

On Unifying the Coordinate Structure Constraint and the Adjunct Condition

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Abstract: The paper argues for a unification of the ban on extraction out of conjuncts and the ban on extraction out of adjuncts based on the semantics of traditional adjunction modification on which such modification actually involves coordination, with ConjP present in the syntax of traditional adjunct modification. It is shown that there are a number of similarities in the islandhood of conjuncts and the islandhood of adjuncts. Thus, extraction out of conjuncts and extraction out of adjuncts are shown to be exceptionally possible in exactly the same environments, which can be captured if the two involve the same syntactic configuration. The proposed analysis is also shown to capture in a principled way a number of differences in the strength of the violation with extraction out of conjuncts and adjuncts in various languages/contexts, the emphasis regarding the former being on Galician, English, Japanese, and Serbo-Croatian.

Keywords: adjunction, coordination, islands, the Adjunct Condition, the Coordinate Structure Constraint

1. Introduction

The goal of this paper is to explore the possibility of a unification of two rather ill-understood islands, namely the Coordinate Structure Constraint (CSC) and the Adjunct Condition. The CSC is standardly assumed to have two parts, given in (1) and (2) below. However, recent research has shown that the two parts of the traditional CSC need to be separated, since there are languages which are sensitive to only one of the constraints in (1)-(2). Oda (in press) in fact explicitly argues for their separation, providing strong arguments to this effect based on a number of languages. Thus, he notes that Japanese observes (1), but not (2), allowing extraction of conjuncts but not extraction out of conjuncts. The same holds for Serbo-Croatian (SC), as discussed in Stjepanović (2014) (see Oda in press for a list of languages that obey (1) but not (2)). In light of their arguments, I will also separate the two parts of the traditional CSC,¹ focusing on (1) (though I will also make some remarks regarding (2) below). As a result, for ease of exposition I will use the term CSC to refer only to (1). (Where it is necessary to make a distinction between (1) and (2) I will use the terms CSC-1 and CSC-2 respectively.)

- (1) The Coordinate Structure Constraint – Extraction out of Conjuncts:
Extraction out of conjuncts is disallowed.
- (2) The Coordinate Structure Constraint – Extraction of Conjuncts:
Extraction of conjuncts is disallowed.

Turning to adjuncts, the traditional ban on extraction out of adjuncts is given in (3).

¹ On separating the two parts of the CSC, see also Grosu (1973) and Postal (1998).

(3) The Adjunct Condition (AC)

Extraction out of adjuncts is disallowed.

The paper will explore the possibility of a unification of (1) and (3), which are illustrated by (4) and (5) respectively.²

(4) *What_i did you see [a picture of t_i] and a painting of Storrs?

(5) ?*What_i did you fall asleep [after John had fixed t_i]?

Before getting into the issue of islandhood of conjuncts and adjuncts, a brief note is in order regarding extraction of conjuncts and adjuncts. It is standardly assumed that conjuncts and adjuncts differ in this respect, conjuncts being unmovable and adjuncts movable. It is actually not clear that this is indeed the case. Thus, as noted above, many languages allow extraction of conjuncts. Furthermore, a number of authors have argued that what looks like adjunct extraction actually involves base-generation of adjuncts in their surface position (e.g. Uriagereka 1988; Law 1993; Stepanov 2001a). The standard assumptions in this respect are thus incorrect, at least with respect to conjuncts. At any rate, as noted above, the goal of this paper is not to examine extraction of conjuncts and adjuncts, but islandhood of conjuncts and adjuncts themselves (i.e. extraction out of conjuncts and adjuncts), though some remarks regarding extraction of conjuncts and adjuncts will be made below from the perspective of a unified analysis of (1) and (3) (more precisely, it will be shown that (2) is not an impediment to such an analysis).

The starting point in the discussion will be the semantics for adjuncts given in Higginbotham (1985). Higginbotham argues that traditional adjunction modification (henceforth traditional adjuncts) actually involves coordination semantically.³ For example, the rough semantics of (6a) is something like (6b), which can be paraphrased as *There is an event which is walking by John and it is slow*.

(6) a. John walked slowly.

b. $\exists e$ [Walk (John, e) and Slow (e)]

Takahashi (1994) made an important observation that under Higginbotham's semantics of adjuncts, where adjuncts essentially involve coordination, it may be possible to unify the ban on extraction out of conjuncts and the ban on extraction out of adjuncts by reducing the latter to the former.⁴ Under Higginbotham's semantics, where adjuncts are in fact conjuncts, extraction out of an adjunct does involve extraction out of a conjunct, which makes the unification plausible and appealing. The

² The slight difference in the grammaticality status of (4) and (5) will be accounted for under the unified analysis proposed below.

³ There is a long line of research in this tradition, see e.g. Davidson (1967), Parsons (1980; 1990), Dowty (1989), Takahashi (1994), Progovac (1998; 1999), Hunter (2011). I refer to Higginbotham (1985) as the representative of this line of research because Takahashi (1994) bases his account of the Adjunct Condition on it, as discussed below (following Takahashi, I also generalize this approach to adjunct modification in general).

⁴ It is worth noting here that Ross (1974) suggested a unification of the CSC with the Complex NP Constraint (clausal complements of nouns are also sometimes treated as adjuncts, see e.g. Stowell 1981, Takahashi 1994).

unification, however, raises an issue. In Takahashi's analysis, while conjuncts and adjuncts are treated in the same way semantically (following Higginbotham), they are treated very differently syntactically, since Takahashi follows standard assumptions in the syntactic literature where coordination involves the presence of a Conjunction Phrase (ConjP), while adjuncts involve adjunction, with no ConjP present. Thus, the direct object in (4) is a ConjP, with the conjuncts located in the Spec and the complement position of ConjP ((7); the issue of where exactly the conjuncts are located within ConjP is debated in the literature (see e.g. Munn 1993; Progovac 1999), the details of their placement will not matter for our purposes). On the other hand, there is no ConjP in (5). Semantically, the VP and the traditional adjunct are conjoined here. However, this is not reflected in the structure, since Takahashi assumes, following standard assumptions, that the adjunct is adjoined to VP, as in (8).

(7) *Who_i did you see [_{ConjP} [a picture of t_i] and [a painting of Storrs]]?

(8) ?*What_i did you [_{VP} [_{VP} fall asleep] [after John had fixed t_i]]?

A serious issue then arises: Locality of movement is standardly assumed to be a syntactic effect. However, under the above analysis, conjuncts and adjuncts are unified only semantically, they are not unified syntactically in that they involve very different syntactic configurations. It is then not clear that Higginbotham's conjunction semantics of adjuncts can help us here.

While this paper will also take the conjunct semantics of adjuncts seriously, taking it in fact as the point of departure, it will also take seriously the issue of the syntax-semantics mapping here. An obvious question arises in this respect: What would be the syntax that would most straightforwardly correspond to the conjunct semantics of adjuncts? The answer is quite obvious in fact. It is a syntax that involves a ConjP, where e.g. VP and the adjunct in (6) are conjoined. The only difference with true coordination would then be that the conjunction head is phonologically null.⁵

This paper will then take the conjunct semantics of adjuncts seriously, assuming that it is also reflected in the syntax. From this perspective, it is easy to see how (1) and (3) can be unified. Since they involve the same configuration, whatever rules out extraction out of conjuncts will also rule out extraction out of adjuncts.⁶

⁵ This is in fact what Progovac (1998; 1999) argues for. Thus, Progovac (1998) adopts the structure in (i), where VP is the Spec of ConjP and the adverbial is a complement of a null conjunction (the structure is slightly richer in Progovac 1999).

(i) [_{ConjP} VP [_{Conj'} Conj AdvP]]

In this respect, Progovac (1998; 1999) is an important predecessor of the current work.

It should also be noted that the discussion in this paper raises an issue of whether phrases are ever generated as adjuncts (in the traditional understanding of the term). While the discussion in this paper falls in line with attempts to abandon adjunction as a distinct structure-building mechanism, showing that adjunction can indeed be eliminated goes beyond the scope of this paper.

⁶ There is an important issue that arises here. Under the analysis outlined above, not just the adjunct, but also the VP is a conjunct in constructions that involve traditional VP-adjunction. It appears that extraction out of the VP should then also be ruled out here. This is a serious issue that any unification of the CSC and the Adjunct Condition based on Higginbotham's semantics of adjuncts needs to address. I will provide an account of this issue in §4 below (see Takahashi 1994 for an alternative account which is however based on the assumption that conjuncts and adjuncts have a different syntax).

