

摘要

心理语言学界的一个研究热点是代词消解问题。根据“可及性”(Accessibility)理论(Ariel, 1988),可及性越高的先行词(antecedent),越容易成为后文中回指语(anaphor)的回指对象。基于英语语篇下代词消解研究显示,话题、对比焦点都能促进代词解读(Kaiser, 2011)。与“主语优先”(subject-prominent)的英语不同,汉语是“话题优先”(topic-prominent)语言,允许主从复句中位于关联词之前的主语名词充任话题。汉语针对主从复句下的代词消解研究不多,而将焦点和话题放在同一语境中考察的研究更少。来自语料库(许余龙, 2003)、句子产生(徐晓东、倪传斌、陈丽娟, 2013)、脑电实验(徐晓东, 2013; Xu & Zhou, 2016)的证据显示,位于话题位置的主语具有更高的可及性,因此更可能与代词同指。但条件复句下的语料库结果尚不明确(陈舜婷, 2014),且关于焦点的回指研究结论不一(Xu, 2016; 陈瑶, 2016)。

本文聚焦条件复句,结合离线产出实验(句子补全实验)和在线理解实验(视域眼动实验, Visual-world eye-tracking paradigm),通过为焦点位置上的主语增设重音,进一步研究“焦点”和“话题”如何影响代词消解的时间进程。

本文提出的具体研究问题有三:一、在引入焦点重音后,“焦点”是否会有主效应?二、在歧义代词的消歧词出现之前,“焦点”主语和位于关联词之前的“话题”主语同为先行词时,二者是否竞争?三、“焦点”和“话题”对代词消解的作用孰大孰小?

句子补全实验旨在考察汉语被试在理解语篇时,对于具有不同信息结构(information structure)地位的先行词候选项——即话题主语(NP1)、焦点主语(NP2),其代词回指是否具有偏向性。该实验采用了性别相同的成对人名(如:NP1“王玲”、NP2“蒋芸”),操纵了NP1与关联词的前、后位置(话题、主语),和NP2是否位于焦点位置(焦点、非焦点),让被试续写“...,那么他/她_____”之后的句子。逻辑回归分析仅发现了话题主效应,即汉语被试更多地将代词回指为话题主语(NP1)。但没有焦点主效应,也没有焦点与话题的交互效应。

视域眼动实验则采用了性别相异的成对人名(如:NP1“王玲”、NP2“张辉”),由于以听觉呈现的第三人称代词无法区分性别,因而具有歧义。该实验旨在考察

消歧代词出现前后被试对注视目标图片（“张辉”）和竞争图片（“王玲”）的比例，即代词消解的时间进程。增长曲线模型（growth curve model）分析显示，（1）歧义区内：在被试对目标图片的注视比率中发现了焦点和话题的交互作用，在竞争图片的注视比率中发现了话题主效应；（2）消歧区内：在目标图片和竞争图片的注视比例中，均发现有话题主效应；（3）对歧义区的交互作用进一步分析后，发现话题和焦点、话题和非焦点之间存在交互：话题条件下，非焦点条件对话题图片的注视比例比焦点条件更高。

总体结果表明：话题条件下，被试更多将歧义代词消解为话题名词，说明话题结构能提高先行词的可及性；当话题和焦点共现时，二者存在竞争关系；由于在竞争图片的歧义和消歧时间窗内均发现有话题主效应，说明相较于焦点，话题效应的持续时间更长。

关键词：代词回指；焦点；话题；视域眼动实验；焦点重音

Abstract

One focus of inquiry in psycholinguistics is pronoun resolution. In Ariel (1988)'s Accessibility Theory, the more accessible an antecedent is, the more likely it is to be retrieved to co-index with the pronoun in the later context. Existing work on English discourse have shown that both topic and contrastive focus can facilitate pronoun resolution (Kaiser, 2011). Different from English, which is known as a subject-prominent language, Chinese is topic-prominent and allows the subject before the conjunctive words to be a topic in a bi-clausal sentence. Few works have been conducted on Chinese pronoun resolution in bi-clausal structures, with even fewer on both topic and focus in the same sentential context. Evidence from corpus-based studies (Xu, 2003), sentence completion test (Xu, Ni & Chen, 2013) and ERPs (Xu, 2013; Xu & Zhou, 2016) has shown that the topic NP is more accessible than the subject NP, and hence is more likely to be co-indexed with the pronoun. However, the corpus results remain unclear regarding conditional sentences (Chen, 2014), and the results are mixed regarding whether a focused NP can facilitate pronoun resolution (Xu, 2016; Chen, 2016).

Focusing on conditional sentences, this study used both off-line production method (i.e., sentence completion test) and online comprehension method (i.e., visual world paradigm), to investigate how topic and focus modulate pronoun resolution, by adding stress on the focused NP. It aims to address three research questions: 1) With stressed focus, will the factor of focus show a main effect after introduced by stress? 2) When focus- and topic-marked antecedents occur in the same discourse context, will they compete as candidates of pronoun prior to the disambiguating words? 3) How topic and focus weigh against each other?

Sentence completion test aims to investigate whether Chinese speakers show a preference for pronoun to co-refer to its candidate antecedents that are of different information status: a topic-marked NP1 or a focus-marked NP2. We used pairs of names with the same gender, for instance 'Wang Ling' as NP1 and 'Jiang Yun' as NP2,

manipulating the syntactic position of NP1 (before or after connectives, i.e., a topic or a subject) and the focused status of NP2 (focus or non-focus). A logit regression analysis shows a main effect of topic only, but no effect of focus and no interaction. Chinese participants were more likely to interpret the ambiguous pronoun to refer to topic-marked subject NP1.

In the visual world eye-tracking experiment, we used paired names with different genders (NP1 ‘Wang Ling’, NP2 ‘Zhang Hui’), but the auditory pronoun was ambiguous. We aimed to investigate the time course of pronoun resolution by examining the proportion of looks to the target picture (‘Zhang Hui’) and to the competitor picture (‘Wang Ling’). Growth curve analysis yielded three findings: First, in the time window of ambiguous words, we found an interaction of focus and topic in participants’ fixation to the target picture, and a main effect of topic in participants’ fixation to the competitor picture. Second, during the time window of disambiguating words, we found a main effect of topic in participants’ fixation to both target picture and competitor picture. Third, unpacking the interactions in ambiguous area showed that participants were more likely to fixate to the competitor picture in the topic/non-focus condition than the topic/focus condition.

Taken together, the results suggest that:

- (1) Topic can increase the accessibility of antecedents.
- (2) Topic competes with focus when the two presenting in the same context.
- (3) Topic exerts a prolonged effect on pronoun resolution.

Keywords: pronoun resolution; focus; topic; visual world eye-tracking experiment