An Economic Perspective on Long-distance Binding

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I. LDR UNDER PERSPECTIVALS. Starting from a new puzzle about the distribution of long-distance reflexives in purpose clauses, this paper argues that Chinese LDR is subject to binding economy (Heim 1993, Fox 2000). The binding possibilities of *ziji* ‘self’ within a purpose clause are sensitive to two factors: a) the person features of the binder; b) whether the purpose clause is marked with the directionals *lai* ‘come’ or *qu* ‘go.’ When the purpose clause is not marked by a directional, LDR is always possible (modulo the blocking effect); however, with directional marking, LDR is only possible if the antecedent is third person and the directional is *lai* ‘come’ (1).

We argue that *lai* and *qu* may signal point-of-view (POV) more generally, and that the pattern in (1) arises from two factors of these POV markers: a) the obligatory de re reading of elements under POV-*qu* and b) hidden point of view variables in POV-*lai* and POV-*qu*, which enter in binding competition with long-distance antecedents.

II. AFFECTIVE *LAI/QU*. While *lai* ‘come’ and *qu* ‘go’ are most commonly used as directionals tied to the pivot discourse function of Sells (1987), they can signal point of view more generally than Sells’ narrow physical deixis (Zhu 1984): both can be used as post verbal modifiers of purpose clauses (cf. Zhang 2001), in which case they have two important influences on interpretation. First, they both give rise to implications about the affectedness of a speech act participant (SAP) (2). With *lai* the implication is that the relevant entity is bene/malefactively affected by the event asserted, while *qu* implicates that she is not affected by the event. The use of *lai* also forces an anaphor to be read de se (3a), while use of *qu* prevents a de se reading (3b) (these are diagnosed by usual tests of de se attitudes). Qu’s de re effect rules out long-distance *ziji*, which is obligatorily read de se (Pan 1997).

III. THE SYNTACTIC SOURCE OF AFFECTEDNESS. The affected party for *lai*/*qu* need not be a SAP. In (4), John can serve as the affected party of the hitting event, but only if *ziji* is not bound by John. That is, the affectee argument of *lai*/*qu* and *ziji* cannot be co-referent (5).

We propose that this state of affairs results from the economy condition Rule H (6). If the hidden variable of *lai* is bound by *John*, then there are two possible antecedents for *ziji* that yield identical interpretations: *John* (non-local binding) and *lai*’s covert variable (local binding). In such a situation, Rule H rules out non-local binding. However, local-binding is independently ungrammatical, since *lai*’s covert variable is not a subject and *ziji* is subject-oriented. Under this model, the role of the subject-orientation constraint is to filter the output of Rule H, precisely the role of Condition B in Heim (1993).

IV. PERSPECTIVAL CENTERING. Given that the affectee of *lai*/*qu* may be a SAP, why is [1/2...lai...ziji] bad, rather than just having the opposite SAP of the *ziji* antecedent as the affectee? We claim that indexically-dependent readings of affectedness are also instances of binding, in this case by a covert, referentially-denoting point-of-view head, the P(erspectival)-CENTER, located high in the left periphery (cf. Cinque 1999, Tenny & Speas 2003). The P-CENTER’s referential value is dependent on both discourse and syntax (7): crucially, a matrix SAP forces the P-CENTER to be that SAP, forcing [1/2...lai...ziji] to have only the binding possibility [1/2,...lai,...ziji], which is ruled out by Rule H as above.

V. FURTHER IMPLICATIONS. Our economy-based account predicts that, in general, LD-binding of *ziji* should be impossible in configurations where there is a non-subject intervener. This appears to be correct (8). Interestingly, the so-called logophoric/discourse-dependent/1st person *ziji* is also blocked by a non-subject c-commanding antecedent (9), suggesting that discourse dependent *ziji* may be unified with traditional LDR via P-CENTER binding, and hence is also governed by Rule H. Finally, we note that although POV-*lai*/*qu* headed clauses do not show independent temporal properties (and hence seem to be serial verbs), POV-*lai*/*qu* are compatible with short-distance *ziji* (10), suggesting that these clauses are larger than they appear on first blush, and, in particular, that they are large enough to contain a controllable external argument, if not a full-fledged verbal projection.
(1) DP, renwei J. yao yong yizi [X da ziji]  
   DP think J. want use chair [X hit self]  
   DP = {I, you, he}        X={come, go}  
   ‘DP thinks J. wants to use a chair to hit self.’

(2) a. Bill yong yizi lai da John de tu  
   B. use chair come hit John DE pic.  
   ‘B. used a chair to hit a picture of J. (affects me)’
   b. Bill yong yizi qu da John de tu  
   B. use chair go hit John DE pic.  
   ‘B. used a chair to hit a statue of J. (~affect me).’

(3) a. Bill yao yong yizi lai da ziji  
   Bill want use chair come hit self  
   ‘B. wants to hit himself with a chair (de se).’
   b. Bill yao yong yizi qu da ziji  
   Bill want use chair go hit self  
   ‘B. wants to hit himself with a chair (de re).’

(4) John zhidao Bill yao yong yizi lai da ziji de tiaoxiang  
   John know Bill want use chair come hit self DE statue  
   a. ‘John knows Bill wants to use a chair to hit a statue of Bill (which affects John).’
   b. ‘John knows Bill wants to use a chair to hit a statue of John (which affects me).’
   c. ‘*John knows Bill wants to use a chair to hit a statue of John (which affects John).’
   d. ‘*John knows Bill wants to use a chair to hit a statue of Bill (which affects Bill).’

(5) **Disjoint Binding Condition:** perspectival directionals and ziji cannot be co-bound.
   a. [John [Bill lai ziji]]  
   b. [SAP [John [Bill lai ziji]]]  
   c. *[John [Bill lai ziji]]

(6) **Rule H:** A variable, x, cannot be bound by an antecedent, α, in cases where a more local antecedent, β, could bind x and yield the same semantic interpretation (Fox 2000)
   a. *[John [Bill lai ziji]]  
   b. [John [Bill lai ziji]] as \( \{6a\} = \{6b\}\), *(6b).

(7) **P-Center Discourse Principles:**
   a. In unmarked contexts, P-CENTER is speaker.
   b. When a SAP is the matrix subject, the P-CENTER is that SAP.

(8) a. John, renwei Bill, gei ta, ziji, de shu  
   John think Bill give he DE book  
   ‘John thinks Bill gives him a book.’
   b. John, renwei Bill, gei ta, DE mamaziji, de shu shu  
   John think Bill give he DE mother self DE book  
   ‘John thinks Bill gives his mother a book.’

(9) a. Bill, gei wo, ziji, de shu  
   Bill give I self DE book  
   ‘Bill gives me a book.’
   b. Bill, gei wo, DE mama ziji, de shu shu  
   Bill give I DE mother self DE book  
   ‘Bill gives his mother a book.’

(10) wo na yizhi lai da ziji de tiaoxiang  
     I take chair come hit self DE statue  
     ‘I used a chair to hit my statue (near here).’

**REFERENCES**