The Rhetorical Use of Chinese Conditional Questions[1]

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1．INTRODUCTION

Rhetorical questions are questions that we do not expect an answer to. More precisely, the speaker utters a rhetorical question to persuade the listener to accept the speaker's belief. For example, the following *wh*-question seeks a piece of information on the resignation apparently, but the speaker asserts his/her belief that no one will resign.

（1）Who will resign?

　Information-seeking interpretation: I ask you who will resign.

　Rhetorical interpretation: I assert that no one will resign.

As you can see from the rhetorical interpretation, there are two salient features, as shown in the following（ⅰ）and（ⅱ）:

　（ⅰ）The discrepancy between the form and the meaning: Rhetorical questions have the form of interrogative but are assertive in their illocutionary force.

　（ⅱ）The polarity reversal effects: The negative form describes as the positive meaning, and vice versa.

These features of rhetorical questions have been studied from both syntactic and semantic viewpoints. Recent researchers argue that the asserted contents of rhetorical questions are included in the common ground (the common ground hypothesis). In this paper, I analyze the rhetorical use of conditional questions in Mandarin Chinese in the framework of semantics of conditional questions and provide evidence to support the common ground hypothesis.

　The structure of this paper is as follows: Section 1 is an introduction; in section 2, I show the preceding research on rhetorical questions; in section 3, I introduce Isaacs and Rawlins's (2008) semantics of conditional questions; in section 4, I analyze the rhetorical use of Chinese conditional questions in the framework of Isaacs and Rawlins's proposal; in section 5, I show that the conditional conjunction *ruguo* and the causal conjunction *jiran* can be swapped in Chinese rhetorical conditional questions as evidence to support the common ground hypothesis. Section 6 is a conclusion.

2．PRECEDING ANALYSES OF RHETORICAL QUESTIONS

The polarity reversal effects of rhetorical questions have attracted linguists' attention since the 1990s. In those days, the licensing of negative polarity items (NPIs) was extensively discussed, as

the licensor of an NPI does not appear in the S-structure of rhetorical questions. Most of the discussions focus on the locus of covert negation operator that licenses NPIs: Which component does the negation operator appear in: D-structure, S-structure or LF (Linebarger 1987, Progobac 1993, among others)? The result was inconclusive, but most researchers agreed that LF is a strong candidate of the locus of the negative operator.

Sprouse (2007) conducted research on the island effects of *wh*-words in various languages and observed that *wh*-words in rhetorical questions behave differently from the ones in interrogative questions. Based on that observation, he argues that rhetorical *wh*-words tend to move more often than their counterpart *wh*-words. This finding reflects that *wh*-words in rhetorical questions across languages tend to scope over the whole sentence. The licensing of NPIs and the scope-relation of rhetorical *wh*-words both indicate that licensors and *wh*-words in rhetorical questions are not only involved with the local structure but also involved with the whole proposition they appear in.

The research on rhetorical questions from a semantic viewpoint began in 2000. Han (2002) accounts for the discrepancy between the form and the meaning by Hamblin-style semantics (1972) for interrogatives, and she also accounts for the polarity reversal effects by combining the Gricean maxim of quantity and the pragmatics of questions.

Hamblin-style semantics defines an interrogative sentence as a set of answers to it. Taking the example of *yes/no* question (2), its meaning is a pair of positive and negative propositions, thus providing alternative propositions.

（2）Does John drink? = {John drinks, John doesn't drink}

The Gricean maxim of quantity requires the utterance to be as informative as needed. In addition, the pragmatics of questions requires the speaker to develop the question in the way that the proposition would be the most informative if it turned out to be true. In the case of question (2), the form "Does John drink?" indicates that the speaker more expects the negative proposition "John doesn't drink" than the positive one "John drinks." Meanwhile, the sentence-final falling intonation indicates that the sentence is declarative, thus asserting the speaker's belief "John doesn't drink," regardless of the apparent positive form.

