1. Introduction

Movement and ellipsis have common features in both conceptual and empirical grounds.

- Conceptually, both movement and ellipsis share an operation “delete,” and contain copies lacking phonological elements under the standard minimalist treatments.
- Empirically, parallels between movement and ellipsis are observed for some cases.


VP ellipsis in an adjunct or subject infinitival (1) vs. VP ellipsis in a complement infinitival (2):

(1) a. *Mag Wildwood came to read Fred’s story, and I also came to [read Fred’s story].
   b. You shouldn’t play with rifles because to [play with rifles] is dangerous.

(2) a. Mag Wildwood wants to read Fred’s story, and I also want to [read Fred’s story].
   b. You shouldn’t play with rifles because it’s dangerous to [play with rifles].

Johnson (2001:446): For a VP to elide it must first topicalize. Thus, (2a) is equivalent to (3) prior to VP ellipsis.

(3) … read Fred’s story, I also want to ___.

The ill-formedness of (1b) now patterns with (4) if VP ellipsis = VP movement:

(4) *You shouldn’t play with rifles because play with rifles [to ___] is dangerous. (Johnson 2001: 447)

Despite the similarities between VP ellipsis and VP movement, parallels between movement and ellipsis are not observed in the cases of other categories.

For some CPs, ellipsis *, movement ok:

(5) a. *Myron believed that the senator was guilty, but I didn’t believe [that the senator was guilty].
   b. That the senator was guilty, Myron didn’t believe.

For PPs and DPs, ellipsis *, movement ok:

(6) a. Jim can talk to Mary and Kim can talk [to Mary] too.
   b. It’s [to Mary] that Jim said Kim can talk.

(7) A: I saw John’s brother.
   B: *I also saw [DP John’s brother].

(8) a. [DP John’s boss] appeared to be arrested ___.
   b. [DP Which car] can you buy ___ now?

For TPs and NPs, ellipsis ok, movement *:

(9) a. Jose asks that we go to the meeting, and Sally will tell us when [TP we go to the meeting].
   b. *It’s [TP we go to the meeting] that Sally will tell us when ___.

(10) a. John’s book was good, but [DP Mary [D’s [NP book] ]] was even better.
   b. *It’s [NP story] that Joe Bell will read Holly’s ___.

Aims of this paper:

- We propose two independent licensing conditions on movement and ellipsis.
- Our proposed licensing conditions explain why certain categories cannot undergo ellipsis or movement.
- Our claim implies that RNR may not involve ellipsis or movement since it violates our licensing conditions.
- Our observation on fragments (based on our claim) further supports amelioration effects induced by ellipsis.

2. Licensing the Ellipsis

Proposal #1 (necessary condition): Only functional heads such as C, v, and D can bear the [E] feature (cf. Merchant 2001) which enables to license the ellipsis of their complements. These functional categories also head phases, hence only complements of phases can be elided.

(additional condition): The licensing heads need an Agree relation. (cf. Lobeck 1995, 1999)
**Prediction #1**: DP, PP, TP, and CP which are directly selected by V cannot be elided since they are complements of the lexical category V which gives a theta role.

(11) *

V

Ellipsis is barred

\[ \text{XP} = \text{DP, PP, TP, and CP} \]

DP ellipsis
B: *I also saw/met \[\text{DP John's brother}\].

PP ellipsis
(13) *Joe can talk to Mag Wildwood and Holly can talk \[\text{PP to Mag Wildwood}\] too. (Johnson 2001:444)

TP ellipsis
(14) *John seems to solve the problem, and Mary also seems \[\text{TP to solve the problem}\].

CP ellipsis (cf. Kennedy & Merchant 2000:1)
(15) A: I regret that we bought the charcoal grill.
B: *I don’t regret \[\text{CP that we bought the charcoal grill}\].

**Prediction #2**: TP, VP, and NP can delete since they are complements of the functional category C, v, and D.

(16) *

C/v/D

Ellipsis is possible

\[ \text{XP} = \text{TP, VP, and NP} \]

TP ellipsis
(17) Jose asks that we go to the meeting, and Sally will tell us when \[\text{TP we go to the meeting}\].

VP ellipsis
(18) a. John drank beer, and Mary did \[\text{VP drink beer}\] too.
    b. John drank beer, and Mary also wanted to \[\text{VP drink beer}\].
    c. Ybarre-Jaegger ate rutabagas, and Holly has \[\text{VP eaten rutabagas}\] too.

