

Interpretations of Chinese Wh-phrases in Relative Clauses in Perspective of Cognitive Grammar

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Abstract—The paper demonstrates the differences of three relative clauses with Wh-phrases when they are the complements of “zhidao (to know)”, “wen (to ask)”, “xiangxin (to believe)” in the perspective of cognitive grammar. Chinese Wh-phrases in questions don’t need to be moved to the beginning of the sentences. The interpretation of questions or no questions of Chinese Wh-phrases in relative clauses is related to the semantic features of matrix verbs and inquiry interactivities of interpersonal communication.

Keywords—questions; matrix verbs; Wh-movement; cognitive semantic features

I. INTRODUCTION

Just like English Wh-phrases “what”, “who”, “where”, “when”, “which”, there are also interrogatives in Chinese such as “shenme (what)”, “shui (who)”, “nali (where)” and so on. Linguistic scholars [3][4][5] notice that Chinese Wh-phrases in questions don’t need to be moved to the beginning of the sentences, which are quite different from English questions. Identifying questions or not confuses foreigners so much all the time especially in relative clauses with Wh-phrases. Huang [5] presented a set of classical corpora:

- (1) Zhangsan wen shui mai-le shu
Zhangsan asked who bought books.
- (2) Zhangsan zhidao shui mai-le shu
Zhangsan knows who bought books.
Who does Zhangsan know bought books?
- (3) Zhangsan xiangxin shui mai-le shu
Who does Zhangsan believe bought books?

Huang tried to explain the differences of three sentences in perspective of generative grammar. However, for a long time his view received few feedback and obtained few outbreak [1][7][10]. In Chinese traditional linguistic fields, quite a few scholars [8][1][2][9] tried to find some syntactic evidences by specifying all sorts of question forms, but the explanation are not remarkable. Based on the studies before, the purpose of this paper is to illustrate the different distributions between

¹Some scholars [3][7] claim that Chinese is a Wh-in-situ language, in which Wh-phrases in question sentences must stay in original situations and need not to be moved to the beginning of the sentences

English Wh-phrases and Chinese Wh-phrases in questions, and explore the approach of questions or no questions interpretation in perspective of cognitive theory.

II. DIFFERENT POSITIONS OF ENGLISH WH-PHRASES AND CHINESE WH-PHRASES

In English we generally define the sentence that can raise a question as question and the sentence that cannot expect an answer as no question or statement [5][6][7]. The examples are illustrated as follows:

- (4) a. [_{CP}What_i does[_{IP} Mary buy t_i]]?
b. [_{IP} John has found out [_{CP} what_i[Mary bought t_i]]].

The above (4) a is undoubtedly regarded as a question while b is as no question or statement. The judgement can be very easy to make by observing the syntactic distribution of the Wh-phrase in the sentence. When the Wh-phrase moves to the beginning of the sentence, it will be interpreted as a question, and when the Wh-phrase distributes the other place of the sentence, no question or the statement will be denoted such as in (4) b.

Different from English, the inquiry on some information in Chinese doesn’t need to depend on the movement of Wh-phrase. No matter what the Wh-phrase in the sentence indicates (question or not), the Chinese Wh-phrase doesn’t change its original place, as illustrated below.

- (5) a. Lisi mai-le shenme?
Lisi bought what?
- b. Zhangsan qingchu Lisi mai-le shenme.
Zhangsan figure out Lisi bought what.

Thus, we cannot directly infer question or not question of the Wh-phrase only according to the surface structure, and the underlying approach based on different language cognitions should be found out to illuminate the confusing situation.

III. THE COGNITIVE GRAMMAR APPROACH

As demonstrated by Huang’s classical corpora in Chapter 1, questions or no questions seem to be affected by matrix verbs directly. When the matrix verb belongs to the semantic category of “zhidao (to know)”, two interpretations (questions;

no questions) of Chinese Wh-phrases in relative clauses can be decoded alternatively. When the matrix verb is in the category of “wen (to ask)”, only no questions (statement) can be accepted, and the matrix verb in the category of “xiangxin (to believe)”, only questions are decoded. The consequence will at least involve two issues: How do the three semantic categories of “zhidao”, “wen”, “xiangxin” be categorized? Are question or no question interpretations of Wh-clauses only related to matrix verbs? The following chapter will discuss the two aspects.

A. Involvement of Cognitive Degree of Matrix verbs

According to (1)-(3) in Chapter 1, there are three varieties of cognitive verbs that directly decide the validity of question interpretation of Wh-phrases in relative clauses. So we are wondering what the distinguished and common properties of the three varieties are if there are more anything else which can be categorized to the three categories, and how we categorize them.

Firstly we investigate the verb “wen (ask)” which occurs at the position of matrix verbs shown in (1), it is “ask” that leads to the no questions (statements) interpretation of the sentences. This type of verbs such as “ask” show that the speaker (here is the syntactic subject) absolutely have no information about the inquiry, so these verbs with “[-information]” semantic features distinguish them from the other verbs in the other categories. The congeneric verbs such as “tanting (pry into)”, “zixun (inquire)”, “haoqi (wonder)” and so on are in the same category of “ask”.