An important remark is, however, in order here. It seems fair to say that the CSC and the Adjunct Condition (AC) are the least understood of the traditional islands. The suggestion made above reduces two mysteries to one. Resolving this mystery, which would involve providing an actual account of the CSC, however, goes beyond the scope of this paper. Any attempt to do that would involve a detailed discussion of the structure of coordination, as well as the theories of the locality of movement, which is currently based on the theory of phases. A number of issues would arise in this respect: the precise definition of phases, the precise statement of the Phase-Impenetrability Condition (PIC) and the notion of *edge*, the issue of the generalized EPP effect as it applies to successive-cyclic movement, the theory of labeling, which has been argued to interact with the theory of phases in the locality of movement effects (see Bošković 2015; in press), etc; the list certainly does not end here. Addressing all of this would go way beyond the scope of this paper.⁷ The scope of the paper is more modest: to point out a number of similarities between extraction out of conjuncts and extraction out of adjuncts which can be taken to justify unifying the two. Higginbotham's semantics of adjuncts, when taken seriously from the syntactic point of view, provides a basis for such a unification since the two then have essentially the same structure. Determining the precise source of islandhood of that structure is beyond the scope of this paper (as a result, a number of phenomena noted below will only be discussed at a descriptive level). I will therefore simply use the term islandhood informally below. In several places, the discussion will become more detailed structurally and theoretically when it comes to islandhood – in fact, the paper will provide a principled account of a number of differences in the strength of the violation with extraction out of various conjuncts and adjuncts (as well as the voiding of their islandhood in certain cases); however, the exact reason for the islandhood of conjuncts will not be provided below. In this respect, the paper can be considered to be programmatic, providing a foundation for future work that will account for the islandhood of the syntactic configuration under consideration here (see in fact Bošković in preparation).

Having laid down the necessary background, the general line of argumentation, and the limits of the current work, I now turn to making a case for unifying (1) and (3). In that vein, in §2 and §3 I note a number of similarities between the CSC and the Adjunct Condition. §4 discusses and resolves some potential impediments to the unification of the islandhood of conjuncts and adjuncts. §5 discusses extraction of conjuncts and adjuncts. §6 concludes the paper.

2. The stubbornness of the CSC and the AC

As discussed above, a unification of the traditional coordination and the traditional adjunction has plausible semantic grounds, which can be taken to be reflected in the syntax. From that perspective, it is not surprising that the traditional coordination and the traditional adjunction share some syntactic properties, in particular islandhood. The unification reduces two islands to one, which is already conceptually appealing, especially in light of the fact that we are dealing here with a rather mysterious issue. (Admittedly, we still have a mystery, but reducing two mysteries to one does leave us in a less mysterious state).

⁷ See, however, Bošković (2017; in preparation).

One point that has generally been overlooked in the literature on islandhood is worth emphasizing here. For pretty much all islands, it has been noted that there are languages that do not obey them. Thus, there are languages that do not obey the Subject Condition (e.g. Japanese; see Stepanov 2001b for a more exhaustive list), there are languages that do not obey the *Wh*-Island Constraint (e.g. Swedish, see Engdahl 1986), there are languages that do not obey the Complex NP Constraint (e.g. Bantu languages, see Bošković 2015). The CSC and the AC stand out rather prominently in this respect. I am not aware of any language that does not obey the CSC and the AC.⁸ From the current perspective, that the CSC and the AC behave in the same way in this respect is not surprising: we are after all dealing with one and the same constraint here – that the two behave in the same way in the relevant respect is then expected.

3. Some exceptions to the CSC and the AC

3.1. A semantically-based exception

It is well-known that there are exceptions to both the AC and the CSC (see Truswell 2011 and references therein for the former and Postal 1998 and references therein for the latter). Interestingly, some of these exceptions are rather similar in nature. Thus, extraction from an adjunct is possible in some cases where there is a contingent relationship between the relevant events. Importantly, the same kind of exception is found with the CSC. The former is illustrated by (9) and the latter by (10).

- (9) a. What_i did you come around [to work on t_i]?
b. What_i did Christ die [to save us from t_i]? (Truswell 2011: 131)
- (10) a. This is the drug which_i athletes [take t_i] and become quite strong.
b. the stuff which_i Arthur sneaked in and [stole t_i] (Postal 1998: 53)

There are no good explanations for why under the semantic condition noted above the Adjunct Condition effect and the CSC effect are voided, and I will not provide one in this work. What is important for our purposes is that the two behave in the same way here. A unified approach to the two in this respect has not been attempted before even at a descriptive level; what complicates the situation even further when it comes to providing an actual account is that only argument (both DP and PP) extraction is allowed in the exceptional context in question, non-argument extraction is still unacceptable, as illustrated below.

- (11) *How_i did you come around [to work on that car t_i]?
(12) *How_i should athletes [take that drug t_i] and become strong?

⁸ As is well-known and as we will see below, there are particular coordinations and adjunctions that allow extraction (in fact likely universally). What I am referring to here is different, namely I am not aware of any language that would allow extraction out of all coordinations and all adjuncts, where conjuncts and adjuncts simply would not be islands at all.

This, however, further confirms that the CSC and the AC behave in the same way here, which can be interpreted as calling for a unified analysis of the two. The suggestion made here achieves this trivially, by treating the CSC and the AC as one and the same phenomenon.

3.2. Across-the-board movement and parasitic gaps

There is another well-known exception to the CSC which is not semantically based (i.e. it is not semantically restricted like the one noted directly above). The exception, noted already in Ross (1967), concerns across-the-board-movement (ATB). As is well-known, an unacceptable extraction out of a conjunct can be made acceptable if the extraction takes place out of each conjunct in the coordination.

(13) Who did you see enemies of and friends of?

(14) cf. *Who did you see John and enemies of?

There is an obvious counterpart of this with the AC, which is the traditional parasitic gap construction (see also Haik 1985; Huybregts & van Riemsdijk 1985; Williams 1990; Franks 1993; Progovac 1998; Nunes 2004).

(15) What did you file without reading?

(16) cf. *What did you file the book without reading?

From the current perspective, (15)-(16) can be looked at on a par with (13)-(14). Just like the unacceptable case of extraction out of a conjunct in (14) becomes acceptable if extraction takes place out of both conjuncts, as in (13), so does the unacceptable case of extraction out of a conjunct in (16) (the traditional adjunct being a conjunct under the current analysis) become acceptable if extraction takes place out of both conjuncts, as in (15) (VP being a conjunct under the current analysis; see below for extraction out of the VP here).

There have in fact been many attempts to unify the ATB and the parasitic gap construction (see the references cited above); the current perspective can be taken to provide motivation for those attempts (Takahashi 1994 in fact also argues for a unification of the two from the perspective of Higginbotham's semantic treatment of adjuncts (recall, however, that Takahashi treats conjuncts and adjuncts differently syntactically)).

3.3. The edge exception

Bošković (in press) notes another exception to the AC. Bošković (in press) shows that the AC effect is quite generally voided for elements that are base-generated at the adjunct edge, also providing an account of this state of affairs where the problem with extraction out of adjuncts arises with movement to the adjunct edge (which is required by the PIC); elements that are base-generated at the adjunct edge can then extract. The details of the account are not important for our purposes; what is important is that elements base-generated at the edge of an adjunct can extract out of it.

One illustration of this effect is provided by the different behavior of agreeing possessors and adnominal genitive complements with respect to extraction out of adjuncts in Serbo-Croatian (SC). Consider first the former. Agreeing possessors in SC have been argued to be base-generated at the edge of the traditional NP (TNP).⁹ As one argument to that effect, consider the following binding contrast between English and SC, noted in Despić (2011; 2013).

- (17) a. His_i latest movie really disappointed Kusturica_i.
 b. Kusturica_i's latest movie really disappointed him_i.
 c. Serbo-Croatian (Despić 2011: 31; 2013: 245)
 *Kusturicin_i najnoviji film ga_i je zaista razočarao.
 Kusturica's latest movie him is really disappointed
 d. *Njegov_i najnoviji film je zaista razočarao Kusturicu_i.
 his latest movie is really disappointed Kusturica

Under the assumption that traditional Specs c-command out of the phrase where they are located, Kayne (1994) takes the acceptability of (17a-b) to indicate that English possessors are not located in SpecDP, but in the Spec of a lower phrase, SpecPossP, with the DP confining the c-command domain of the possessor. Despić (2011; 2013) observes that in SC, a language without articles which has been argued by a number of authors to lack DP (e.g. Corver 1992; Zlatić 1997; Trenkić 2004; Bošković 2005; 2012; 2014; Marelj 2011; Despić 2011; 2013; Runić 2014a,b; Takahashi 2012; Talić 2014; 2015), possessors do c-command out, as indicated by the binding violations in (17c-d) (Condition B is at issue in (17c) and Condition C in (17d)), which contrast with English (17a-b). Despić takes the contrast in question as indicating that DP is missing in SC, with the possessor located in the highest projection of the traditional NP.