Other semantic analyses of rhetorical questions are couched in the presupposition theory. Caponigro and Sprouse (2007) as well as Biezma and Rawlins (2017) argue that the asserted contents of rhetorical questions are already inferable from the context. In other words, the answers are already in the common ground or are accommodated to be included in the common ground (the common ground hypothesis). They apply the dynamics proposed by Farkas and Bruce (2010) on assertions to formalize how the presupposition of a rhetorical question is accommodated into the common ground. They also argue that the procedure of accommodating makes the content of the rhetorical question less accessible for future propositional anaphora ("that" in 3b), thus leading to the unnaturalness of (3b):

（3）Scenario：John has just poured a gallon of iced water over Tim's head for fun.

　　Tom：Are you an idiot?

John：a．You are right.

b．#That's not true!　　(Biezma & Rawlins 2017:304)

As shown so far, researchers have come to recognize the importance of analyzing rhetorical questions in context. Biezma and Rawlins (2017) set a context of the rhetorical question in order to capture its correct interpretations. Another way to provide contexts is add conditional clauses to rhetorical questions. A conditional clause sets a context to evaluate the rhetorical question. In this paper, I focus on rhetorical questions with a conditional clause. I show that the dynamic semantics of conditional questions induces the rhetorical interpretation.

3．ANALYSIS OF CONDITIONAL QUESTIONS

A conditional question consists of a conditional clause (hereafter antecedent) and an interrogative consequent clause (hereafter consequent), as shown in (4). Because example (4) is a *yes/no* question, the answer options should be limited to *yes* or *no*, as with responses A and B below; however, an option such as C also exists:

（4）If Alfonso comes to the party, will Joanna leave?

A：Yes, she will.

B：No, she won't.

C：Alfonso isn't coming to the party.

(Isaacs and Rawlins 2008:269)

Response C denies the proposition of the antecedent. The speaker of C does not answer the question directly, instead he denies the presupposition of the questions. This kind of response demonstrates what are called "issue-dispelling effects": Response C above dispels the question (= "the issue" in the terminology of inquisitive semantics) by negating the proposition of the antecedent.

Isaacs and Rawlins (2008) account for issue-dispelling effects by combining the stack-based model for the conditionals proposed by Kaufmann (2000) with Hamblin-style semantics. In the stack-based model, a proposition is evaluated in an information state of the discourse or conversation (hereafter "discourse"). An information state of a discourse is a set of possibilities that consists of propositions that are uttered in the preceding discourse and every proposition that is compatible with them. The information state changes as the new propositions are uttered. If the newly uttered proposition is compatible with the current information state of the discourse, it creates a new information state; otherwise, it is dismissed. Every information state is stored in the stack of information states ordered along the timeline.

Let us see an example. Suppose that the speaker and the listener are in the original information state s, and someone says, "the president has resigned". In the original information state s, all the possibilities that do not contradict the speaker's belief are admitted. When the listener accepts the proposition and all the propositions it presupposes, the new information state s' is created. The information state s' contains possibilities that are compatible with the proposition *the president has*

resigned.

The newly uttered proposition can be a compound proposition such as conditionals. As a compound proposition contains more than one proposition, we need more than one information state to evaluate a compound proposition. Hence, an ordered pair of information states (hereafter "macro-contexts") is used to evaluate a compound sentence. We show the definition of macro-contexts from Isaacs and Rawlins (2008:291-4) in (5).

（5） Definition：macro-contexts

 a． < > is a macro-context.

 b． If c is a Stalnakerian context and s is a macro-context, then $<c, s>$ is a macro-context.

 c． Nothing else is a macro-context.

 d． If s is a macro-context, then s_n is the nth context (counting from 0 at the top) and $|s|$ is its size (excluding its final empty element).

According to this definition, a macro-context is an ordered pair of a Stalnakerian context and another macro-context. A Stalnakerian context is a set of possible worlds, and a macro-context is a stack of information states so far. Thus, we have a stack of information states which has the newest information state at its top.

A conditional consists of an antecedent and a consequent, so that it is evaluated according to macro-contexts. In example (4), firstly, the antecedent *If Alfonso comes to the party* creates a new context c; Secondly, c is combined with macro-context s; Lastly, a new macro-context $<c, s>$ is created. The consequent *Joanna will leave* is evaluated against $<c, s>$.

Isaacs and Rawlins (2008) propose two operators that operate on macro-context: a push operator and a pop operator. The push operator adds a new context to the macro-context; the pop operator removes a context from the macro-context or leaves it as it is, if it is the first context of the discourse.

