Towards a unified account of adjunct island extraction: the case of sluicing.

Introduction: The aim of this paper is to provide a uniform analysis of those structures that allow extraction from adjunct islands (namely, parasitic gaps (PGs), sluicing constructions (SCs) and resumptive pronoun instantiations (RPs)). I will focus on SCs. Taking Nunes & Uriagereka (2000) as a point of departure, I will claim that these phenomena are explicable if Sideward Movement (SWM) applies.

Starting point: Huang (1982) brings together subject and adjunct island effects by establishing Conditions on Extraction Domains (CED). Nunes & Uriagereka (2000) revise Huang's CED effects (1982) in Minimalist terms. Following Uriagereka's Multiple Spell Out (1999), they claim that both subjects and adjuncts behave as syntactic islands because they are spelled out before introducing the (subject or) adjunct phrase in the main derivation. But there are three sorts of constructions that accept extraction from these constituents. Nunes and Uriagereka (2000) solely deal with extraction from PGs (1).

(1) Which paper$_i$ did you read ____$_i$ before filing ____$_i$?

Their claim is that the main derivation (L) and the adjunct derivation (K) are formed in parallel. When required, i.e. when the main derivation lacks an (internal) argument, it is borrowed from the adjunct subtree before this is introduced in the main derivation. The process that allows the borrowing is SWM (Nunes 1995, 1999, 2001), which has four steps: Copy, Merge, Form Chain and Chain Reduction (2):

(2) a. $[_K\ldots\alpha^i\ldots]$ α^i **Copy**
b. **Merge** $\alpha^i \longrightarrow [_L\ldots]$ $[_M\ \alpha^i\ [_L\ldots]]$
c. **Form chain** $[_N[_M\ \alpha^i\ [_L\ldots]]\ [_K\ldots\ \alpha^i\ldots]]$
d. **Chain Reduction** $[_N[_M\ \alpha^i\ [_L\ldots]]\ [_K\ldots\ \alpha^i\ldots]]$

The wh- phrase (*which paper*) is copied from the adjunct and merged in the internal argument position of the main derivation (i.e. [*read θ*]). It further rises to SpecCP in the main derivation, from where it c-commands both traces. The traces in A-position (i.e. the internal arguments of both *read* and *file*) are deleted.

SWM is viewed as a Last Resort mechanism, which is used when a θ- role needs to be satisfied in the main derivation. As such, it should be available for other constructions. Obvious candidates are those structures that lead to the same phenomenon as PGs: extraction out of islands.

Proposal: I defend that SWM is also responsible for allowing extraction out of adjuncts in SCs.

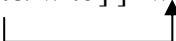Sluiced sentences allow an unpronounced clause that would otherwise be barred (3).

(3) John cried for hours after visiting someone, but I don't know who [*~~John cried for hours after visiting~~ ____].

Since Merchant (2001), it is widely accepted that Sluicing constructions involve movement and deletion, as is diagnosed by case matching and preposition stranding behaviours (between the wh- operator and its indefinite variable).

Following Merchant, I will assume that movement is involved in these constructions, but moving away from his analysis, I propose that the moved element is the wh- phrase (rather than the IP).

The empirical observations that Merchant raised are also accountable in the (SWM) analysis presented here, which is summarized as follows: Both members of the coordinate are built in parallel. The second member of the coordinate lacks a θ-role (its internal argument), which is crucially a CP (4).

(4) [John cried for hours after visiting *someone*/ *who*] [know θ_{CP}]

The wh- element in the first coordinate sideward-moves to that empty position after receiving its case in its original coordinate subtree. This mechanism (5) mimics the steps (2a) through (2c):

(5) **a. Copy:** [John cried for hours [after visiting *someone*/ *who*]]   *who*

      b. Merge: [$_{V'}$ *who* [$_V$ know]]

      c. Form Chain: [[John cried [after visiting *someone*]] but [I don't know *who*]]

The last step described for SWM (2d) –deletion- will not occur in SCs. As we can observe in (5c), the chain is formed between a wh- element and an indefinite pronoun. Arguably they share all features except for the wh- one. I suggest that the reason why the indefinite keeps its pronunciation is that otherwise we cannot track the base position of the wh- element because there is no c-command between the copies.

This claim builds on a traditional proposal for RPs developed in Ross (1967), Chomsky (1977) and Lasnik, Hornstein, Uriagereka (2003): Adjunct islands are PF phenomena. Adjunct constituents allow no PF gaps. Therefore, if no phonetic gap appears, extraction will be permissible. My claim should be viewed as the motivation for this effect.

The analysis in (5a) poses the question of how *someone* and *who* are born together. This sort of correferential marking has previously been proposed for clitic doubling (eg. Uriagereka 1995) and binding effects (eg. Kayne 2002).

To sum up: This analysis provides a unified approach to adjunct PGs and SCs, given that they are both constructions that surprisingly allow extractions from them. Extraction from such constructions will make use of the same Last Resort mechanism: SWM. This syntactic resort happens only when the main derivation lacks its internal argument. It is prior to subtree insertion. Its phonological consequences will be a reflex of the c-commanding configuration resulting from the mentioned subtree insertion.

Extensions: If the presented proposal is on the right track, it seems reasonable to extend it to RPs. For such purposes, 1) RPs have to be understood as subject to movement (Aoun, Choueiri & Hornstein 2001); and 2) RPs will be interpreted as a "leftover" of a moved element (crucially an island) (Wang 2007). A proper analysis of RPs in these terms unifies all adjunct islands as PF phenomena, as suggested by the cited studies (Ross (1967); Chomsky (1977); Hornstein, Lasnik & Uriagereka (2003)). Ultimately, RPs can also be explained as an instance of Sideward Movement.

References

Aoun, J., L. Choueiri & N. Hornstein. 2001. Resumption, movement and derivational economy. *Linguistic Inquiry 32* (3). 371- 403.

Chomsky, N. 1977. On Wh- movement. Peter Culicover, Thomas Wasow & Adrian Akmajian (eds.) *Formal syntax*. NY: Academic Press.

Hornstein, N., H. Lasnik & J. Uriagereka. 2003. The dynamics of islands: speculations on the locality of movement. *Linguistic Analysis 33* (1-2) 149- 175

Huang, J. 1982. *Logical relations in Chinese and the theory of grammar.* PhD dissertation: MIT.

Kayne, R. 2002. Pronouns and their antecedents. Samuel Epstein & Daniel Seely (eds. *Derivation and explanation in the minimalist program*. MA: Blackwell.

Merchant, J. 2001. *The syntax of silence. Sluicing, Islands and the Theory of ellipsis.* NY: OUP.

Nunes, J. & J. Uriagereka. 2000. Cyclicity and extraction domains. *Syntax 3* (1): 20-43.

Ross, J. 1967. *Constraints on variables in syntax*. PhD dissertation: MIT.

Uriagereka, J. 1995. Aspects of the syntax of clitic placement in Western Romance. *Linguistic Inquiry 26*: 79-123.

Uriagereka, J. 1999. Multiple Spell Out. Samuel Epstein & Norbert Hornstein (eds.) *Working Minimalism*. Cambridge, MA: MIT Press.

Wang, C. 2007.Sluicing and resumption. *Proceedings of NELS 37*. 239-252.