

**2. Binding theory and *wh*-movement.** (Inspired by a problem from Roberts 1997). Under certain circumstances, anaphors can be bound inside DPs. So, (1) is grammatical.

(1) John<sub>i</sub> likes [DP songs about himself<sub>i</sub> ].

**Part A.** Draw a tree for (2) (same ground rules as in problem #1).

(2) Who did Mary give a song about herself to?

**Part B.** Draw a tree for (3).

(3) [DP which song about himself<sub>i</sub> ] does John<sub>i</sub> like?

**Part C.** (3) is grammatical, so it must satisfy Principle A. It doesn't *look* like it does, though. Assume Principle A is correct as it is (anaphors must be bound within their binding domain). Briefly explain how (3) satisfies Principle A. *Hint:* Think about what we write as “<DP>”—that's just a shorthand, really. “Movement” is a process of making a copy of the thing we're moving and then Merging/Adjoining the copy at the top. You can assume that when you make a copy of an anaphor, only one of the copies needs to be bound.

**Part D.** Briefly explain why *she* in (4) cannot be *Mary*.

(4) \* [DP which song about Mary<sub>i</sub> ] does she<sub>i</sub> like?

**Part E. What is the binding domain for Principle A? (Is it TP or CP?)** We've not so far been very explicit about what the binding domain (for Principles A and B) is exactly—it's just been “the clause.” That could mean either TP or CP. But, we're in a position now to make this determination. Consider (5), where *himself* can refer either to *David* or to *Nigel*. This is predicted, but it also indicates that an anaphor like *himself* need not be bound by the closest possible binder—it just has to be something within the binding domain. Both *David* and *Nigel* are inside the binding domain.

(5) David<sub>i</sub> gave Nigel<sub>j</sub> a picture of himself<sub>i/j</sub>.

Now consider (6)—in (6), *himself* can be *Derek*, but it can't be *David*.

(6) David<sub>i</sub> believes Derek<sub>j</sub> to have taken a picture of himself<sub>j/\*i</sub>.

So, here's the question: **What is the binding domain for Principle A (TP or CP)?**

**Part F.** Go back to Part C and remind yourself about what you said. Then, consider (7).  
**Draw a tree for (7).**

(7) [<sub>DP</sub> which songs about himself<sub>i/j</sub> ] did Nigel<sub>i</sub> say that Derek<sub>j</sub> likes?

**Part G.** Explain how it is possible in (7) for *himself* to refer to *Nigel*, and how it is possible for *himself* to refer to *Derek*.

**Part H.** (Inspired partly by Adger 2003, ex. 9.6.). **What seems to be the problem with (8)?** There's no easy solution to this problem, the traditional solution has been to slightly complicate the definition of "binding domain." More recent solutions often involve altering the means by which accusative case is checked. For now, you just need to **identify what it is about (8) that would have led us to predict that is should be ungrammatical.**

(8) Derek believes himself to have the role of lukewarm water.

**Problem 2. Island identification.** Each of the following sentences is ungrammatical, because a *wh*-word has been moved out of an island. Name the islands that the *wh*-word was "trying" to escape.

- (9) \* What did John buy a hat because Mary bought?
- (10) \* What did John know who asked Mary to buy?
- (11) \* Who did John read the first book by?
- (12) \* Who did John wonder why Mary dated?
- (13) \* Which books did John misplace the box of?
- (14) \* Who did John laugh after he gave a book to?
- (15) \* What did John know who started the rumor about?