（6） Definition：push operator

 For any macro-context s and context c: push$(s, c) =_{\text{def}} <c, s>$

（7） Definition：pop operator

 For any macro-context $<c, s'>$: pop$(<c, s'>) =_{\text{def}} <c, s'>$ if $s' = < >$, s' otherwise

Upon interpreting a conditional, the push operator operates first on the antecedent, next on the consequent: First, the push operator adds the context of the antecedent to the macro-context of the discourse, thus creating a new macro-context; next, the push operator adds the context of the consequent to the new macro-context that is created just by the antecedent.

So far, we have seen the way in which conditionals are analyzed in terms of macro-context. Now we see the truth condition of a conditional sentence against macro-contexts. The truth condition of a sentence is described as a support relation (⊢). A context c supports the proposition ϕ, iff no possible world in c contradicts the proposition ϕ ($\neg \exists w \in W$, s.t. $w \in c$ and $w \notin \phi$). In contrast, a macro-context supports the proposition ϕ, iff (i) neither world in the pair appears in c', but the worlds are in c ($\{<w_1, w_2> \in c \mid \neg \exists w \in W$, s.t. $<w_1, w> \in c'$ or $<w, w_2> \in c'\}$), or (ii) the worlds would remain if c' were updated with ϕ ($\{<w_1, w_2> \in c \mid <w_1, w_2> \in c''\}$).

（8）Definition of ⊢

For any contexts c and c', and c'': ⊢(c, c', c'') $=_{\text{def}}$

$$\left\{ <w_1,\ w_2> \in c \ \middle| \ \begin{array}{l} \neg \exists w \in W,\ \text{s.t.}\ <w_1,\ w> \in c'\ \text{or}\ <w,\ w_2> \in c' \\ \text{or}\ <w_1,\ w_2> \in c'' \end{array} \right\}$$

Next, let us see the definition of update. Upon uttering a declarative, the macro-context is updated so that the topmost context of the stack supports the proposition described by the declarative. The definition of assertive update is given in (9). In contrast, an interrogative does not create a new context. As Hamblin (1972) proposes, the meaning of a question is a set of possible answers. These answers are not added to the context, but divide the context into sets of possible worlds that support the answers. The definition of inquisitive update is given in (10).

（9）Assertive update on macro-contexts

For any macro-context s and clause ϕ:

$s + [\text{Assert } \phi] =_{\text{def}} s'$ where $|s'| = |s| = n$ and $s_i' = ⊢(s_i, s_0, s_0 \oplus \phi)$ for all $i, 0 \leqslant i < n$

(10) Inquisitive update on macro-contexts

For any macro-context s and clause ϕ:

$s + [\text{Question } \phi] =_{\text{def}} s'$ where $|s'| = |s| = n$ and $s_i' = ⊢(s_i, s_0, s_0 \oslash \phi)$ for all i, $0 \leqslant i < n$

Finally, the macro-context change potential (MCCP) of conditionals is defined in (11) and (12). (11) requires that the antecedent and the consequent be mapped on the context in turn. (12) requires that the antecedent be compatible with the preceding context, otherwise the update of the context by the antecedent is banned.

(11) MCCP of an indicative conditional:

For any macro-context s, if-clause $[if \ \phi]$, and clause ψ: $s + [if \ \phi,\ \psi] =_{\text{def}} s + \text{if } \phi + \psi$

(12) MCCP of an if-clause

For any macro-context s and if-clause $[if \ \phi]$: $s + \text{if } \phi =_{\text{def}} \text{push } (s, s_0 \oplus \phi)$

Admittance conditions: "$If \ \phi$" is admissible in a macro-context s iff $s_0 \oplus \phi \neq \emptyset$

The idea of macro-contexts enables us to account for the issue-dispelling effects. First, the antecedent creates a temporary information state by updating the original information state, resulting in a macro-context consisting of the temporary information state and the original stack of information states. Second, the consequent maps the interrogative meaning on the temporary information state, by negating the presupposition of the question (= the antecedent proposition and its presupposition). Then, the listener can either choose one of the sets of possible worlds representing his/her answer, or remove the temporary information state, thus recovering the original information state. Therefore, we have three ways to answer a conditional question: a positive answer, a negative answer, and an issue-dispelling answer. Technically speaking, the issue-dispelling effects of conditional questions in the form of (13) are triggered through three steps shown in (14): ⅰ) The antecedent creates a temporary information state, and the push operator put it together with the stack of information states so far; ⅱ) the consequent divides the temporary information state into possible answers; ⅲ) the temporary information state is popped out.

