又小，但毕竟是我的镇。 (21)

Sui shuo zhen you wu te se ke yan you xiao, dan bi jin shi wo de zhen. (21)

Although the town is featureless and small, it is my town after all. (21)

The above examples are sentences that do not conform to the Chinese prosody. It is the result of the exchange of the components of (10)-(14) before and after the you...you..., and the sentence becomes very awkward after exchanging. The "illegal correct" of these examples again proves the correctness of our reasoning.

So far, it is compulsively asked: why does the combination pattern of conjunction words show such a rule? Can the difference in the number of syllables really affect the legality of a combination? What causes the subsequent components to show such a strong correspondence in the number of syllables? In the following, we are trying to propose the solution.

### III. A STUDY INTO THE MECHANISM OF THE CONJUNCTIONS USAGE OF YOU...YOU...

Before "why" is answered, a concept of prosodic syntax — Nuclear Stress is introduced. "The Nuclear Stress refers to the stress structure that a sentence is expressed in the absence
Nuclear Stress is non-focus stress, that is, the special emphasis on a certain component of the sentence to exclude the special situation after the stress form. Nuclear stress in Chinese obeys the following rules ("Fig. 1"):

\[
\begin{array}{c}
\text{VP} \\
\text{Weak} \\
[\text{X} \quad \text{Y}]S \\
\text{Strong}
\end{array}
\]

Fig. 1. The Nuclear Stress Rule of Chinese.

The "X" and "Y" in the picture above are two components of the verb-centered VP. "X" is the last verb in the sentence; "Y" is the object of "X". VP is the last verb phrase in the sentence. The nuclear stress of the sentence falls on "Y". If "Y" or "X" are intransitive verbs in the sentence, the nuclear stress is borne by "X".  

It is known that the adjective and the verb can be used as the predicate in the modern Chinese. According to the traditional classification, the verb is divided into transitive verbs and intransitive verbs. Then, according to the Nuclear Stress Rule, the following conclusion is got:

If the predicate of a sentence is acted as an adjective, then the adjective carries the Nuclear Stress of the whole sentence, which is equivalent to the intransitive verb in the last VP.

Now, from the combination pattern above, the following can be got:

In the pattern [yò u 1 yò u 1], there are two situations in the corpus of the elements that match yò u…yò u…. First, the two act as predicate elements of the whole sentence together, in which case, "yò u A yò u A" naturally bear the nuclear stress of the whole sentence. However, within the whole predicate element, it is also needed to follow the principle of "post-emphasis", that is, the nuclear stress of a sentence should fall on the element after the adverb, such as:

街上卖的那些粉纸rellas又糙又厚，真不讲究。 (22)

Jie shang mai de fen zhi die 又糙又厚, 纸在火炉旁边。 (23)

She was as flat as a mummy, thin and cold, and curled up beside the fire. (23)

In the above two cases, the "yò u cao yò u hou (又糙又厚 / rough and thick)" is the predicate component of the previous sentence (22). The "yò u shou yò u leng (又瘦又冷 / thin and cold)" is the predicate component of the previous sentence (23). In the prosody level, the "yò u cao (rough)" and the "yò u hou (thick)" form two double-syllable sound steps, and the prosodic weight is equivalent. So, the post-adverb "yò u..." and the following components can be accented, and the "back weight" on the prosody is satisfied. So it reads fluently.

Second, the whole of the composition acts as a language component and serves as a modification. In this case, although the whole of the composition acts as a fixed language, in the combination, it is also necessary to follow the "back weight" principle to drop the stress on the latter component, such as:

在又热又干的天气里，它们在地上撒尿。 (24)

Zai yò u re yò u gan de tian qi li, ta men hui zai di shang sa niao. (24)

In hot and dry days, they will pee on the ground. (24)

He wore a gold crown full of precious stones and was wrapped around by a bright and large black cloak. (25)

Similarly, in the [yò u 2 yò u 2] mode, the front and rear are also disyllabic words. In terms of syllable weight, the latter disyllabic components are no lighter than the previous, so the stress can be carried smoothly. Thus, the [yò u 2 yò u 2] combination mode also conforms to the prosodic rules, it also exists grammatically correctly.

But for the pattern of [yò u 1 yò u 2], its grammatically correct existence can be explained more effectively. The front component is monosyllabic, the following component is disyllabic, in the syllable weight, and the front component is lighter than the following. Therefore, the following disyllabic component can be stressed, the whole combination also conforms to the Chinese prosodic rules. So it also becomes the grammatically correct form. And the legality of the prosody [yò u 1 yò u 2] can also be deduced, why the pattern [yò u 2 yò u 1] is illegal correct. Because the syllable of the latter component is monosyllabic, the syllable of the front component is disyllabic, according to the Nuclear Stress Rule; the stress should fall behind the component. However, due to the heavier weight of the syllables in the previous component, the stress is taken, and the following components can be excluded from the grammatically correct form by the prosodic rules without the stress, which is an important reason for such a combination pattern being such a small stock in the corpus.

As far as this is concerned, the legitimate reasons for the combination form [yò u 1 yò u more] are very clear. The Nuclear Stress Rule in Chinese requires "post-emphasis". And in all the grammatically correct patterns that conform to the prosodic rules investigated earlier, "yò u…yò u..." the number of syllables in the front component is not more than in the latter component, and the combination form [yò u 1
IV. CONCLUSION

The combining form of adverbs is governed by the rules of Chinese prosody. Specifically, the Nuclear Stress Rule of China dominates its specific forms, and its dominant role is independent of the semantic and syntactic influences. There are many syntactic forms in modern Chinese that are influenced by Chinese prosodic rules, and prosody will greatly restrict syntactic forms at some times. The collocation pattern yòu...yòu... investigated is also affected by the prosodic rules of Chinese. In this article, it is discussed only for the yòu...yòu... combined by adjectives and adjectives phrases; it has not discussed for various forms of their collocation with verbs for the time being limited to the length. And, in addition to yòu...yòu..., many related words in Chinese also show strong syllable correspondence in form, which are extremely obvious and urgent to explain language phenomena. And prosodic syntax theory undoubtedly provides with a new perspective, and it is expected to continue to use new tools to solve new problems in future research.

Prosodic syntax is a new theory, which is also developed on the basis of Chinese literature. Although it has not been widely accepted by the theory of the international mainstream linguistics, it has explained many linguistic phenomena that can not be explained by the traditional theory. With the continuous development of theory, more and more language phenomena will be explained, which is not only helpful to the further development of the subject, but also has practical significance and reference function on constructing the theory, as well as the development of Chinese linguistic theory.

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