Argument reduction and anaphora resolution: the case of xiang-verbs in Mandarin Chinese

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Abstract In this paper, I discuss argument reduction and anaphora resolution of xiang-verbs in Mandarin Chinese. When xiang is prefixed to a verbal stem, one of the arguments of the verbal stem is absorbed, xiang functions as an anaphor replacing the absorbed argument and hence requires an antecedent. I argue that the argument reduction of xiang-verbs depends on the Thematic Role Hierarchy (Bresnan and Kanerva, Language 70:72–131, 1989; Bresnan, Linguistic Inq 20(1):10–50, 1993): the second highest role on the argument structure of a verbal stem to which xiang is attached, is absorbed. For anaphora resolution, I propose a non-subject constraint, Available Candidates for xiang, which includes a principle utilizing attachment sites of Segmented Discourse Representation Theory (for short, SDRT) to determine a set of candidates for the antecedent to xiang a last resort to include the speaker and addressee(s) in the set when there is no available candidate, and a pragmatic principle to select the most fitting one from the set of candidates to be the antecedent to xiang. And, I propose an SDRT account for the phenomena observed. I also discuss the reciprocity of xiang-verbs and suggest that reciprocal xiang-verbs and non-reciprocal xiang-verbs have the same origin. Furthermore, I demonstrate that the SDRT account argued in this paper can be extended to zero anaphora resolution (with some modification) and is, at least to a certain degree, applicable to the resolution of the third person singular anaphor ta ‘he/she’.

Keywords Xiang-verbs · Argument reduction · Anaphora resolution
1 Introduction

In Mandarin Chinese (hereafter, Mandarin), there is one type of compound verb which attracts little attention, if any, i.e. xiang-verbs.¹ Xiang-verbs manifest two interesting phenomena: argument reduction and anaphora resolution.² When xiang is prefixed to a verbal stem to form a xiang-verb, such as xiangsong ‘to xiang-see off’, xiangzhu ‘to xiang-help’, xiangzeng ‘to xiang-give’, etc., xiang reduces the number of arguments of the verbal stem by absorbing one argument, and functions as an anaphor substituting for the absorbed argument and therefore requires an antecedent. See the examples below.

(1)  
\begin{align*}
\text{a. zhuming geshou}\, & \text{guoshi} \\
\text{famous singer pass away} & \text{‘A famous singer passed away.’}
\end{align*}
\begin{align*}
\text{b. zuotian juxing gaobieshi} \\
\text{yesterday hold memorial service} & \text{‘His memorial service was held yesterday.’}
\end{align*}
\begin{align*}
\text{c. guji yue you wu liu qian} \\
\text{estimate about there be five six thousand} & \text{‘It was estimated that about five or six thousand fans followed all the way and xiangi-see off.’}
\end{align*}

(2)  
\begin{align*}
\text{a. benshengren}\, & \text{shou pohai} \\
\text{locali undergo prosecution} & \text{‘Localsi underwent prosecution.’}
\end{align*}
\begin{align*}
\text{b. } & \text{Øi shang you qinyou xiangzhu (}*tamen) \\
\text{Øi still have relative xiangi-help (*they)} & \text{‘Theyi still had relatives to xiangi-help’}.
\end{align*}

(3)  
\begin{align*}
\text{wo you yi wu xiangzeng (}*yu ni) \\
\text{I have one thing xiang-give (}*to you) & \text{‘I have one thing to xiang-give (you).’}
\end{align*}

As we can see from the examples above, xiang absorbs one argument of the verb to which it is attached. In (1c), song ‘to see someone off’ is a transitive verb. When xiang is prefixed to it, it becomes intransitive and cannot take a direct object. The

¹ Xiang-verbs can have either a reciprocal meaning or a non-reciprocal meaning. The focus of this paper is on xiang-verbs with a non-reciprocal meaning. I discuss the reciprocity of xiang-verbs in Sect. 2.3. In this paper, when xiang-verbs are used without specifying whether the meaning is reciprocal or not, I refer to non-reciprocal xiang-verbs.
² In this paper, I adopt the definition of anaphora as in Huang (2007, p. 245): “Anaphora can in general be defined as a relation between two linguistic elements, in which the interpretation of one (called an anaphoric expression) is in some way determined by the interpretation of the other (called an antecedent).” Under this definition, anaphora includes reflexives, reciprocals, and pronouns. I use anaphor to refer to reflexives and reciprocals only when I discuss the Government and Binding theory.