

# A Study of the Cognitive Mechanism of the Chinese Network Discourse Constructions

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**Abstract:** Language used in network features with active verility and rapid change. By using the framework of discourse construction grammar analysis established by Yuan Ye, we analyze the discourse construction that have changed in form and function, tend to find out the motivation and the cognitive mechanism behind the variant constructions. Research invastigated that the factor of cognitive perception should be added to the discourse construal grammar analysis framework; (2) phonological coersion is the cognitive mechanism behind the variation of network language.

**Keywords:** Network language; Discourse construction; Constructional variation; Cognitive mechanism

## 1. Introduction

With the development of the Internet, the Internet buzzwords in Chinese are exceptionally active and occupy an important position in communication. Internet language is a product of the combination of written and spoken language. This paper attempts to utilize the discourse construction grammar (DCG) analysis framework established by Yuan Ye<sup>[1]</sup>, as it has been proven to be applicable to both written and spoken discourse.

## 2. Variation of network construction

This paper focus on the variation of the constructions caused by phonological changes, and examine the conversational network constructions in the form of texts, of which phrase constructions are important components.

Internet language is the spoken language that people use for communication presented on the Internet in the form of written language. In this process, because the written text is more formal and lacks phonetic intonation, people deliberately change some of the original constructions in order to achieve some phonetic effects, which are usually achieved by using harmonics. For example, “Rang wo kan kan (let me have a look)” is transformed into “Rang wo kang kang” because “ang” has a thicker sound than “an”, which gives people a simple and a sense of humor, and does not contain the rigid tone of direct command “look”. As a result, this achieves a friendly and euphemistic tone effect.

This phonological change leads to the abandonment of the previous collocations and the interaction between the new collocations and the original invariant components, which may be misinterpreted as collocation errors or misspellings if not analyzed in the context of the whole discourse. In addition, some constructions do not leave any invariant components, and the whole construction is completely changed with the harmonics. For example, searched by February 2021, the Internet buzzword “夺笋(duo sun)” replaced “多损(duo sun)”, both of which means “harmful”. similarly, “耗子尾汁(hao zi wei zhi)” replaced “好自为之(hao zi wei zhi)”, and the word “sister” was expressed as “集美(ji mei)” in Chinese instead of “姐妹(jiemei). At the phrase level, the change in phonology leads to the creation of new constructions, i.e. new Internet buzzwords. This shows that phonology plays an important role in the pursuit of articulation and coherence between phrases, so that two unrelated phrases are combined and gradually conformed, which I call phonological inheritance. However, it is difficult to understand these phrases if they are not analyzed in the context of the whole discourse. Therefore, the part of speech is important for the production and understanding of the constructional changes.

## 3. Analysis of discourse constructions of online dialogues

Based on the above discussion, we will analyze a conversation between two friends on Weibo (a popular wednsite in China) on August 20, 2020, which contains changed constructions.

Lee: 集美, 我买了条新裙子。(ji mei, wo mai le tiao xin qun zi)

My sister, I bought a new dress.

Liu: 让我康康+emoji。(rang wo kang kang)

let me have a look at your new dress + emoji

Lee: Pictures

Liu: 真好看鸭, 你穿上太可耐了.

It looks so good on you, how cute are you!

In the analysis of Figure 1, first of all, in the first box the context of the discourse in question is defined, i.e., the domain factor refers to Internet chat, and also the purpose of the discourse aims to inform and comment, and the type of discourse activity to which the subject belongs to internet conversation. The second description box adds the cognitive perception<sup>[1]</sup>, which is crucial to understand the purpose of the conversation and the steps of its realization by recognizing the phonological variation of the construal, and to continue the harmonious tone by using the variation of the construction in the response. Since Figure 1 depicts a dialogue, its staging is developed by two interlocutors in the form of a question and an answer, each of which often contains two sub-stages, i.e., a question