Then we use “xiangxin (believe)” illustrated in (3) as a substitute of matrix verb “wen (ask)”, the no questions (statements) interpretation goes into reverse, and question interpretations occur! At this time we can have no hesitation to say that “xiangxin (believe)” as a substitute plays a key role. The verbs similar to “xiangxin (believe)” are “renwei (think)”, “kaolü (consider)”, “jihua (plan)”, “zuomo (expect)”, “huaiyi (doubt)”, “guji (estimate)”, “xiangxiang (image)”, “cai (guess)” and so on, which indicate partial information held by matrix subjects. So these verbs with semantic feature [+partial information] will be accommodated into the same category of “believe”.

Inspiring from the above analysis on the categories of “ask” and “believe”, it’s not hard for us to conclude that it must be the semantic feature of “know” that affects question or no questions interpretation. As illustrated above, when the verb “zhidao (know)” replaces “wen (ask)” “xiangxin (believe)”, the sentences can be alternatively interpreted as questions or no questions. What an unique semantic feature does “know” have? Different from “ask” and “believe”, the verb “know” concerns the full information that the matrix subjects held. The allied verbs such as “liaojie (understand)”, “mingbai (figure out)”, “jide (memorize)”, “tihuì (experience)”, “faxian (find out)”, “xianshi (demonstrate)”, “zhengming (prove)”, “shengcheng (claim)” and so on should enter into the same category of “know”.

The above three categories have common cognitive

semantic features in which the different cognitive degrees distinguish them from each other. The cognitive degrees involve much complicated context such as the cognitive abilities, background knowledge, psychological expectation of speech participants, so we can expect that sometimes there are no clear boundaries between the three categories. However, no clear boundaries doesn’t mean no boundaries at all, the similarity to the prototype can approximately help us identify the categories that cognitive verbs belong to, and that should be our next step we endeavor to settle down.

B. Involvement of matrix subjects

In addition to matrix verbs’ effects on questions or no questions of Wh-clauses, matrix subjects also affect the acceptability and legality of sentences. In the premise of same matrix verbs, the validity of sentences will be challenged if matrix subjects are replaced by the other pronominal objects. As the following examples illustrate.

(6) zhidao (to know):

- a. Zhangsan zhidao Lisi mai-le shenme
Zhangsan knows Lisi bought something.
Does Zhangsan know what Lisi bought?
- b. Ni zhidao Lisi mai-le shenme
(?)You know Lisi bought something.
Do you know what Lisi bought?
- c. Wo zhidao Lisi mai-le shenme
I know Lisi bought something.
(?/*)Do I know what Lisi bought?

(7) wen (to ask):

- a. Zhangsan wen Lisi mai-le shenme
Zhangsan asked what Lisi bought.
- b. Ni wen Lisi mai-le shenme
(?/*)You asked what Lisi bought.
- c. Wo wen Lisi mai-le shenme
(?/*)I asked what Lisi bought.

(8) xiangxin (believe):

- a. Zhangsan xiangxin Lisi mai-le shenme
Does Zhangsan believe what Mary bought?
- b. Ni xiangxin Lisi mai-le shenme
Do you believe what Lisi bought?
- c. Wo xiangxin Lisi mai-le shenme
(?/*)Do I believe what Lisi bought?

The acceptability and legality of all the (a) in (6) - (8) have been attested in the above chapter, but the situation of (b) (c) are very complicated which some can be accepted and some cannot. Which factor the results attribute to? Obviously the alternatives of personal references in subject positions should

²Matrix verbs are the main verbs as predicate verbs in sentences.

be responsible for the acceptability and legality. And why can personal references in the position of matrix subjects affect the validity of Wh-phrase clauses? We assume the question properties in Wh-clauses are closely related to two aspects: one is the interaction of speaker and listener, the other is the information storage which speech participants have. The first personal reference (e.g., I/we) and the second personal reference (e.g., you) as speech participants are indispensable precondition that communication can take place. When speaker inquire listener about something, a question occurs. So the message sending of “questions or not” in current occasion naturally involves the interaction of “I (speaker)” and “you (listener)”, that’s why some (b) (c) in (6) - (8) seem to be weird after the matrix subjects are replaced by “I” or “you”. And what’s more, as for the information the speech participants hold, in an actual conversation it’s impossible for “I” or “you” to simultaneously take on identities of speaker and listener. Therefore, from the views in cognitive pragmatics we can assume that due to the inherent attributes of Wh-questions in interactive communication, the personal references in matrix subjects closely related to communication interaction inevitably affect the validity of sentences.

IV. CONCLUDING REMARKS

“wen (ask)”, “xiangxin (believe)”, “zhidao (know)” belong to cognitive verbs which would effect questions or no questions interpretation in Wh-phrase relative clauses when they are matrix verbs, and the force presents some general tendencies: as far as the matrix verbs such as “wen (ask)” are concerned, which belong to [-information] cognitive semantic category, Wh-phrase clauses are interpreted as no questions; for the matrix verbs as “xiangxin (believe)” which are in [+partial information] cognitive semantic category are construed as questions; and to the those such as “zhidao (know)” which are in [+full information] category can be decoded questions or no questions alternatively.

What’s more, inquiry is a sort of interaction which involves speech participants sending and receiving messages, in actual conversation “I (speaker)” and “you (listener)” are naturally inherent constituents of speech. Therefore, the personal references in matrix subjects closely related to communication interaction affect the validity of sentences inevitably as well.

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