Turning now to adjuncts, SC is rather productive regarding the possibility of TNPs functioning as adjuncts. One such case is given below, where an instrumental nominal functions as an adjunct (see Bošković in press for discussion of such adjuncts).

- (18) Serbo-Croatian
 Trčao je šumom.
 run is forest.INSTR
 'He ran through a/the forest.'

That the instrumental nominal in (18) is indeed an adjunct is confirmed by extraction. First, its extraction out of islands yields an ECP-strength, not a Subjacency-strength violation (compare (19a-b)).

- (19) Serbo-Croatian
 a. *Šumom_i se pitaš [kad je trčao t_i].
 forest.INSTR REFL wonder when is run
 'You wonder when he ran through a/the forest.'

⁹ The term TNP is used neutrally, for whatever the categorial status of the relevant element is.

- b. ??Šumu_i se pitaš [kad je posjekao t_i].
 forest.ACC REFL wonder when is cut-down
 ‘You wonder when he cut down a/the forest.’

In addition to agreeing possessors, which roughly correspond to English *'s*-genitives, nominal arguments in SC can be expressed through adnominal genitive, which roughly corresponds to English *of*-genitives; the element bearing adnominal genitive occurs in the complement position of the noun. Returning now to the instrumental adjunct under discussion, notice that while extraction of genitive complements of nouns is in general somewhat degraded in SC, (20a), which involves extraction out of the nominal under consideration, is clearly worse than (20b), which involves extraction out of an object. This confirms the adjunct status of the instrumental TNP ((20a) is worse than (20b) because it involves extraction out of an adjunct).

(20) Serbo-Croatian

- a. *Moga djeda_i je trčao [šumom t_i].
 my.GEN grandfather.GEN is run forest.INSTR
 ‘He ran through the forest of my grandfather.’
 b. ??Moga djeda_i je volio [šumu t_i].
 my.GEN grandfather.GEN is loved forest.ACC
 ‘He loved the forest of my grandfather.’

As noted above, Bošković (in press) shows that in contrast to elements that are not base-generated at an adjunct edge, elements that are base-generated at an adjunct edge can be moved out of adjuncts. The adnominal genitive ‘my grandfather’ in (20a) is base-generated in the N-complement position. Recall, however, that an agreeing possessor that precedes the nominal is generated at the TNP edge. Importantly, such possessors can move out of the adjunct under consideration.

(21) Serbo-Croatian

- Ivanovom_i je on trčao [t_i šumom].
 Ivan’s.INSTR is he run forest.INSTR
 ‘He ran through Ivan’s forest.’

Bošković (in press) provides a number of additional cases which also show that elements that are base-generated at an adjunct edge can move out of adjuncts, in contrast to those that are not generated at an adjunct edge.¹⁰

What is important for our purposes is that the CSC behaves just like the AC in this respect. Recall that an agreeing possessor can extract out of a TNP adjunct, while an adnominal genitive cannot.

¹⁰ One such case is given in (i) (see Bošković in press for an account why (i) is unacceptable in English).

(i) Izuzetno_i se on [t_i loše] ponašao?
 extremely is he badly behaved
 ‘He behaved extremely badly.’

Coordinations behave in exactly the same way: an agreeing possessor can extract out of a conjunct (22), but an adnominal genitive cannot (23).¹¹

(22) Serbo-Croatian

Markovog_i je on [t_i prijatelja] i [Ivanovu sestru] vidio.
Marko's.ACC is he friend.ACC and Ivan's.ACC sister.ACC seen
'He saw Marko's friend and Ivan's sister.'

(23) Serbo-Croatian

*Fizike_i je on [studenta t_i] i [Ivana] vidio.
physics.GEN is he student.ACC and Ivan.ACC seen
'He saw a student of physics and Ivan.'

What is important for our purposes is that both traditional adjuncts and traditional conjuncts exceptionally allow extraction of elements that are base-generated at their edge.

To sum up the discussion in this section, we have seen that in a number of environments extraction is exceptionally possible out of conjuncts and adjuncts. Significantly, the environments where extraction is exceptionally possible out of conjuncts and adjuncts are the same – all the contexts discussed in this section exceptionally allow extraction out of both conjuncts and adjuncts (see below for an additional case). That the two behave in the same way in this respect then provides an argument that they should be unified, which is straightforwardly accomplished if they involve the same syntactic configuration.

4. Some differences between the CSC and the AC and rescue by PF deletion

Above, I have discussed a number of similarities between CSC effects and AC effects which can be captured under the analysis on which traditional adjunction actually involves coordination, which is motivated by Higginbotham's semantics of adjunction. There are, however, also some differences between the two, which will be discussed in this section, starting with an obvious difference.¹² Consider (24)-(25), which are intended to represent a case of traditional coordination (24) and a case of traditional adjunction (25), which is also treated as involving coordination under the current analysis.

(24) DP & DP

(25) VP & Adjunct

¹¹ Left-branch extractions in SC are best when the remnant precedes the verb, but the relevant contrast is also there when the coordination follows the verb. Notice that there is an interfering factor when such extraction is attempted out of the second conjunct. As noted in Stjepanović (2014) and discussed below, *i* 'and' is a proclitic, which procliticizes to the element following it. A problem then arises if the element following it is a trace.

¹² A reviewer notes that coordination and traditional adjunction differ regarding gapping, compare *John ate an apple and Mary a pear* with **John ate an apple after Mary a pear*. The difference can be accounted for under Johnson's (2009) analysis of gapping (gapping is actually quite generally disallowed in embedded clauses, even with coordination).

The conjuncts in the traditional coordination in (24) are symmetric regarding islandhood in that extraction is banned out of each conjunct (putting aside the ATB case).

- (26) a. *Who_i did you see [a friend of t_i] and John?
b. *Who_i did you see John and [a friend of t_i]?

However, this is not the case with (25), where extraction is not banned out of the first conjunct, i.e. VP.

- (27) What_i did you [buy t_i] slowly?

A question then arises under the current analysis regarding the source of this difference. In particular, what raises the issue here is the grammaticality of (27), which appears to be unexpected.

As noted above, providing an account of the unacceptability of extraction out of conjuncts goes beyond the scope of this paper. I simply assume here that conjuncts are islands (as explicitly also argued in Oda in press). The islandhood of conjuncts is apparently voided for the VP conjunct in (27). The question is why. There is actually a rather straightforward answer to this question.

Bošković (2011; 2013b) discusses a variety of islands from a number of languages and observes that movement of the head of an island voids islandhood (for additional arguments to that effect, see Bošković 2015). Based on this, Bošković establishes the generalization in (28).

- (28) Traces do not head islands.

Bošković (2013b) provides a number of arguments for (28). As an illustration, consider the saving effect of article incorporation on islandhood in Galician, also discussed in Uriagereka (1988; 1996). Galician has a rather interesting phenomenon of D-to-V incorporation, which quite generally voids islandhood of the DP from which the incorporation takes place (see Uriagereka 1988; 1996; Bošković 2013b). Thus, Galician disallows movement from definite DPs, as in (29). However, the violation is voided when D incorporates into the verb, as shown by (30).¹³ Further confirmation of the islandhood-voiding effect of article incorporation is provided by (31). Extraction from adjuncts is banned in Galician, as in (31). However, the ban is voided under D-incorporation, as in (32) (the same holds for the Subject Condition effect, which is also voided under article incorporation).

- (29) Galician (Uriagereka 1988: 81)
*e de quén_i viches [DP O [NP retrato t_i]]?
and of who saw(you) the portrait
- (30) Galician (Uriagereka 1988: 81)
e de quén_j viche-lo_i [DP [D' t_i [NP retrato t_j]]]?
and of whom saw(you)-the portrait
'So, who have you seen the portrait of?'
- (31) Galician (Bošković 2016: 58)

¹³ As discussed in Uriagereka (1988), when the article incorporates the final *s* of the verb is truncated.

??de que semana_j traballastedes [_{DP} o Luns t_j]
of which week worked(you) the Monday
‘Of which week did you guys work the Monday?’

(32) Galician (Bošković 2016: 58)

de que semana_j traballastede-lo_i [_{DP} [_{D'} t_i Luns t_j]]
of which week worked(you)-the Monday

These cases illustrate the generalization in (28). The islandhood of the DPs from (29) and (31) is voided in (30) and (32), where the relevant DPs are headed by a trace, due to the movement of the head of the DP in question. Bošković (2013b; 2015) provides a number of other cases from a wide range of languages that illustrate the same effect (thus, Bošković 2013b shows that, among other things, Baker’s 1988 Government Transparency Corollary effects are also subsumed under (28); i.e. they also involve islands that are headed by a trace.) Under (28), if the head of an island α undergoes movement, the islandhood of α is voided, making movement out of α possible.

