Chapter Four

Conclusion

In the first part of this dissertation, I have shown that wh-questions must be properly typed, and the wh-clausal typing is constrained by the following condition:

(1) The Pure Clausal Typing Condition (PCTC)
   a. For wh-raising languages, a clause is typed as a wh-question iff there is a wh-word that moves overtly into [Spec, CP] via cyclic movement without crossing any strong island.
   b. For Q-particle languages, a clause is typed as a wh-question iff there is a wh-word interpreted with the closest C_{[+Q]} via either the Agree operation or the choice function application.

Besides, all wh-expressions must have an interpretation, and the wh-interpretation condition is given below:

(2) The Wh-Interpretation Condition
   A wh-expression must be properly interpreted, and it is properly interpreted if it is interpreted in syntax or semantics.

Wh-interpretations in syntax or semantics are defined below:
(3) Wh-Interpretation in Syntax
A wh-word can be directly interpreted in syntax iff it matches with C via the Agree operation.

(4) Wh-Interpretation in Semantics
A wh-word is interpreted in semantics if it is interpreted via the choice function application or in the pair-list reading.

The following is the definition of the Agree operation:

(5) The Agree Operation
A probe can enter into the Agree operation with a goal via Spec-head agreement in either syntax or LF iff the following two conditions are met:

a. The probe and the goal are the closest to each other before the application of the Agree operation.

b. The goal is not contained in an island.

The conditions on the choice function application and the pair-list reading are given below:

(6) The Condition on the Choice Function Application
A wh-expression can be interpreted via the choice function if it can range over a set of elements that can be individuated.

(7) The Condition on the Pair-List Reading
B can be interpreted with A in the pair-list reading if (i) A can function as a set generator, and (ii) B can be paired with the members of the set generated by A.

The following is the condition on set generators:

(8) The Condition on Set Generators
A is a set generator for B if (i) A precedes B and is more prominent than B or (ii) A is an inherently D-linked wh-phrase that c-commands the trace of B.

Prominence is defined below:

(9) The Prominence Hierarchy
a. Subject > Non-Subject
b. Argument > Non-Argument
c. Lexical Element > Functional Element
d. D-Linked > Non-D-Linked

Since wh-expressions can be interpreted by different applications in syntax and semantics, there should be a principle that regulates the preference of their application. This is the principle of economy, which is given below:

(10) The Principle of Economy (PE)
Choose the most economical operation whenever possible unless it is intended to cancel the interpretation associated with it.
a. Syntactic Interpretation > Semantic Interpretation
b. Default Interpretation > Non-Default Interpretation

(where A > B means that A is more economical than B)

Now, we can see that the derivation and interpretation of wh-questions are constrained by PCTC, the Wh-Interpretation Condition, and PE. PCTC is a pure locality condition, whereas the Wh-Interpretation Condition and PE show the interaction between prominence and locality.

In the second part of the dissertation, I use the following features to characterize the properties of anaphoric expressions in Chinese.

(11) The Characterization of Chinese Anaphoric Expressions

A.

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<tr>
<td>controlled Pro</td>
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<td>ziji</td>
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<tr>
<td>pronoun+ziji</td>
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<td>ziji-benshen</td>
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I claim that the binding of the compound reflexive and the bare one is constrained by the same condition, as given below:

(12) Reflexive Binding Condition (RBC)

- A reflexive can be bound to an accessible prominent NP in its binding domain.
- The binding domain of the reflexive is the minimal complete functional complex (CFC) that contains all the members of the candidate set and the reflexive.
- A binds B iff A is co-indexed with B, and A and B are compatible in phi-features.
- A is accessible to B iff the assignment of the index of A to B would not violate *[γ…δ…], where γ and δ bear the same index.
The difference between the compound reflexive and the bare one with respect to binding lies in the fact that they have different definitions of the most prominent NP, and it is the most prominent NP that determines the size of their candidate sets, which, in turn, determines the size of their binding domains. Since the compound reflexive lacks only the referential feature, the most prominent NP for it is determined by following hierarchies:

(13) The Empathy Hierarchy (EH)

