Derivationally Bound Pronouns at the C-/I-Interface

In recent work on Binding Theory, several authors have argued that Condition A has to be stated derivationally as in (1) (see Belletti und Rizzi 1988; Lebeaux 1991; Epstein et al. 1998, Epstein and Seely 2006, among many others). The idea is that an anaphor (or a reciprocal expression) that is A-bound at one step of the derivation (within a local domain D) satisfies Condition A of the Binding Theory during the whole derivation. Binding Conditions impose opposing requirements on anaphors and pronouns. The domain within which Condition A requires that anaphors are bound, Condition B requires that pronouns are free. If Condition A is stated as a derivational condition, the question arises whether Condition B can be likewise stated in derivational terms. Different proposals have been made concerning the application of disjoint interpretative procedures, as found with Condition B/C (Lebeaux 1995, Epstein et al. 1998). Epstein et al. (1998), for example, claim that Condition B applies at every step of the derivation. In this talk, I develop a new and more fine-grained approach, arguing that a pronoun can violate Condition B at early stages of a derivation but that as soon as its uninterpretable formal features ([u]-F) are erased (valued) it has to fulfill Condition B at every point of the derivation (see (2)). It is argued that (2) follows from the fact that Condition B operates at the LF- or C-/I-Interface for generating a wellformed semantic representation (see also Chomsky 1995). Given that pronouns containing [u]-F do not fulfill the necessary C-/I-interf ace legibility condition, they are inaccessible for binding theoretic computations within the derivation. A pronouns’ structural context becomes relevant for binding theoretic computations at the C-I interface at the moment when the pronoun has checked/value its [u]-F.

Consider first example (3b) with the pronoun *him* that has its [u] Case features checked in its base position when it has been merged with *to*. At this point of the derivation (in its base position (cf. (3a))), it fulfills Condition B, but it violates Condition B after NP-movement of *he*, as shown in (3b). (3b) is ungrammatical because *him*, after it has its [u]-F checked, does not fulfill Condition B at every later point of the derivation. Example (3c) suggests that the ungrammaticality of (3b) is not due to reconstruction or to an intermediate movement step of the pronoun *he* into the position *t’* (see also (4)). (3b) is compatible with an analysis according to which disjoint interpretative procedures occur at every point of the derivation (Lebeaux 1995, Epstein et al. 1998, Epstein and Seely 2006). Given that the pronoun is bound in its domain at one step of the derivation the derivation is cancelled.

However, it is inadequate to conclude from (3b), that a pronoun violates Condition B if it is bound in its local domain at any step of the derivation. Before the pronouns move to the subject position in (4)-(6), they violate Condition B at one step of the derivation, i.e. in the embedded Spec TP in (4) and in the base position in (5), (6) offers both possibilities. Given the grammaticality of (4)-(6), it is obvious that a pronoun may be bound in its local binding domain at one step of the derivation without leading to a violation of Condition B. Based on (2) and on standard assumptions about feature checking, the difference between (4)-(6) and (3b) can be explained as follows. In (4)-(6), at the step of the derivation when the pronoun is bound in the relevant local domain it does not yet have its [u]-F checked. Being equipped with an [u] Case feature, the pronoun is not visible to interpretative procedures (Condition B) that apply at the C-/I-Interface. It becomes visible when its [u]-F are deleted, i.e. when it occupies the (matrix) Spec TP position. At this derivational step it fulfills Condition B. Therefore, (4), (5b), and (6b) are grammatical. In (3b) the pronouns’ [u]-F is deleted at the step of the derivation before the pronoun is bound in its local domain. The pronoun, being visible to interpretative procedures, violates Condition B after movement of the antecedent to the root TP takes place. (2) correctly predicts the difference between (3b) and (4)-(6). Other paradigmatic examples show that (2) makes correct predictions. In (7) we have the case of a pronoun that has its [u] Case feature checked and violates (2) as a consequence of an intermediate movement step of its binder. At the step of the derivation when the antecedent is located in *t’* the pronoun has already checked its [u]-F, being visible for Condition B at this moment, i.e. when it is too close to its binder. This example is problematic for analyses which assume that intermediate A-movement steps are impossible (as, for example, Epstein and Seely 2006). The proposed analysis of (7) gains independent support from the fact that coreference between the pronoun in the intermediate clause and an antecedent in the matrix clause is possible (but perhaps more difficult to interpret in (8) vs. (9) due to multiple raising). We cannot ascribe the impossibility of pronounal coreference in (7) to the fact that a Condition C violation arises at one step of the derivation because this would incorrectly rule out the derivation of (7) with anaphoric binding. Furthermore, (2) correctly predicts that ungrammaticality results for a pronoun that fulfills Condition B in its base position and is moved to an EPP- (Case) checking-position in which it is bound in its local domain, as illustrated in (10a). As shown in (10b), if the pronoun is substituted by an anaphor the derivation leads to a grammatical result. This is expected according to (1).