Bošković (2011; 2013b) also provides an account of the effect in question, which unifies it with the rescuing effect that ellipsis has on islandhood, noted by Ross (1969) and illustrated by (33).¹⁴

- (33) a. *She kissed a man who bit one of my friends, but Tom does not realize [which one of my friends]_i she kissed [**a man who bit t_i**].
b. She kissed a man who bit one of my friends, but Tom does not realize [which one of my friends]_i ~~she kissed [a man who bit t_i]~~ (Ross 1969: 276)

The effect from (33) is standardly treated in terms of rescue by PF deletion (Chomsky 1972; Merchant; 2008; Lasnik 2001; Fox & Lasnik 2003; Hornstein, Lasnik, & Uriagereka 2003; Boeckx & Lasnik 2006; Bošković 2011; among others): a * is assigned to an island when movement crosses it. If the * remains in the final PF representation, a violation incurs. If a later operation like ellipsis deletes the category that contains the *-marked element, the derivation is rescued. Under the standard analysis, then, when *wh*-movement crosses the island in (33) the island is *-marked in both (33a) and (33b). Since the *-marked element is deleted in (33b) the islandhood effect disappears in this example.

Bošković (2011; 2013b) also provides a rescue-by-PF deletion account of the generalization in (28), unifying (28) with the rescuing effect of ellipsis on islandhood. Bošković argues that what is *-marked is not the whole island, but the head of the island. This means that in e.g. (29), what is *-marked is the head of the object DP. The reason for the rescuing effect of head movement in (30) is that the *-marked element in the head position of the object DP is actually a copy that is deleted under copy deletion in PF. The offending *-marked element is thus deleted in PF in (30), just as it is in (33). The analysis quite generally captures the generalization in (28).¹⁵ (Bošković 2011 also extends the

¹⁴ See, however, Abels (2011), Barros et al. (2014).

¹⁵ The analysis predicts that head movement is not sensitive to (non-relativized minimality) islands, more precisely, that the head of an island can move out of the island since the locality violation will be rescued by deleting the copy of the moved head (the prediction holds only for the head of the island and does not hold for relativized minimality (i.e. head-movement constraint) violations; see Bošković 2013b). Bošković (2013b) provides a number of cases from a variety of languages that this is indeed the case (in fact, Galician article

analysis to the generalization that traces do not count as interveners (Chomsky 1995). In the relevant cases, the *-marked intervener is also removed under PF copy deletion, see the discussion below).

At any rate, what is important for our purposes is that head movement voids islandhood: if the head of an island undergoes movement, the islandhood effect disappears, making movement out of the island possible.

Returning to the potentially problematic case in (27), we now have a straightforward explanation why movement out of the VP, which is a conjunct hence an island under the current analysis, is allowed in this case. The reason is V-to-v movement.¹⁶ Being a conjunct, the VP (i.e. the bracketed element) in (27) is an island. However, V-to-v movement, i.e. movement of the head of the VP, voids the islandhood of the VP, allowing movement out of this VP, as in (27). The grammaticality of (27) is then just another instance of the general rescuing effect of head movement on islandhood, given in (28). The potential obstacle to the unification of the CSC and the AC that was raised by (27) is thus rather straightforwardly resolved; the reason for the grammaticality of (27) is an independent and more general effect regarding locality of movement.

The analysis does not only remove a potential problem for the unification of the CSC and the AC raised by (27) but it also makes a prediction. Consider again (24)-(25). Just like in (25) movement of the head of the VP conjunct makes movement out of the VP possible so should movement of the head of the corresponding conjunct in (24) make movement out of this conjunct possible. The prediction can in fact be tested with respect to Galician. The issue here is whether article incorporation in Galician also improves extraction out of a conjunct. It turns out that it does. Consider (34)-(35) (the Galician data below are due to Juan Uriagereka, p.c.; *a* in (34)-(35) is a differential object marker).

(34) Galician

*De quén_i vistedes [o amigo t_i] e-mais [a Xan] onte?
of who (you)saw the friend and a Xan yesterday
Intended: ‘You saw [[the friend of who] and [Juan]] yesterday?’

(35) Galician

??De quén_i vistede-lo_j [t_j amigo t_i] e-mais [a Xan] onte?
of who (you)saw-the friend and a Xan yesterday

(34) shows that extraction out of a conjunct is not possible in Galician, i.e. conjuncts are islands. Importantly, (35), which involves article incorporation from the conjunct from which *wh*-movement takes place, is clearly better than (34), which does not involve article incorporation. Article incorporation thus also improves extraction out of conjuncts.

Putting for the moment the residual awkwardness of (35) aside, and focusing on the fact that (35) is better than (34), the current analysis unifies the grammaticality of (27) with the improvements that

incorporation (cf. (32)), which is also acceptable without *wh*-movement, is one such case; see also Bošković 2013b on noun incorporation in Kinyarwanda, Chichewa, and Southern Tiwa).

¹⁶ There are various proposals in the literature regarding the exact identity of the relevant head and the height of V-movement (e.g. we could be dealing here with a vP conjunct, with the verb moving to VoiceP above vP, see Collins 2005); I simply use *v* for ease of exposition.

article incorporation causes for *wh*-movement in (31)-(32) and (34)-(35). All the relevant cases involve extraction out of a conjunct where the head of the conjunct undergoes movement.

Consider now why, in contrast to (27) and (32), (35) is still degraded (although better than (34), which is what is crucial here for our purposes).¹⁷ Oda (in press) captures the two parts of the CSC, i.e. (1)-(2), by proposing that both individual conjuncts and ConjP are islands. What this entails for our purposes is that with extraction out of a conjunct what is *-marked is the head of the conjunct itself, as well as the head of ConjP (given that what is *-marked is the head of an island). In (34), both *-marked heads survive into PF, hence the strong unacceptability of the construction. On the other hand, in (35), the *-marked head of the conjunct is removed in PF through copy-deletion. However, the *-marked head of ConjP is still present in PF. I suggest that this is the reason for the residual awkwardness of (35). Article-incorporation voids the islandhood of the conjunct itself, by turning its head into a trace (i.e. a copy that is deleted in PF). However, it does not affect the islandhood of ConjP. The analysis thus captures the contrast between (34) and (35), as well as the fact that (35) itself is still degraded.

What about (27) and (32), which involve traditional adjunction? I suggest that what is important here is that the ConjP head in these examples is phonologically null. In this respect, the head of ConjP in (27) and (32) in fact does not differ from the head of the first conjunct in (27) and the second conjunct in (32) – in all these cases the relevant head is phonologically null. Now, it is standardly assumed that intervening heads block head movement (see e.g. Roberts 2010). There is an additional implicit assumption here: in all the cases that are traditionally given as an illustration of this effect the blocking head is overt. This is in fact reminiscent of another standard assumption, noted briefly above, that traces do not count as interveners.¹⁸ What traces and null heads have in common is that they are both phonologically null; this means that null elements do not count as interveners. Bošković (2011) in fact provides a rescue by PF deletion account of the trace case that can be generalized to the null head case. Bošković (2011) argues that with intervention effects, what is *-marked is the intervener itself. With traces, the intervener is deleted in PF, which voids the intervention effect. Another way to look at this is that the locality effect is voided if the *-marked element is not realized (i.e. pronounced) in PF, i.e. a * induces a violation in PF only if it is PF realized, i.e. if it is present on a PF-realized element.¹⁹

There is independent evidence for the above account of (27), where the reason why (27) does not display the CSC effect although adjunction is treated as coordination is that the ConjP head is

¹⁷ (32) is actually slightly awkward (meriting at most ?). The proposal below will not explain the residual awkwardness of (32), which I leave open here (also putting it aside below), merely noting that there may be a weak intervention effect associated with phrasal movement from the second conjunct crossing the first conjunct, also a phrase ((32) is in fact fully acceptable if it involves only head-movement/article incorporation, see Bošković 2013b); in this respect compare also (35) with (39) below and note that (26b) is worse than (26a); for discussion of the effect in question, which I put aside here, see Bošković (in preparation), who also shows that the effect is selective in that it depends on labeling (so it does not arise in all relevant contexts).

¹⁸ Notice that there is no conflict between the assumption that traces do not count as interveners for extraction and the blocking effect of *wh*-traces on *wanna*-contraction. Under multiple spell-out (see Uriagereka 1999; Epstein 1999; Chomsky 2000; 2001; among many others), it is not a *wh*-trace but the *wh*-phrase itself that blocks *wanna*-contraction (see Bošković 2013c, where it is shown that this kind of approach also captures the traditional claim that NP-traces do not block contraction; traces actually never block contraction, only heads of chains do under a multiple spell-out analysis).

