

Extraction from Relative Clauses

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1. Introduction Relative clauses (henceforth RCs) are considered islands for extraction, yet acceptable cases of overt extraction from RC have been attested over the years in a wide variety of languages: Swedish, Norwegian, Danish, Hebrew, English, Italian, Spanish, French (Erteschik 1973, 1982, Kuno 1976, Engdahl 1980, McCawley 1981, Chomsky 1982, Taraldsen 1982, Doron 1982, Chung and McCloskey 1983, Abe et. al. 2010, Cinque 2010). Over the years, the possibility for extraction from RCs has produced a variety of responses which depart from traditional syntactic conceptions of locality: locality constraints defined in terms of information structure (Erteschik-Shir 1973, 1982, 1997, Engdahl 1982, 1997, Ambridge & Goldberg 2008), or processing and constraints on working memory (Hofmeister & Sag 2010). In recent work, RCs which allow extraction have been considered ‘escapable’ islands (Kush, Lohndal & Sprouse 2015, Philip & Huang (in prep)): although extraction is ungrammatical, it is judged to be acceptable. This is, essentially, the reverse of sentences with center embedding, which are grammatical yet unacceptable (Chomsky 1964). The possibility for ungrammatical yet acceptable sentences raises potential difficulties for linguistic theory and methodology, and it remains unknown what sort of factors might render an ungrammatical sentence acceptable- they are clearly unrelated to the factors that might render a grammatical sentence unacceptable. Here I argue against this position, and develop a traditional syntactic account of extraction from RCs in which acceptable extraction is grammatical. I assume the structural ambiguity of RCs (Sauerland 1998, Grosu & Landman 1998, Bhatt 2002, among others) and argue that while externally headed RCs are strong islands which always block extraction, Raising RCs are weak islands and extraction is possible, under certain conditions (see Schachter 1973, Vergnaud 1974, Carlson 1977, Kayne 1994, for earlier Raising analyses, and Hulsey & Sauerland 2006 for an earlier claim that a Raising RC is necessary). The crucial difference between the Raising RC (1a) and the externally headed RC (1b, irrelevant details omitted) is that in the former, the NP head of the RC is located in specCP (Kayne 1994). This entails that when a constituent is extracted from RC, only in the latter (1b) will movement cross the NP node.

- (1) a. $XP_1 \dots [_{DP} D [_{CP} NP [\dots t_{NP} \dots t_1]]$ extraction from a ‘raising’ RC
b. $*XP_1 \dots [_{DP} D [_{NP} NP [_{CP} \dots t_{NP} \dots t_1] NP]$ extraction from a head-external RC

Following Bošković (2015), NP is a phase for all constituents that it dominates but doesn’t theta-mark, and this is why extraction from the RC NP node in (1b) is extraction from a strong island, hence ungrammatical. An immediate advantage of the NP-phase approach to RC islandhood over previous, government-based approaches, is that it also correctly distinguishes between RCs and complex NPs with complement clauses, which will similarly involve extraction from NP and are therefore ungrammatical. It is difficult to imagine what sort of performance-related factors might successfully distinguish between acceptable extraction from RCs and unacceptable extraction from complex NPs with clausal complements, let alone between Raising and Matching RCs. Returning to (1a), the talk will develop an account of the grammaticality of (1a) based on a formal similarity of Raising RCs and embedded interrogatives: in both, a constituent may extract from a CP with a filled specifier. To the extent that it is possible, in extraction from an embedded interrogative, to side-step the filled specCP (e.g. Richards 1997, Fox & Pesetsky 2005, Preminger 2010), the same should be possible in a Raising RC. The argument for the Raising analysis is based on Hebrew. In the examples of extraction from an RC in (2), the RC is indefinite, and the containing sentence is an existential statement ((2a) adapted from Cinque 2010). In this context extraction is optimal.

