

## Clausal complements of factive verbs as DPs in Jordanian Arabic

This study investigates impossibility of extraction out of clausal complements of factive verbs (CCFV) in Jordanian Arabic (JA). It argues that such complements are CPs, embedded under a null  $D^\circ$ , something that turns such clauses into strong islands in JA. This paper thus, on the one hand, adds empirical evidence in favour of the DP analysis of CCFV (originally advanced in Kiparsky & Kiparsky 1970). It challenges, on the other, several recent proposals that argue either that CCFV instantiates an impoverished left periphery (Haegeman 2006; de Cuba 2007) or that there is an operator (in the left periphery of such complements) that blocks extraction to the matrix clause (cf. Melvold 1991, Hegarty 1992, Zubizaretta 2001, and Haegeman 2012). To illustrate, consider the following JA sentence, which contains several factive predicates.

- (1)   ʔabuu-i   ħizin/ nasa/ħirif       ʔinn-uh   ʔaxoo-i   sarag       s-sijjarah  
           father-my regretted/forgot/knew that-3SM brother-my stole.3SM DEF-car  
           ʔimbaarih  
           yesterday

‘My father regretted/forgot/knew that my brother had stolen the car yesterday.’

Had any element of the CCFV in (1) been extracted to the matrix clause (e.g. questioned), the resulting sentence would be sharply ungrammatical, as evidenced in (2):

- (2)   \*miin/ween       ʔabuu-i       ħizin/ nasa/ħirif       ʔinn-uh   sarag  
           who/when       father-my       regretted/forgot/knew that-3SM   stole.3SM  
           DEF-car  
           s-sijjarah

Intended: ‘Who/when did my father regret/forget/know stole the car?’

Ill-formedness of example (2) is straightforwardly accounted for assuming that the relevant CCFV is embedded under a DP which is widely assumed as an absolute island for extraction in Arabic grammar, and hence impervious to movement (Mohammad 1989, 1999; Soltan 2007). Note here that under the operator approach to CCFV, the extracted elements in (2) are said to have an impoverished featural content in comparison to the operator situated in the left periphery of CCFV (Haegeman 2012). This account is rejected here because the resulting question would remain ungrammatical, even if the extracted wh-word has a richer featural content such as D(iscourse)-linked wh-expressions (e.g. *which man?*), typical examples of richly-featured elements (ibid):

- (3)   \*miin   z-zalamih       ʔabuu-i       ħizin/ nasa/ħirif       ʔinn-uh  
           which DEF-man       father-my       regretted/forgot/knew that-3SM  
           sarag               s-sijjarah  
           stole.3SM       DEF-car

Intended: ‘Which man did my father regret/forget/know stole the car?’

Ungrammaticality of sentence (3) gives substance to the Kiparskian stance that the asymmetry between factive and non-factive complements lies in subcategorization of the matrix verb. A factive predicate sub-categorizes for, with update terminology, a DP with a silent noun and determiner, giving rise to the islands effects (see, Manahlot 1977; Ouhalla 2004 for similar proposals to Amharic).

What also provides evidence in favour of this line of analysis is the fact that movement to the left periphery of the CCFV is obviously not disallowed in JA, an observation that is hard to account for under the two approaches: the operator-based approach (cf. e.g. Haegeman 2012) or a reduced left periphery approach to CCFV (Haegeman 2006; de Cuba 2007). Consider the following sentences:

- (4)    ʔabuu-i    ħizin/ nasa/ ʕirif            ʔinn-ha    s-sijjarah            ʔaxoo-i  
father-my regretted/forgot/knew    that-3SF    DEF-car            brother-my  
stole.3SM-it  
sarag-ha  
≈ 'My father regretted/forgot/knew that the car my brother stole it.'
- (5)    ʔabuu-i    ħizin/ nasa/ ʕirif            ʔinn-ha    SIJJARAH            ʔaxoo-i  
father-my regretted/forgot/knew    that-3SF    car            brother-my  
sarag  
stole.3SM  
≈ 'My father regretted/forgot/knew that it was a car that my brother stole.'

Sentence (4) includes an instance of object topicalization, whereas (5) includes an instance of object focalization within the factive complement. For the sake of demonstration, let's consider sentence (5) (as one might object that (4) is a subcase of CLLD, not generated by movement, while focalization is a ubiquitous example of A-bar movement in Arabic grammar (see, Ouhalla 1994, 1997, and Aoun et al. 2010, among others)). The FOCUS+ed element *sijjarah* moves to the left periphery (i.e. to Spec, of Focus Phrase; cf. Rizzi 1997), and the sentence remains grammatical. The FOCUS+ed element *sijjarah* forms a chain with the clause-internal gap, which is subject to the usual condition on (movement) chains (Ouhalla 1997: 14). This fact distinguishes JA from other languages such as English and Japanese, whereby movement to the left periphery of CCFV is prohibited:

- (6) a. \*John regrets that this book Mary read. (Grimshaw 1990: 3).  
b. \*John-wa [kono hon-\*wa/o Mary-ga yonda no]-o  
John-top this book-top/act Mary-nom read COMP-act  
kookaisiteiru  
regret  
'John regrets that this book, Mary read.' (Japanese; Maki et al 1999: 9)].

In order to account for the ungrammaticality of the sentences in (6), Haegeman (2012) assumes that there is a clause-typing operator in the left periphery of factive complements, which accounts for the ban against argument fronting in such clauses. This assumption cannot carry over to JA CCFV as movement to the left periphery in this type of clauses is allowed, as evidenced above. If the DP-approach to the factive complements is adopted instead for JA, sentences (4,5) are readily accounted for, i.e. the DP layer that dominates the CP factive complement has no syntactic effects whatsoever on A'-movement within these clauses, something that gives rise to the possibility of fronting inside such complements.

In this light, JA CCFV casts doubt of the operator approach to factive complements insofar as its effects are altogether absent in JA grammar (and obviously in Arabic grammar). It is worth mentioning that even the proponents of this approach have divergent views about the nature of this operator; an iota operator for Melvold (1991), an assertion operator for Starke (2004), and a TP-internal clause-typing operator for Haegeman and Ürögdi (2010). What I propose here is that CCFVs in all languages are either weak islands (as the case in English) or strong islands as the case in JA. Haegeman (2012) herself shows that intervention effects caused by the operator can be overcome by D-linked elements. This implies that weak islandhood is not only related to the type of the extracted element (argumental vs. adverbial) (see, Szabolcsi and Zwarts 1997), but also tied to the featural content of such elements. Other observations associated with factive complements do not need to follow from the same factors behind extraction or lack thereof. See, e.g. Schueler (2016) for a new account of why the complementizer introducing factive complements cannot be dropped without making resort to any argument building on there being an operator in the left periphery of CCFV.

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