¹⁹ Though see below for a potential alternative.

phonologically null here. Progovac (1998; 1999), who also argues for a unified analysis of coordination and traditional adjunction based on the coordination analysis of the latter, observes that in some cases the ConjP head can in fact be overt with traditional adjunction based on examples like (36). Importantly, extraction out of the VP conjunct is degraded in such cases: (37a-b) are worse than (27). This is exactly what is expected: since the *-marked head of ConjP is phonologically realized in (37a-b), in contrast to (27), examples (37a-b) are degraded, in contrast to (27).

- (36) a. Mary read his paper, and quickly.
b. John read the book, and avidly.
- (37) a. ??What did Mary read, and quickly?
b. ??What did John read, and avidly?

We now have all we need to account for the full paradigm under consideration. In (27) and (32), both the islandhood of the relevant individual conjuncts and the islandhood of ConjP is voided since both the head of the relevant conjuncts and the head of ConjP are phonologically null. On the other hand, in (35), only the head of the conjunct is null, which means that the islandhood of the conjunct, but not the islandhood of ConjP, is voided here. Notice also that (34) is worse than (31), which is also captured under the current analysis. (34) in a sense involves two violations, since the heads of both islands, the relevant conjunct and ConjP, are phonologically overt. On the other hand, in (31) only the former is phonologically overt: the islandhood of ConjP is voided here since the head of ConjP itself is phonologically null. Furthermore, notice that standard CSC violations like (26a) are worse than traditional adjunction cases with an overt conjunction like (37). This is also expected and can be accounted for on a par with the contrast between (31) and (34): (26a) involves two island violations since both the head of the conjunct island and the head of ConjP are overt while in (37) only the head of ConjP is overt. The proposed analysis thus captures the full paradigm in (26), (27), (31)-(32), (34)-(35), and (37): it captures the fact that (27) and (32) are better than the rest of this paradigm, the contrast between (34) and (35) as well as the fact that (35) is still degraded, and the fact that (34) is more strongly degraded than (31) and that (26) is more strongly degraded than (37).²⁰

What's particularly important for our purposes is that the current analysis unifies the grammaticality of (27) and the improvement that article incorporation causes in (34)-(35). In both cases we are dealing with extraction out of a conjunct where the head of the conjunct undergoes movement, voiding the islandhood of the conjunct. The grammaticality of (27) then turns out not only not to be a problem for the unified CSC/AC analysis, but it in fact has its counterpart with the traditional CSC, thus providing an argument for the unified analysis. In other words, we are dealing here with another case where movement out of a conjunct is exceptionally allowed, which also extends to traditional adjunction. In fact, the effect holds not only for what under the traditional view would be considered to be the "host" of adjunction, i.e. the VP in (25), but also for the traditional adjunct itself. As shown in (31)-(32), the

²⁰ One issue that I will put aside here is whether extraction out of all conjuncts can be saved by movement of the conjunct head. What is important for us is that this is in principle possible, hence needs to be allowed. Whether there are factors that constrain the effect in question will be left for future research (see Bošković 2017, where it is argued that the status of a conjunct with respect to phasehood matters here; for relevant discussion see also Bošković in preparation).

islandhood of extraction out of adjuncts is also voided under movement of the adjunct head. I conclude therefore that what appeared here to be a difference between the CSC and the AC is in fact another case where the two behave in the same way, which can be added to the cases discussed in §3: both the CSC and the AC effect are voided under head movement of the head of the conjunct/adjunct.

There is still one missing piece needed to complete the paradigm regarding the rescuing effect of head movement on extraction from conjuncts. Returning to (24)-(25), we have seen that head movement rescues extraction out of both conjuncts in the traditional adjunction case in (25), i.e. it makes extraction out of both VP and the traditional adjunct possible. Regarding (24), we have seen that head movement of the head of the conjunct makes extraction out of the first conjunct possible. The remaining piece of the puzzle concerns extraction out of the second conjunct in (24). Does head movement of the head of that conjunct make extraction out of it possible? We have confirmed the rescuing effect of head movement on extraction out of a conjunct regarding the first conjunct in (24) with article incorporation in Galician. Does the effect also hold for extraction from the second conjunct? In fact, it does. Conjunction *e mais* in Galician can host article incorporation. Crucially, extraction out of the second conjunct is worse in (38) than in (39), the difference here being that the article head of the second conjunct, from which *wh*-extraction takes place, undergoes incorporation only in (39). (Not surprisingly given the above discussion, while better than (38), (39) is still degraded.)

(38) Galician

*De qué cidade_i vistedes um retrato de Diego e mais [a paisaxe t_i?
of what city (you)saw a portrait of Diego and the landscape

(39) Galician

???De qué cidade_i vistedes um retrato de Diego e-mai-la_j [t_j paisaxet_i?
of what city (you)saw a portrait of Diego and-the landscape

I will conclude the discussion in this section with an example which can be analyzed in several ways within the approach argued for here. The example is given in (40).

(40) *What_i did you see [pictures of t_i] and paintings of Storrs?

The conjunct from which extraction takes place in (40) is most often assumed to be a DP, headed by a null D. Given the grammaticality status of (40), here we do want the *-marking on the head of the conjunct to contribute to the ungrammaticality of the example.

There are several possibilities here. One possibility is that the conjunct is actually smaller than DP, with the noun located in (possibly moving to) the head position of the conjunct. Nothing special would then need to be said about such cases.

If the conjunct is a DP, with the noun located lower than D, we could assume that this is actually a D that is deleted in PF, with PF D-deletion either not yet having taken place at the point when *-marking is checked, or with *-marking interfering with the required D deletion here. However, what may be relevant here is that DP is a phase, in contrast to ConjP (see Bošković 2017 for relevant discussion). In light of this, it is possible that, as suggested above, *-marking on null heads never

matters (i.e. it does not induce a PF violation) but that *-marked heads are unable to send their complement to spell-out. The standard assumption is that phasal heads send their complement to spell-out after all their uninterpretable features are checked; under the suggestion made here *-marking has a similar effect to uninterpretable features in that it prevents spell-out. As a result, the *-marked null D in (40) would not be able to send its complement to spell-out.²¹

There is another possibility here. Assume a framework like Distributive Morphology, where phonological features are inserted in PF to essentially lexicalize appropriate feature matrices. As argued in Progovac (1998; 1999) and discussed briefly in §6 (see Footnote 27), the reason why Conj⁰ is typically not lexicalized with traditional adjunction is the Avoid Overt Conjunction Principle, which works in a similar way as Chomsky's (1981) Avoid Pronoun Principle. We can then assume that in the relevant situations (see §6 for why this happens with traditional adjunction), the feature matrix of the conjunction head (or the pronoun in the cases where the Avoid Pronoun Principle is relevant, see here Holmberg 2005) is deleted, as a result of which phonological features cannot be inserted. This is not the case with the null D in (40). The feature matrix of this null D simply does not correspond to any phonological features (in contrast to the conjunction head, where, unless the relevant feature matrix is deleted, phonological features would be inserted): there is no deletion of the feature matrix here that would prevent phonological feature insertion. Under this analysis, the difference between the null Conj head in examples like (27) and the null D in examples like (40) with respect to *-marking is treated in the same way as the difference between the article and its trace in Galician examples like (29)-(30): In all these cases the relevant head is *-marked due to extraction out of a conjunct, conjuncts being islands. The *-marked head is then deleted in (30) (due to copy deletion) and (27) (due to the Avoid Overt Conjunction Principle, which works on a par with the Avoid Pronoun Principle). On the other hand, the *-marked head is not deleted in examples like (29) and (40). Notice that under this analysis, *-marking on elements which are not realized (i.e. pronounced) in PF would not actually be ignored.²²

At any rate, I leave teasing apart the analyses of (40) suggested above for future research and continue to assume below that a * induces a violation in PF only if it is present on a PF realized element.²³

5. On extraction of conjuncts/adjuncts

As noted at the outset, the discussion in this paper is limited to islandhood of conjuncts and adjuncts, i.e. extraction out of conjuncts/adjuncts; it does not deal with extraction of conjuncts/adjuncts. As

²¹ I assume that spell-out must take place for each phasal level, which means that we do have a violation here.

Notice also that there is still a difference here with the Galician case in (30), where the *-marked element in D is deleted under copy deletion. Under the analysis under consideration, the spell-out for the DP phase in (30) would be triggered only after D-incorporation (with copy deletion appropriately ordered), which is in fact in line with Chomsky's (2001) proposal that the spell-out for phase XP is triggered by a higher phase head. (Note also that, as argued in Bošković 2015, D-incorporation is driven by an uninterpretable feature of D, which means that D anyway could not trigger spell-out before it moves.) It should, however, be noted that under the approach to phases in Bošković (2015), D-incorporation voids the phasehood of the DP from which it takes place, so that the issue of DP-phase spell-out would not even arise in this case.