NP ellipsis
(19) Mag will read Fred’s story, and Joe Bell will read Holly’s \[\text{NP story}\]. (Johnson 2001:443)

**Prediction #3** (due to additional condition): TP ellipsis and NP ellipsis are restricted to certain syntactic environments.
(20) a. *Miffy said she had bought a present, but I don’t know whether \[\text{TP Miffy bought a present}\], actually.
    b. *Miffy likes the shoes and I liked the \[\text{NP shoes}\], as well. (Aelbrecht 2011:6)

3. **Licensing the Movement**

**Proposal #2** (necessary condition): We suggest that only “phrasal” constituents can undergo movement.

(additional condition): Extending Kim’s (2011) analysis somewhat, we further claim that only “nominal” categories can move since only DPs can bear a referential index (cf. Baker 2003) that represents criteria of identity to form a chain, and moving elements bear “operator” features which are inherently nominal or D-like, and induce movement to Spec of OpP such as TopP, FocP, CP, and TP (we assume that A-movement is also an instance of operator movement a la Bošković (2011)).

DP movement is ok (a-b); NP movement is * (c).
(21) a. \[\text{DP John’s boss}\] appeared to be arrested __.
    b. \[\text{DP Which car}\] can you buy __ now?
    c. *It’s \[\text{NP story}\] that Joe Bell will read Holly’s __. (Johnson 2001:443)

Apparent PP movement
(22) \[\text{VP On this wall}\] were hung two portraits of our founder.
Assuming that PP is a phase, the moved PP can be analyzed as a DP in disguise. The fact on agreement presents evidence for this. Dislocated PPs display standard nominal agreement: (23) [DP [PP Under the table]] and [DP [PP inside the closet]] are not good places to hide them.

CP movement is generally barred: Although CP a phase, it doesn’t bear a referential index, hence cannot move. (24) *That the senator was guilty, Myron didn’t hear.

Apparent CP movement: Interestingly, some CPs can undergo movement. (25) That the senator was guilty, Myron didn’t believe.

Movable CPs are also DPs in disguise. It substitution presents indirect evidence that the moveable CP in (26a) (=> (25)) is nominal while the non-moveable CP in (26b) (=> (24)) is not.

(26) a. Myron believed that the senator was guilty, but I didn’t believe it.
   b. *Myron heard that the senator was guilty, but I didn’t hear it. (Postal 2004)

VP movement below must be analyzed as vP movement: Inverted vP in (27) is a phase and has a nominal status. (27) [vP Fix the car], I believe John did.

Huang (1993)
(28) John, said that wash himself Bill, certainly would.
(29) John said that [vP tBill v [wash himself]] Bill certainly would tP.

VP ellipsis and movement
(30) a. Jose Ybarre-Jaegger ate rutabagas, and Holly has [vP eaten rutabagas] too. \(\Rightarrow\) ellipsis licensed by v
   b. Madam Spanella claimed that [vP eaten rutabagas], Holly hasn’t. \(\Rightarrow\) moved phrase is vP & nominal

In sum, our proposal can explain the ellipsis and movement asymmetries under the premises that:
(i) a. only functional categories (= heads of phases) can license the ellipsis of their complements.
   b. the licensing heads need an Agree relation.
(ii) a. movable categories should be phases.
   b. the phases should be nominal (to bear a referential index).

4. Further Issues: Right Node Raising & Fragments

4.1. Right Node Raising (RNR)

TP RNR and NP RNR (Bošković 2004: fn. 4) (TP and NP are immobile under our analysis since they aren’t phases).
(31) a. John asked when ______, but he didn’t why, Mary left. TP RNR
   b. I like expensive ______, and you like cheap, dresses. NP RNR

The shared constituent in RNR can be buried within an island.
(32) a. John knows a man who likes _____ and Bill knows a man who dislikes, syntax.
   b. John wondered whether Mary bought _____ and Bill wondered whether Sue sold, the car.

Bošković (2004): VP RNR (33) differs from VP preposing (34); VP RNR patterns with VP ellipsis (35).
(33) a. Mary must have, and Bill could have, been being hassled by the police.
   b. Mary must have been, and Bill could have been, being hassled by the police.
(34) a. *Been being hassled by the police, Bill must have.
   b. *Being hassled by the police, Bill must have been.
(35) a. Mary must have been being hassled by the police, and Bill must have too.
   b. Mary must have been being hassled by the police, and Bill must have been too.

RNR of a certain DP (complement of P) and CP
(36) a. Mary talked to and Sally talked about, Marilyn Manson. RNR of DP (Johnson 2007:15)
   b. Mary heard, and John said, that Tom was a secret agent. RNR of CP (An 2007:85)
As noted by Johnson (2007:16), rightward movement cannot strand prepositions.
(37) *Mary talked to ___ yesterday Marilyn Manson.

