THE THEMATIC HIERARCHY AND CAUSATIVITY*

Chinese resultative compounds provide evidence that the thematic hierarchy is not the only factor determining the link between theta roles and syntactic arguments. Rather, it interacts with the causative hierarchy and when in conflict, can be over-ridden by the latter. This "asymmetrical" interaction between the two factors is shown to be responsible for the complex and, in some cases, totally unexpected patterns of ambiguity that resultative compounds demonstrate in various syntactic contexts. To the extent that the presence/absence of the causative hierarchy can be accurately predicted and its interaction with the thematic hierarchy explicitly specified, this paper lends support to the multi-dimensional nature of human language.

0. Introduction

In the government-binding framework, it is often taken for granted that the linking between theta roles of a lexical item and syntactic argument positions is sufficiently constrained by the thematic hierarchy in which Agent, for instance, is more prominent than Theme. In this paper, I consider a violation of the thematic hierarchy, characteristically exhibited by resultative compounds in Chinese. I show that the complicated semantic and syntactic behaviors of these compounds are best explained if the thematic hierarchy can be violated, and that the condition for such violations can be precisely formulated. The basic data is given in section 1, followed by arguments against possible analyses in which syntactic movement is used to avoid a thematic hierarchy violation. My own analysis is presented and defended in section 2. In the last section, my analysis is briefly compared with Grimshaw’s (1990) theory of aspectuality.

1. Basic Data and Movement-Based Analyses

Chinese has a productive resultative V-V compound in which the first verbal morpheme refers to the causing event (hereafter referred to as

* The data as shown in (4) was brought to my attention by Bao Zhiming. I thank Jane Grimshaw for discussing the basic analysis with me at its beginning stage. Grimshaw (1990) has important influence on the ways in which my analysis is presented. This revised version benefits greatly from the detailed comments of three NLLT reviewers and Carol Georgopoulos. I am also grateful to Emily Huang, Teng Qiuyun, Wang Yuyan, and Xie Qing for providing judgments on the Chinese data.

Vcanaus) and the second refers to the resulting event (hence Vres). An example is given in (1):  

(1) Taotao zhui-lei-le Youyou le  
Taotao chase-tired-asp Youyou LE

a. Taotao chased Youyou and as a result Youyou got tired.  
b. Taotao chased Youyou and as a result Taotao got tired.

Li (1990a) argues that the ambiguity of (1) results from optionally identifying the single theta role of Vres lei ‘tired’ with either one of the two theta roles of Vcanaus zhui ‘chase’ and assigning the identified pair of theta roles to a single argument in the sentence. The two alternatives are represented in (2):  

(2a) V(1(2-a)) (yielding (1a))  
(2b) V(1-a(2)) (yielding (1b))

In (2a), the single theta role a of Vres is identified with the theta role 2 of Vcanaus and the identified pair 2-a is assigned to the object of the sentence, Youyou, as indicated by the two pairs of angled brackets surrounding them.

1 In this paper, asp stands for an aspect marker in Mandarin, and LE for the sentence-final particle that often occurs with declarative sentences about past events. The examples remain well formed without LE, though less natural as stand-alone sentences. For some native speakers, the reading in (1b) is harder to obtain than the one in (1a). However, the type of reading represented by (1b) can be made more salient with examples like (i):

(i) Taotao ting-fan-le neishou ger le  
Taotao listen-to-bored-asp that song LE

Taotao listened to that song (for so many times that he) got bored.

In this article, I will stick to examples like (1) both because many native speakers do get the ambiguity in (1a–b) and because it provides a minimal pair that helps simplify subsequent discussions. An early but extensive lexical analysis of the resultative compounds can be found in Thompson (1973).

2 I follow Li (1990a) in using “(...)” to indicate an argument structure. The theta roles of Vcanaus are represented as whole numbers 1, 2, . . . , and the theta roles of Vres are represented as English letters a, b, . . . . The natural sequence of these symbols carry no significance. “-” is used to indicate theta-identification, a thematic operation first proposed in Higginbotham (1985). Adapting Grimshaw’s (1990) notations to mine, I will surround the thematically most prominent theta role (or pair of theta roles) with one pair of angled brackets, the next prominent theta role with two pairs of angled brackets, etc.