²² For an argument that it shouldn't be, see Bošković (2011).

²³ The discussion below can be easily adjusted to the last account of (40) suggested above, if it turns out to be the most appropriate one.

discussed in §1, while the CSC was traditionally assumed to hold both for extraction out of conjuncts and for extraction of conjuncts, this view is quite clearly wrong, since there are languages that productively allow extraction of conjuncts but still disallow extraction out of conjuncts. This is the reason why I have put the discussion of extraction of conjuncts, i.e. (2), aside above. In this section, I will, however, make some brief remarks on extraction of conjuncts, i.e. the status of (2), the reason being that the rescue-by-PF deletion mechanism, which I have appealed to above, turns out to be relevant to (2), as was in fact explicitly argued in Stjepanović (2014) and Oda (in press).

Notice first that the CSC is not completely divorced from the AC even when it comes to (2), i.e. extraction of the conjunct/adjunct. Both are in principle possible, but there is a productivity difference here in that extraction of adjuncts is more readily available crosslinguistically than extraction of conjuncts. In this respect, we have the following situation: there are languages like Japanese and SC that in principle allow both extraction of conjuncts and extraction of adjuncts; there are languages like English that allow extraction of adjuncts but not extraction of conjuncts. I am, however, not aware of any languages that would allow extraction of conjuncts but not extraction of adjuncts. In other words, we have a small implicational hierarchy here, where the possibility of extraction of adjuncts entails the possibility of extraction of conjuncts. It turns out that there is a way of making sense of this state of affairs under the rescue-by-PF deletion approach discussed above.

Recall that Oda (in press) argues that both individual conjuncts and ConjP are islands. When it comes to extraction of conjuncts themselves, i.e. (2), what is relevant is the islandhood of ConjP: the island that is crossed when a conjunct is extracted is ConjP. This means that what is *-marked when a conjunct is extracted is the head of ConjP (given that what is *-marked is the head of an island).

Importantly, in languages where extraction of a conjunct is allowed, it has been shown that the ConjP head is a clitic that undergoes movement. In other words, the head of ConjP is a trace. This immediately makes (28) relevant here: the cliticization voids the islandhood of ConjP, making extraction of a conjunct possible. In fact, Oda (in press) and Stjepanović (2014) argue for exactly this account of the exceptional possibility of extraction of conjuncts in Japanese and SC. In both languages the conjunction head is a clitic, which Oda and Stjepanović argue undergoes movement. In Japanese, the conjunction is an enclitic and in SC it is a proclitic. In Japanese (41), the conjunction cliticizes to the first conjunct and is in fact carried along under the movement of the first conjunct, which quite conclusively shows that the conjunction head does not remain in its in situ position.

(41) Japanese (Oda in press)

- a. ?Kyoodai_i-to kanojo-wa [t_i Toodai]-ni akogareteiru
 Kyoto.University-and she-TOP Tokyo.University-DAT admire
 ‘She admires Kyoto University and Tokyo University.’
- b. (?)Nani_i-to Taro-ga [t_i mizu]-o katta no?
 what-and Taro-NOM water-ACC bought Q?
 lit. ‘What did Taro buy and water?’

In fact, as discussed in Oda (in press), in all languages where extraction of a conjunct is possible the conjunction head is a clitic that undergoes movement.²⁴ The possibility of conjunct extraction can then be rather straightforwardly accounted for under (28), i.e. in terms of a rescue-by-PF deletion analysis (see Oda in press; Stjepanović 2014).

As discussed above, with extraction of conjuncts, ConjP functions as an island. This means that what is *-marked when such extraction takes place is the head of ConjP. In Japanese, where the conjunction head undergoes movement, the islandhood effect is voided since the *-marked element is deleted in PF (under copy deletion). The analysis thus unifies acceptable CSC-2 violations like (41) with other acceptable island violations in (30) and (32), all of which are instances of the generalization in (28), which is, as discussed above, unified with the rescuing effect of ellipsis on locality violations, i.e. cases like (33), in terms of the rescue-by-PF deletion mechanism.

Recall now the observation made above regarding the availability of extraction of traditional conjuncts and traditional adjuncts, both of which involve extraction of conjuncts under the current analysis: extraction of traditional adjuncts is much more generally available than extraction of traditional conjuncts. The mechanism of rescue-by-PF deletion provides a straightforward account why this is the case. The above discussion has indicated that extraction of a traditional conjunct is possible only if the head of ConjP is phonologically null, which we have seen can be captured by the mechanism of rescue-by-PF-deletion. Turning to adjunct extraction, under the current analysis adjuncts are conjuncts, with ConjP headed by a null head present in the structure. But this is exactly when extraction of a conjunct is possible even with traditional coordination: when the head of ConjP is phonologically null. True, the reason for this is different (in one case the head is phonologically null as a result of PF copy deletion and in the other case it is null to start with), but that does not matter under the approach to rescue by PF deletion discussed above. The reason why the conjunct (a traditional adjunct) in (42) is then able to undergo movement is the same as the reason why the conjunct in (41) (a

²⁴ As discussed in Stjepanović (2014), in SC the conjunction procliticizes to the second conjunct, which makes movement of the first conjunct, as in (i), possible. (See Stjepanović 2014 for details of the derivation, which also involves ConjP-internal movement of the second conjunct prior to the procliticization of the conjunction to it. Stjepanović shows that the process in question quite generally applies to SC proclitics; thus, she shows, following Bošković 2013b and Talić 2014, that the proclitic preposition in (ii) procliticizes to the AP (and is carried along under further movement of the AP, as in (iii)), with Talić's 2014 prosodic arguments for procliticization in terms of syntactic movement of the preposition in (ii) extending to the conjunction in (i).)

(i) ?Knjige_i je Marko [t_i i filmove] kupio.
 books is Marko and movies bought
 'Marko bought books and movies.'

(ii) On je ušao u veliku sobu.
 he is entered in big room
 'He entered a big room.'

(iii) U veliku je ušao sobu.

It may also be worth noting here that the cliticness of the conjunction may not be the only requirement for the possibility of a CSC-2 violation. Oda notes that all the languages that he observes can violate CSC-2 lack articles, which may suggest that such violations may be possible only in NP languages under Bošković's (2008; 2012) analysis, where languages without articles lack DP (for an account along these lines, see Bošković 2017).

traditional conjunct) is able to undergo movement.²⁵ What we see here is that a ConjP that is headed by a trace behaves like traditional adjunction modification, which under the current analysis involves a ConjP with a null head, in that both cases void islandhood, a state of affairs that can be captured by the rescue-by-PF-deletion mechanism.

(42) How did John walk?

The analysis thus unifies the possibility of extraction out of the VP conjunct in (27) and the improvement with extraction out of a traditional conjunct in (34)-(35) with the possibility of extraction of a traditional conjunct in (41) and the traditional adjunct in (42); what matters in all these cases is that the head of the island, the conjunct and ConjP in the former case and ConjP in the latter case, is phonologically null, which is captured under the rescue-by-PF deletion analysis.

There is an interesting prediction made by the current analysis that is worth noting at this point. Recall that, as argued in Oda (in press), both conjuncts and ConjP are islands. In cases like Galician (34), both of these islands are “violated”. In (35), on the other hand, the islandhood of the conjunct island is voided since the head of the conjunct is phonologically null as a result of article incorporation. Recall now that in languages like Japanese and SC, the head of ConjP (in traditional coordinations) is actually phonologically null (due to conjunction incorporation). This means that extraction out of a conjunct in Japanese and SC involves extraction out of only one island, the conjunct. As a result, we would expect it to be better than extraction out of a conjunct in English and Galician (34) – it should be more on a par with Galician (35) than Galician (34). The prediction is in fact more general, it holds for all languages where extraction of a conjunct is possible; more precisely, in languages where CSC-2 can be voided by incorporating the conjunction head CSC-1 violations should be somewhat weaker than in languages where this is not the case (unless such languages have a way of incorporating the conjunct head, like Galician). It is obviously difficult to compare the strength of island violations across different languages, but impressionistically, CSC-1 violations do seem to be slightly weaker in Japanese and SC than in English (one bilingual Japanese/English speaker consulted did find that CSC-1 violations with Japanese scrambling are weaker than CSC-1 violations with English topicalization). Obviously, a more careful investigation is needed here, which I leave for future research.²⁶

The proposed analysis makes a similar prediction regarding the strength of CSC-1 violations and the Adjunct Condition violation. Consider cases where no islandhood is voided through movement of

²⁵ As discussed in Oda (in press), extraction of the second conjunct in traditional coordinations is not possible in Japanese for an independent PF reason that does not arise in (42) (the reason also does not arise with *wh*-in-situ in Japanese, which Oda notes is possible as both the first and the second conjunct).