   The Subject of the Inherent Empathy Verb > Other Subjects

(14) The Animacy Hierarchy (AH) (Chou 1992)

   [+Human] > [+Animate, -Human] > [-Animate]

(15) The Syntactic Prominence Hierarchy (SPH)

   a. The Grammatical Function Hierarchy (GFH)

      Subject/NP-in-Subject > Obj (Indirect-Object > Direct-Object)

      > Adjunct

   b. The Structural Hierarchy (SH)

      C-Commander > Sub-Commander > Non-C/Sub-Commander

(16) The Closeness Hierarchy (CH)

   [+Closer] > [-Closer]

Since we have several hierarchies, one important thing is how to apply these hierarchies to compute the prominence of NPs and determine the binding of reflexives. I think that the application of these hierarchies will be regulated by something like the ordering of rules in early generative grammar or the ranking of the relevant constraints.
in the Optimality Theory. The basic idea is that some of the hierarchies should be ranked higher than others in the computation of the prominence of NPs. I propose that the relevant hierarchies can be ranked below:

(17) The Prominence Ranking (PR)

EH > AH > GFH > CH > SH

I further propose that the computing of the prominence of the relevant NPs in PR is regulated by the following algorithm.

(18) The Prominence Computing Algorithm (PCA)

If A appears higher than B in a higher hierarchy in PR, A is more prominent than B.

I assume that the binding domain is determined by the most prominent NP chosen by the feature-searching engines. Since the compound reflexive lacks only the reference, its binding domain is defined by the most prominent NP chosen by the R-engine (referential feature engine) in PR according to PCA. The bare reflexive, different from the compound reflexive, lacks both the referential feature and the phi-feature. Hence, besides PR, it needs another prominence hierarchy, as given in (19), to determine the prominent NP for it.

(19) The Person Hierarchy (PH)

First/Second Person Pronoun> Third Person NP
Under the present analysis, the most prominent NP for *ziji* is determined not only by the R-engine, but also by the P-engine (phi-feature engine). And it is the union of the sets related to the two prominent NPs chosen by the two engines that determines the binding domain for *ziji*. When the binding domain for *ziji* is defined, it cannot be bound outside of it. Notice that under the present analysis, the blocking effect is derived from the prominence condition, which is not a pure syntactic constraint. Hence, what the present analysis derives is only a preferred reading.

In this work, I have shown that prominence and locality are the two important factors in the grammar of natural language, which are often interrelated and interact with each other to determine the relevant linguistic derivation and interpretation. Although linguistic derivation and interpretation are generally constrained by prominence and locality, the relevant prominence condition and locality condition may act on the derivation and interpretation of different linguistic structures differently. It can be seen from this work that the derivation and interpretation of wh-questions are constrained more by locality, whereas the interpretation of reflexives in Chinese is constrained more by prominence. In wh-interpretation, prominence is used to define set generators so as to license other wh-words in the pair-list reading in multiple wh-questions. In reflexive binding, prominence is used to define the binding domain of the reflexive. Although both wh-interpretation and reflexive binding employ the notions of prominence and locality, these two notions are defined differently in these two areas of study. One may ask if there is some universal definition of prominence and locality. It seems that if locality is viewed in terms of closeness, it can be defined universally. If it is viewed in terms of the local domain, it may be difficult for it to have a universal
definition. Compared with locality, prominence is more flexible since it is even
difficult to achieve a unified definition of prominence for different linguistic structures
in the same language, not to say to have a universal definition of prominence for
linguistic structures across languages. If we probe into the nature of prominence and
locality, we can see why they exhibit different properties in their definition. Locality is
basically a pure syntactic constraint, whereas prominence is not a pure syntactic
constraint since it incorporates not only pure syntactic factors like c-command, but
also pure semantic factors like animacy. If all languages were constrained by the same
set of syntactic conditions and the parametric variation among languages could be
derived only from pure syntactic factors, the task of finding linguistic universals would
become easy. However, the reality is not that ideal since what is constrained by pure
syntactic factors in one language may be constrained by the combination of syntactic
and semantic factors in another language. The definition of prominence in reflexive
binding is such an example.