Generalized Edge Feature Movement

1. Edge Feature Movement. Chomsky (2005) has proposed edge feature movement (EF-movement), characterizing it as (1a-e), which applies to the derivation of sentences like (2).

2. D-effect. According to (1c), in (2) the EF-movement of *John* is not supposed to check off a feature of focus or topic; rather the discourse effect of focus or topic, which I call a D-effect, is to be interpreted as the result of the movement. In fact, I claim that the notion of D-effect should be the most significant property of EF-movement in the sense that it will systematically motivate EF-movement that should undergo Agree checking, unlike (1c). According to (1b) EF-movement is optional; hence, the D-effect should be due to the output effect condition (3). I will argue that a D-effect induced by EF-movement should be generalized to include not only phasal D-effects like focus and topic but also possibly nonphasal discourse effects like definiteness, specificity, 'aboutness', highlighting, givenness, etc., as well as scopal effects, as Chomsky (2005) has suggested for IM (internal Merge) in general as in (4).

Given that EF-movement should in general be characterized by a D-effect, I propose that (1a) should be generalized as (1a'), since the D-effects cannot be restricted to movements induced by a phase head, as evidenced by the VP-internal scrambling in Polish (5) (Wiland *prep*).

3. Generalized Edge Feature Movement. Given (1a'), EF-movement theory is generalized to be a theory for both phasal and nonphasal (or phase-internal) movements, offering a systematic account for both long-distance and clause-internal movements. Furthermore, I claim, EF-movement covers most types of movement, since now the only other type of movement should be obligatory movements or so-called EPP-constrained movements. Hence, all optional movements should involve generalized EF-movement, as we see in the Icelandic examples (6a, b), which show that Icelandic object shift (OS) is optional even if it is apparently an Agree-movement along with Agree *in situ*. Indeed, as shown in (6b), optional OS consistently induces the D-effect of specificity, unlike obligatory Agree-movements. Here we see that the D-effect of EF-movement is not a typological stipulation but the consequence of the output effect condition (3). That is, a D-effect is a property of an optional operation or EF-movement according to (3) irrespective of the traditional typology of movements. The same situation occurs in Icelandic optional Subject Raising as shown in (7a, b).

All generalized EF-movements have only to conform to the general conditions on the minimalist grammar (8a, b) along with the EF-movement chain condition (9), which further motivates the generalized EF-movement theory.

4. Agree-Movement. Given the generalization that EF-movement is any optional movement inducing a D-effect, Agree-movement should be restricted to obligatory or EPP-constrained movement inducing no D-effect. I claim that any semantic effect associated with Agree-movement is due to the property or position of the Agreeing head, not the (obligatory) movement itself. Take the Agree-movement of English *Wh*-Movement. It has been claimed that English *Wh*-Movement is induced by the Q-head (particle) (Cable 2007), which I claim induces the semantic effect of *wh*-scope for English *Wh*-Movement. In fact, it has been shown that the *wh*-scope effects of *wh*-phrase can be induced without any movement; for example, *wh*-elements like *whether*, *if*, etc., are inserted by EM and a *wh*-adjunct like *why* should not be moved to but inserted in Spec-C (Ko 2006).

5. Motivation of Generalized EF-Movement Theory. The notion of Agree-movement can also be incorporated within the EF theory of movement by elaborating the notion of EF into "unmarked" and "marked" as follows. (1b) for EF-movement is the case where an EF is "unmarked" or "optionally deletable"; hence, EF-movement is optional. On the other hand, Agree-movement is the case where an EF is "marked" or the "optional deletion" of EF is blocked by the Agreeing head, so that Agree-movement is obligatory. Hence, the non-final link(s) of an Agree-movement chain should be considered as formed by generalized EF-movement(s), since the non-final link(s) of Agree-movement chain cannot be considered to be formed by "marked" EF induced by an Agreeing head. Indeed, it has been recognized that it is impossible to account for the non-final or intermediate link(s) of the successive-cyclic A- and A'-movement chain in terms of the traditional checking theory of movement without special stipulation (Chomsky 1995, 2001, Chomsky and Lasnik 1993, Bošković 2007, Heck and Müller 2000, Preminger 2007). The problems are automatically solved under the generalized EF-movement theory, which is free from the two major problems of successive-cyclic movements, i.e., the problems of feature-checking and look-ahead at the intermediate positions. Cf. (10).

Examples

- (1) a. Only driven by edge feature (EF) of a phase head.
 - b. EF is optional.
 - c. No Agree checking applies.
 - d. No last resort condition applies.
 - e. No crash applies.
- (2) $[_{CP}$ John_i, I hope $[_{CP}$ t_i that you will decide $[_{CP}$ t_i that we should not invite t_i to our party]]].
- (3) Optional operations can apply only if they have an effect on outcome (Chomsky 2001).
- (4) IM yields discourse-related properties such as old information and specificity, along with scopal effects (Chomsky 2005).
- (1) a'. Only driven by edge feature (EF).
- (5) a. Piotr mogl [_{v*P} (szybko) dac [_{VP} jakiemus chlopcu kazda monete]. Piotr could (quickly) give some boy every coin (∃>∀)
 b. Piotr mogl [_{v*P} (szybko) dac [_{VP} kazda monete_i jakiemus chlopcu t_i]. Piotr could (quickly) give every coin some boy (∀>∃ & ∃>∀) (*The boldface indicates the realization of the D-effect.*) (Wiland *in prep.*)
- (6) a. Nemandin las [v*P ekki þrijá bækur]. (non-specific) student-the read not three books 'The students did not read three books.'
 b. Nemandin las [brijá bækur ekki t]. (non-specific)
 - b. Nemandin las $[\nu^*P$ **prijá bækur**_i ekki t_i]. (*specific*) student-the read three books not 'The students did not read three books.' (*Boldface letters indicate the D-effect of specificity.*)
- (7) a. I fyrra luku [vP víst þrír stúdentar öllum prúfunum]. (non-specific) Last year finished apparently three students all exams-the
 - 'Last year there were three students who finished all the exams.'
 - b. Í fyrra luku **þrír stúdentar**_{*i*} [VP víst t_{*i*} öllum prúfunum]. (*specific*) Last year finished three students apparently all exams-the 'Three students apparently finished all the exams last year.' (*Boldface letters indicate the D-effect of specificity.*)
- (8) a. Architectural conditions of the Minimalist Program.b. Interpretive conditions at the interface.
- (9) Each EF-movement chain contains one D-effect.
- (10) a. What i do you think $[_{CP} t_i \text{ that John bought } t_i]$?
 - b. *Do you think [$_{CP}$ what $_i$ (that) John bought t_i]?

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