²⁶ It is worth noting here that Oda (in press) observes a construction in SC where both the conjunct and ConjP are headed by a trace, namely (i).

(i)(?)[U veliku]_i je Ivan ušao [[t_i sobu]_i u malu kuhinju].
in big is Ivan entered room and in small kitchen

As noted in Footnote 24, the conjunction undergoes procliticization in SC, which means ConjP is headed by a trace in (i). Moreover, as also discussed in Footnote 24, the head of the first conjunct, which is a PP, undergoes procliticization to the AP, and is carried along under movement of the AP. As a result of P-procliticization, the conjunct from which the AP is extracted is also headed by a trace. Both the islandhood of ConjP and the first conjunct are then voided in (i) through the rescue-by-PF deletion mechanism, hence the acceptability of (i).

island heads (cf. (28)). As discussed above, both conjuncts and ConjP are islands. Extraction out of a conjunct then involves two island violations. Since adjuncts are treated as conjuncts, extraction out of an adjunct also involves extraction out of a conjunct island and a ConjP island. However, since with adjuncts the head of ConjP is phonologically null, the islandhood effect of ConjP is voided, as discussed above. Extraction out of an adjunct then involves one island violation. We may then expect that CSC-1 violations should be stronger than Adjunct Condition violations in a language like English. That indeed seems to be the case: CSC-1 violations like (4) seem to be worse than Adjunct Condition violations like (5) (as noted above, the prediction is also borne out with Galician (31) and (34), (34) being worse than (31)). On the other hand, in a language like SC where the head of ConjP is also phonologically null due to the cliticization of the conjunction, extraction out of both conjuncts and adjuncts involves extraction out of a single island. CSC-1 violations and the Adjunct Condition violations indeed seem to have more or less the same status in SC. Of course, all the predictions noted in this passage still need to be confirmed with more careful data elicitation.

6. Conclusion

This paper has argued for a unified approach to the islandhood of conjuncts and adjuncts, both of which disallow extraction out of them. The unification was made possible by adopting Higginbotham's semantics of traditional adjunction, on which traditional adjunction actually involves coordination. This paper took this to be reflected in the syntax, with ConjP present in the syntax of traditional adjunction (see also Progovac 1998; 1999). Not only did this position achieve straightforward syntax-semantics mapping in the case at hand, but it also made possible a unification of the islandhood of conjuncts and traditional adjuncts since the two then involve the same syntactic configuration.

I have shown that there are a number of similarities in the islandhood of conjuncts and adjuncts, including the general resistance of their islandhood to crosslinguistic variation (in contrast to other traditional islands, which are subject to crosslinguistic variation). We have also seen that in a number of environments extraction is exceptionally possible out of conjuncts and adjuncts. Significantly, the environments where extraction is exceptionally possible are the same for conjuncts and adjuncts, which can be captured if the two involve the same syntactic configuration. A number of important issues, however, still remain to be addressed in future research, including the question why conjunctions are typically null with traditional adjuncts and overt with traditional coordination, as well as providing an actual account of the islandhood of conjuncts/adjuncts.

The intuition regarding the former issue seems clear: there are choices when it comes what heads ConjP in traditional coordinations. Even if we put aside the obvious major distinction here, conjunction vs disjunction, languages often have more than one coordinator, which come with different flavors syntactically and/or semantically (note e.g. that the coordinator that hosts article incorporation in Galician is not simple *e* 'and' but *e mais*); in other words, phonological realization of conjunction is a way of making a choice which coordinator to use. Traditional adjunction, on the other hand, involves the most neutral, straight coordination which does not add anything else – this is the null Conj⁰.²⁷

²⁷ This does not mean that null Conj⁰ can never be used with traditional coordination (see Progovac 1999 for some such cases) or that an overt Conj⁰ cannot be used in traditional adjunct modification. Regarding the latter,

Some preliminary remarks were also made regarding the islandhood of conjuncts/adjuncts (an issue that is discussed in more detail from the perspective taken in this paper in Oda in press and Bošković 2017; see also Bošković in preparation). Importantly, it was shown that in several cases where the islandhood of traditional conjunction configurations is voided (for both individual conjuncts and the conjunction phrase itself), where traditional adjunction configurations also do not show islandhood (in both respects), the head of the conjunction (and individual conjuncts) is phonologically null, with the parallel situation holding for the traditional adjunction configuration, a state of affairs which was captured by appealing to the rescue-by-PF deletion mechanism. We have also seen that the rescue-by-PF-deletion analysis can account in a principled way for a number of differences in the strength of the violation with extraction out of conjuncts and adjuncts in various languages/contexts.

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References

- Abels, Klaus. 2011. Don't repair that island! It ain't broke. (Paper presented at Islands in the Contemporary Theory, University of the Basque Country, Victoria-Gasteiz.)
- Baker, Mark. 1988. *Incorporation*. Chicago: Chicago University Press.
- Barros, Matthew & Elliott, Patrick D. & Thoms, Gary. 2014. There is no island repair. (Manuscript, Rutgers University, University College London, and University of Edinburgh.)
- Boeckx, Cedric & Lasnik, Howard. 2006. Intervention and repair. *Linguistic Inquiry* 37. 150–155.
- Bošković, Željko. 2005. On the locality of left branch extraction and the structure of NP. *Studia Linguistica* 59. 1–45.
- Bošković, Željko. 2008. What will you have, DP or NP? In Elfner, Emily & Walkow, Martin (eds.), *Proceedings of the North East Linguistic Society 37*, 101–114. Amherst: University of Massachusetts, GLSA.
- Bošković, Željko. 2011. Rescue by PF deletion, traces as (non)interveners, and the *that*-trace effect. *Linguistic Inquiry* 42. 1–44.
- Bošković, Željko. 2012. On NPs and clauses. In Grewendorf, Günther & Zimmermann, T. Ede (eds.), *Discourse and grammar: From sentence types to lexical categories*, 179–242. Berlin: De Gruyter.
- Bošković, Željko. 2013a. Phases beyond clauses. In Schürcks, Lilia & Giannakidou, Anastasia & Etxeberria, Urtzi (eds.), *The nominal structure in Slavic and beyond*, 75–128. Berlin: De Gruyter.

as noted in §4, Progovac (1998, 1999) discusses examples like *I read his paper, and quickly* and *John read the book and avidly*. Also relevant in the context of the current discussion is Progovac's (1999) Economy of Pronunciation which works in a similar way as Chomsky's (1981) *Avoid Pronoun Principle*, choosing the null conjunction head when possible (Progovac 1998 in fact adopts *Avoid Overt Conjunction*).

- Bošković, Željko. 2013b. Traces do not head islands: What can PF deletion rescue? In Miyamoto, Yoichi & Takahashi, Daiko & Maki, Hideki & Ochi, Masao & Sugisaki, Koji & Uchibori, Asako (eds.), *Deep insights, broad perspectives: Essays in honor of Mamoru Saito*, 56–93. Tokyo: Kaitakusha.
- Bošković, Željko. 2013c. Principles and Parameters theory and Minimalism. In den Dikken, Marcel (ed.), *The Cambridge handbook of generative syntax*, 95–121. Cambridge: Cambridge University Press.
- Bošković, Željko. 2014. Now I'm a phase, now I'm not a phase: On the variability of phases with extraction and ellipsis. *Linguistic Inquiry* 45. 27–89.
- Bošković, Željko. 2015. From the Complex NP Constraint to everything: On deep extractions across categories. *The Linguistic Review* 32. 603–669.
- Bošković, Željko. 2016. What is sent to spell-out is phases, not phasal complements. *Linguistica* 56. 25–66.
- Bošković, Željko. 2017. On the Coordinate Structure Constraint, islandhood, phases, and rescue by PF deletion. (Manuscript, University of Connecticut.)
- Bošković, Željko. in press. On movement out of moved elements, labels, and phases. *Linguistic Inquiry*.
- Bošković, Željko. in preparation. On the Coordinate Structure Constraint, across-the-board movement, and labeling. (Manuscript, University of Connecticut.)
- Chomsky, Noam. 1972. Some empirical issues in the theory of transformational grammar. In Peters, Paul Stanley (ed.), *Goals of linguistic theory*, 63–130. Englewood Cliffs: Prentice Hall Inc.
- Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, Noam. 1995. *The minimalist program*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries. In Martin, Roger & Michaels, David & Uriagereka, Juan (eds.), *Step by Step: Essays on minimalist syntax in honor of Howard Lasnik*, 89–155. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In Kenstowicz, Michael (ed.), *Ken Hale: A life in language*, 1–52. Cambridge, MA: MIT Press.
- Collins, Chris. 2005. A smuggling approach to the passive in English. *Syntax* 8. 81–120.
- Corver, Norbert. 1992. Left branch extraction. In Broderick, Kimberly (ed.), *Proceedings of the North East Linguistic Society* 22, 67–84. Amherst: University of Massachusetts, GLSA.
- Davidson, Donald. 1967. The logical form of action sentences. In Rescher, Nicholas (ed.), *The logic of decision and action*, 81–95. Pittsburgh: University of Pittsburgh Press.
- Despić, Miloje. 2011. *Syntax in the absence of determiner phrase*. Storrs: University of Connecticut. (Doctoral dissertation.)
- Despić, Miloje. 2013. Binding and the structure of NP in Serbo-Croatian. *Linguistic Inquiry* 44. 239–270.
- Dowty, David. 1989. On the semantic content of the notion of 'thematic role.' In Chierchia, Gennaro & Partee, Barbara H. & Turner, Raymond (eds.), *Properties, types and meaning*, vol. 2, 69–129. Dordrecht: Kluwer.
- Engdahl, Elisabet. 1986. *Constituent questions*. Dordrecht: Reidel.

