Explaining backwards association with even

English VP-even can associate with material outside of its scope:

1. A [professor] will come to the party. (based on Jackendoff 1972)
2. [John], they even consider ___ intelligent. (Kayne 1998, p. 75)

When even associates with a constituent outside of its surface scope, it is actually associating with a lower copy of the focused constituent, within the scope of even.

Support from a raising (seem) vs control (want) contrast:

3. A [professor] (seems *wants) to even be at the party.

Nakanishi’s Scope Theory account for (9) predicts that even can associate with any subpart of the DP. In contrast, my account predicts only association with the head noun to be possible, not the relative clause which is late-merged (Fox, 2002).

The Copy Theory proposal here defuses Nakanishi’s (2012) argument. A copy of the focused box will be in the surface scope of even in (9), while resolving the ACD as intended.

Scope Theory doesn’t explain backwards association

We might imagine the Scope Theory (5a) would be useful for backwards association with even, but it would overgenerate.

6. No student (seems / wants) to even read [Aspects].

The Scope Theory predicts the focus student to be in the scope of even at LF, and predicts no raising vs control contrast in (3) or (7).

Computing even in example (1):

I adopt the Copy Theory of movement, with F-marking subject to copying. At LF, the lower copy is interpreted as a definite description bound variable following Trace Conversion (4b).

4. a. Syntax: [A [professor]] will even [a [professor]] come to the party.
   b. LF: [A [professor]] λx Fut even [the [professor] x comes...]
   c. even ~ GENERIC x ([the professor x comes...])<likely>
   d. ~ GENERIC x ([x is a professor and comes...])<likely>
   (x is a student and comes...)<likely>

The scalar inference of even is computed in its pronounced position (4c). The complement of even contains a variable; the scalar inference of even will project with using generic quantification over its domain (4c). Local Accommodation makes the contents of definite descriptions count towards likelihood orderings (4d).

Background: even in DE contexts

The scalar inference of even is reversed in downward-entailing (DE) contexts. Two dominant approaches:

5. a. The Scope Theory: Even takes scope outside of the DE operator at LF (Karttunen and Peters, 1979; Wilkinson, 1996; Nakanishi, 2012, a.o.)
   b. Lexical ambiguity theory:
      There are PPI and NPI events which introduce reverse scalar inferences (Rooth, 1985), and are lexically distinguished in some languages.

Even, ACD, and the Scope Theory

Nakanishi (2012) presents an argument for the Scope Theory from Antecedent-Contained Deletion. Different ellipses in (8) require QR of the DP to different heights (Sag 1976, Fox 2002):

8. Bill [VP] failed to [VP] lift [x the box that Mary did ∆].
   a. ∆ = “fail to lift” Bill failed to lift [x the box [ant that Mary did ∆]]
   b. ∆ = “fail to lift” Bill PAST lift [ant] fail to lift x [x the box [ant that Mary did ∆]]

Nakanishi’s argument:

9. Mary tried to lift the piano, the desk, and the box, but couldn’t lift any of them. Bill said that he can lift all of them. However, he has failed to lift the piano that Mary has failed to lift, and has also failed to lift the desk that she has failed to lift. Moreover, he has failed to even lift [x the [box]x that she has ∆]. (Nakanishi 2012: p. 127)

Nakanishi’s argument goes as follows:

(a) the intended ∆ = “failed to (even) lift” reading requires QR of the DP to a position above fail;
(b) the focus will then be out of the scope of even (assuming movement leaves traces, not copies);
(c) even then must covertly scope above fail (Scope Theory).

The contrast between (11) and (12) is unexpected by Nakanishi’s account.