The asymmetry between (1) and (2) follows from the varying role of [u]-F. [u]-F play an interpretative role in connection with Condition A. Reuland (2005) argues for this on the basis of examples from Icelandic showing that a bindee (anaphor) is probed by T in sentences where the antecedent does not c-command the anaphoric element. Additional evidence comes from German impersonal passive constructions (see (11)). Reflexives and reciprocals are licensed without an overt antecedent DP, arguably the binder are the uninterpretable φ-features on T. [u]-F may play an interpretative role in connection with Condition A because reflexives are "φ-underspecified" (see Haegeman 2002, Reuland 2005, among many others). [u]-Features, due to this exceptional situation, provide some interpretative support for the reflexives. Pronouns are not underspecified. For interpretation, they are incompatible with [u]-F, as I have demonstrated. Finally, the relation between Condition B and C will be addressed. (2) follows from the fact that Condition B operates at the LF- or C-/I-Interface and that pronouns containing [u]-F do not fulfill the necessary C-/I-interface legibility condition. I show that R-expressions behave differently, because they are often subject to additional semantic/pragmatic constraints (see (12)).
Derivational Condition A
Condition A of the Binding Theory can be fulfilled at any stage of the derivation.

Derivational Condition B
A pronoun that has its uninterpretable feature checked (is visible to interpretative procedures at the C-I Interface and) has to fulfill Condition B at every point of the derivation.

(3) a. It seems to him [that it is likely [that he, will loose]].
   b. * Hei seems to himi [t’ to be likely [i to loose i]].
   c. John’s mother seems to himi [t’ to be likely [i to loose i]].

(4) Hei seems to himselfi [t’ to be i intelligent].
   (compare: *It seems to John, he, is intelligent)

(5) a. [pleased hei] himselfi,
   b. Hei [pleased t] himselfi,

(6) a. were considered by each otheri [theyi (to be i intelligent)].
   b. Theyi were considered by each otheri [i (to be i intelligenti)].
   (compare: Theyi, consider *themi/each otheri (to be i intelligenti))

(7) a. Johni, seems [i’ to appear to *himi (himselfi) [t’ to be i intelligenti]].
   b. Maryi, seems to Johni [i’ to appear to *heri (herselfi) [i’ to be i pregnanti]].

(8) Mary seems to Johni, to appear to him,/*himselfi, to be pregnant.

(9) It seems to Johni, to appear to himi/?? himselfi, that Mary is pregnant.

(10) a. * Maryi, expected [heri, to seem to Johni [i’ to be i pregnanti]].
    b. Maryi, expected [herselfi, to seem to Johni [i’ to be i pregnanti]].

(11) a. weil [VP sich gewaschen] [T wurde]
    since REFL washed was
   b. weil [VP einander angelogen] [T wurde]
    since each-other lied at was

(12) Clinton/Shei votes for Clintoni.

References