

Counterfactual Emotions and Language: Cautionary Implications for Linguistic Relativity

CHIN 342 Final Presentation

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Main Questions, Study Motivation, and Relevance

Definitions and Background



- **Counterfactual reasoning**: the thinking of what might or could have been, often expressed through the subjunctive in English
 - Example: "If it were not for work, I would have rested"
- **Linguistic relativity**: a principal suggesting that the structure of a language affects its speakers' worldview or cognition (also known as the Sapir-Whorf hypothesis)

Introduction

- [Counterfactual Emotions and Language: Cautionary Implications for Linguistic Relativity](#) by Zhuo-Jing Schmidt
- Myth investigated
 - The Chinese language lacks a grammatical structure to mark a counterfactual proposition, so native Chinese speakers have difficulty engaging in counterfactual reasoning (Bloom 1981)

Research Questions and Importance

- Questions
 - How is counterfactual reasoning expressed in the Chinese language?
 - How ubiquitous is counterfactual reasoning, and is counterfactual reasoning linguistically relative?
- Importance
 - Addressing highly controversial, biased, and outdated misconceptions about Chinese
 - Focusing on a non-Eurocentric perspective with which to analyze Chinese

Relevance to Course

- Covers an aspect of Chinese linguistics and how **evolving psychology and decision science research** can impact linguistics
- Relates to the idea of Chinese being called a “**grammar-less**” language because it lacks inflection
 - Lacking grammatical structures to express ideas does not mean that Chinese (and therefore a native speaker) is more primitive

Literature Review

Overview of Referenced Work

- Chinese has **no forms comparable to the English subjunctive**
 - However, Chinese possesses some capacity for counterfactual thinking, but only within the limit of common sense and world knowledge (Yeh and Gentner 2005)
- Chinese speakers have **no obstacles to counterfactual thinking** despite the lack of a designated marker
 - Did not consider alternative linguistic structures in Chinese that signal counterfactuality besides subjunctive as a grammatical category (Au 1984) and (Liu 1985)

Counterfactual Emotions Offer Advantages

- **Regret** derives from “**upward counterfactuals**”
 - Prefer alternatives to reality
 - Serves the preparative function by providing heuristics for the future so people learn from their mistakes and avoid repeating them (Rose 1994)
- **Relief** is experienced through “**downward counterfactuals**”
 - Prefer reality to alternatives
 - Contributes to affective well being by making people feel fortunate about or grateful for their reality in which a potential disaster has been avoided (Rose 1994)

Existing Knowledge on Counterfactual Representations

- Chinese does not use the same grammatical categories as English to express counterfactuality
 - The conveyance and interpretation of counterfactuality **requires units larger than the morpheme** (Feng and Yi 2006)
- Due to the differences in English and Chinese, they cannot be analyzed for counterfactuality in the same way

Major Arguments, Evidence, and Learnings

Linguistic Devices to Communicate Counterfactuality

- Chinese has lexical and grammatical markers that are predictive of a counterfactual reading (Feng and Yi 2006)
 - Markers corresponding with the highest percentage of counterfactuals shown below

Category	Marker	% CFs
Temporal	早 <i>zao</i> 'early'	83
Negators	要不是 <i>yaobushi</i> 'if not be'	91
Predicates	还以为 <i>haiyiwei</i> 'still think'	91
	原来应该 <i>yuanlaiyinggai</i> 'actually should'	92

Fun Fact!

- Feng and Yi's original **glosses** are idiomatic English expressions, which may obscure the literal senses of the Chinese expressions
 - For example, they gloss 要不然 *yaoburan* as 'had it not been the case', which is explicitly counterfactual in English, but not always so in Chinese
 - They therefore use word-by-word literal glosses here
- **Gloss:** notations that describe the meaning of words / phrases in a text
要不然 *yaoburan* (if not this way) - 43%

Differing Expressions of Counterfactuality

- The subjunctive (past tense and aspect) is used in English to express counterfactuality
- Chinese is non-inflecting and temporal meaning must be contextually inferred, so it cannot be the same as English (Chao 1968)
- Chinese has “counterfactual ingredients” (Wang 2013)
 - Includes hypothetical conjunctions, negation markers, past tense reference, etc. (Yong 2016)

Bi-Clausal Counterfactual Constructions

- Bi-clausal counterfactual constructions encode causal attribution / inference about an imagined situation in view of an actual outcome as markers of counterfactuality ([Jing-Schmidt 2017](#))
 - [要不是 *yaobushi* X, Y]: expresses private and personal experiences of regret and relief
 - [如果 X, 早就 Y]: considers an alternative reality and attributes its failure to materialize due to a lack of knowledge or action

Universality of Linguistic Categories

- Counterfactual reasoning is **universal, but not random**, and is most naturally observed when a problem is detected ([van Hoeck et al 2013](#))
- Language can influence how we experience reality (linguistic relativity), but counterfactual emotions are **related to innate human emotions** that are universally experienced
 - The experience of basic emotions such as happiness, surprise, fear, anger, and disgust are universally unaffected by culture ([Cannon 1929](#))

Knowledge Acquired from the Article

- Formalized the idea of **counterfactual emotions**: these counterfactual thoughts can affect people's emotions, such as causing them to experience regret, guilt, relief, or satisfaction
- Learned more about the impact of psychology on linguistics
- Understanding the language-thought relationship **requires interdisciplinary insights** into what makes us human

Final Thoughts

Our Critique

- **No deciding conclusion** about whether or not counterfactuality is linguistically relative
 - “All of these affective experiences [including counterfactuality] are **probably** not subject to linguistic relativity, for they are shared human experiences...”
 - Could have been more rigorous in supporting this statement
 - **Strength:** cited developing research in social / neuropsychology to suggest the universality of counterfactual reasoning

Additional Questions

- Do native Chinese speakers who learn a “counterfactual” language have the same experiences with counterfactual thinking?
- Would counterfactuality in colloquial language and speech differ from written works?
- Are there more hypotheticals that arise in real-world scenarios as opposed to in literature?
 - **Example:** 非诚勿扰 *feichengwurao*, a dating show similar to “The Bachelor” in the US, presents many hypothetical situations ([Powrie 2013](#))

Further Reading!

- Further reading
 - [*What are they good for? A constructionist account of counterfactuals in ordinary Chinese* \(corpus-based study from the same author, 2017\)](#)
 - [*The Chinese Counterfactual* \(Chinese language learning hobbyist blog post, 2013\)](#)

Q&A

A black rectangular area containing the text "WHAT IF...?" written in a white, chalk-like, handwritten font. The text is slightly slanted and has a rough, textured appearance, typical of chalk on a chalkboard. The ellipsis consists of five dots.