(13) *If φ, ψ?*

(14) ⅰ) push $(s, s_0 \oplus \phi) = <s_0 \oplus \phi, s>$

ⅱ) $<s_0 \oplus \phi, s> + \psi = <s_0 \oplus \phi \oslash \psi, s>$

ⅲ) pop $(<s_0 \oplus \phi \oslash \psi, s>) = s$

This process is easy to conduct as the consequent does not create a new information state, thus allowing us to access the antecedent directly. By removing the topmost information state, we can remove the whole conditional. In the following sections, I demonstrate the adaptation of this analysis to Chinese conditional questions.

4. ANALYSIS OF THE RHETORICAL USE OF CHINESE CONDITIONAL QUESTIONS

In Chinese, there are several markers indicating that a question is rhetorical. For example, *wh*-word *nar* ("where"), some adverbs such as *nandao* ("difficult to tell"), and the combination of negation and question marker *bu shi ma* (NEG COP Q) all indicate the proposition is contrary to the speaker's belief. These rhetorical question markers have been extensively studied by Chinese grammarians (Liu 2014:9-10). However, studying single sentences without any context might lead to a misjudgment, given that the interpretation of rhetorical questions relies heavily on the context where the rhetorical question appears. One way to control the judgement is provide a conditional clause to the rhetorical question. The conditional clause sets a context of the rhetorical question, and thus allowing us to analyze the process of interpreting the rhetorical question.

The conjunctions to be discussed in this paper are conditional conjunctions and causal conjunctions. The conditional conjunctions are *ruguo, yaoshi, jiaru* and their short forms. They introduce a conditional clause irrespective of factual or counterfactual (Jiang 2000). The causal conjunction is *jiran. Jiran* introduces a fact, with the consequent describing the inference based on that fact. In section 4.1, I show the analysis of conditional questions formed with *ruguo* in the framework of Isaacs and Rawlins (2008), and in section 4.2, I discuss rhetorical questions formed by *jiran*.

4.1. ANALYSIS OF CONDITIONALS FORMED WITH *RUGUO*

The following example is a conditional question formed by the conditional conjunction *ruguo* ("if").

(15) *Ruguo name qiong, weishenme que tiantian you rou chi?*

RUGUO so poor why yet everyday have meat eat

(If you are so poor, why do you eat meat every day?) (Xing 2001)

Example (15) is interpreted as a rhetorical question, based on the common knowledge that meat is too expensive for a poor family to eat every day.

According to Isaacs and Rawlins's (2008) proposal, example (15) is processed as shown in (16):

(16) ⅰ) push $(s, s_0 \oplus "You\ are\ poor") = <s_0 \oplus "You\ are\ poor", s>$

ⅱ）$< s_0 \oplus$ *"You are poor"*$, s > +$ *"why do you eat meat"*

$$= < s_0 \oplus \textit{"You are poor"} \oslash \textit{"why do you eat meat"}, s >$$

ⅲ）pop $(< s_0 \oplus \textit{"You are poor"} \oslash \textit{"why do you eat meat"}, s >) = s$

Let us explain (16) step by step: ⅰ）The antecedent creates a context that supports the proposition "you are poor" and the push operator places it at the top of the macro context; ⅱ）the topmost context is divided into possible answers in accordance with the consequent clause "why do you eat meat every day?"; ⅲ）the pop operator removes the topmost context, thus recovering the original context.

Recall that the MCCP of an *if*-clause is limited to indicative *if*, as specified in the admittance conditions of (12): The propositional content of the antecedent should be compatible with the current context. Therefore, it is necessary to discuss whether we can apply the MCCP of an *if*-cause to *ruguo*, as *ruguo* can introduce a wide range of propositions irrespective of counterfactual or factual.