Register:[web·chat,#j] <sub>μ</sub> Genre:[dialogue·text,#j] <sub>μ</sub> Prag: [web·exchange·information] <sub>μ</sub>	Cognitive perception:[phonological·variation] <sub>μ</sub> Goal:·[a·sense·of·humor] <sub>μ</sub> Staging:·[#1·greeting·+·asking]·-·[#2·answering·+·continuing·to·use·variant·constructions] <sub>μ</sub> [#1·Show·content]·-·[#2·Commentary·answer·+·continue·with·variant·constrcuts] <sub>μ</sub> [#1·Response·to·#2·Answer] <sub>μ</sub>	Field: [Web·Live·Chat] <sub>μ</sub> Tenor: [webmaster#1·&·webmaster#2] <sub>μ</sub> Mode: [Typing·in·spoken·language·+·pictures] <sub>μ</sub>
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Figure 1 Discourse and cognitive analysis framework of network dialogues containing variant constructions

and an answer. The dialogue itself can also be seen as a large discourse construction, as it has its general functional semantics and its structural form. Finally, the rightmost box indicates the field of the discourse content, the tenor of the author-reader relationship, and the mode of the discourse medium.

#### 4. Motivation and cognitive mechanism of changed discourse construction

Language variation is used to express needs, sometimes even for euphemism, sometimes for economy, sometimes for distance, and sometimes to add interest to the discourse. Context has great limitations and constraints on the use of language, and the production, use, and understanding of constructions are also constrained and influenced by the context <sup>[1]</sup>(Wen Xu. 2017). The conditions of construct variation are also based on context, the literacy of variation depends on context, and the purpose of variation is to achieve some discourse functions. Wang Chuming proposed the concept of construct context, pointing out that the motivation for the association of constructs and situations comes from communicative intention, and intention enables the selection of constructs and situations in both directions.

At the same time, in addition to the role of context, people’s cognitive ability based on their own life experience also plays a very important role in the process of recognition and interpretation, e.g., the visual recognition of “capture bamboo shoots” stimulates cognitive effort because of the unconventional collocation or association with “more damage “. Therefore, I believe that contextual and cognitive factors should be emphasized in the analysis of construct variation using the DCG model.

#### 5. Cognitive rationale for structural variation

The cognitive basis for the variation of online constructions comes mainly from phonological coercion. Taylor<sup>[2]</sup> argues that coercion can be both at the semantic and phonological levels. Phonological coercion refers to the suppression formed by the phonological factor of the variant component playing a dominant or critical role in the structure, meaning and function of the construction, and forcing the variant component to make appropriate modifications or restricting the range of choice of the variant component. In other words, the variant component is phonetically harmonized or paired with the unchanged part of the variant as much as possible, i.e., the phonetic similarity of the variant component to the original component. Thus we can further divide such suppressions into three categories, i.e., identical phonology, and similar phonology. Among them, similar phonology is in turn influenced by vowel, rhyme, tone, and dialect, and its classification can be further refined.

The coercion<sup>[3]</sup> of identical phonology in the variation of network constructions refers to the fact that the variant component is phonetically identical to the original component, and this type of variation has the best acceptance and people put less cognitive effort in the process of recognition and interpretation. For example, the word “sudden” transformed in “突然(tu ran)” in Chinese, but is was chaged into “秃然”. They have the same prononciation and meaning but the first changed word refer to bald, which add a function of expressing humor. The suppression of similar speech sounds means that the variant component is pronounced similarly to the original component, i.e., the vowel or rhyme or tone is different. When these similar expressions appear in online communication, they do not fix which specific Chinese characters are used, as long as they phonetically express the English pronunciation. Therefore, in the process of variation of specific constructions, the phonetic variation in form will produce corresponding functional changes in specific contexts, such as adding humor and affirmation.

#### 6. Concluding remarks

This paper mainly discusses the variation of specific constructions in network discourse at the phonetic level. Using t the network language analysis framework of conversational discourse, to describe and analyze a text from context, solution, contents, and conervation steps. Discourse analysis provides a new and more formalized representation and cognitive perspective, The recognition of knowledge factor is the enrichment and development of its framework in analyzing language change.

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