Op-movement in referential CPs and DPs

The empirical focus of this paper is the syntax and semantics of embedded clauses, and in particular, finite object clauses that are weak islands for extraction and incompatible with main clause phenomena (MCP). Such CPs (which subsume factive complements) have been shown to have referential properties both distributionally and in terms of their semantics (de Cuba & Ürögdi 2009). The paper develops and provides novel evidence for the movement derivation of such embedded clauses (Haegeman 2009), and shows that their referential property (de Cuba & Ürögdi 2009) can be made to follow from an event relativization account. It is proposed that both referential DPs and referential clauses (RCP henceforth) are derived by operator movement. The paper thus offers further evidence for the CP/DP parallellism.

1. Operator movement and the derivation of adverbial clauses. MCP (such as argument fronting, cf. Hooper & Thompson 1973) are known to be ungrammatical in temporal clauses (1a). In contrast, fronted adjuncts (1b) as well as Romance CLLD (1c) are grammatical. The same pattern is found to obtain in conditional clauses. Under the movement analysis of temporal and conditional clauses as developed in Haegeman (2007, 2010) (cf. Geis (1975), Larson (1990), Demirdache & Uribe Etxebarria (2004), Bhatt & Pancheva (2006) etc. for earlier proposals), their incompatibility with MCP is attributed to locality: the fronted argument blocks the probe-goal relation between C and the temporal / event / conditional (or world) operator. Adjunct fronting (1b) and CLLD (1c) are independently known not to give rise to the same intervention effects, hence they remain compatible with adverbial clauses.

2. *That*-clauses, MCP and extraction. While a subset of complement clauses allow for argument fronting in English, factive complements (2) are generally held to be incompatible with MCP, while again remaining compatible with fronted adjuncts and CLLD. Given the observed asymmetries Haegeman (2007) extends the Op-movement account to complements of factive predicates. (see also Munsat (1986), Hegarty (1991), Melvold (1991), Arsenijevic (2009). That such complement clauses are also islands for extraction follows directly from the movement analysis.

3. Complement clauses and referentiality. In independent work, de Cuba and Ürögdi (2009) show that those complement clauses that are incompatible with MCP and islands for extraction have referential properties. In this respect too, such complement clauses contrast with embedded clauses that allow for MCP and which are not islands. De Cuba and Ürögdi (2009) argue that *referentiality* (rather than factivity/presupposition or contextual givenness) provides for a principled account of the properties of this clause type. The proposal finds a wide range of empirical support. For one, syntactic evidence from English and from Dutch shows that these clauses pattern with referring expressions in terms of distribution (see also Kiparsky&Kiparsky (1970)). In Hungarian, the distribution and interpretation of clausal expletives that 'double' both declarative and interrogative embedded clauses (the latter also known as the *wh*-expletive construction) can be captured by the referentiality account, taking into consideration the sensitivity of this language to the referentiality of arguments (cf. Kiss 2002).

4. Operator movement and referentiality. De Cuba and Ürögdi (2009) point out that RCPs share syntactic properties with referring DPs, e.g. they resist the extraction of non-referential *wh*-phrases. We make the correlation between RCPs and referential DPs explicit by coupling Haegeman's (2010) Opmovement account with Campbell's (1996) suggestion that referential DPs involve a chain between Spec,DP and an NP-external variable. We argue that the same operator movement renders both CPs and DPs referential, yielding similar syntactic and semantic effects in these two types of phrases. With this, we also add a novel argument to the long-standing discussion on CP/DP parallelism.

5. Intervention effects: a refinement. Looking closer at (2a), we show that in terms of featural relativized minimality (Starke 2001, Rizzi 2004), contrastive topics (arguably [+wh]) match the feature make-up of the operator involved in event relativization in referential clauses, and as such, are interveners to its movement. Aboutness topics, for example, are featurally simpler, so no such intervention results. On this view, the contrast between (1a; 2a) and (1b,c; 2b,c) is due to the fact that English argument fronting does, while English adjunct fronting and Romance CLLD do not, involve contrastive topicalization (cf. also Bianchi & Frascarelli (2009)). English (3) and Hungarian (4) data indicate that even contrastive topics can be grammatical in RCPs, provided that the RCP itself is focused.

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We argue that in such examples, the moved event operator that derives the complement clause is associated with an extra D-linking feature, obviating the intervention effect of the contrastive topic.

- (1) a *When this song I heard last week, I remembered my first love
 - b When <u>last week</u> I heard this song, I remembered my first love
 - c *Quand <u>cette chanson je l'ai entendue...</u>* (French) when this song I it-have-1sg heard-PART-FSG
- (2) a. (%)*John regrets that this book Mary read. (Maki et al, 1999: 3, (2c))
 - b. I regret that <u>in those days</u> I didn't realize the importance of classical languages.
 - c. *Mi dispiace che <u>questo problema</u> gli studenti non l'abbiano potuto risolvere.* me displeases that this problem the students *non* it have been able to solve
- (3) a. John resents that *this book* Mary read from cover to cover, and not that the other (his favorite) she didn't even open. (compare to (2a), which is not easily read contrastively)
 b. It's that *this book* Mary read that John resents.
- (4) János AZTfeleitette el, hogy MARI tegnap kit választott. Expl Prt John forgot Comp Marv vesterdav whom chose "What John forgot is whom MARY chose yesterday."

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