According to Li (2010), Wang (2014) and Zhang (2017), *ruguo* typically forms counterfactual conditionals, as shown in example (17).

(17) *Ruguo bu shi zai 19 shiji zhongqi faxian le dianzi*

if NEG COP in 19 century middle discover LE electromagnetic

ganying xianxiang, jiu bu hui you fadianji, diandongji.

induction phenomenon JIU NEG may have generator motor

(If the phenomenon of electromagnetic induction had not been discovered in the mid-19th century, there would not have been generators or electric motors.)   (Li 2010)

In addition to the counterfactual usage, it has been reported that *ruguo* can form factual conditionals. In comparing *ruguo* and *jiran*, Wang (2008) gives the following example in which *ruguo* introduces a fact to enhance the factuality of the consequent proposition.

(18) *Ruguo yibufende shangren, dizhu he guanliao shi Zhongguo zichanjieji de qianshen,*

RUGUO a-part-of merchant landlord and bureaucrats COP Chinese bourgeoisie DE predecessor

name yibufende nongmin he shougongye gongren jiu shi Zhongguo gongye wuchan jieji de

then a-part-of peasant and handicraft-workers JIU COP Chinese industrial proletariat DE

qianshen le.

predecessor LE

(If a part of merchants, landlords and bureaucrats are the predecessors of Chinese bourgeoisie, then a part of peasants and handicraft-workers are the predecessors of Chinese industrial proletariats.)

Example (17) and (18) shows that *ruguo* form both counterfactual and factual conditionals. Some conditional clauses lead by *ruguo* are contrary to the fact in the real world, others are assumptions based on the fact in the real world. Hence, some clauses introduced by *ruguo* are indicative, thus satisfying the admittance condition of (12).

The admittance condition is not only required in syntax, but also in semantics. The rhetorical effect is caused only by the indicative conditional: On the one hand, the clause introduced by *ruguo* is presented as compatible with the common ground, on the other hand, it is waiting to be

retorted. For example, the antecedent in (15) contains the adverb *name* ("so"), so that it is obvious that the antecedent refers to a proposition in the common ground.

In the next section, I show that conditional conjunction *ruguo* in rhetorical context can be swapped by causal conjunction *jiran* as evidence to support that the antecedent clause introduced by *ruguo* is indicative in rhetorical conditional questions.

4.2. CONDITIONAL CLAUSE FORMED BY *JIRAN*

The difference between *ruguo* and *jiran* has been extensively discussed in literature of Chinese grammar. Xing (2001: Chapter 5) and Zhong and Zhang (2013) argue that the propositions introduced by *jiran* are given information, whereas *ruguo* can introduce propositions regardless of whether they are new or given. Additionally, Wang (2008) argues that the propositions introduced by *jiran* are factual, whereas *ruguo* can introduce both factual and counterfactual propositions. To summarize the research to date, the proposition introduced by *jiran* is already included in the common ground, whereas there is no such restriction on the proposition introduced by *ruguo*. The differences caused by the two conjunctions are shown in (19) and (20).

(19) *Ta ruguo aihao yinyue, name jiu cong yinyue fangmian qu dadong tade xin.*

　　he RUGUO love music then JIU from music direction go move his heart.

　　(If he loves music, let's move his heart from music.)

(20) *Ta jiran aihao yinyue, name jiu cong yinyue fangmian qu dadong tade xin.*

　　he JIRAN love music then JIU from music direction go move his heart.

　　(Since he loves music, let's move his heart from music.)

Since the propositions introduced by *jiran* are compatible with the common ground, the clause introduced by *jiran* naturally satisfies the admittance conditions of the MCCP of an *if*-clause specified in (12), even though *jiran* does not express "if". Example (21), the *jiran*-counterpart of (15), is well-formed as a rhetorical question, thus indicating that the synonymity of *ruguo* and *jiran* in rhetorical contexts.

(21) *Jiran name qiong, weishenme que tiantian you rou chi?*

　　JIRAN so poor why yet everyday have meat eat

　　(If you are so poor, why do you eat meat every day?) (Xing 2001)

In the next section, I introduce the research on alternation of the two conjunctions in both interrogatives and declaratives and argue that *ruguo* forms an indicative conditional in rhetorical questions.

