Double modals in Southern United States English: A Tree Adjoining Grammar approach

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This work addresses the syntactic structure of Southern United States English double modals in a Tree Adjoining Grammar (TAG) framework (Frank 2002). Previous analyses have taken a generativist approach (e.g. di Paolo 1989; Battistella 1995; Nagle 2003; Hasty 2012) but have been unable to fully explain the distribution of double modals in this dialect with respect to tense-mixing, quantifier stranding, question formation, and combinations with other auxiliaries and modals. A TAG-based analysis, in which higher modals head auxiliary trees, is shown to provide a cohesive description of these phenomena.

In Southern United States English, double modals permit morphologically tense-mixed combinations (1a) and intermediate quantifier stranding (1b); they pattern distinctly in polar questions, where the second (and optionally the first) modal is preposed (1c–e); a perfect auxiliary may appear between the modals (1f); finally, more complex combinations of modals are possible (1g).

(1) a. If you like it, I might can sell it. (Mishoe & Montgomery 1994:14)
　　b. We might all could go to the store. (Hasty 2012:1728)
　　c. Could$_i$ you might t_i possibly use a teller machine? (Nagle 2003:351)
　　d. *Might$_i$ you t_i could possibly use a teller machine? (ibid.)
　　e. Might can you do this later? (ibid.)
　　f. He might have could done it. (Nagle 2003:352)
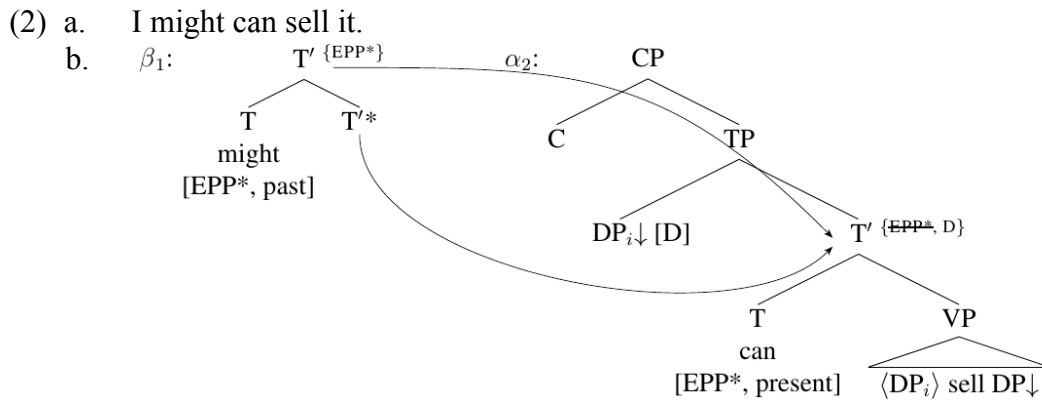　　g. [...Y]ou may might can get one right over [there]. (Mishoe & Montgomery 1994:9)

Hasty's (2012) generativist analysis of Southern United States English double modals descriptively improves on previous proposals (2012:1724) yet cannot explain the full range of data in (1). In Hasty's merged MP analysis, the first modal heads an MP above TP. This modal lacks syntactic tense, and so Hasty predicts mismatches such as that of morphologically past-tense *might* and present-tense *can* in (1a). As M hosts an [EPP*] feature, the subject raises to [Spec, MP], and *all* may be stranded between the modals in [Spec, TP] in (1b). In questions, C probes its complement for a tense-valued element to raise, so the second modal undergoes T-to-C inversion in (1c). As the first modal lacks tense, it cannot be selected for inversion in (1d). Nevertheless, Hasty cannot account for the optional raising of this tenseless modal in (1e), the position of perfect *have* above T in (1f), or the addition of a third modal in (1g).

This work develops a novel analysis of Southern United States English double modals in a TAG framework. High modals are construed as auxiliary trees recursive on T′; the structural properties of these trees are shown to explain the data in (1).

In a TAG-based framework, grammatical dependencies, including agreement and Move operations, may only obtain between nodes base-generated in the same elementary tree (Frank 2002:37). Since high modals do not participate in tense agreement (1a) or T-to-C movement
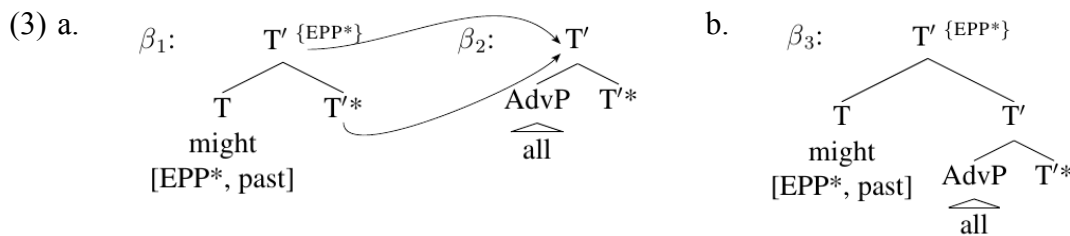
(1d), they can be analysed as belonging to separate elementary trees, auxiliary trees (Frank 2002:63), which may Adjoin to a main clausal elementary tree.

A declarative clause such as (2a) is then derived as in (2b): β_1 Adjoins at T′ in α_2, and the unchecked [EPP*] in the top feature set of β_1's root combines with the top feature set of α_2's T′, where it checks against [D]. After Substitution of the subject and object DPs, no uninterpretable features remain unchecked, and so the derivation converges.

(2) a.   I might can sell it.
     b. β_1:   T′ {EPP*} α_2:   CP

                    T   T′*   C   TP

                 might

              [EPP*, past]

                                                    DP_i↓ [D]   T′ {EPP*, D}

                                                              T   VP

                                                           can $\langle DP_i \rangle$ sell DP↓

                                                      [EPP*, present]

This analysis explains the tense-mixing of modals in (1a): since *might* and *can* are in distinct elementary trees, local agreement dependencies do not apply.

Quantifier stranding in (1b) is explained if *all* is an adverbial (Bobaljik 1995:194). In TAG, adverbial *all* may be construed as an auxiliary tree recursive on T′. Then *might* Adjoins to the root of *all*, as outlined in (3a), and the resultant tree, shown in (3b), Adjoins to T′ in the clausal tree.

(3) a. β_1:   T′ {EPP*} β_2:   T′   b. β_3:   T′ {EPP*}

                  T   T′*   AdvP   T′*   T   T′

               might   all   might   AdvP   T′*

            [EPP*, past]   [EPP*, past]   all

In questions, since Move only applies within a single elementary tree, *could*, not *might*, must raise to C, as in (1c–e). Yet given an alternative auxiliary tree recursive on C′, *might* may Adjoin at C′ in (1e). Note that this alternative may only Adjoin in questions, where a DP in [Spec, CP] can check *might*'s [EPP*]. The position of *have* in (1f) is explained if *have*, like *all* in (3a), may form an auxiliary tree recursive on T′. Then *might* Adjoins to the root of *have*, and the resultant tree Adjoins to the clausal tree. Finally, recursively Adjoining auxiliary trees for *may* and *might* yields the triple modal in (1g). Recall that (1e–g) remain unexplained in Hasty 2012.

In conclusion, previous generative approaches (e.g. Hasty 2012) have been shown to be insufficient to explain Southern United States English double modal constructions. By contrast, a TAG-based account using auxiliary trees presents a thorough analysis of the observed data.

Selected References

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