In contrast to CP RNR (36b), the corresponding CP movements are not possible:
(38) a. *[CP that Tom was a secret agent], Mary heard.
   b.*[CP that Tom was a secret agent], John said.

Thus, RNR is unlikely to be a result of (rightward) movement. Our analysis of (36) vs. (38) confirms this.

Collectivity effects whose triggers are distributed across conjuncts (cf. Grosz 2009, Barros & Vicente 2010):
(39) a. Alice is proud that Beatrix and Claire are glad that Diana {have/#has} travelled to Cameroon.
   b. I saw the linguist yesterday and I’ll meet the philosopher tomorrow who {were/#was} singing at the ice-cream social.

RNR of Non-constituents (problematic for some ellipsis approaches; problematic for all movement analyses):
(40) a. [a positively ___] and [a negatively charged electrode] (Wilder 1997:86)
   b. [the in-_____] and [the output] of this machine…. (Höhle 1991)

RNR of DP, PP, and CP
(41) a. John enjoyed, but Jane disliked, the TV show. RNR of DP (Ha 2008:101)
   b. John can talk, and Mary must talk, about that old guy. RNR of PP
   c. Mary suspected, and John believed, that Tom was a secret agent. RNR of CP (An 2007:85)

DP, PP, and CP ellipsis in (42) aren’t allowed since they all are selected by a lexical category V.
(42) a. *John enjoyed [NP the TV show], but Jane disliked △. (Ha 2008:101)
   b. *John can talk [PP to that old guy], and Mary must talk △.
   c. * Mary suspected [CP that Tom was a secret agent], but John believed △.

4.2 Fragments
(43) A: What does no one believe? B: *(That) I am taller than I really am.
(45) *(That) I’m taller than I really am, no one believes.
(46) *(That) I ignored you, I’m ashamed of.

The CP fragments in (43-44) should be “nominal” that undergo movement prior to ellipsis:
(47) a. That I’m taller than I really am, [no one believes ____].
   b. That I ignored you, [I’m ashamed of ____].

Potential problem: Unlike CP movements, the distribution of CP fragments is much less restricted.
E.g. CP movement is degraded (48) (cf. (24)), while the corresponding CP fragment answer is relatively ok (49).
(48) *(That) the senator was guilty, I heard.
(49) A: What did you hear? B: That the senator was guilty.


---

1 Other types of analyses like a multi-dominance (MD) analysis which may not run afoul of this problem might be worth pursuing in order to account for RNR examples in (41) and the like. However, inflectional mismatches in the RNR constructions, illustrated by (i), and vehicle change effects given in (ii) wouldn’t work for MD analysis. Ellipsis analysis seems to be more promising for these cases.
(i) Alice already has and Beatrix wants to, work on Binding theory.
(ii) She hopes that the department head won’t [fire/beet], but I fear that he will fire Alice.
Barros & Vicente (2010) suggest that RNR constructions as a class are best analyzed as involving either ellipsis in some cases or multi-dominance in others (see Ahn & Cho 2006 for an analysis of Korean RNR along similar lines). Another interesting issue is the exact “level” that ellipsis takes place for RNR: Is it syntax-proper hierarchical (constituents) PF or shallower PF that is only sensitive to linearization (strings), adjacency, and the like. Ahn & Cho (2006) propose that it’s the string-sensitive shallow PF where the RNR deletion occurs (see also An 2007, Ha 2008 on this matter). We put aside the ultimate analysis of RNR here.
(50) A. What did you make Bo do? B: (*To) leave the house.
(51) A: What did you force Bo to do? B: *(To) leave the house.
(52) A: How did Bo seem? B: *(To be) sick.
(53) [(To) leave the house] I made Bo.
(54) [(To) leave the house] I forced Bo.
(55) [(To be) sick] Bo seemed.

Merchant (2004:697): the non-elliptical counterparts are distinctly odd in American English. He suggests that the constraints that give rise to their oddity are similar to a wide range of amelioration effects induced by ellipsis.

Our speculative suggestion:
Our licensing condition on movement that requires a nominal/referential index to form a chain is not a derivational constraint (such as Superiority) but a representational constraint (such as Subjacency and Chain Condition) which can be repaired by ellipsis (see Merchant 2001 for further details on this issue).

Selected References

Grosz, Patrick. 2009. Movement and agreement in Right Node Raising constructions. Ms., MIT.
Kim, Kwang-sup. 2011. Movement paradoxes are not paradoxes. Lingua121: 1009-1041