5. MORE ON SWAPPING *RUGUO* AND *JIRAN*

Although both *ruguo* and *jiran* form rhetorical conditional questions, the difference between the two conjunctions remains. Xing (2001:506) mentions that the distinction between *ruguo* and *jiran* in declaratives remains in rhetorical questions: *Ruguo* introduces an assumption, while *jiran* introduces a fact, as shown in examples (22) and (23).

(22) *Ruguo/Jiran baba shi "huaidan", name, shenmeyangde ren cai shi haoren ne?*

RUGUO/JIRAN father COP bad-person then what-kind-of person finally COP good-person SFP

(If/Since the father is a bad person, what kind of person is a good person?) (Xing 2001)

(23) *Ruguo/Jiran bu shi youhui, weishenme hui you nayangde judong, ni gei wo jisehi qingchu!*

RUGUO/JIRAN NEG COP date why possible have those behaviors you for me explain clearly

(If/Since it is not a date, why did you behave like that, you should explain the reason clearly.)(Huang 1998)

No matter whether the antecedent introduces an assumption or a fact, these conditional questions can be rhetorical questions denying the antecedent proposition.

Huang (1998:89) observes alternation of the two conjunctions in declaratives and summarizes the condition of swapping as follows: When the proposition introduced by *ruguo* expresses a counterfactual and the consequent describes a matter contrary to common sense, *ruguo* can be swapped by *jiran* without any change in meaning. (The judgements of (24) and (25) are quoted from Wang 2021, not from Huang 1998).

(24) *Ruguo/*Jiran dangshi Ma Su tingcong Wang Ping de quangao,*

RUGUO/JIRAN back-then, Ma-Su listen-to Wang Ping's advice,

Jietingzhizhan kongpa jiang shi lingwai yifan jieju le.

The-battle-of-Jieting maybe will COP different one-CL outcome SFP.

(If Ma Su had listened to Wang Ping's advice at that time, the Battle of Jieting would have had a different ending.)

(25) *Ruguo/?Jiran ta neng dang banzhang, muzhu ye neng shang shu!*

RUGUO/JIRAN he can serve chief, female-boar also can climb tree

(If he can be the chief, then even a female boar can climb a tree.)

(24) is a counterfactual conditional, based on the historical fact that Ma Su did not listen to Wang Ping's advice. The consequent of (24) is inferred from the counterfactual condition, but it is not a matter contrary to common sense. This is the reason conjunction *jiran* is not used. The consequent of (25) describes a proposition contrary to common sense, but the antecedent is not always counterfactual; it might be an assumption. The different degrees of acceptability of *jiran* might be caused by the ambiguity of the sentence. Wang (2021) accounted for the impossible use of *jiran* in examples (24) and (25) by the different degrees of refutability: Given the antecedent of (24) is obviously counterfactual, it would be absurd to object to it. Similarly, if the antecedent of (25) is counterfactual, it is not refuted. However, if the focus of utterance (25) is on his ability to be a chief, the antecedent proposes an assumption, and thus it can be objected to. Of the two examples, only the assumption-reading of (25) can be rhetorical, i.e., it expresses the proposition contrary to the speaker's belief and is uttered to persuade the listener. Therefore, the proposition introduced by the antecedent should not be counterfactual but should be compatible with the common ground to make the whole sentence rhetorical.

6．Conclusion

In this paper, I have shown that Chinese conditional questions formed with *ruguo* express rhetorical questions through the same mechanism for issue-dispelling effects proposed by Isaacs and Rawlins (2008). I have argued that *ruguo* in rhetorical questions should introduce an indicative clause, so that it follows the admittance conditions of the MCCP of an *if*-clause specified in (12). I have also shown that *jiran*, the conjunction that introduces factual proposition, forms rhetorical questions in the same way as *ruguo*. Finally, I have argued that rhetorical interpretation is not compatible with counterfactual conditional, thus supporting the common ground hypothesis regarding the rhetorical questions proposed by Caponigro and Sprouse (2007) and Biezma and Rawlins (2017).

