Escape Hatches and the Derivation of the DP
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In this paper, I argue for the possibility of DP-phases contra Matushanky’s (2005). I show that Matushanky’s claims about the absence of Escape Hatches (which Matushanky argues is a critical diagnostic for phasehood) in the DP is wrong. The apparent lack of escaped hatches is due to a complex interaction of null-prepositional phrases associated with a semantic class of adjectives and the presence of an nP phase analogous to vP which Matushanky did not account for. This analysis also explains the “semantic” restrictions on extraction out of DP which defied previous syntactic accounts.

Extraction out of noun phrase has been known to be highly constrained since the earliest work in generative syntax. (see Ross’s 1967 NP-Island Constraint). The problem is that these constraints are not absolute. Extraction is sometimes possible and sometimes not:

1. *of those present, who did you take the picture of?
2. of those present, who did you take the best picture of? (Matushanky 2005)

Following Chomsky (2001, 2008) phases are spell-out points for the derivation where the elements contained within them are immediately sent to PF and LF. Only elements in the edge of the phase (typically the SPEC of the phase-head) are available for further derivation. This edge constitutes the escape hatch and all movement out of a phase must stop in the edge.

Elements at the edge of the phase are the only parts of a phase that are eligible for movement (due to the PIC). But, if a phase is present we should expect that movement should be possible because of these escape hatches. Matushanky argues that the lack of movement out of some DPs is a problem for phase theory because the escape hatches should permit it (what constrains the movement if not a phase, Matushanky does not say). Matushanky argues that the difference in the availability of extraction between (1) and (2) is “semantic”, but again fails to define what semantic properties constrain extraction.

Matushanky also failed to discuss the possibility of a lower phase embedded within the DP (namely nP) which would block extraction in cases like (1). Such an analysis would make the phase structure of the DP analogous to the CP. This analysis alone would explain why (1) is ungrammatical but it could not explain why extraction is sometimes permitted, as in (2). The extracted prepositional phrase in both (1) and (2) is the complement of the noun and would therefore be contained within the nP phase. Extraction out of the nP phase is constrained by the movement of who into SPECnP and the lack of a topic projection in the left edge of nP. The lack of a topic phrase is clearly seen in the ungrammaticality of nP topicalization in (3) below:

3. *who did you take the of those present picture of?

This analysis alone would predict that both (1) and (2) are ungrammatical. However this pattern follows from McKinney-Bock’s (2010) claim that subsective adjectives all contain a covert prepositional phrase which restricts the adjective to its set (see Partee (2007) for discussion of these adjective types). The adjective best found in (1) is a subsective adjective and thus contains one of these hidden prepositional phrases. This prepositional phrase is available for movement (it is outside the nP phase unlike the complement copy) and available for pronunciation (see Bobaljik 1995, Groat and O’Neil 1996, Pesetsky 1998). The full derivation is given in the tree in (5) provided on the next page.

This analysis is supported by the fact that other non-subsective adjectives do not license extraction out of the DP. This follows from McKinney-Bock’s (2010) claim that only subsective adjectives contain covert prepositional phrase. Extraction out of DPs containing intersective adjectives (such as color terms) would face the same problems as extraction out of DPs containing no adjectives as in (1).

4. *of those present, who did you take the purple picture of.

Subsective adjectives allow extraction because of the redundant (typically covert) prepositional phrase constraint contained within them. In all DPs, the lower prepositional phrase is always unavailable for extraction because it is contained within the nP phase and unable to escape. Extraction out of DPs containing subsective adjectives is permitted because the prepositional phrase associated with the adjective is outside of the nP phase, and therefore visible for movement to the left periphery of the DP
which then makes it available for further movement. The apparent “semantic” restrictions on DP extraction are therefore reduced to the interaction of other necessary syntactic operations.

5. Derivation of (2)

References