- (2) a. al lexem Saxor₂, ani makira rak [gvina levana axat]₁ Se-efSar limroax t₁ t₂
 on bread black I know only cheese white one that-possible to-spread
 ‘On black bread I know only one white cheese that it is possible to spread.’
 b. me-ha-sifria hazot₂, od lo macati [sefer exad₁ [Se-kedai PRO le-haS’il t₁ t₂]
 from-the-library this yet not found book one that-worth to-borrow
 ‘From this library, I haven't yet found a single book that’s worth borrowing.’
 c. PP₂ V [DP ... NP₁ [... V t₁ t₂]]

The structure of the talk is as follows: Section 2 argues that (2) involve true movement, section 3 motivates the Raising analysis, and section 4 argues for an analysis of the limitation to indefinites in structural terms, along the lines of Diesing 1992.

2. Evidence for a movement analysis. Evidence from reconstruction, parasitic gaps and locality will be presented in support of a movement analysis of (2).

3. Grammatical Extraction is launched from a Raising RC. Three kinds of evidence are presented. I. Binding - Extraction is degraded when a head-external RC is forced by binding requirements: for example, when the RC head contains an R-expression which is potentially bound, upon reconstruction, by a pronoun (Sauerland 1998, 2004). Extraction should be blocked, and it is, as in (3a), significantly worse than (3b), where Principle C is not at stake. On the other hand, extraction from an uncontroversial Raising RC, such as a Free Relative, should be permissible, and it is (to be presented in the talk).

- (3) a. *me-ha-doda hazot₃, yeS [kama tmunot bar micva Sel dani₁]₂ Se-hu₁ lakax t₂ t₃
 from-the-aunt this is few photos Bar Mitzva of dani that-he took
 b. me-ha-doda hazot₃, yeS [kama tmunot bar micva Selo₁]₂ Se-hu₁ lakax t₂ t₃
 from-the-aunt this exist few photos Bar Mitzva of-his that-he took
 ‘From this aunt, there are a few Bar Mitzvah photos of his / *Dani that he took.’

II. If extraction is from a Raising RC, it should pattern with extraction from a Wh-island. This holds for two distinct properties: (IIa) Weak islandhood: Adjunct extraction is impossible. (IIb) Minimality effects: The interaction of the two chains in RCs shows the same restrictions as in embedded interrogatives: a strict Subj-Obj asymmetry, alongside flexibility when the two chains are headed by two internal arguments.

- (4) a. Obj [CP Subj ... t_{subj}... t_{obj}] / *Subj.... [CP Obj t_{subj}... t_{obj}]
 b. Obj₁ ... [CP Obj₂ V t₁ ... t₂] / Obj₂ ... [CP Obj₁ V t₁ ... t₂]

These arguments form the basis of an analysis of extraction from Raising RC to be presented in the talk.

4. Indefiniteness of the extraction domain. While previous discussion has been dominated by contextual factors, idiosyncratic properties, and speaker variation (Allwood 1976, 1982, Engdahl 1982, Erteschik-Shir 1973, 1982, 1997), the structural analysis above opens the door to a syntactic analysis of this restriction as well. I show how a variety of effects previously taken to support an info-structure account can be accounted for within a contemporary version of Diesing 1992, based on the Activity Condition (Chomsky 2000; for related accounts see Ormazábal et. al. 1994, Uriagereka 1999, Rizzi 2004, 2006, Gallego & Uriagereka 2006, 2007 among others). Diesing argued that extraction from simple DP is ultimately conditioned by the position of the containing DP, and that this, in turn, is determined by whether DP is presuppositional or not. In support of the view that the factor facilitating extraction is ultimately structural, I show that extraction is determined by positional factors: (I) overt position of RC: postverbal subject RCs allow it, preverbal RC does not; (II) LF scope position of RC: (a) relative to an intensional

predicate: narrow scope object RC allows it, wide scope RC does not; (b) ACD forces wide scope of an RC object, and here extraction is blocked.