<div align="center">ABBREVIATIONS</div>

CL：classifier   COP：copular   DE：nominalizer

JIU：an adverb of causative relation   LE：perfective

NEG：negation   SFP：sentence-final particle

<div align="center">NOTES</div>

<div align="center">REFERENCES</div>

Biezma, María and Kyle Rawlins 2017 "Rhetorical questions: Severing questioning from asking." *SALT* 27, 302-322.

Caponigro, Ivano and Jon Sprouse 2007 "Rhetorical questions as questions." In Estela Puig-Waldmueller (ed.) *Sinn und Bedeutung* 11, 121-133.

Chen, Guo-hua 1988 "Ying-Han jiashe tiaojianju bijiao (Comparison of counterfactuals in English and Chinese)." *Waiyu Jiaoxue yu Yanjiu* 73, 10-19.

Farkas, Donka and Kim Bruce 2010 "On reacting to assertions and polar questions." *Journal of Semantics* 27, 81-118.

Hamblin, C. L. 1973 "Questions in Montague English." *Foundations of Language* 10:1, 41-53.

Han, Chung-hye 2002 "Interpreting interrogatives as rhetorical questions." *Lingua* 112, 201-209.

Heim, Irene 1983 "On the projection problem for presuppositions." In Portner, P. and B. H. Partee (eds.) 2002 *Formal Semantics — the essential readings*. Oxford: Blackwell Publishers. 249-260.

Huang, Wenlong 1998 "'*Jiran P, jiu Q*' ju zhiyi (Issues on '*Jiran* P, *jiu* Q' sentences)." *Guizhou*

Shifandaxue Xuebao (Shehui Kexue ban) 100, 87-91.

Isaacs, James and Kyle Rawlins 2008 "Conditional Questions." *Journal of Semantics* 25, 269-319.

Jiang, Yan 2000 "Hanyu tiaojianju de weishi jieshi (The interpretation of Chinese conditionals)." *Yufayanjiu he Tansuo (Research and Inquiry on Grammar)* 10, 257-279.

Kaufmann, Stefan. 2000 "Dynamic Context Management." In Faller et al. (eds.) *Formalizing the Dynamics of Information*. CSLI Publications, California. 171-188.

Li, Jinxia 2010 "Fanshishi ruguoju (Counterfactual *ruguo*-sentences)." *Yuwen Yanjiu* 2010:1, 53-55.

Linebarger, Marcia C. 1987 "Negative polarity and grammatical representation." *Linguistics and Philosophy* 10:3, 325-387.

Liu, Yaqiong 2014 *Xiandai hanyu huihua zhong de fanwenju yanjiu (A study on rhetorical questions in Chinese conversations)*. Xulin publishers, Shanghai.

Progovac, Ljiljana 1993 "Negative polarity: Entailment and binding." *Linguistics and Philosophy* 16:2, 149-180.

Sprouse, Jon 2007 "Rhetorical questions and Wh-movement." *Linguistic Inquiry* 38:3, 572-580.

Wang, Maiqiao 2008 "'*Jiran p, name q*' yu '*ruguo p, name q*' zhi bijiao (A comparison between '*jiran p, name q*' and '*ruguo p, name q*')." *Yuyuan Yingyon Ynajiu* 2008:08, 59-61.

Wang, Xiaoxi 2014 "Fanshishi tiaojianju de yuyong bianxi (Analysis of Counterfactual conditionals)." *Yuwenxuegan* 2014:9, 1-3.

Wang, Yihuan 2021 *Chugokugo-ni okeru inga-kankee-o arawasu hukubun-ni kansuru kenkyu (A study on Chinese compound sentences representing causal relations)*. Ph.D. dissertation, Ochanomizu University.

Xing, Fuyi 2001 *Hanyu fuju yanjiu (A study on Chinese compound sentences)*. The Commercial Press, Beijing.

Zhang, Xueping 2017 "Xiandai hanyu jiasheju de fenlei xitong (A classification of Mandaring Chinese conditionals)." *Bohai Daxue Xuebao* 2017:1, 53-55.

Zhong, Xiaoyong and Zhang Lin 2013 "*Jiran*-ju he *yinwei*-ju zhuguanxing chayi tanxi (On the difference between *jiran*-sentences and *yinwei*-sentences)." *Hanyu Xuexi* 2013:8:4, 35-40.