# Max Elide and Derivational Economy

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The purpose of this study is to propose a novel account of the Max Elide paradigms exemplified in (1) in terms of derivational economy.

(1) a.  They studied a Balkan language, but I don't know which Balkan language they studied.

 b.  They studied a Balkan language, but I don't know which Balkan language.

 c. ?? They studied a Balkan language, but I don't know which Balkan language they did.

In contrast with the non-elided wh-question in (1a) and its sluicing counterpart in (1b), its VP-ellipsis counterpart in (1c) is degraded. To capture this fact, the Max Elide condition, defined in (2), has been proposed in the literature (Merchant (2008)).

(2)  Elide the biggest deletable constituent if EC contains an A'-trace.

Although the Max Elide condition is descriptively adequate, it is just a generalization. Thus, the condition should be deduced from a general principle.

This study presents a novel account of the Max Elide paradigms in terms of derivational economy. We adopt the movement theory proposed by Agabayni (2000), according to which overt movement consists of two sub-operations: feature movement and category movement. Thus, wh-movement in (3) is analyzed as in (4).

(3)  I can't imagine what she is reading.

(4)  a. [$_{TP}$ she's reading what]

 b. [$_{CP}$ *wh* [$_{C'}$ *Q* [$_{TP}$ she's reading what]]]: *Feature Movement*

 c. [$_{CP}$ what$_i$ [$_{CP}$ *wh* [$_{C'}$ *Q* [$_{TP}$ she's reading $t_i$]]]]: *Category Movement*

The initial step involves feature movement of the wh-feature. The second step, category movement, is triggered by a PF adjacency condition, which requires that a moved feature and its category should be phonetically adjacent to each other. One consequence of this theory is that when the PF condition is satisfied directly after feature movement, category movement does not apply. Local movement of a subject wh-phrase as in (5) is such a case.

(5)  Who will come?

(6)  a. [$_{TP}$ who will come]

 b. [$_{CP}$ *wh* [$_{C'}$ *Q* [$_{TP}$ who will come]]]: *Feature Movement*

Since no overt elements intervene between the moved wh-feature and its remnant category in (6), category movement is unnecessary and must be banned by the economy principle that precludes superfluous steps.

Adopting this movement theory, this study recaptures the Max Elide paradigms in terms of derivational economy. The main claim is that since such an example of VP-ellipsis as in (1c) involves more derivational steps than those of a non-elided wh-question and sluicing, the former

is excluded by the same economy principle that bans category movement in (6). With this in mind, let us consider the examples in (1). They are analyzed as in (7), (8) and (9), respectively.

(7) a. [$_{TP}$ they studied which Balkan language]

b. [$_{CP}$ *wh* [$_{C'}$ Q [$_{TP}$ they studied which Balkan language]]]: *Feature Movement*

c. [$_{CP}$ which Balkan language$_i$ [$_{CP}$ *wh* [$_{C'}$ Q [$_{TP}$ they studied $t_i$]]]]: *Category Movement*

(7) shows the derivation of the non-elided wh-question, in which feature movement and category movement apply.

(8) a. [$_{TP}$ they studied which Balkan language]

b. [$_{CP}$ *wh* [$_{C'}$ Q [$_{TP}$ they studied which Balkan language]]]: *Feature Movement*

c. [$_{CP}$ *wh* [$_{C'}$ Q [$_{TP}$ ~~they studied~~ which Balkan language]]]: *Deletion*

(8) shows the derivation of sluicing, which involves feature movement and deletion. Suppose that deletion applies to recoverable elements except a focused phrase (den Dikken, Meinunger and Wilder (2000)). Then, deletion eliminates all the overt interveners between the moved wh-feature and its category, so that the PF adjacency condition is satisfied without recourse to category movement. Thus, the derivations in (7) and (8) are equally economical.

(9) a. [$_{TP}$ they did [$_{VP}$ study which Balkan language]]

b. [$_{CP}$ *wh* [$_{C'}$ Q [$_{TP}$ they did [$_{VP}$ study which Balkan language]]]]: *Feature Movement*

c. [$_{CP}$ which Balkan language$_i$ [$_{CP}$ *wh* [$_{C'}$ Q [$_{TP}$ they did [$_{VP}$ study $t_i$]]]]]: *Category Movement*

d. [$_{CP}$ which Balkan language$_i$ [$_{CP}$ *wh* [$_{C'}$ Q [$_{TP}$ they did [$_{VP}$ ~~study~~ $t_i$]]]]] : *Deletion*

(9) shows the derivation of VP-ellipsis, in which the wh-phrase must undergo category movement as well as feature movement and deletion; otherwise *they did* would intervene between the moved wh-feature and its category even after deletion. Crucially, the derivation in (9) is less economical than those in (7) and (8). Thus, the economy condition excludes the derivation of VP-ellipsis. This is how the Max Elide paradigm is recaptured in a principled way.

Moreover, it will be shown that the proposed account can accommodate (apparent) counterexamples to the Max Elide Condition, such as the ones in (10) and (11).

(10)   a.   Someone kissed Susan, but I don't know who.

b.   Someone kissed Susan, but I don't know who did.

(11)   a.   John said Mary would leave, but I forget when.

b.   John said Mary would leave, but I forget when he did.

(Hartman (2011))

As long as the above arguments are on the right track, they provide novel support for Agbayani's movement theory.

**References**: **Agbayani, B.** "Wh-Subjects in English and the Vacuous Movement Hypothesis," *LI* 31. **Dikken, M, Meinunger, A, and Wilder, C.** (2000) "Pseudoclefts and Ellipsis," *Studia Linguistica* 54. **Hartman, J.** "The Semantic Uniformity of Traces: Evidence from Ellipsis Parallelism," *LI* 42. **Merchant, J.** "Variable Island Repair under Ellipsis," *Topics in Ellipsis*.