MODALS IN MANDARIN CHINESE AND UNIVERSAL BASE HYPOTHESIS

BADAN Linda University of Padova, Italy linda.badan@unipd.it Cinque (1999) in his "Universal Base Hypothesis" claims that at the clausal level, all languages have the same fundamental hierarchical structure and that every projection in this hierarchy is necessarily associated with a precise semantic interpretation. I test Cinque's idea by examining modal projections distribution in Mandarin Chinese. I am able to define an order of its modals elements which is consistent with that independently argued for on the basis of Romance. Modals Mandarin Chinese Generative Syntax

1. Modals in Madarin Chinese and Universal Base Hypothesis

My investigation is based on the Chinese and Romance Syntax studies inside the framework of Generative Grammar principles, specifically inside the Governement and Binding Theory.

Along the basic lines of the "Cartographic project" (Cinque 1999, 2002; Rizzi 2004; Belletti 2004) I provide a preliminary study of the hierarchical structure of functional particles expressing modal meanings in Chinese.

Cinque (1999) in his "Universal Base Hypothesis" claims that at the clausal level, all languages have the same fundamental functional structure and that every projection in this hierarchy is associated with a precise semantic interpretation. One consequence of this hypothesis is that Tense, Modality and Aspectual projections are base-generated in the same order in all languages, as in (1):

 Mood Evaluative> Mood Evidentials> Mod Epistemic> Tense (Past)> Tense (Future)> Mood Irrealis> Deontic > Alethic necessity> Alethic Possibility> Root volition> Root obligation > Root ability/permission > ASP habitual> ASP perfect> ASP completive

In this work I apply Cinque's Hypothesis to the distribution of modal particles in Mandarin Chinese. I limit my investigation to modals indicating possibility and necessity.

I will claim that Chinese confirms Cinque's hypothesis.

A lot of research has been carried out on the definition of Chinese modals. They are commonly called "auxiliary verbs", because they share their main properties, but actually they also reveal many aspects that we find in Chinese adverbs.

First of all, on the basis of empirical tests, thanks to Chinese mother tongue speakers, I am able to identify their own syntactic behaviour that permits to define them as "functional elements": for example they cannot be reduplicated, they cannot appear directly on the left of Aspectual particles, they cannot be nominalized.

At first sight the Chinese language in many aspects does not seem to be coherent with the hierarchy proposed on the basis of Romance and other languages.

Then, as it has been done for Romance, on the basis of others empirical tests, I analyse the semantic distinctions between the different modal particles in Chinese. Even a single element can correspond to many different meanings and it is very difficult to make precise distinctions on the basis of their interpretation. Only few of them have only one specific modal meaning. So I formulate tests with

very precise contexts, to clarify the possible semantic interpretations of every modal element, eventually making a comparison with the modal verbs in English. For instance in (2) only the modal "keyi" (can) is possible in deontic context:

2) a. Mama, wo xiang dao muchang qu! *mum I think arrive prairie go* "Mum, I'd like to go to the prairie!" b. Ni keyi/*neng/*hui qu! *You can/ can/ can go* "You can go" (slightly modified example from Li, 2004)

Then I try to identify syntactically different Modal positions, following Cinque's Hierarchy, that correspond to different functional projections in a one-to-one relationship.

I test them in many possible positions inside a sentence with the appropriate context and in different orders with the principal verbs or other modals with which they can cooccur. I test their positions also in relation with many types of adverbs and with the Negation.

Example (3) and (4) shows that the correct order of the modal adverb Irrealis "yexu" (perhaps) and the two modals, the Deontic one "yinggai" (should) and the Root one "hui" (to be able to) is:

Modal Irrealis> Deontic> Root

3) Yexu ni yinggai hui shuo hanyu. Perhaps you should be able to speak Chinese Lett.: "Perhaps you should can speak Chinese"

The order: Deontic> Modal Irrealis>Root is ungrammatical:

4) *Ni yinggai yexu hui shuo hanyu. *You should perhaps be able to speak Chinese* Lett.: "You should perhaps can speak Chinese."

(5) and (6) show that the Root adverb "congming" (cleverly) has to precede the Alethic modal "dei" (to have to):

- 5) Ni shiba sui. Ni dei congming de kai che. (slightly modified example *you eighteen age you have to cleverly DE drive car* from Hsieh, 2005) "You are eighteen years old. You have to drive cleverly."
- 6) Ni shiba sui. Ni congming de dei kai che. You eighteen age you cleverly DE have to drive car

I also point out a case that seems to be in contrast with Universal Base Hypothesis predictions: where we expect modals in positions dominating VP (i.e. on the left of VP), a modal potential particle appears in post-verbal position. The same element (morphologically speaking) also can be on the left of the verb, without any problem for the hierarchy.

I will explain it by indipendent motivations, like verb head-movement and its direct consequences in Chinese syntax and relative open issues: is the verb movement optional? If it is optional, what is the rule for its "activation"? Are the elements appearing in post verbal position and the one in preverbal position really the same? Are they the same unity or do they constitute two different morphemes? If they are two separate particles, do they occupy two positions and the verb can move only with the presence of "lower" modals in the structure? Then, through my investigation, I am able to define an order of the modals elements of Chinese which is consistent with the hypothesis that was independently argued for on the basis of Romance.

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