- Fox, Danny & Lasnik, Howard. 2003. Successive-cyclic movement and island repair: The difference between sluicing and VP-ellipsis. *Linguistic Inquiry* 34. 143–154.
- Franks, Steven. 1993. On parallelism in across-the-board dependencies. *Linguistic Inquiry* 24. 509–529.
- Grosu, Alexander. 1973. On the nonunitary nature of the coordinate structure constraint. *Linguistic Inquiry* 4. 88–92.
- Haik, Isabelle. 1985. *The syntax of operators*. Cambridge, MA: MIT. (Doctoral dissertation.)
- Higginbotham, James. 1985. On semantics. *Linguistic Inquiry* 16. 547–593.
- Holmberg, Anders. 2005. Is there a little pro? Evidence from Finnish. *Linguistic Inquiry* 36. 533–564.
- Hornstein, Norbert & Lasnik, Howard & Uriagereka, Juan. 2003. The dynamics of islands: Speculations on the locality of movement. *Linguistic Analysis* 33. 149–175.
- Hunter, Tim. 2011. *Syntactic effects of conjunctivist semantics: Unifying movement and adjunction*. Amsterdam: John Benjamins.
- Huybregts, Riny & van Riemsdijk, Henk. 1985. Parasitic gaps and ATB. In Berman, Stephen & Choe, Jae-Woong & McDonough, Joyce (eds.), *Proceedings of the North East Linguistic Society 15*, 168–187. Amherst: University of Massachusetts, GLSA.
- Johnson, Kyle. 2009. Gapping is not (VP-) ellipsis. *Linguistic Inquiry* 40. 289–328.
- Kayne, Richard. 1994. *The antisymmetry of syntax*. Cambridge, MA: MIT Press.
- Law, Paul. 1993. On the base position of *wh*-adjuncts and extraction. (Paper presented at the 67th annual meeting of the Linguistic Society of America, Los Angeles, CA, January 7–10, 1993.)
- Lasnik, Howard. 2001. When can you save a structure by destroying it? In Kim, Min-Joo & Strauss, Uri (eds.), *Proceedings of the North East Linguistic Society 31*, 301–320. Amherst: University of Massachusetts, GLSA.
- Marelj, Marijana. 2011. Bound-variable anaphora and Left Branch Condition. *Syntax* 14. 205–229.
- Merchant, Jason. 2001. *The syntax of silence*. Oxford: Oxford University Press.
- Munn, Alan Boag. 1993. *Topics in the syntax and semantics of coordinate structures*. College Park: University of Maryland. (Doctoral dissertation.)
- Nunes, Jairo 2004. *Linearization of chains and sideward movement*. Cambridge, MA: MIT Press.
- Oda, Hiromune. in press. Two types of the Coordinate Structure Constraint and rescue by PF deletion. In Lamont, Andrew & Tetzloff, Katerina (eds.), *Proceedings of the North East Linguistic Society 47*. Amherst: University of Massachusetts, GLSA.
- Parsons, Terrence. 1980. Modifiers and quantifiers in natural language. *Canadian Journal of Philosophy*, supplementary volume 6. 29–60.
- Parsons, Terrence. 1990. *Events in the semantics of English: A study in subatomic semantics*. Cambridge, MA: MIT Press.
- Postal, Paul. 1998. *Three investigations of extraction*. Cambridge, MA: MIT Press.
- Progovac, Liljana. 1998. Avoid conjunction, adjunction, and the coordination of likes constraint. In Bošković, Željko & Franks, Steven & Snyder, William (eds.), *Formal Approaches to Slavic Linguistics: The Connecticut meeting 1997*, 252–266. Ann Arbor: Michigan Slavic Publications.
- Progovac, Liljana. 1999. Events and economy of coordination. *Syntax* 2. 141–159.
- Roberts, Ian. 2010. *Agreement and head movement: Clitics, incorporation, and defective goals*.

- Cambridge, MA: MIT Press.
- Ross, John Robert. 1967. *Constraints on variables in syntax*. Cambridge, MA: MIT. (Doctoral dissertation.)
- Ross, John Robert. 1969. Guess who?. In Binnick, Robert I. & Davison, Alice & Green, Georgia M. & Morgan, Jerry L. (eds.), *Papers from the Fifth Regional Meeting of the Chicago Linguistic Society*, 252–286. Chicago: University of Chicago, Chicago Linguistic Society.
- Ross, John Robert. 1974. Three batons for cognitive psychology. In Weimer, Walter B. & Palermo, David S. (eds.), *Cognition and the symbolic processes*, 63–124. Hillsdale, NJ: Lawrence Erlbaum.
- Runić, Jelena. 2014a. A new look at argument ellipsis: Evidence from Slavic. In Huang, Hsin-Lun & Poole, Ethan & Rysling, Amanda (eds.), *Proceedings of the North East Linguistic Society 43*, 91–102. Amherst: University of Massachusetts, GLSA.
- Runić, Jelena. 2014b. *A new look at clitics, clitic doubling, and argument ellipsis: Evidence from Slavic*. Storrs: University of Connecticut. (Doctoral dissertation.)
- Stepanov, Arthur. 2001a. Late adjunction and minimalist phrase structure. *Syntax* 4. 94–125.
- Stepanov, Arthur. 2001b. *Cyclic domains in syntactic theory*. Storrs: University of Connecticut. (Doctoral dissertation.)
- Stjepanović, Sandra. 2014. Left branch extraction and the Coordinate Structure Constraint. In Iyer, Jyoti & Kusmer, Leland (eds.), *Proceedings of the North East Linguistic Society 44*, 157–170. Amherst: University of Massachusetts, GLSA.
- Stowell, Tim. 1981. *Origins of phrase structure*. Cambridge, MA: MIT. (Doctoral dissertation.)
- Takahashi, Daiko. 1994. *Minimality of movement*. Storrs: University of Connecticut. (Doctoral dissertation.)
- Takahashi, Masahiko. 2012. Phases and the structure of NP: A comparative study of Japanese and Serbo-Croatian. In Franks, Steven & Dickinson, Markus & Fowler, George & Whitcombe, Melissa & Zanon, Ksenia (eds.), *Proceedings of Formal Approaches to Slavic Linguistics 21*, 359–372. Ann Arbor: Michigan Slavic Publications.
- Talić, Aida. 2014. Extraordinary complement extraction: PP-complements and inherently case-marked nominal complements. *Studies in Polish Linguistics* 8. 127–150.
- Talić, Aida. 2015. Adverb extraction, specificity, and structural parallelism. *Canadian Journal of Linguistics* 60. 417–454.
- Trenkić, Danijela. 2004. Definiteness in Serbian/Croatian/Bosnian and some implications for the general structure of the nominal phrase. *Lingua* 114. 1401–1427.
- Truswell, Robert. 2011. *Events, phrases, and questions*. Oxford: Oxford University Press.
- Uriagereka, Juan. 1988. *On government*. Storrs: University of Connecticut. (Doctoral dissertation.)
- Uriagereka, Juan. 1996. Determiner clitic placement. In Freidin, Robert (ed.), *Current issues in comparative grammar*, 257–295. Dordrecht: Kluwer.
- Uriagereka, Juan. 1999. Multiple Spell-Out. In Epstein, Samuel David & Hornstein, Norbert (eds.), *Working minimalism*, 251–282. Cambridge, MA: MIT Press.
- Williams, Edwin. 1990. The ATB theory of parasitic gaps. *The Linguistic Review* 6. 265–279.
- Zlatic, Larisa. 1997. *The structure of the Serbian noun phrase*. Austin: University of Texas. (Doctoral dissertation.)